

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
HERBERT A. MILLER, JR.  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF HERBERT A. MILLER, JR.**

1 **Q: Please state your name and business address.**

2 A: My name is Herbert A. Miller, Jr., and my business address is 2001 Mercer  
3 Road, Lexington, Kentucky 40511.

4

5 **Q: What are your current position and responsibilities?**

6 A: Since September 1, 2006, I have served as President of Columbia Gas of Ken-  
7 tucky, Inc. ("Columbia") and as a member of its Board of Directors. My re-  
8 sponsibilities include the general operation of the natural gas distribution  
9 utility in 30 Kentucky counties, and specifically all regulatory, legislative  
10 and corporate affairs, business strategy, policy matters, customer relations  
11 and external and public matters associated with the utility service of Co-  
12 lumbia.

13

14 **Q: What is your educational background?**

15 A: I received a B.A. degree from the University of Kentucky in 1972, and a J.D.  
16 degree from the University of Kentucky College of Law in 1976.

17

18 **Q: Please describe your employment history.**

1 A: Prior to joining Columbia, from 1998 to 2006, I served as the Corporate  
2 Counsel for all of the regulated subsidiaries of the American Water Works  
3 Company in Kentucky, Tennessee and Georgia. From 1993 to 1998, I was a  
4 partner in the law firm of Stoll Keenon & Park (now Stoll Keenon Ogden  
5 PLLC). From 1980 to 1993, I was the Senior Vice President and General  
6 Counsel for First Security Corporation, a Kentucky multi-bank holding  
7 company. From 1977 to 1980, I was Corporate Counsel for the Lexington-  
8 Fayette Urban County Government, and from 1976 to 1977 I served in the  
9 Office of Chief Counsel of the U.S. Customs Service in Washington, D.C.  
10 In addition, I am a former Adjunct Instructor in the University of Ken-  
11 tucky College of Business and Economics.

12

13 **Q: Have you previously testified in rate cases before the Kentucky Public**  
14 **Service Commission?**

15 A: Yes. I have filed testimony in several previous cases including Case Nos.  
16 2007-00008, 2009-0041 ("2009 Rate Case), and 2013-00167 ("2013 Rate  
17 Case").

18

1 **Q: What is the purpose of your testimony?**

2 A: The purpose of my testimony is to provide the Commission with a brief  
3 overview of this filing, and to discuss the objectives Columbia seeks to ac-  
4 complish in this proceeding. I will also introduce the other witnesses who  
5 will present testimony on Columbia's behalf.

6  
7 **Q: Please summarize the business of Columbia.**

8 A: Columbia is one of seven natural gas local distribution companies in the  
9 NiSource Inc. ("NiSource") family of utility companies. Headquartered in  
10 Lexington, Kentucky, it is largely the result of a long history of consolida-  
11 tions of other natural gas distribution companies. The result is a system  
12 made up of various different types of pipe installed during different time  
13 periods as discussed in the testimony of Columbia witness Eric Belle. Co-  
14 lumbia employs 154 active full-time employees and serves approximately  
15 135,000 customers in 30 Kentucky counties. Through nearly 2,600 miles of  
16 mains, it provides natural gas service to residential, commercial and in-  
17 dustrial customers in the counties and municipalities listed in the Tariff.

18 NiSource is headquartered in Merrillville, Indiana and was created  
19 by the mergers of Northern Indiana Public Service Company ("NIPSCO")  
20 and Bay State Gas Company in 1998, and the Columbia Energy Group in

1 2000. NiSource is a registered public utility holding company subject to  
2 the jurisdiction of the Federal Energy Regulatory Commission.

3

4 **Q: Why is Columbia seeking an adjustment in its base rates in this case?**

5 A: Columbia is proposing an increase in its base rates for the fully forecasted  
6 test period of 2017. Columbia last adjusted its base rates in December  
7 2013. Since that time, and including the fully forecasted test period of  
8 2017, Columbia will have increased its average rate base by \$50,062,282 (or  
9 24.6%), from the 13 month average rate base of \$203,298,499 requested in  
10 the 2013 rate case to the 13 month average rate base of \$253,360,781 re-  
11 quested in this case. This requested rate increase reflects our ongoing ef-  
12 fort to make capital investments for the safety and reliability of our gas  
13 distribution system, pay debt and cover the increased operating costs re-  
14 lated to operational compliance standards, enhanced employee training,  
15 public protection measures and related costs. Columbia's current rates are  
16 not sufficient to support the revenue requirement needed for these in-  
17 vestments and the operations and maintenance ("O&M") costs and the  
18 opportunity to earn a reasonable rate of return on the invested capital.

19

1 **Q: Please describe the July 1, 2015 corporate separation of Columbia Pipe-**  
2 **line Group from NiSource.**

3 A: In September 2014, NiSource announced its plan to separate into two pub-  
4 licly traded companies. Specifically, the separation that took effect July 1,  
5 2015, resulted in two highly focused, premier energy infrastructure com-  
6 panies – a fully regulated natural gas and electric utilities company  
7 (NiSource) and a natural gas pipeline, midstream and storage company  
8 (Columbia Pipeline Group). Post-separation, NiSource remains one of the  
9 largest natural gas utility companies in the United States, serving more  
10 than 3.4 million customers in seven states under the Columbia Gas and  
11 NIPSCO brands. NiSource has maintained a strong focus on its customers,  
12 safety, local employment, and community involvement. The provision of  
13 safe, reliable, and efficient service remains the top commitment.

14 In June 2015, NiSource received confirmation of its post-separation  
15 investment-grade credit ratings. Standard & Poor's upgraded NiSource's  
16 credit rating to BBB+ from BBB-, Fitch Ratings revised its outlook on  
17 NiSource to BBB- (positive) from BBB- (stable), and Moody's reaffirmed its  
18 rating of NiSource at Baa2.

19 On September 15, 2015, NiSource was named to the Dow Jones Sus-  
20 tainability Index for the second consecutive year and for the ninth time

1 since 1999. On March 7, 2016, NiSource was designated, for the fifth  
2 straight year, as one of the World's Ethical Companies by the Ethisphere  
3 Institute. NiSource was the only company named in the gas utility category.  
4

5

6 **Q: Have Columbia's daily operations been affected by the separation?**

7 A: No, Columbia's day-to-day operations have not been affected by the separation.  
8 In fact, the separation has allowed the entire NiSource organization, from the most senior leadership levels, to focus solely on the regulated utility model across all operating states. Columbia's operations continue to be directed by leaders with extensive experience in the natural gas distribution industry. Under the new NiSource business model, additional decision making and accountability has been assigned to each of the state operations, decentralizing decisions on day-to-day service provision to allow the operating company's management to be close to its customers, and establishing the central corporate function as one of support for the state operations.  
17

18 Columbia's safety culture has retained the same high level of focus.  
19 NiSource has designated safety as a core value. In March of this year, for example, all NiSource senior leadership, Vice President/General Manager  
20

1 Kimra Cole, and I, signed the NiSource Safety Pledge, which signals to all  
2 employees that safety is a core value that is modeled by the company's  
3 leadership and is set as an expectation for which all employees are ac-  
4 countable. In June 2015, Columbia's local leadership team signed a similar  
5 pledge (Attachment HAM-1).

6 Finally, Columbia's commitment to continue making investments  
7 to enhance the safety, reliability and integrity of its distribution system for  
8 the benefit of all customers remains unchanged following the separation.  
9 Columbia's overall capital program for 2016, the first full year post-  
10 separation, includes system enhancements to both strengthen integrity  
11 and serve new customers.

12  
13 **Q: What overall rate of return and return on equity does Columbia propose**  
14 **in this case?**

15 A: As presented by Columbia witness Paul Moul, Columbia proposes an  
16 overall rate of return of 8.41%. Columbia witness Moul also demonstrates  
17 in his testimony that Columbia should be granted the opportunity to earn  
18 an 11% return on equity. I refer you to his testimony for a complete expla-  
19 nation.

20

1 **Q: In summary, what is Columbia requesting in this case to support this**  
2 **return?**

3 A: Columbia is seeking a revenue increase of approximately \$25,408,373, or  
4 27.41 %, in order to produce rates that are fair, just and reasonable for  
5 both Columbia and its customers. This requested revenue increase is nec-  
6 essary for Columbia to continue to provide safe and reliable service at the  
7 lowest reasonable price to its customers. Consistent with the approved  
8 practices in the 2009 Rate Case and the 2013 Rate Case, this revenue in-  
9 crease is a net increase from what Columbia customers are paying for the  
10 Rider AMRP. The Accelerated Main Replacement Program (“AMRP”) rid-  
11 er will be re-set to zero.

12 Specifically, Columbia is proposing that the Commission approve  
13 several important initiatives, including: (1) capital investment and opera-  
14 tions and maintenance (“O&M”) expenses related to important safety,  
15 compliance and training programs since the 2013 Rate Case and forecasted  
16 in the 2017 test period; (2) Columbia’s continued use of a forecasted test  
17 period for ratemaking purposes; (3) the inclusion (or “rolling in”) of the  
18 AMRP charge for its Accelerated Main Replacement Program into the  
19 monthly customer rates, and the continuation of the AMRP program  
20 based on recovery of this capital on a forecasted test year basis; (4) ap-

1 proval of the capital investment and O&M expenses for a new Training  
2 Facility for its employees; (5) approval of changes in its tariff Rider AMRP  
3 to include (a) the replacement of Aldyl-A and various forms of older plas-  
4 tic pipe when it is encountered in an AMRP project, where a leak is found  
5 on such plastic pipe or where the Optimain DS™ tool supports the re-  
6 placement of such pipe and (b) to include the capital investment and  
7 O&M expenses (but not the on-going annual sampling costs) to support  
8 Columbia's replacement of those meters which, as a result of Columbia's  
9 statistical meter testing plan authorized in Case No. 2000-429, have been  
10 shown not to be meeting the required variances for accurate usage meas-  
11 urement; and (6) revised depreciation rates, tariff changes, and other mat-  
12 ters as further outlined in this case.

13 All of the initiatives and concepts referenced above will be summa-  
14 rized and supported by other Columbia witnesses in this proceeding. I re-  
15 fer you to their testimony for greater detail, and the topics covered by  
16 each witness are summarized at the end of my testimony.

17

18 **Q: What test period has Columbia used to develop its revenue require-**  
19 **ment?**

1 A: Columbia developed the revenue requirement using a forecasted test pe-  
2 riod, consisting of the 12 months ended December 31, 2017.

3

4 **Q: What factors are contributing to Columbia’s revenue deficiency for the**  
5 **forecasted test period?**

6 A: A significant reason is the growth in O&M expenses since the 2013 Rate  
7 Case associated with safety-related capital and operational programs and  
8 initiatives described in further detail below and by other Columbia wit-  
9 nesses, including Cote, Cole and Belle. Columbia witness Cote is recog-  
10 nized by the gas utility industry as a knowledgeable leader in the area of  
11 pipeline safety. He will describe the evolving expectations of the general  
12 public, the regulatory community, our lawmakers and the utility industry  
13 on the way we safely conduct our business. Columbia’s witnesses describe  
14 Columbia’s increased focus on infrastructure replacement, increased at-  
15 tention to safer leak repair, the prevention of excavator damages to natu-  
16 ral gas pipelines and the enhancement of safety and operational training  
17 for utility employees.

18 Another factor is what is referred to as “regulatory lag.” This is the  
19 financial impact due to the elapsed time between the investment or de-  
20 ployment of capital, the filing of an application for recovery of the invest-

1           ment and the actual recovery of the return on the capital invested, as well  
2           as the inability to recover increased actual O&M expenses (upon which no  
3           rate of return is allowed) after the end of the most recent test period. For  
4           Columbia, the elapsed time includes the time period between the end of  
5           the forecasted test period in the last rate case proceeding (calendar year  
6           2014) and the beginning of the forecasted test period (calendar year 2017).  
7           The investment and recovery of AMRP capital is on a separate timetable  
8           as previously approved by this Commission.

9

10   **Q:   Has any loss of Columbia customers contributed to the revenue defi-**  
11   **ciency?**

12   A:   In the past, the answer to this question would have been “yes” for both  
13   residential and commercial customers. However, the number of customers  
14   has stabilized in 2013, 2014 and 2015, with Columbia seeing slight increas-  
15   es in the number of residential customers. However, Columbia has con-  
16   tinued to experience a slight decrease in the number of commercial cus-  
17   tomers. Economic conditions in different business sectors also impact Co-  
18   lumbia’s revenues, For example, the AK Steel Plant near Ashland an-  
19   nounced in late 2015 that its production, and consequently its gas con-  
20   sumption, will be significantly reduced in the test period and beyond.

1

2 **Q: Has Columbia made efforts since its last rate case to improve customer**  
3 **and employee safety and efficiencies?**

4 A: Yes. Columbia continues to implement procedures to improve safety and  
5 efficiencies. As discussed in the testimony of Columbia witnesses Cote  
6 and Belle, Columbia has continued in its mission to replace the aging in-  
7 frastructure of its underground pipes. Since Columbia's AMRP began in  
8 2008, Columbia has replaced more than 108 miles of its priority pipe and  
9 associated services and appurtenances. Columbia uses a computer pro-  
10 gram called Optimain DS™, and confirmation by experienced employees  
11 in the field, to identify higher risk pipe based on risk factors such as the  
12 pipe's age, composition and condition (such as unprotected bare steel, ca-  
13 thodically protected bare steel, cast or wrought iron), the history of corro-  
14 sion leaks, the proximity to human population and the depth of the facili-  
15 ties.

16 The total projected capital expenditures sought to be recovered  
17 during the forecasted test period is approximately \$31.5 million, of which  
18 \$17.2 million is attributable to the AMRP. For the past 10 years, and for all  
19 of the capital budget categories described by Columbia witness Belle, the  
20 actual capital investment of \$176.1 million exceeded the original expected

1 investment of \$167.2 million by 5.3%. Consequently, Columbia is also  
2 seeking recognition and recovery in the forecasted test period of the posi-  
3 tive “slippage” over this 10-year period. Please refer to the testimony of  
4 Columbia’s witnesses Belle and Katko for the proposed details of any  
5 changes.

6 Columbia is also addressing the safety risks identified in its DIMP  
7 plan. DIMP stands for “Distribution Integrity Management Program,” a  
8 federally-mandated requirement of the U.S. Department of Transporta-  
9 tion, Pipeline and Hazardous Materials Safety Administration in 49 CFR  
10 Section 192, effective August 2, 2011. A DIMP plan is required of all natu-  
11 ral gas distribution companies and requires the continuous identification  
12 of threats and risks and the continuous improvement of their systems to  
13 mitigate such risks. Columbia’s DIMP plan is on file with the Commission.

14 Columbia witness Cole describes Columbia’s efforts to meet its  
15 DIMP plan obligations, including the most significant threat to our pipe-  
16 line infrastructure: excavator damages. She explains Columbia’s efforts,  
17 including additional personnel and enhanced operating procedures, to  
18 improve the enforcement of the Kentucky 8-1-1 One Call law to prevent  
19 third-party excavation damages to our pipelines. Columbia was a leader  
20 in the legislative efforts, including providing committee testimony, to en-

1 hance KRS § 367.4901, et seq. Since the amended statute's effective date in  
2 July 2015, Columbia has seen a decline in the incidence of these dangerous  
3 third party excavation damages. Columbia receives over 40,000 requests  
4 per year through the 8-1-1 system to locate its facilities. In 2009, Columbia  
5 experienced a rate of 7.15 damages per 1,000 requests to locate our facili-  
6 ties. In 2015 the rate was 3.74 damages and through April of 2016 the rate  
7 is down to 2.86. When damages occur, however, they represent a signifi-  
8 cant risk to the excavators, the surrounding public, first responder fire  
9 fighters and Columbia employees. Continued diligence is necessary to re-  
10 duce these events.

11 Columbia witness Cole describes these efforts, including the im-  
12 plementation of a GPS mapping initiative to better identify and locate our  
13 underground facilities and employing personnel to inspect damage sites,  
14 educate excavators and the public on the law and help with enforcement.

15

16 **Q: What other risks have been identified through the DIMP process?**

17 A: Other DIMP identified significant risks include corrosion leaks and the  
18 threat of cross-bores. The repair of corrosion leaks is an important part of  
19 maintaining safe and reliable service to customers. As described by Co-  
20 lumbia witness Cote, cross-bores occur when gas lines intersect or come in

1 contact with other utility lines such as storm or sanitary sewers. Uncor-  
2 rected, gas lines can be damaged when sewer lines are cleaned leaving gas  
3 to travel through the sewer line and into a home or business. To mitigate  
4 these dangers, Columbia will incur significant costs.

5 In the past, boring without exposing the intervening utilities often  
6 was a common practice when installing underground piping. It was faster  
7 and avoided the disruption of the surface, saved landscaping and mitigat-  
8 ed the costs of surface restoration, including expensive street, driveway  
9 and sidewalk paving. Due to the cross-bore risks, boring without exposing  
10 the intervening utilities is now rarely acceptable. Open trench pipeline in-  
11 stallation, at more time and expense, is now more frequently used. Un-  
12 derground camera technology is sometimes used as an alternative where  
13 the depth or surface conditions inhibit open trench installation.

14 The cost of mitigating the foregoing DIMP risks are in addition to  
15 many of the other improvements outlined in previous cases and which are  
16 now part of our normal operations. Such improvements Columbia previ-  
17 ously implemented include: computerized customer scheduling and  
18 emergency response management, automated dispatching that uses GPS  
19 coordinates to identify the closest Columbia responder, installation and  
20 replacement of mobile data terminals in all service vehicles to direct and

1 redirect service responses, the adoption of “call ahead” procedures to re-  
2 duce Columbia’s CGI (“can’t get in” orders) and improved customer rela-  
3 tions.

4

5 **Q: Why is Columbia proposing to construct a local Training Facility?**

6 A: Columbia intends to construct, if approved by the Commission, a new  
7 Training Facility on its headquarters property in Lexington. There are sev-  
8 eral reasons why Columbia proposes this investment.

9 First, by building such a facility in Kentucky, Columbia’s customers  
10 will mitigate the O&M expense and loss of productivity incurred from Co-  
11 lumbia employees traveling to Ohio or other training locations for safety  
12 and service training.

13 Second, the construction of a training facility on real estate already  
14 owned by Columbia will avoid additional land acquisition costs.

15 Third, Columbia is moving away from a training model that histor-  
16 ically almost exclusively relied upon “on the job” training in which new  
17 field personnel learned their skills from more experienced workers in ac-  
18 tual field conditions. Columbia, and other NiSource companies, are rec-  
19 ognizing that the preferred training model is to hire new field employees  
20 in groups (or “waves”) and train them together in a controlled environ-

1           ment where their safety skills can be evaluated and measured. In addition  
2           to real field experience, this model also allows new employees to learn  
3           from repeated tasks and focused individual coaching, such as how to  
4           identify and make safe a perimeter, repair a leak or change a meter set-  
5           ting.

6                    Like many businesses, Columbia is experiencing an aging of its  
7           workforce. As longer tenured employees retire, Columbia’s workforce has  
8           become younger and there are fewer opportunities for newer employees  
9           to quickly gain safety skills for a variety of occupational experiences. The  
10          percentage of field employees with less than five years’ experience has in-  
11          creased since the 2013 Rate Case. Reliance upon traditional “on the job”  
12          training takes longer to put an experienced employee into the field to  
13          serve customers. A local Training Facility would allow Columbia to en-  
14          hance its training and to provide training more efficiently and timely.

15

16   **Q:   Please briefly describe the operations and cost of the Training Facility.**

17   A:   The facility is proposed to be built on the west side of Columbia’s proper-  
18   ty at 2001 Mercer Road in Lexington, thus avoiding the acquisition costs of  
19   new real estate. It will consist of a series of small buildings containing var-  
20   ious gas appliances such as furnaces and water heaters, and gas meters

1 and other natural gas infrastructure. The small structures will be served  
2 by a new system of underground pipes and equipment using both com-  
3 pressed air and natural gas. Employees will be trained in a variety of situ-  
4 ational learning experiences, including gas line leaks, appliance line leaks,  
5 meter replacements and identifying and working safely through other  
6 tasks. If the Commission approves funding for the facility as proposed by  
7 Columbia in this case, the facility will be in service in 2017, and is estimat-  
8 ed to have an initial capital cost of approximately \$1.955 million. This will  
9 cover the costs of engineering the site, constructing the underground and  
10 surface improvements, purchasing and installing the equipment, plus the  
11 2017 O&M costs of maintaining the facility and employing trainers for in-  
12 struction. The cost of an indoor classroom will be avoided by being able to  
13 use Columbia's existing headquarters building that will be immediately  
14 adjacent to the training center.

15

16 **Q: Are other approvals needed to build this facility?**

17 A: Columbia will comply with the notice requirements of KRS § 100.324,  
18 whereby Columbia will submit its site plan for review and comment by  
19 the local planning commission in Fayette County. However, under this  
20 statute, local zoning approval is not required for the location of service fa-

1 cilities of public utilities under the jurisdiction of the Public Service Com-  
2 mission.

3 Based on the facility's size, scope, purpose, expense and lack of al-  
4 ternatives, Columbia does not believe that the construction of this facility  
5 requires a certificate of public convenience and necessity from the Com-  
6 mission under KRS § 278.020. The estimated capital cost of the facility is  
7 less than 1% of Columbia's rate base. Locating this facility in Columbia's  
8 service territory will save the employee costs of out-of-state travel. The fa-  
9 cility is similar to already existing training facilities of other gas utilities  
10 and is in the ordinary course of its business. To Columbia's knowledge,  
11 there are no similar training facilities in Columbia's service territory and  
12 therefore there is no wasteful duplication of plant, equipment, property or  
13 facilities of other jurisdictional utilities. In a separate docket, Columbia  
14 will seek a Declaratory Order from the Commission finding that the con-  
15 struction and operation of the training facility does not require a certificate  
16 of public convenience and necessity.

17

18 **Q: Is Columbia aware of similar training facilities maintained by other**  
19 **utilities?**

1 A: Yes, other Columbia companies either have built or are planning to build  
2 similar facilities. Columbia is also aware that other Kentucky gas utilities  
3 may have training facilities, but is unaware of any similar facilities in the  
4 Columbia service territory.

5

6 **Q: Your earlier testimony mentioned the need for a change in Rider AMRP**  
7 **for the replacement of meters discovered failing under Columbia’s me-**  
8 **ter replacement program. Please explain.**

9 A: Columbia has been operating a statistical meter testing program under a  
10 deviation from 807 KAR 5:006, Section 25(5)(b), as granted by the Com-  
11 mission in Case No. 2000-429. Rather than automatically replacing ap-  
12 proximately 14,000 meters per year, at a significant expense to Columbia  
13 customers and regardless of whether the specific meters were inaccurately  
14 measuring gas usage, Columbia conducts a random sampling of groups  
15 (or “families”) of meters to test whether the identified meters are perform-  
16 ing properly. Columbia files an annual report with the Commission on the  
17 results. , Since 2007 the program has saved Columbia customers almost  
18 \$11.5 million in avoided costs to replace gas meters as otherwise required  
19 by the rule. That is an average of nearly \$1.277 million per year. Please re-

1           fer to the testimony of Columbia witnesses Cole and Cooper for a more  
2           complete discussion.

3

4   **Q:   Are there any other changes proposed for Columbia’s AMRP Rider?**

5   A:   Yes. Columbia is proposing to include in its AMRP Rider the replacement  
6           of older plastic pipe susceptible to premature brittle-like cracking. Plastic  
7           pipe was widely used in the gas industry from the 1960s through the early  
8           1980s as a substitute for steel pipe. This pipe has come under scrutiny by  
9           PHMSA for its premature brittle-like cracking propensities.

10                 Following the Commission’s approval of LG&E’s application to in-  
11           clude this pipe in its Gas Line Tracker Rider in Case No. 2015-00360, on  
12           March 25, 2016 and April 1, 2016, this Commission sent two inquiries to  
13           gas system operators seeking information about such pipe in their systems  
14           and asking for review and mitigation of the safety risk posed by this pipe.  
15           Columbia has submitted a response to these Commission inquiries. As a  
16           result of this inquiry, and the recognition of the safety risk, Columbia is  
17           requesting the approval for the inclusion of the replacement of this pipe in  
18           its AMRP Rider. Columbia witnesses Cote and Belle provide a more de-  
19           tailed summary of this pipe and the request for such inclusion.

20

1 **Q: Have Columbia initiatives improved emergency responses to its cus-**  
2 **tomers?**

3 A: Yes. An important safety statistic is how long it takes a Columbia employ-  
4 ee to respond to a known emergency or the smell of gas. Columbia's goal  
5 is to reach the customer's location within the industry standard of 60  
6 minutes. Columbia is now measuring its performance to reach the location  
7 within 45 minutes and recent efforts show that we are meeting the 45-  
8 minute goal 96% to 98% of the time. To meet this aspiration, Columbia is  
9 adopting new efforts such as requiring employee residency in remote are-  
10 as to be closer in proximity to customers, the addition of off-hour shifts  
11 and the greater use of GPS technology to identify the closest or quickest  
12 responder to the event. I refer you to the testimony of Columbia witness  
13 Cole.

14  
15 **Q: Have the efforts you just described, and others, proven successful in**  
16 **improving customer satisfaction?**

17 A: Yes. Columbia continues to focus on several key metrics to measure the  
18 level of satisfaction of its customers who interact with Columbia. Colum-  
19 bia uses the Louisville-based market research firm of Thoroughbred Re-  
20 search Group to measure customer satisfaction through random telephone

1 interviews of customers who have interacted with our customer call cen-  
2 ter. Recent 2015 survey results showed, on average, 90% of customers re-  
3 sponding expressed overall customer satisfaction with their experience  
4 with Columbia, and 91% approved of the ease of doing business with Co-  
5 lumbia. In addition, customers who interacted with one of our field per-  
6 sonnel reported a 97% approval rating.

7 Columbia also participates in quarterly surveys by J.D. Power &  
8 Associates. Columbia is the smallest gas company in the “mid-west/mid-  
9 size” category, but in 2015 and for so far in 2016, we are the top ranked  
10 performer among all of its regional peers in this segment. The peer group  
11 includes two other Kentucky gas utilities.

12 Columbia considers the number of customer complaints brought to  
13 the Public Service Commission an important measurement tool in how it  
14 is serving its customers. In 2015, Columbia experienced the lowest num-  
15 ber of Public Service Commission customer complaints in the 18 years that  
16 it has been keeping this statistic. The 60 complaints in 2015 were in com-  
17 parison to an average yearly level of 87.

18 Columbia maintains a variety of customer payment options and is  
19 planning investments in 2017 to add ways for customers to communicate  
20 with us, including receiving alerts and notices, as well as paying bills,

1 through their mobile communication devices. In addition to existing tradi-  
2 tional payment channels, Columbia customers will still be able to pay  
3 their bills at Kentucky Kroger stores, Wal-Marts and other locations  
4 throughout our service territory, as well as in person at Columbia's Lex-  
5 ington headquarters.

6

7 **Q: Has Columbia improved other safety and reliability results since the**  
8 **2013 Rate Case?**

9 A: Yes, safety for customers, the public and our own employees is paramount  
10 to Columbia. Columbia has invested, and will continue to invest, its finan-  
11 cial resources and its management attention in developing programs, de-  
12 signing work activities and measuring results for improved safety.

13 Columbia's deployment of automated meter reading ("AMR") de-  
14 vices provides a more accurate meter reading process, saves meter read-  
15 ing expense and improves the safety of Columbia meter readers who no  
16 longer have to go inside customer homes and backyards. This use of tech-  
17 nology reduces risk for customers and employees alike.

18

19 **Q: What is Columbia doing to improve efficiencies in its business opera-**  
20 **tions?**

1 A: Columbia strives to build business efficiencies both into its capital and  
2 O&M planning. As stated in the testimony of Columbia witness Belle, Co-  
3 lumbia has targeted its AMRP implementation process with the benefit of  
4 computer assistance, combined with employee experience, to identify are-  
5 as of our pipeline system for main replacement and mitigate the increased  
6 costs of merely reacting to unplanned discoveries of priority pipe. Colum-  
7 bia also continues to work closely with state road officials, municipalities  
8 and counties to identify upcoming construction projects and road paving  
9 plans to coordinate projects and mitigate costly duplication of efforts. Co-  
10 lumbia has also developed improved cost-saving and timesaving response  
11 processes for employee scheduling and calling out its service employees  
12 for installations, repairs and emergencies. As previously stated, AMR de-  
13 vices are now in use across Columbia's territory.

14

15 **Q: You have described a number of on-going and proposed initiatives and**  
16 **improvements for Columbia customers. How will the rates for the gas**  
17 **commodity section on a customer's bill be affected by the proposed rate**  
18 **changes?**

19 A: The proposed rate changes will only affect a customer's gas commodity  
20 charges because the uncollectible accrual rate in Columbia's base rates is

1 changing. The cost of gas is not changing in this proceeding. The variable  
2 gas supply commodity cost can be a significant portion of a customer's bill  
3 depending on the commodity cost of natural gas. The charge for gas sup-  
4 ply costs (billed for usage on a per thousand cubic feet (Mcf) basis) will  
5 continue to be adjusted, subject to Commission approval, on a quarterly  
6 basis, without any markup by Columbia, and will not be impacted by the  
7 proposed rate changes in this proceeding.

8

9 **Q: What portion of the customer's bill will be affected?**

10 A: The proposed rate adjustment will affect the Customer Charge, Delivery  
11 Charge, and the riders as indicated in this proceeding. These charges are  
12 based on Columbia's costs of making gas available to customers, includ-  
13 ing main installations, line inspections, repair and maintenance, customer  
14 service, personnel, emergency responses and other operational expenses.

15

16 **Q: How will the current residential Customer Charge and Delivery Charge**  
17 **be affected by this case?**

18 A: Consistent with the 2013 Rate Case, the current AMRP rider will be rolled  
19 in to the monthly base rate revenue increase for each class of customers  
20 covered by the AMRP rider and the rider will be re-set to zero. This accu-

1 mulated amount since Columbia's last rate case is \$2.25 per month for res-  
2 idential customers. The rates designed to address the revenue requirement  
3 will be added to the monthly Customer Charge resulting in an increase  
4 from \$15.00 to \$19.75 per month for residential customers and the Gas De-  
5 livery Charge will be increased from its current level of \$2.2666 per Mcf to  
6 \$3.8668 per Mcf for residential customers. Although the proposed custom-  
7 er charge is \$4.75 higher than the current \$15.00 customer charge, custom-  
8 ers will only experience an increase of \$2.50 in fixed monthly charges be-  
9 cause of the AMRP monthly charge being re-set to zero. These rates are  
10 supported by the testimony of Columbia witness Balmert.

11

12 **Q: At the effective date of the proposed rates, how will Columbia's overall**  
13 **residential rates be impacted?**

14 A: While the actual impact to a specific residential customer's total bill will  
15 depend on the volume of gas used by that particular customer, local fran-  
16 chise fees and the like, under the proposed rates, including the re-set of  
17 the AMRP charge, a residential customer using an monthly average of 5.5  
18 Mcf, will experience, in the 2017 forecasted test period, a monthly increase  
19 of \$11.35, or 26.36%.

20

1 **Q: Does Columbia provide alternatives or assistance for low-income cus-**  
2 **tomers to pay their bills?**

3 A: Low income customers have a variety of help available for bill payment  
4 assistance. Columbia's Energy Assistance Program ("EAP") provides a  
5 fund of \$675,000 annually for this purpose. Columbia shareholders con-  
6 tribute \$175,000 and Columbia customers support it with \$500,000. The  
7 EAP is administered by the Community Action Councils in our service  
8 territory and supports up to 2,000 households who are at or below 130%  
9 of the federal poverty guidelines. Last winter 1,791 families were helped.  
10 In 2014-2015, 1,979 families received assistance. Winter Care is another  
11 program supported by donations from Columbia customers. Columbia  
12 shareholders match the contributions dollar for dollar up to \$20,500 per  
13 year, plus an additional \$10,000 per year.

14

15 **Q: Are there other assistance programs?**

16 A: Yes. The federal LIHEAP program is designed to help low income utility  
17 customers pay their bills. From October 2015 to April 2016, \$345,273.33  
18 was received through 2,507 payments to Columbia customers. From Octo-  
19 ber 2014 to May of 2015, \$538,474.85 was paid through 3,347 payments. In  
20 addition, since 2010, Columbia's Energy Efficiency and Conservation Pro-

1           gram, funded by customers, has helped over 878 low income Columbia  
2           gas customers (who are eligible based on incomes at or below 200% of the  
3           federal poverty guidelines) with a free replacement furnace when their  
4           furnaces were failing.

5

6   **Q:   Will Columbia continue to support its energy assistance programs for**  
7           **its low-income customers?**

8   A:   Yes, Columbia’s shareholders, customers and employees will continue to  
9           support these and other energy assistance programs, to help low-income  
10          families throughout Columbia’s service territory to help pay their gas  
11          heating bills.

12

13   **Q:   The Commission’s Order in the 2013 Rate Case requires Columbia to**  
14          **“submit an application seeking approval to continue its EEC Rider and**  
15          **Program [Energy Efficiency and Conservation Program] no later than**  
16          **February 29, 2016.” Has this occurred?**

17   A:   Yes. Columbia’s EEC is also sometimes referred to as its DSM Program  
18          (Demand Supply Management Program). Following discussions with the  
19          DSM Collaborative Group, Columbia is seeking an extension of its DSM  
20          Program in a separate Commission action in Case No. 2016-00107. Co-

1 Columbia's current DSM program was established in the 2009 Rate Case. The  
2 program currently consists of a three-part effort to provide home energy  
3 check-ups, rebates for high efficiency appliances and a program with the  
4 Community Action Council for low-income customers to replace failing  
5 gas furnaces with new gas furnaces. The proposed program in Case No.  
6 2016-00107 contains, and requests approval of, continuation of the three  
7 measures available to customers.

8

9 **Q: Are there any other outstanding matters from the 2013 Rate Case?**

10 A: Yes. On page six of the order in the 2013 Rate Case, the Commission stat-  
11 ed, "As part of the application when Columbia next seeks an adjustment  
12 in its base rates for gas service, Columbia should submit the results of its  
13 analysis on the threat of by-pass by its special contract customers."

14

15 **Q: What are the results of that analysis?**

16 A: As stated by Columbia witness Moul, large industrial and commercial  
17 customers represent 54% of the total of Columbia's gas throughput and  
18 have the ability to by-pass Columbia's facilities for other pipelines or en-  
19 ergy sources. Columbia witness Cooper addresses the results of this anal-  
20 ysis in her testimony.

1

2 **Q: What other matters since the 2013 Rate Case should be addressed.**

3 A: On July 9, 2015, the Commission sent a letter to Columbia regarding an  
4 explosion that took place at the Fairfield Inn in Lexington. The Commis-  
5 sion found, “no indications of compliance issues related to any Commis-  
6 sion enforced statutes or regulations.” The Commission went on to rec-  
7 ommend that, “Columbia review this incident to determine if there are  
8 any additional safety precautions which could be implemented to prevent  
9 this type of occurrence in the future.” The Commission also recommended  
10 that Columbia review the PHMSA proposed rules on excess flow valves  
11 (“EFVs”) to determine which procedures it will need to modify to be in  
12 compliance with the Rule once it becomes effective.”

13

14 **Q: Has Columbia reviewed the incident to determine if additional safety**  
15 **precautions can be implemented?**

16 A: Yes. Columbia takes the Commission’s recommendations very seriously.  
17 The Fairfield Inn incident is still in civil litigation. Immediately after the  
18 incident, Columbia began a review of its policies regarding meter protec-  
19 tion as prescribed by 807 KAR 5.022 Section 9(2)(a) and 49 CFR 192.353(a).  
20 Heightened awareness training is in place regarding meter locations.

1 Many factors can influence a specific location: the customer's building de-  
2 sign, desired visibility for emergency responders, lines of sights for driv-  
3 ers, distance from the vehicular way to the meter, the presence of struc-  
4 tures or other obstacles such as fences, landscaping or curbs, and the fre-  
5 quency and intensity of the nearby vehicular traffic. In the specific case of  
6 Fairfield Inn, the customer directed the meter to be replaced in the same  
7 location as before, and protective concrete posts (called "bollards") were  
8 erected during the re-installation of the meter.

9

10 **Q: What about protection for existing meters?**

11 A: Columbia is designing a study to ascertain the threat to pre-existing me-  
12 ters, the level of risk and mitigation alternatives for protection. The  
13 amount of \$50,000 is budgeted in the base period for this purpose. Co-  
14 lumbia witness Cote addresses the need for meter protection in his testi-  
15 mony.

16

17 **Q: Will Columbia's policy for installing excess flow valves be impacted by**  
18 **the new PHMSA rule?**

19 A: No. Columbia's polices already conform to the Rule.

20

1 **Q: What is the Columbia CHOICE program?**

2 A: The CHOICE program is referred to in Columbia's tariff as the Small Vol-  
3 ume Gas Transportation Service rate schedule and has been in existence as  
4 a pilot program since 2000. Under the program, Columbia customers may  
5 enroll as CHOICE customers and purchase their gas commodity from a  
6 registered gas marketer instead of from Columbia. Columbia files annual  
7 reports with the Commission showing the results of customers participat-  
8 ing in the CHOICE program.

9

10 **Q: Is Columbia proposing any changes in the CHOICE program in this**  
11 **case?**

12 A: No.

13

14 **Q: Do Columbia shareholders support community charitable agencies?**

15 A: Yes. During 2015, our shareholders contributed more than \$125,000 to  
16 charitable causes in its service territory and have donated more than one  
17 million dollars over the past decade. This annual level of giving is ex-  
18 pected to continue into the future, but is not a part of the revenue re-  
19 quirement for Columbia and Columbia is not seeking recovery of those  
20 contributions in base rates.

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**Q: Please introduce Columbia’s other witnesses and generally describe the subject of their testimony?**

A: Other Columbia witnesses providing direct testimony and supporting schedules are:

- Danny C. Cote, Vice-President of Pipeline Safety and Compliance for all NiSource gas operating companies, including Columbia, will discuss the Columbia system and address a number of federal pipeline safety regulations and what Columbia is doing to respond and comply with such regulations;
- Eric T. Belle, Director of Field Engineering for Columbia, will provide an overview of Columbia’s infrastructure system, the AMRP process, the capital budgeting process and Columbia’s performance in the execution of its capital plan;
- Kimra H. Cole, Vice-President and General Manager for Columbia, will address Columbia’s operating system, including its DIMP plan and other safety and operational issues;
- Judy M. Cooper, Director of Regulatory Affairs, will address Columbia’s proposals that include tariff revisions;

- 1 • William Gresham, Manager of Forecasting for NiSource  
2 Corporate Services Company, will provide support for the  
3 forecasted test period basis of customer counts and usage;
- 4 • Paul R. Moul, Managing Consultant of P. Moul & Associates,  
5 will present evidence regarding Columbia's cost of capital  
6 and recommend the appropriate rates of return for Colum-  
7 bia;
- 8 • Mark Katko, Manager of Regulatory Strategy and Support  
9 for NiSource Corporate Services Company, will provide  
10 support for the development of the rate base presented in  
11 this case;
- 12 • Jana T. Croom, Director of Regulatory Affairs for Columbia  
13 Gas of Ohio, will present the cost of service and revenue re-  
14 quirement;
- 15 • Brian J. Noel, Director of Operations Budgets for NiSource  
16 Corporate Services Company, will support Columbia's Op-  
17 erations & Maintenance budgets and certain filing require-  
18 ments;
- 19 • Mark P. Balmert, Director of Rates and Regulatory Services  
20 for NiSource Corporate Services Company, will address Co-

- 1                   Columbia’s revenue allocations across the various rate classes  
2                   and Columbia’s proposed rate design;
- 3                   • Chad E. Notestone, Manager of Regulatory Accounting for  
4                   NiSource Corporate Services Company, will present Colum-  
5                   bia’s allocated cost of services studies;
  - 6                   • John J. Spanos, a Senior Vice-President with the Valuation  
7                   and Rate Division of Gannett-Fleming, Inc. d/b/a Gannett-  
8                   Fleming Valuation and Rate Consultants, LLC, will sponsor  
9                   the depreciation study performed for Columbia in this pro-  
10                  ceeding;
  - 11                  • Melissa J. Bell, Lead Regulatory Analyst for NiSource Cor-  
12                  porate Services Company, will support the development of  
13                  revenues for both the base period and the forecasted test pe-  
14                  riod as well as the typical bill comparisons;
  - 15                  • Austin M. Schauer, Manager of Accounting, Special Studies,  
16                  for NiSource Corporate Services Company, will provide a  
17                  background on how NCSC supports Columbia and the allo-  
18                  cation of costs to Columbia; and,
  - 19                  • Panpilas W. Fischer, CPA, Tax Director of Corporate Income  
20                  Tax for NiSource Corporate Services Company, will provide

1 testimony to support the level of federal and state income  
2 taxes.

3

4 **Q: Does this complete your Prepared Direct testimony?**

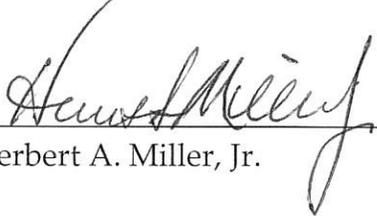
5 **A:** Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Herbert A. Miller, Jr., being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
Herbert A. Miller, Jr.

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Herbert A. Miller, Jr. on this the 18<sup>th</sup> day of May, 2016.



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
Notary Public

My Commission expires: MARCH 26, 2017

## COLUMBIA GAS OF KENTUCKY SAFETY LEADER PLEDGE

As a Safety Leader of Columbia Gas of Kentucky, (CKY), I am dedicated to maintaining a safe work environment and, at a minimum, will demonstrate my commitment to Safety in the following actions:

- I understand and embrace that Safety is a core value at NiSource and CKY, and commit myself to live by that value in everything I do.
- Helping lead NiSource and CKY to be "Premier" in safety culture and safety performance by committing to an incident free workplace - zero recordable injuries and vehicle collisions.
- I am responsible for my safety and the safety of others by not accepting any employee or business partner getting hurt while working at or for NiSource.
- I will demonstrate and act immediately, with sincere and general caring, if one of my employees or business partners gets hurt.
- I will not perform or permit an unsafe act. I will act with my teams to ensure all employees understand their responsibility and authority to stop work that appears unsafe. I will look for unsafe conditions and will fix them or report them.
- I will encourage and positively reinforce the safe behaviors of others.
- I will demonstrate myself to be a "Champion for Safety," and lead by example as a role model for the entire organization by:
  - Devoting a portion of every staff meeting to safety.
  - Expecting leaders to include a discussion of safety at their staff meetings.
  - Conducting or participating, when asked, in reviews of safety results, injuries, and vehicle collisions to understand root causes, lessons learned, and remedial/corrective actions.
  - At every opportunity, interacting with my fellow employees and business partners to ensure understanding of NiSource's safety expectations.
  - Wearing my seat belt at all times whether driving or as a passenger.
  - Pulling through parking spaces and backing into parking spaces upon arrival.
  - Assisting others when they are backing their vehicle.
  - Completing a proper 360° "circle for safety" before moving any motorized vehicle.
  - Using appropriate PPE, Personal Protective Equipment when on job sites.
  - Living "Speak-up for Safety."

Name (Print): \_\_\_\_\_

Signature: \_\_\_\_\_

Date Endorsed: \_\_\_\_\_

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
JUDY M. COOPER  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016** Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF JUDY M. COOPER**

1 **Q: Please state your name and business address.**

2 A: My name is Judy M. Cooper and my business address is Columbia Gas of  
3 Kentucky, Inc., 2001 Mercer Road, Lexington, Kentucky, 40511.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am the Director of Regulatory Policy for Columbia Gas of Kentucky, Inc.  
7 (“Columbia”). I am responsible for the management of Columbia’s regula-  
8 tory affairs, tariffs and filings with the Commission, including quarterly  
9 Gas Cost Adjustments. I am also responsible for Columbia’s local custom-  
10 er service functions.

11

12 **Q: What is your educational background?**

13 A: I obtained a Bachelor of Science Degree in Accounting from the University  
14 of Kentucky in 1982. In 1985, I received a Master’s Degree in Business  
15 Administration from Xavier University.

16

17 **Q: What is your employment history?**

18 A: I began my employment with the Kentucky Public Service Commission  
19 (“Commission”) as an auditor in 1982. Subsequently, I served as Rate

1 Analyst, Energy Policy Advisor, Branch Manager of Electric and Gas Rate  
2 Design, and Director of Rates, Tariffs and Financial Analysis at the Com-  
3 mission. In July of 1998, I joined Columbia as Manager of Regulatory Ser-  
4 vices. My job title has since been revised to that of Director, Regulatory  
5 Policy.

6

7 **Q: Have you previously testified before the Kentucky Public Service**  
8 **Commission?**

9 A: Yes, I have testified before the Kentucky Public Service Commission in  
10 five cases for Columbia: Case No. 2002-00117, *The Filing by Columbia Gas of*  
11 *Kentucky, Inc. to Require that Marketers in the Small Volume Gas Transporta-*  
12 *tion Program be Required to Accept a Mandatory Assignment of Capacity;* Case  
13 No. 2007-00008, *In the Matter of Adjustment of Rates of Columbia Gas of Ken-*  
14 *tucky, Inc.;* Case No. 2009-00141, *In the Matter of an Adjustment of Rates of*  
15 *Columbia Gas of Kentucky, Inc.;* Case No. 2010-00146, *An Investigation of*  
16 *Natural Gas Retail Competition Programs;* and Case No. 2013-00167, *In the*  
17 *Matter of Application of Columbia Gas of Kentucky, Inc., for an Adjustment of*  
18 *Rates for Gas Service.*

19

1 **Q: What is the purpose of your testimony in this proceeding?**

2 A: The purpose of my testimony is to support certain exhibits required by the  
3 Commission's regulations including the proposed modifications to Co-  
4 lumbia's tariff pages set forth in Schedule L according to 807 KAR 5:001  
5 Section 16-(1)(b)3 and 807 KAR 5:001 Section 16-(1)(b)4. My testimony will  
6 provide a narrative description and explanation of all the proposed tariff  
7 changes in compliance with 807 KAR 5:001 Section 16-(8)(l). The proposed  
8 revised tariff sheets are filed pursuant to 807 KAR 5:011. In addition, my  
9 testimony will address how Columbia proposes to revise its Accelerated  
10 Main Replacement Program Rider ("AMRP") to allow for consideration of  
11 expanded activity within the AMRP and the proposed rate change to the  
12 AMRP Rider. Finally, I will submit the analyses required by the Commis-  
13 sion's Order in Case No. 2013-00167<sup>1</sup> pertaining to the threat of by-pass by  
14 certain of Columbia's customers.

15

16 **Tariff Revisions**

17 **Q: What are the tariff changes that Columbia has included in Schedule L?**

---

<sup>1</sup> *Application of Columbia Gas of Kentucky, Inc., for an Adjustment of Rates for Gas Service, Order (December 13, 2013) at page 8.*

1 A: The changes proposed on Tariff Sheet Nos. 5, 6, 7, 11, 14, 22, 31, 38, 41, and  
2 70 are base rate changes. These changes are supported by the revenue re-  
3 quirement contained in the testimony of Columbia witness Croom and the  
4 rate design contained in the testimony of Columbia witness Balmert.

5 The change on Sheets 33 and 36 is to correct the title in the header.  
6 Tariff Sheet No. 58 contains rate changes and revisions to the AMRP Rid-  
7 er. The provision concerning Remote Meter Reading Devices on Tariff  
8 Sheet No. 67 is removed. On Tariff Sheet No. 73 there is an address  
9 change. Tariff Sheet No. 74 reflects changes to convert the returned check  
10 fee to returned payment fee and to correct a typographical error. Changes  
11 on Tariff Sheets 89, 91 and 92 are specifically to clarify the obligations of  
12 Columbia and transportation customers to ensure operational integrity of  
13 Columbia's system and update to the current naming conventions of the  
14 referenced indexes. Changes on Tariff Sheet 92a are necessitated by revi-  
15 sions on Tariff Sheet 92 exceeding the allowable space.

16

17 **Q: Why does Columbia propose to remove the provision for Remote Meter**  
18 **Reading Devices on Tariff Sheet No. 67?**

1 A: Columbia was authorized to deploy automated meter reading devices  
2 across its system in its last rate case<sup>2</sup>. Therefore this provision is no longer  
3 needed.

4

5 **Q: Why does Columbia propose to convert the Returned Check Fee on**  
6 **Sheet No. 74?**

7 A: The term “Returned Check Fee” is rather outdated in today’s terminology  
8 because many banks do not actually return checks any longer and cus-  
9 tomer payments may no longer be in the form of a check. 807 KAR 5:006  
10 Section 9(3)(g) has been revised to reference a “returned payment charge”  
11 and Columbia proposes to rename its “Returned Check Fee” to “Returned  
12 Payment Fee” in recognition of this change in the regulation and newer  
13 forms of customer payment.

14

15 **Q: What is the typographical error on Tariff Sheet No. 74?**

16 A: In the second paragraph, under the section entitled, “Billing Adjustment  
17 and Monitoring of Customer Usage,” about mid-way through the para-  
18 graph is a sentence that reads, “Company shall readjust the account based

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<sup>2</sup> Case No. 2013-00167, Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates for Gas Service, Order (December 13, 2013).

1 upon the period during which the error is know to have existed." The  
2 word "know" should be "known."

3

4 **Q: What specific modifications are being made to Tariff Sheet No. 89 to en-**  
5 **sure operational integrity?**

6 A: Columbia is adding a provision that allows it to designate alternative  
7 points of delivery and require Delivery Service Customer deliveries at  
8 other point(s) of receipt from time to time. There may be times when  
9 quantities that can be scheduled to Columbia's city gate are reduced due  
10 to restrictions on the upstream interstate pipeline. The alternate point(s) of  
11 receipt will provide Delivery Service customers an alternative point in  
12 which to schedule natural gas supplies.

13

14 **Q: Please provide an example.**

15 A: Columbia Gas Transmission, LLC ("TCO"), for example, due to the influx  
16 of Appalachian production, has more gas being produced in certain areas  
17 of its system than can be absorbed by the market and/or injected into stor-  
18 age. As a result, primarily during the summer months when demand is  
19 reduced, TCO has begun restricting the gas quantities that can be sched-

1           uled from Appalachian receipt points to the city gate through the issuance  
2           by TCO of an operational flow order.

3                     In order to assist its storage customers, which include Columbia,  
4           TCO has provided them with the ability to deliver gas quantities to an al-  
5           ternate designated point located outside of the restricted areas that simu-  
6           lates a city gate delivery. This enables the storage customers, as well as  
7           other shippers, to reduce quantities delivered at the city gate within the  
8           limitations set forth by TCO, while providing a means to deliver the re-  
9           mainder of the desired/required gas quantities to the alternate designated  
10          point, thereby minimizing the penalty exposure under TCO's operational  
11          flow order. While these restrictions by TCO have not yet occurred in Co-  
12          lumbia's service territory, it desires to incorporate this type of provision in  
13          its Tariff so that should this or some other instance occur, Columbia is not  
14          hindered from providing this alternate point to its Delivery Service cus-  
15          tomers.

16

17   **Q:   What other modifications have been made to Tariff Sheet No. 89 to en-**  
18   **sure operational integrity?**

19   A:   As more fully described below, Delivery Service customers are responsi-  
20   ble for purchasing and transporting their own supply of natural gas to Co-

1 Columbia's distribution system receipt points. A provision has been added to  
2 Tariff Sheet No. 89 that allows Columbia to move a customer back to the  
3 applicable Sales Service rate primarily due to the customer's failure to de-  
4 liver gas to Columbia for a period of at least five consecutive days. This  
5 should encourage Delivery Service customers to schedule gas appropri-  
6 ately and in accordance with the intent of the Tariff and should provide a  
7 mechanism for Columbia to take action in the event of non-delivery.

8

9 **Q: What specific modifications are made to Tariff Sheet No. 91 to ensure**  
10 **operational integrity?**

11 A: Paragraph B – Cash-Out and Paragraph D – Imbalances have been modi-  
12 fied to clarify the index pricing to be utilized, as well as taking into con-  
13 sideration purchases made by Columbia. Specifically, under the modified  
14 provisions, where Columbia is selling gas to a customer, the gas will be  
15 sold at the higher of: (1) 120% of the average index price plus applicable  
16 costs to the city gate; or (2) 120% of the highest city gate equivalent com-  
17 modity purchase by Columbia during the month. Similarly, for instances  
18 where Columbia is purchasing gas from a customer under these provi-  
19 sions, the purchase price will be the lower of: (1) 80% of the average index

1 price; or (2) 80% of the lowest city gate equivalent commodity purchase by  
2 Columbia during the month.

3

4 **Q: Why are these modifications necessary?**

5 A: Delivery Service customers are responsible for purchasing and transport-  
6 ing their own supply of natural gas to Columbia's distribution system re-  
7 ceipt points, and Columbia is expected to transport that gas on its distri-  
8 bution system. Columbia is not required, and does not plan its gas supply  
9 portfolio or operations, to have the firm upstream interstate pipeline  
10 transportation capacity necessary to supply gas quantities to these cus-  
11 tomers.

12 Columbia is proposing to modify the pricing under the Cash-out  
13 and Imbalance sections to financially direct Delivery Service customers to  
14 deliver gas quantities as intended under the Tariff. If the price signals are  
15 not adequate, Delivery Service customers may choose not to deliver  
16 knowing the gas being sold to them by Columbia is lower in price than  
17 what they could otherwise purchase in the marketplace. Likewise, should  
18 the index price be higher than the price Delivery Service customers are  
19 paying in the marketplace, they may over-deliver knowing Columbia will  
20 pay them at a price higher than their purchase price.

1           Each of these scenarios could cause operational issues and poten-  
2           tially jeopardize sales service customers – i.e., Columbia might have inad-  
3           equate supplies to cover the delivery deficiencies or might have to deal  
4           with the excess deliveries. Therefore, Columbia proposes to modify the  
5           Tariff to take into account the highest and lowest commodity purchases.  
6           This should provide the proper price signals and encourage Delivery Ser-  
7           vice customers to act appropriately and in accordance with the intent of  
8           the Tariff.

9

10 **Q:   What specific modifications are being made to Tariff Sheet No. 92 and**  
11 **why are they necessary?**

12 A:   Customers who have contracted for Standby Service have the ability to  
13       call on that service as a backup supply in the event their deliveries to Co-  
14       lumbia’s point(s) of receipt fall short of their consumption, assuming there  
15       are no interruptions or curtailments in place. The use of Standby Service  
16       would only occur in an under-delivery situation. Additional language has  
17       been added to Tariff Sheet No. 92 simply clarifying that standby sales  
18       quantities should only be considered during an under-delivery situation.

1

2 **Q: What change is Columbia proposing to its AMRP Rider?**

3 A: As explained in the testimony of Columbia witness Belle, Columbia pro-  
4 poses to expand the scope of its eligible AMRP projects to include various  
5 types of older plastic pipe susceptible to premature brittle-like cracking. In  
6 addition, as explained in the testimony of Columbia witness Cole, Colum-  
7 bia proposes to recover the cost of replacing meter families that fail its sta-  
8 tistical meter sampling program. The proposed provision to include meter  
9 replacement costs would be added to the AMRP Rider and combined for  
10 billing purposes.

11

12 **Q: What update to the AMRP revenue calculation does Columbia propose**  
13 **for the inclusion of older plastic pipe?**

14 A: No specific updates are necessary to the AMRP revenue calculation to in-  
15 clude older plastic pipe. Projects that replace eligible plastic pipe suscepti-  
16 ble to brittle-like cracking would be included in the same manner as pro-  
17 jects that replace other eligible types of pipe.

18

19 **Q: What update to the AMRP revenue calculation does Columbia propose**  
20 **to track the cost of required meter replacements?**

1 A: Columbia proposes to update the revenue requirement calculation on Tar-  
2 iff Sheet No. 58 to include the cost of meter replacements that are required  
3 by the Commission based upon the failure of a meter family. The cost of  
4 the new meters would be included in the same manner as other AMRP-  
5 related plant in-service. The associated operation and maintenance ex-  
6 pense would be separately included in the calculation of the AMRP reve-  
7 nue requirement. A meter family failure, if any, is reported to the Com-  
8 mission in Columbia's annual Meter Sampling Report. Pursuant to the  
9 Commission's Order in Case No. 2000-429,<sup>3</sup> the annual report contains the  
10 results of the statistical meter testing plan and identifies any meter family  
11 that fails, along with required plans for removal and replacement. The on-  
12 going cost of the meter sampling program itself and associated meter  
13 change-outs is included in base rates and would not be included.

14  
15 **Q: Why is it reasonable to include the cost of required meter replacements**  
16 **in the AMRP Rider revenue calculation?**

17 A: As explained in the testimony of Columbia witnesses Miller and Cole, the  
18 meter sampling program provides a savings to customers and has for

---

<sup>3</sup> *The Application of Columbia Gas of Kentucky, Inc., for Authority to Implement a Permanent Statistical Meter Sampling Plan for Residential, Industrial and Commercial Class Meters and for Authority to Deviate from 807 KAR 5:006, Section 25(5)(b), Order (February 26, 2001).*

1 many years. The performance record of meters indicates that predicting  
2 the failure of a meter family to be replaced in the forecasted test period  
3 could not accurately be expected to be included in Columbia's planning. It  
4 is therefore reasonable to preclude the cost of replacing any failed meter  
5 families in base rates and to instead provide a mechanism for future re-  
6 covery of such costs. Columbia proposes to provide this mechanism with-  
7 in the AMRP Rider because it is administratively more efficient

8

9 **Q: What is the purpose of the proposed rate change to Rider AMRP set**  
10 **forth on Tariff Sheet No. 58?**

11 A: The purpose of the proposed rate change in Rider AMRP is to reflect the  
12 roll-in of the AMRP charges to proposed base rates. Consistent with the  
13 intentions expressed in Case No. 2009-00141 wherein the Commission first  
14 approved Columbia's Rider AMRP, and the past practice in Case No.  
15 2013-00167, Columbia's currently effective AMRP charges will be "rolled-  
16 in" to base rates at the conclusion of this proceeding and the AMRP  
17 charge reset to zero as of the effective date for rates authorized in this  
18 case.

19

1 **Q: What are the proposed rates for Rider AMRP?**

2 A: The proposed Rider AMRP charges that would become effective for Janu-  
3 ary 2017 are \$0.00 per billing period for all rate schedules.

4

5 **Q: Do the proposed base rates include all forecasted AMRP additions**  
6 **through the end of the rate year 2017?**

7 A: No, the additions are only partially included in the proposed base rates  
8 because the forecasted test period uses a 13-month average of 2017 spend  
9 instead of the actual projected AMRP spend in 2017.

10

11 **Q: How does Columbia propose to address subsequent revisions to Rider**  
12 **AMRP charges?**

13 A: Subsequent revisions to Rider AMRP charges will follow the requirements  
14 set forth in the tariff, except that there will be no true-up of the 2016  
15 AMRP Rider on March 31, 2017. A filing to adjust Rider AMRP charges  
16 would only be submitted on March 31, 2017 if Columbia is required to re-  
17 place any failed meter families pursuant to the Meter Sampling Report  
18 that will be filed on the same date. On October 15, 2017, Columbia will file  
19 to update the projected AMRP program costs for calendar year 2018 and  
20 establish the charge to be effective January 2018. As was done subsequent

1 to the order in Case No. 2013-00167, Columbia will incorporate in that fil-  
2 ing, AMRP-eligible costs not included in its base rates as approved in this  
3 case. The AMRP cost of service not in base rates would be the difference  
4 between the projected calendar year 2017 AMRP spend and the 13 month  
5 average included in base rates.

6

7 **Q: What is the bypass threat analysis required by a prior Commission Or-**  
8 **der?**

9 A: The Commission's Order in Case No. 2013-00167<sup>4</sup> required that as part of  
10 its next application for an adjustment of its base rates, Columbia should  
11 submit its analyses of the agreement contained in the Stipulation and Rec-  
12 ommendation of all the parties to said case – i.e., to internally conduct and  
13 maintain studies that demonstrate the threat of by-pass of its special con-  
14 tract customers.

15

16 **Q: What is meant by the term “special contract customers?”**

17 A: As the term “special contract customers” is used in the Case No. 2013-  
18 00167, Columbia's special contract customers are customers that subscribe

---

<sup>4</sup> *Application of Columbia Gas of Kentucky, Inc., for an Adjustment of Rates for Gas Service, Case No. 2013-00167, Order (December 13, 2013) at page 8.*

1 to Rate Schedule DS – Delivery Service and are served under the Flex Pro-  
2 vision of Columbia’s Tariff. There are currently five such customers. The  
3 last one in the listing of customers is identified in Schedule M by the des-  
4 ignation SC, thus the colloquial reference, “special contract customers.”

5

6 **Q: What internal studies has Columbia conducted about the bypass threat**  
7 **of these customers and what is the result?**

8 A: Please see Attachment JMC-1 to my testimony.

9

10 **Q: Does this complete your Prepared Direct testimony?**

11 A: Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

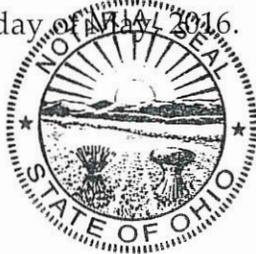
The Affiant, Judy M. Cooper, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

Judy M. Cooper  
Judy M. Cooper

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Judy M. Cooper on this the 18<sup>th</sup>  
day of APRIL, 2016.



CHERYLA. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

Cheryla MacDonald  
Notary Public

My Commission expires: MARCH 26, 2017

DELIVERY SERVICE RATE SCHEDULE  
BY-PASS THREAT ANALYSIS OF  
CUSTOMERS WITH FLEX RATE DISCOUNT

- Customer 1 – Flex agreement entered into July 2012, 5 year initial term expires July 2017. 30-day notice for annual roll-over. Assessment as of April 2016 is that customer volumes have decreased significantly and at current volumes, customer is effectively paying the non-discounted Delivery Service rate.
- Customer 2 – Flex agreement entered into June 2012, 5 year initial term expires June 2017. 60-day notice for annual roll-over. Assessment as of April 2016 is that customer volumes have decreased significantly and at current volumes, customer is effectively paying the non-discounted Delivery Service rate.
- Customer 3 – Flex agreement entered into May 2013. Based on diminishing by-pass threat, discounted rate is reduced each year until May 2017 when customer will be placed on the non-discounted Delivery Service rate.
- Customer 4 – Customer is served from dual-purpose line. Flex rate discount applies only to the Banking and Balancing charge. Customer pays non-discounted Mainline Delivery Service rate.
- Customer 5 - Customer is served from dual-purpose line. Flex rate discount applies only to the Banking and Balancing charge. Customer pays non-discounted Mainline Delivery Service rate.

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
KIMRA H. COLE  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016** Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF KIMRA H. COLE**

1   **Q:   Please state your name and business address.**

2   A:   My name is Kimra H. Cole and my business address is 2001 Mercer Road,  
3       Lexington, Kentucky, 40511.

4  
5   **Q:   What is your current position and what are your responsibilities?**

6   A:   I am the Vice President and General Manager for Columbia Gas of Ken-  
7       tucky, Inc. ("Columbia"). As Vice President and General Manager, my prin-  
8       cipal responsibilities include overseeing:

- 9       • The day-to-day operations of Columbia's physical gas piping sys-  
10      tems;
- 11      • Delivery of safe and reliable gas distribution service to our custom-  
12      ers;
- 13      • Leak detection, leak investigation, leak response, and leak repair  
14      activities;
- 15      • Customer metering activities;
- 16      • Plant operations and system regulation;
- 17      • All required leakage surveys and system inspections, testing and  
18      inspection of cathodic protection systems for steel facilities, and

1 performing underground facility locates for third-party excavators;  
2 and damage prevention activities;

- 3 • Field customer service to Columbia customers, including respond-  
4 ing to odor complaints, pilot light-ups, meter turn-ons and turn-  
5 offs, and all other customer interfacing field interactions.

6

7 **Q: What is your educational background and professional experience?**

8 A: I graduated from the University of Kentucky, earning a Bachelor of Science  
9 Degree in Chemical Engineering in 1987. I joined Columbia as an Industrial  
10 Marketing Engineer in 1987. While holding this position, I also earned my  
11 Master of Business Administration at the University of Kentucky. I held  
12 various management roles of increasing responsibility over a 15-year period  
13 with Columbia. I left the company in 2002 with the title of Director of Sales,  
14 Marketing, Engineering and Operational Services. In 2007 I joined Lexington  
15 Fayette Urban County Government in the role of Commissioner of General  
16 Services where I had the responsibility for Parks and Recreation, Fleets,  
17 Facilities and other shared functions for the City of Lexington for a four-year  
18 term. My next position was with the Kentucky Public Service Commission  
19 as the Director Engineering from 2011-2012. I then rejoined Columbia as the  
20 Operation Center Manager in 2012, and held that role until 2015 when I was

1 promoted to my current position as Vice-President and General Manager of  
2 Columbia.

3

4 **Q: Have you previously testified before any regulatory commissions?**

5 A: Yes, I have testified before the Kentucky Public Service Commission.

6

7 **Q: What is the purpose of your testimony?**

8 A: I will testify regarding Columbia's Distribution Integrity Management  
9 Program Plan ("DIMP Plan"), the strategic operation and maintenance  
10 ("O&M") activities that Columbia has undertaken to improve its system,  
11 the service it is providing to customers, and additional proposed O&M  
12 safety initiatives.

13

14 **Q: Please explain the nature of DIMP.**

15 A: DIMP is the federally mandated Distribution Integrity Management  
16 Program requirement that became effective for gas distribution operators on  
17 2/12/2010 (49 C.F.R. Section 192.1005); gas operators were required to  
18 develop a plan by 8/02/2011. This rule amended the Federal Pipeline Safety  
19 Regulations to require operators of gas distribution pipelines to develop and  
20 implement integrity management program plans. As a requirement of this

1 rule, operators must demonstrate “knowledge of the system” by gathering  
2 more detailed information on the design, operating conditions, and  
3 environmental factors necessary to assess the threats and risks to the  
4 integrity of the pipeline. The operator is required to evaluate and rank the  
5 top risks to its system and develop accelerated programs to demonstrate  
6 action in reducing risk.

7

8 **Q: What are the top threats and risks that Columbia has identified?**

9 A: Columbia has identified a number of threats to its distribution system that  
10 have been included as top ranked risks in its DIMP Plan. The most  
11 significant risk is in the area of third party excavation damage. Improper  
12 excavation, failure to notify the 8-1-1 damage prevention center, and poor  
13 locating associated with inadequate records are among the top threats to  
14 Columbia’s system. Third party damage is a leading cause of pipeline  
15 incidents in the United States. Most excavation damages result in an  
16 immediate hazard to the public safety due to the significant volume of  
17 uncontrolled gas that escapes when excavation damage occurs.

18 Another high risk to Columbia’s distribution system is leakage  
19 caused by corrosion leaks on bare steel pipe. Although not all corrosion  
20 leaks are classified as hazardous, any leak can become hazardous over time

1 due to changing environmental conditions, or as a result of increased  
2 volumes of gas escaping as a given leak grows larger over time. This is  
3 particularly an issue with corrosion leaks. Based on the number of leaks  
4 found on an annual basis, the risk associated with open leakage is a threat  
5 that Columbia continues to actively address.

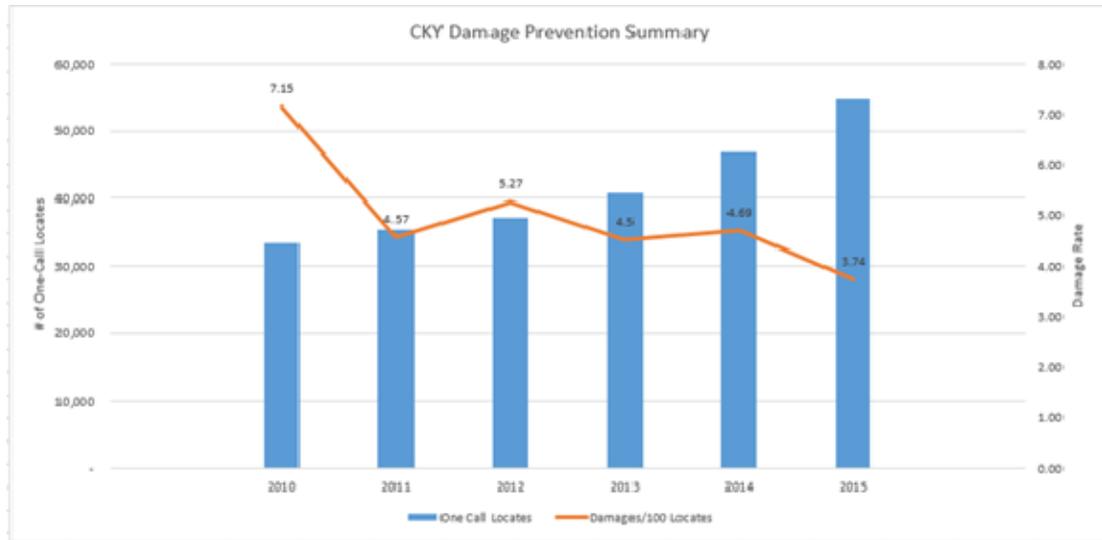
6 Another risk identified in Columbia's DIMP Plan is associated with  
7 cracked mains on cast iron pipe. When these types of leaks occur they tend  
8 to create an immediate hazardous condition due to the volume of escaping  
9 gas. Although Columbia does not have a large amount of cast iron footage  
10 remaining, this risk is considered a significant threat because it is very  
11 difficult to predict when and where a break may occur due to earth  
12 movement. Columbia is systematically replacing its cast iron pipe as part of  
13 its accelerated main replacement program ("AMRP").

14 Cross-bores are another risk identified in the DIMP plan. A cross-  
15 bore is an intersection of an existing underground utility with a second  
16 utility, resulting in direct contact with the existing utility. Gas utilities across  
17 the nation have seen an increase in cross-bores, mainly in situations where  
18 trenchless technology was used to install facilities.

19

1 **Q: How has Columbia improved its operating performance concerning the**  
2 **prevention of third party damage?**

3 A: Since 2006, Columbia has engaged in efforts to improve locating  
4 performance and excavator outreach as measured by a reduction in third-  
5 party damages per thousand locates. This process has included tighter  
6 management controls and more stringent performance standards for  
7 locators. Further, Columbia routinely conducts face-to-face meetings with  
8 excavators who are frequent damagers, to train their employees in safe  
9 excavating practices, as well as to remind them of the potential  
10 consequences of damaging natural gas facilities. As shown on the following  
11 chart, these efforts have resulted in a reduction in third party damage on the  
12 Columbia system between 2010 and 2015, from a damage rate of 7.15 per  
13 thousand locate requests in 2010 to a damage rate of 3.74 per thousand  
14 locate requests as of December 2015.



1

2

3

4

5

6

7

8

The 2015 damage rate is the best annual performance that Columbia has experienced since it began tracking this data. While Columbia is proud of its efforts to reduce third party damage, such damage still remains the leading threat for distribution system integrity. Indeed third party damage is the leading cause of federally reportable pipeline incidents (i.e., incidents resulting in death, injury requiring hospitalization, or property damage greater than \$50,000) in the United States.

9

10

11

12

13

Additionally, Columbia has added personnel in the field to support damage prevention efforts. We also encourage all of our employees to stop at any excavation site that does not have visible markings for locates to ensure that 811 has been called and our facilities have been located. Our damage prevention coordinators hold meetings with excavating companies

1 and educate contractor crews in safe excavating practices, and they also visit  
2 the job sites of frequent damagers.

3 We are currently hiring a Damage Prevention Front Line Leader that  
4 will be responsible for the day to day management of the internal locators,  
5 management of the contract with our third party locators, management of  
6 the damage prevention coordinators, participation in public awareness  
7 programs in Kentucky and continuous improvement in the general area of  
8 damage prevention. This increased focus will allow Columbia to continue to  
9 drive down our damage rate while improving public and employee safety.  
10 Moreover, we have continued to place increased focus on locating. In  
11 portions of our operating system we recently brought locating functions in-  
12 house in an attempt to lower our damage rate and to improve the available  
13 resources for emergency response. We will be evaluating the effectiveness of  
14 this over the upcoming year.

15

16 **Q: Is Columbia proposing any additional initiatives in this case to further**  
17 **address damage prevention risks?**

18 A: Yes. We have begun developing a Global Positioning System ("GPS") /  
19 Geographic Information System ("GIS") to collect the GPS coordinates of  
20 some of our new facilities associated with our AMRP. We are proposing to

1 expand this program to capture not only new facilities, but existing facilities  
2 that are considered legacy systems. This is a long-term project that will  
3 significantly change our ability to more efficiently and precisely locate our  
4 facilities. Columbia witness Cote further describes this proposed program in  
5 his testimony.

6

7 **Q: What efforts has Columbia taken to reduce risk associated with corrosion**  
8 **leakage?**

9 A: In addition to its accelerated infrastructure replacement program,  
10 Columbia performs an annual leakage survey on its bare steel and cast  
11 iron mains that have been identified as possibly having a higher leak risk.  
12 This effort goes beyond the requirements of federal code, which only  
13 requires a leakage survey every three years outside of business districts.  
14 Columbia continues to aggressively reduce the number of open leaks on  
15 its distribution system as measured by the Federal Department of  
16 Transportation report that Columbia submits annually.

17 Columbia repairs approximately 820 leaks annually on its  
18 distribution system and continues to closely manage the number of  
19 outstanding open leaks. The reason for this effort is that corrosion on bare  
20 steel is the second leading cause of pipeline incidents within the industry,

1 and although Columbia actively monitors all open leaks, the  
2 characteristics of any leak can change over time, introducing additional  
3 risks. Repairing leaks is an important part of maintaining safe and reliable  
4 service to customers.

5

6 **Q: Are there any additional changes that Columbia is making to improve its**  
7 **management of risks associated with corrosion leakage?**

8 A: Yes. We are in the process of hiring a System Operations Manager with  
9 responsibilities for leakage programs, corrosion programs, curb valve  
10 program, measurement & regulations and damage prevention. In the past  
11 the management of these functions has been a shared function with  
12 Columbia Gas of Ohio. Our new System Operation Manager will have  
13 responsibility for Kentucky operations only, reporting to me. This change in  
14 management will allow Columbia to more directly align its efforts with the  
15 risks in our DIMP plan and our daily operations.

16

17 **Q: What efforts has Columbia taken to reduce risk associated with cracked**  
18 **mains on cast iron?**

19 A: The replacement of the remaining cast iron in our system is being  
20 prioritized and coordinated as part of our ongoing AMRP.

1 **Q: Is Columbia proposing any initiatives in this case to address the risk of**  
2 **cross-bores?**

3 A: Yes. We are proposing a pro-active approach to finding cross-bores in our  
4 system. This program will be modeled after programs that are on-going in  
5 other NiSource gas distribution companies and is described in the testimony  
6 of Columbia witness Cote.

7

8 **Q: What are some ways that Columbia has improved customer service**  
9 **delivery?**

10 A: Emergency response rates are integral to public safety and quality customer  
11 service. Columbia continues to focus on improving its emergency response  
12 performance. In addition to the historical focus on improving its rate of  
13 response to emergencies within 60 minutes (an industry standard measure),  
14 Columbia has also begun measuring performance of response rates within  
15 45 minutes and setting improvement targets on the basis of this measure.  
16 The sooner the first Columbia responder arrives at a possible emergency, the  
17 quicker the situation can be stabilized, made safe, and ultimately  
18 remediated.

19 Columbia has undertaken a very structured approach to improving  
20 its emergency response times including additional off hours shifts, use of

1 GPS technology (allowing the dispatchers to identify the closest/quickest  
 2 responder when dispatching field technicians to emergencies), requiring  
 3 employee residency in remote areas to be closer in proximity to  
 4 customers, and driving an increased focus with all employees on the need to  
 5 respond to reported emergencies as quickly and as safely as possible.  
 6 Columbia collects detailed data on the steps impacting emergency response  
 7 times and segments emergency response performance data to make it more  
 8 actionable. An example of segmented data used to monitor performance and  
 9 identify improvement opportunities is displayed in the following table:

10 **Segmented Response Data**

|           |                                 |        |
|-----------|---------------------------------|--------|
| Day       | % of Priorities 60 Mins or Less | 99.43% |
|           | % of Priorities 45 Mins or Less | 96.66% |
|           | Average Response Time (Minutes) | 20.20  |
| Evening   | % of Priorities 60 Mins or Less | 96.80% |
|           | % of Priorities 45 Mins or Less | 87.51% |
|           | Average Response Time (Minutes) | 28.51  |
| Holiday   | % of Priorities 60 Mins or Less | 94.34% |
|           | % of Priorities 45 Mins or Less | 79.25% |
|           | Average Response Time (Minutes) | 32.72  |
| Overnight | % of Priorities 60 Mins or Less | 98.71% |
|           | % of Priorities 45 Mins or Less | 88.41% |
|           | Average Response Time (Minutes) | 29.28  |
| Weekend   | % of Priorities 60 Mins or Less | 94.26% |
|           | % of Priorities 45 Mins or Less | 84.29% |
|           | Average Response Time (Minutes) | 32.38  |
| Total     | % of Priorities 60 Mins or Less | 98.02% |
|           | % of Priorities 45 Mins or Less | 92.36% |
|           | Average Response Time (Minutes) | 24.27  |

1 **Q: Has Columbia implemented any operating changes in the interest of em-**  
2 **ployee and customer safety?**

3 A: Yes. Columbia has changed its practices for excavating around our own fa-  
4 cilities. When it comes to excavating around Columbia facilities, Columbia  
5 has historically interpreted KRS Section 367.4911 to only apply to other  
6 companies excavating around our facilities, not applying to Columbia as an  
7 “operator.” Columbia’s increased focus on the implementation of this stat-  
8 ute has changed our interpretation to include Columbia as both an “opera-  
9 tor” and the “excavator.” This change in our interpretation will result in an  
10 additional O&M cost for the expected increase in the unit hour average to  
11 complete jobs by hand digging within the tolerance zone of the marked fa-  
12 cilities.

13

14 **Q: Are there other operating changes that Columbia has implemented to im-**  
15 **prove safety?**

16 A: Yes, we are improving the manner in which we train our new employees.  
17 This includes building a new Safety Training Facility at our Lexington loca-  
18 tion along with a new training curriculum to meet the changing needs of our  
19 new employees and our industry. As referenced in Columbia witness Mil-  
20 ler’s testimony, the demographics and tenure of our field employees has

1 changed considerably. This shift has challenged us on how to better train  
2 and qualify our new employees in a timely manner to ensure we have the  
3 appropriate resources to meet our customer's needs. Columbia witness  
4 Cote's testimony describes the path that the other NiSource companies have  
5 taken to ensure that our employees are qualified to perform their daily job  
6 activities, including through Enhanced Operator Qualification (Enhanced  
7 OQ). Columbia has never experienced the need to hire the number of new  
8 employees that we are currently hiring in the workplace. The ongoing and  
9 increasing cost for the hiring, training and qualifying our employees is also  
10 captured in Columbia witness Croom's testimony.

11

12 **Q: Columbia has proposed tracked recovery for the meter replacement pro-**  
13 **gram as part of Columbia witness Cooper's testimony. Can you explain**  
14 **the reason for this request?**

15 A: Yes. Since 2001 Columbia has had a meter sampling program that has been a  
16 cost beneficial program for our customers. As part of this program, over the  
17 past two years we have experienced the failure of several meter families  
18 during the annual testing process. Our base rates include the cost of our me-  
19 ter sampling program. Being able to predict the number of failed meter  
20 families into the future is becoming uncertain. Due to this uncertainty, as

1 part of this case Columbia requests approval of tracked recovery to capture  
2 the actual cost of the meter changes so that we do not overestimate or un-  
3 derestimate the necessary cost in the future test year. This recovery mecha-  
4 nism will ensure the appropriate level of funding without any risk for the  
5 successful completion of the program, while maintaining the value for our  
6 customers of the current meter sampling program.

7

8 **Q: Are there any additional items that are being proposed that have a direct**  
9 **impact on Columbia’s field operations?**

10 A: Yes, as part of this filing we are asking for recovery of the capital expense of  
11 \$630,000 to purchase replacement Mobile Data Terminals (“MDTs”) for the  
12 front-line workers at Columbia. This includes the purchase and installation  
13 of 150 units across Columbia. Our current MDTs have been in use since  
14 2011-2012 and are no longer available to purchase replacement units or parts  
15 to make repairs. In addition, we are currently experiencing a failure rate on  
16 this units of 16% per year.

17

1 **Q: Why are you proposing all of the units to be replaced in April 2017 in-**  
2 **stead of phasing them in as failures in existing units occur?**

3 A: The new MDTs will require a different base to be installed in the vehicles.  
4 The base not only secures the MDT while in transit, it also provides the  
5 power source for the unit. The new MDTs are not compatible with the exist-  
6 ing base that is currently installed. Columbia assigns the MDTs to each em-  
7 ployee, but an employee will drive a variety of vehicles depending upon the  
8 work they are scheduled to perform. Therefore, it would create an ongoing  
9 issue if the MDTs were not operable in all of the vehicles.

10

11 **Q: Are there any benefits to the customer in the deployment of the new**  
12 **units?**

13 A: Yes, the new technology will provide us a faster boot-up time which will  
14 save minutes in responding to emergencies on evenings and weekends.

15

16 **Q: Does this complete your Prepared Direct testimony?**

17 A: Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Kimra H. Cole, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

*Kimra H. Cole*

Kimra H. Cole

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Kimra H. Cole on this the 19<sup>th</sup> day of May, 2016.

*Charlene Claire Mann*

Notary Public

My Commission expires: 04-25-2019



**Charlene Claire Mann**  
Notary Public, State of Ohio  
My Commission Expires 04-25-2019

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
DANNY G. COTE  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF DANNY G. COTE**

1 **Q: Please state your name and business address.**

2 A: My name is Danny G. Cote and my business address is 121 Champion  
3 Way, Suite 100, Canonsburg, Pennsylvania.

4  
5 **Q: What is your current position and what are your responsibilities?**

6 A: I am the Vice President of Pipeline Safety and Compliance for the gas distri-  
7 bution segment of NiSource Inc. ("NiSource"), and I am employed by  
8 NiSource Corporate Services Company. I am accountable for all leadership  
9 and direction for the Pipeline Safety and Compliance Organization for Co-  
10 lumbia Gas of Kentucky ("Columbia"), Columbia Gas of Pennsylvania, Co-  
11 lumbia Gas of Massachusetts, Columbia Gas of Maryland, Columbia Gas of  
12 Ohio, Columbia Gas of Virginia, and Northern Indiana Public Service Com-  
13 pany (NiSource's gas & electric affiliate in Indiana.). The responsibilities re-  
14 lated to this position include:

- 15 • Developing the strategic direction and processes to comply with the Federal  
16 Pipeline and Hazardous Materials Safety Administration ("PHMSA") man-  
17 dated Distribution and Transmission Integrity Management Programs.
- 18 • Developing damage prevention strategies for each business unit, and then  
19 support the implementation of those plans at the local level.

- 1 • Developing an integrated Global Positioning System (“GPS”) / Geographical  
2 Information System (“GIS”) mapping and system data capture process for  
3 the NiSource natural gas distribution segment.
- 4 • Assessing and prioritize the pipeline safety and compliance risks, needs, and  
5 opportunities across the NiSource gas distribution companies.
- 6 • Working with the gas operations management teams in each state and the  
7 NiSource Regulatory Strategy & Support Group to create policies and pro-  
8 cedures that clearly define and meet the requirements of the sections of state  
9 and federal code (Code of Federal Regulation (“CFR”) 49 parts 190 to 195),  
10 that govern natural gas distribution, transmission, and liquefied natural gas  
11 (“LNG”) plant design, construction, operations and maintenance, and  
12 NiSource expectations for field execution of operations activities.
- 13 • Investigating major issues, events, and incidents that occur in the NiSource  
14 natural gas distribution segment.
- 15 • Serving as a NiSource gas distribution companies liaison with state and fed-  
16 eral pipeline safety regulators.

17

18 **Q: What is your educational background?**

19 A: I attended the University of Southern Maine. Further, earlier in my career I  
20 participated in a number of IGT (Institute of Gas Technology) courses on

1 Distribution Operations and attended both industry and federally  
2 sponsored courses and seminars on pipeline safety processes, and on  
3 understanding an interpretation of federal code (CFR 49 Parts 190 through  
4 195).

5 In addition, from 1976 to 1982 I attended the Annual Northeast Gas  
6 Association Operations School where I took a number of classes that were  
7 specifically targeted to Gas Distribution Operations. The Northeast Gas  
8 Association Operations School provided specific course tracks on major gas  
9 operations disciplines (Gas Distribution, Customer Service, Gas Regulation,  
10 etc.), addressing both basic and advanced training needs. The Northeast Gas  
11 Association is made up of member Gas Distribution Companies from  
12 Maine, New Hampshire, Massachusetts, Rhode Island, New York, New  
13 Jersey, and recently a number of companies from Pennsylvania.

14

15 **Q: Please describe your membership in, or affiliation with, any industry**  
16 **organizations.**

17 A: My industry affiliations include: Past Chairman of the Board, New Eng-  
18 land Dig Safe; Past Chairman of the Northeast Gas Association Operations  
19 Management Committee; Past Chairman, Northeast Gas Association Plas-  
20 tic Joining Qualifications Task Force; Past Chairman, Northeast Gas Asso-

1           ciation Operator Qualifications Task Force; Voting member of the Ameri-  
2           can Society Mechanical Engineers B31Q (Operator Qualification) Commit-  
3           tee; Past Member, American Gas Association Construction and Mainte-  
4           nance Committee; Member, Society of Gas Operators; Member, New Eng-  
5           land Guild of Gas Managers, and most recently, a member of the Execu-  
6           tive Steering Committee of the Virginia Gas Operators Association.

7                     In addition, I am currently the Vice-Chairman of the Virginia State  
8           Corporation Commission Damage Prevention Advisory Council, a Mem-  
9           ber of the Pennsylvania Energy Association Enhanced Operator Task  
10          Force, and Chair the VGOA (Virginia Gas Operators Association) En-  
11          hanced Operator Qualification Task Force, and am on the board of Direc-  
12          tors of the VGOA. I am routinely a guest speaker at Midwest and South-  
13          ern Gas Association meetings, and recently gave a technical paper at the  
14          2016 Southern Gas Association Meeting on Safety Management Systems  
15          and non-punitive self reporting.

16                    Finally, I have presented numerous papers at industry meetings  
17          and seminars on subjects including: plastic fusion qualification programs,  
18          first generation pipe replacement strategies, The PHMSA mandated Dis-  
19          tribution Integrity Management Program, third party damage reduction,  
20          enhanced operator qualification compliance strategies, radio frequency

1 identification and hi-accuracy GPS pipe locating technologies, Distribu-  
2 tion Integrity Management Program (“DIMP”) Asymmetrical Risk Analy-  
3 sis and Risk Reduction Strategies, and other gas distribution operations  
4 related subjects.

5

6 **Q: What is your employment history?**

7 A: I joined the Maine Division of Northern Utilities (“Northern”) in 1972 and  
8 throughout the 1970s, I held a variety of engineering and operations lead-  
9 ership positions, becoming directly accountable for Northern Utilities  
10 Maine distribution system in 1981. In this role, I directed all construction  
11 and maintenance activities related to Northern’s Maine underground pip-  
12 ing system, the system pressure regulators, and LNG/LP peak shaving fa-  
13 cilities necessary to deliver a continuous and reliable supply of natural gas  
14 to the customers in Maine.

15 Throughout the 1980s and 1990s, I held a number of operations  
16 management roles of increasing responsibility for Northern and Bay State  
17 Gas Company (“Bay State”) (now d/b/a Columbia Gas of Massachusetts),  
18 and from 1995 to 1998 served as Director of Distribution for Bay State and  
19 Northern Utilities. (Beginning in 1980, Northern Utilities became a wholly

1 owned subsidiary of Bay State Gas, but operated as a separate entity until  
2 1988 when the management of the two companies was integrated.)

3 Subsequently, I served as General Manager for Bay State's northern  
4 region, which includes Bay State's Merrimack Valley service area in Mas-  
5 sachusetts, as well as VP and General Manager of Northern Utilities in  
6 Maine and New Hampshire. After that, I served as Vice President of Op-  
7 erations, then General Manager for Bay State, and Northern Utilities. In  
8 my most recent prior position, I served as General Manager of Columbia  
9 Gas of Pennsylvania, Columbia Gas of Virginia, and Columbia Gas of  
10 Maryland (an officer level position).

11

12 **Q: Have you previously testified before any regulatory commissions?**

13 A: Yes, I have testified before the Massachusetts Department of Public Utili-  
14 ties, the New Hampshire Public Utilities Commission, the Maine Public  
15 Utilities Commission, the Pennsylvania Public Utility Commission, the  
16 Maryland Public Service Commission, the Virginia State Corporation  
17 Commission, and the Indiana Utility Regulatory Commission.

18

1 **Q: What is the purpose of your testimony?**

2 A: I describe Columbia's distribution system, and will speak to a number of  
3 changes to federal pipeline safety requirements that have been mandated  
4 or re-interpreted (and several that are currently proposed) that will affect  
5 Columbia going forward. Further, from a high level, I will discuss gas sys-  
6 tem safety risks that are being quantified and remediated around the  
7 country, and highlight those that could impact the Columbia system. In  
8 addition, I will discuss the creation of NiSource/Columbia Pipeline Safety  
9 and Compliance Organization (the over-sight of which I am currently re-  
10 sponsible for), new pipeline safety rules, and the planned system en-  
11 hancements to Columbia's 2016 operations and beyond. These planned  
12 Kentucky system enhancements include GPS locates, cross-bore locating  
13 initiatives, and the construction of a training center at our Columbia  
14 headquarters in Lexington.

15

16 **OVERVIEW OF COLUMBIA'S DISTRIBUTION SYSTEM**

17 **Q: Please describe Columbia's distribution system.**

18 A: Currently, in Kentucky, Columbia serves approximately 135,000 resid-  
19 ential, commercial, and industrial customers in 30 counties throughout its  
20 service territory. Columbia provides that service through approximately

1 2,574 miles of mains and associated services (a service is the line that con-  
2 veys natural from the gas main to the structure being served), that it owns,  
3 operates, and maintains. These facilities (as of January 1, 2016) are com-  
4 posed of approximately 402 miles of bare steel, 15 miles of cast or wrought  
5 iron, and 66,781 bare steel services.<sup>1</sup> Over the last few years, Columbia has  
6 reduced its inventory of cast iron to the point that Columbia only has 15  
7 miles remaining, which constitutes less than 1% of the Columbia system.  
8 The balance of the system is comprised of coated cathodically protected  
9 steel, or plastic (polyethylene) mains and services, and 4.5 miles classified  
10 as “other.”

11 Columbia’s distribution infrastructure constitutes the final step in  
12 the delivery of natural gas to customers from the producing regions of the  
13 southern United States, western Canada, Pennsylvania, West Virginia,  
14 and Kentucky. In fact, in some parts of Columbia’s eastern service territo-  
15 ry, gas from local production wells is fed directly into the Columbia sys-  
16 tem without the necessitating an interstate pipeline to make the delivery.  
17 Columbia distributes natural gas to customers by taking it from delivery  
18 points (either “city gate” stations along interstate pipelines or local pro-  
19 duction facilities), then steps down the transmission pressure to local dis-

---

<sup>1</sup> The terms “bare steel,” “unprotected coated steel” and “unprotected steel,” are used inter-

1       tribution pressure, further filters the gas to remove moisture and particu-  
2       lates that may damage Columbia’s system, and then in some cases in-  
3       creases the amount of odorant known as mercaptan (the “rotten egg  
4       smell”) to the natural gas before it is put into the distribution system.

5               The gas then goes into the Columbia distribution system where the  
6       pressure is often further reduced to delivery pressure in a series of district  
7       regulator stations, before being delivered to each customer. Once the gas  
8       is delivered to the customer’s side of the meter, it is owned by the custom-  
9       er and becomes the responsibility of the customer. In sum, Columbia’s dis-  
10      tribution system moves relatively small volumes of natural gas at lower  
11      pressures over shorter distances to a far greater number of individual us-  
12      ers than its interstate pipeline counterparts.

13

14   **Q: Please describe the creation of NiSource’s Pipeline Safety and**  
15   **Compliance Organization.**

16   A: In early 2012, NiSource determined that it was critical in today’s natural  
17   gas distribution operating environment to create a department with the  
18   specific focus of pipeline safety and compliance. On May 1, 2012, I was

---

changeably and all refer to steel pipe without cathodic protection that is susceptible to corrosion.

1 named Vice President of NiSource's newly created Pipeline Safety and  
2 Compliance Organization.

3

4 **Q: What goals and responsibilities fall under NiSource's Pipeline Safety**  
5 **and Compliance Organization?**

6 A: This department is charged with the following: assessing and prioritizing  
7 risks and opportunities; developing state-specific pipeline safety  
8 assessments and collaborative strategies; developing a comprehensive  
9 GPS deployment plan for the NiSource operating companies; planning  
10 and executing legacy cross-bore programs (where needed); carrying out  
11 routine field and office audits of business operations execution to insure  
12 compliance with Federal Code, and NiSource Policies and Procedures;  
13 and devising strategies to reduce third-party damage.

14 Additionally, this department develops standards, interprets state  
15 and federal pipeline safety regulations, and works closely with the  
16 Columbia operations department overseen by Columbia witness Cole to  
17 develop processes to ensure compliance, and coordinate with and provide  
18 support for Columbia's accelerated infrastructure replacement program.  
19 Further, this department is charged with developing and maintaining  
20 relationships with state and federal regulatory agencies, in administering

1 the Transmission Integrity Management Plan (first mandated by PHMSA  
2 in 2003), and the DIMP Rule mandated in 2011 by PHMSA.

3

#### 4 **PIPELINE SAFETY RULES AFFECTING NISOURCE AND CUSTOMERS**

##### 5 *Recently Effective Rules*

6 **Q: Please describe the pipeline safety rules and advisories materially**  
7 **affecting Columbia that are currently in effect.**

8 A: Some of the more significant and impactful Final Rules that have gone  
9 into effect in the last several years are as follows:

- 10 • Control Room Management (76 Federal Register (“FR”) 35130) -  
11 This rule requires that Operators define the experience  
12 requirements, create training programs, and establish clear roles  
13 and responsibilities for Control Room Operators. (Control rooms  
14 are the physical locations where gas supplies are dispatched to  
15 locations around the system based on demand, and where  
16 pressures and flows throughout the system are continuously  
17 monitored.) Further, the rule mandates that appropriate shifts, and  
18 maximum hours of work be established for control room  
19 operations.

- 1 • Mechanical Fitting Failure Reporting Requirements (76 FR 5494) -

2 This final rule is an amendment to PHMSA's regulations involving  
3 DIMP. This final rule revises the pipeline safety regulations to  
4 clarify the types of pipeline fittings involved in the compression  
5 coupling failure information collection; changes the term  
6 "compression coupling" to "mechanical fitting"; aligns a threat  
7 category with the annual report; and clarifies the Excess Flow Valve  
8 ("EFV") metric to be reported by operators of gas systems. It also  
9 requires that operator report file an annual Mechanical Fitting  
10 Failure Report that describes the mechanical filling failures that it  
11 experienced in the prior year, including fitting type and  
12 manufacturer.

- 13 • Integrity Management Program for Gas Distribution Pipelines (74

14 FR 63906) - This final rule amends the Federal Pipeline Safety  
15 Regulations to require operators of gas distribution pipelines to  
16 develop and implement integrity management ("IM") programs.  
17 The IM programs required by this rule are similar to those required  
18 for gas transmission pipelines, but tailored to reflect the differences  
19 in and among distribution pipelines. This rule has direct impact on  
20 Columbia's system and customers because a system risk

1 assessment produced the programs that are underway or planned

2 for 2016 and beyond and include:

3 ○ The Bare Steel and Cast Iron replacement program

4 ○ The Damage Prevention Risk Model

5 ○ The Legacy GPS Program

6 ○ The Cross-Bore Program

7 ○ Transmission MAOP validation

8 ○ Enhanced Operator Qualification Program

9 Further, the rule mandates that operators prioritize the risks to their  
10 system, then develop and implement a prioritized plan to address the  
11 most significant risks identified in the plan (as identified above).

12

13 **Q: Can you further explain what NiSource (including Columbia) is doing**  
14 **to implement its IM program?**

15 **A:** Yes, below I explain some of the more critical elements of IM plan for  
16 NiSource, which includes Columbia in Kentucky.

17

18

1 *GPS*

2 **Q: Please describe the history of locating natural gas facilities and the**  
3 **recent impact of NiSource/Columbia's GPS program.**

4 A: In order to fully understand the impact the GPS new technology, it  
5 should be remembered that for most of the history of the natural gas dis-  
6 tribution industry, approximately 150 years, the primary way of locating  
7 pipe was simply using a measuring tape from a known fixed point. Then,  
8 in the 1960s electronic pipe locators began to be used to find facilities by  
9 impressing an electrical current on a pipe or tracer wire and then follow-  
10 ing that signal to trace the location of the pipe underground.

11 In late 2012, NiSource began partnering with the Gas Technology  
12 Institute to test the newly developed GPS/bar-coding facilities identifica-  
13 tion solution designed to provide sub-decimeter accuracy in identifying  
14 the location of new or replacement facilities. To define fully the two types  
15 of technology, bar coding is simply the ability to scan a pipe or fitting  
16 through the use of a bar-code and from that derive all of the operational  
17 specifications and manufacturer of the pipe or fitting in a single process.  
18 GPS is the ability to use enhanced satellite technology to identify buried  
19 facilities using the X, Y, and Z axis orientation to determine its precise lo-  
20 cation on the earth, plus or minus three inches.

1           In 2013-14, NiSource initiated pilot programs in several of its state  
2           operating companies to test and perfect this technology as it applied to  
3           distribution system data capture. Further, the processes were developed  
4           to test the quality of that data and to develop protocols for how it would  
5           be used going forward to positively impact pipeline safety. The result of  
6           this activity was NiSource’s strategic determination that this GPS pro-  
7           gram would likely be a breakthrough technology for the industry to bet-  
8           ter identify and retrieve pipe location data in the future.

9  
10   **Q:    What is Columbia’s plan for GPS for 2016 and into the future?**

11   A:    The plan for Columbia is to begin implementing this new technology in  
12    2016 that would encompass both current construction activities, including  
13    new and replacement construction, and the “legacy” capture of existing  
14    system location data. Capturing GPS data during current construction  
15    would simply entail the use of a GPS mast to physically identify the loca-  
16    tion of the pipe before it is buried, at 6 to 10 foot intervals. In addition, any  
17    fittings, service line tees, or other main appurtenances, such as valves or  
18    anodes, would be identified in this process also.

19           For the legacy capture process, the same basic electronic locating  
20    technology that was discussed above will be used to identify current fa-

1 cilities, then those locations will be permanently captured through the  
2 GPS process. One other benefit of the GPS technology is that it is unnec-  
3 essary to take the GPS data and manually transpose it onto maps. The  
4 GPS data downloads itself directly onto the NiSource GIS. Thus, this data  
5 transfer can be performed much more quickly, and without the risk of  
6 human error that occurs when large quantities of data are transposed.

7 GPS provides Columbia with an advanced technology that allows  
8 Columbia to more accurately identify all of the components that it has in  
9 the field, and physically locate facilities in the field to within 3 inches of  
10 actual location. Therefore, once this new technology is fully implement-  
11 ed, the GPS system will provide locators and other operating personnel  
12 with a highly accurate, state-of-the-art ability to find facilities (including  
13 mains, services, and valve locations) anywhere in the system that have  
14 been captured using this technology. Thus over time, using this highly ef-  
15 fective technology, GPS will ultimately eliminate the risks related to im-  
16 precise records. Columbia proposes to spend approximately \$770,000 in  
17 incremental annual O&M in 2017 to accelerate this GPS effort.

1 *Cross-Bores*

2 **Q: Can you explain what a cross-bore is and why it constitutes a risk to**  
3 **pipeline safety?**

4 A: For most of the industry's history, pipe was installed by digging trench  
5 and laying the pipe (cast iron, steel, plastic) in the trench. As infrastructure  
6 was built in towns and cities, including roads, sidewalks, and tree belts, it  
7 became increasingly expensive to install new or replaced facilities in these  
8 built up areas of communities. As a result, a new form of pipe installation  
9 was created that was called trenchless installation. Trenchless installation  
10 occurred when, instead of digging a trench and laying the pipe, a whole  
11 was punched through the ground from a launching pit to a receiving pit  
12 on the other side and a gas pipe was pulled back through without having  
13 to dig a trench. This became a preferred installation in areas of existing  
14 infrastructure because it did not necessitate expensive road repairs or  
15 disrupt traffic.

16 A number of years later, however, a problem with this practice  
17 became apparent, and the problem was that in the course of driving these  
18 pipes across the street, unbeknownst to the operator, sewer lines were  
19 penetrated, leaving a gas line sitting inside a sewer or storm drain line.  
20 These lines would often sit for a number of years until the sewer or storm

1 drain line ultimately plugged and backed up, blocking the flow of the  
2 sewer or storm drain. A normal response by the homeowner or  
3 municipality would ordinarily be to use a roto roter to clean out the  
4 sewer. When that happened, the roto roter equipment sometimes cut the  
5 gas line, resulting in gas leaking into the sewer or storm drain, and  
6 flowing into the structures that served the sewer or storm drain served.  
7 These situations would tend to create an immediate and potentially  
8 hazardous public safety situation.

9

10 **Q: What is NiSource doing to alleviate this risk?**

11 A: All NiSource operating companies, including Columbia, have two  
12 different ways of addressing this type of risk. First, for current  
13 construction activities (new and replacement construction), NiSource's  
14 operating company procedures require that either test holes be dug on  
15 any utility in the path of a cross-bore to assure damage does not occur, or  
16 pertaining to sewer and storm drain lines, that those facilities be inspected  
17 via camera (both before and after construction) to assure that a cross-bore  
18 has not been created.

19 The second way cross-bores are addressed is through a legacy  
20 review program where locations that were historically installed using

1 trenchless technologies are visited and inspected using remote camera  
2 technology in sewers and storm drains to assure that a cross-bore does not  
3 exist. In 2017, Columbia plans to begin identifying potential cross-bore  
4 locations in Kentucky and then inspecting these legacy sites. Specifically,  
5 Columbia will spend \$500,000 to launch this program and maintain at  
6 least that run rate throughout the duration of the program.

7

8 *Training Facility / Enhanced Operator Qualification*

9 **Q: Columbia witness Miller's testimony references a new training facility**  
10 **Columbia proposes to build. Why is a new training facility necessary at**  
11 **this time?**

12 A: There are several trends occurring in the gas industry that necessitate an  
13 increased focus on training and qualification of employees. First, and most  
14 impactful, there have been a number of incidents in the United States that  
15 resulted in explosions and loss of life that were caused by gas company or  
16 contractor personnel failing to execute specific tasks according to proce-  
17 dures. Secondly, the continually technical demands of successful gas dis-  
18 tribution operations are requiring a higher level of knowledge and train-  
19 ing than has been historically necessary. Third, as referenced in Columbia  
20 witness Miller's testimony, we are seeing a substantial migration of our

1 experienced workforce (many of them Baby Boomers) into retirement, and  
2 thus are faced with training a new generation of gas operations employ-  
3 ees. Historically, our employees have been experiential learners, perhaps  
4 taking 5-10 years of on the job training to truly become proficient. Today's  
5 learners are generally more information technology savvy and are able to  
6 more easily learn by pulling up and reviewing files or procedures on a  
7 laptop or other smart device.

8

9 **Q: How does the training facility meet the needs of a technically proficient**  
10 **qualified workforce?**

11 A: Through the use of both enhanced technology learning tools and strong  
12 simulated emergency training activities to take place in a controlled envi-  
13 ronment (which would be part of the training facility), coupled with supe-  
14 rior information tools that will be deployed in the field with these new  
15 employees and allow them to quickly reference procedures or training  
16 material, we believe we can reduce the training cycle to achieve proficien-  
17 cy over 2-3 year period as compared to the 5-10 year period that was the  
18 historical norm.

19

1 **Q: What is NiSource doing to ensure that it is able to deploy competent**  
2 **and qualified employees and contractor personnel in the field?**

3 A: In some states served by NiSource we have had regulators express con-  
4 cerns about what they believed to be shortcomings in structural industry  
5 operator qualification programs. As a result of these concerns, for exam-  
6 ple, Columbia's affiliate, Columbia Gas of Virginia and other Virginia gas  
7 operators partnered with the Virginia State Corporation Commission  
8 pipeline safety staff to develop a comprehensive enhanced operator train-  
9 ing and qualification program that would bring much more academic and  
10 skill rigor to the training and qualification process. It is NiSource's expect-  
11 ation that this enhanced training and operator qualification program will  
12 be deployed across all of its operating companies, including Columbia in  
13 Kentucky. NiSource is currently deploying this enhanced training and op-  
14 erator qualification program in Virginia, Massachusetts, and Pennsylva-  
15 nia. The implementation of this enhanced training and operator qualifica-  
16 tion program will be carried out in the training centers that are currently  
17 being designed or built in each of those states, including at the training fa-  
18 cility Columbia is proposing in this case.

19

20

1 *Meter Protection*

2 **Q: Does Columbia intend to study the need for meter protection?**

3 A: Columbia inspects each of its meters at least once every three years as part  
4 of its annual leakage survey. Along with meter inspections for leakage,  
5 Columbia plans to focus an analysis on the need for meter protection at all  
6 of its meter locations over the next three years. The fact is that over time  
7 conditions can change such that meter protection might be necessary to  
8 protect a meter now when at the time the meter was installed protection  
9 might not have been necessary. This tact is cost efficient as it allows Co-  
10 lumbia to avoid the incremental expense of an additional site visit to gath-  
11 er data about meter set protection. The only added cost would be the cap-  
12 ture of the riser/barrier risk data, and incremental costs associated with  
13 remediating any findings. Additionally, by spreading out the analysis  
14 over three years, it may free up funding to install barriers at the locations  
15 identified as having the greatest risk each year as well as spread out  
16 awareness of remediation needs over a longer period.

17

18

1 *Proposed/Pending Rules*

2 **Q: Are there also proposed rules at PHMSA likely to affect NiSource as**  
3 **well as Columbia’s customers?**

4 **A:** Yes. In addition to the final rules above, there are several proposed rules  
5 at PHMSA that NiSource believes are likely to be finalized and  
6 implemented in the next 12 months in a form similar to currently  
7 proposed. Those currently pending at PHMSA rules include:

8 • Pipeline Safety: Pipeline Damage Prevention Programs - This  
9 Rulemaking revises the Pipeline Safety Regulations to: establish  
10 criteria and procedures for determining the adequacy of state  
11 pipeline excavation damage prevention law enforcement programs;  
12 establish an administrative process for making adequacy  
13 determinations; establish the Federal requirements PHMSA will  
14 enforce in states with inadequate excavation damage prevention  
15 law enforcement programs; and establish the adjudication process  
16 for administrative enforcement proceedings against excavators  
17 where Federal authority is exercised.

18 • Expanding the Use of Excess Flow Valves (“EFV”) in Gas  
19 Distribution Systems to Applications Other Than Single-Family  
20 Residences (PHMSA 2011-0009 RIN 2137-AE71) – The National

1 Transportation Safety Board has made a safety recommendation to  
2 PHMSA that excess flow valves be installed in all new and renewed  
3 gas service lines, regardless of a customer's classification, when the  
4 operating conditions are compatible with readily available An EFV  
5 is a device that is typically installed on the gas service at the main  
6 and acts like a circuit breaker in a home electrical system. In the  
7 event of a surge in gas pressure (typically associated with a service  
8 line broken by an excavator), the excess flow valve would  
9 immediately stop the flow of gas in the service. This will make  
10 Columbia's system safer going forward, because any mid-size  
11 commercial or industrial customer whose service line is  
12 significantly damaged or severed will have the gas immediately  
13 shut off instead of having the gas continue to leak until Columbia  
14 personnel can respond and shut the service off manually. Because  
15 Columbia has identified EFV for quite some time as an industry  
16 best practice, Columbia has already modified its procedures to  
17 require these EFVs and is currently installing them. Thus,  
18 notwithstanding additional regulations from PHMSA, Columbia  
19 would expect to be already compliant with any new rule in this  
20 area.

- 1           • Safety of Gas Transmission Pipelines (PHMSA 2011-0023 RIN 2137-  
2           AE72) – PHMSA has issued a notice of proposed rulemaking on  
3           changes to the regulations governing the safety of gas transmission  
4           pipelines. A number of significant changes, include:
- 5           ○ The “Grandfather Clause” for establishing MAOP  
6           (Maximum Allowable Operating Pressure) for Transmission  
7           pipelines installed before 1970 has been eliminated, and the  
8           lines qualified under that provision will have to be pressure  
9           tested under the new rule or replaced. An Integrity  
10          Verification Process Plan will be mandated and required to  
11          be put into place within 180 days of the rule. Simply stated,  
12          this means that a Kentucky specific verification plan will  
13          have to be written for Columbia, then followed while  
14          executing this integrity rule.
  - 15          ○ The standard for transmission line documentation has been  
16          changed from the standard of; “Traceable, Verifiable, and  
17          Complete” to “Reliable, Traceable, Verifiable, and  
18          Complete”. This will likely mean that any fittings or  
19          appurtenances that do not have documentation will require  
20          verification. We are anticipating having to do a number of

1                   digs and sample cut-outs on Kentucky transmission line to  
2                   validate our understanding of the precise technical  
3                   specifications on some of the fittings originally installed on  
4                   the transmission line.

5                   ○ Will require an Internal Monitoring Program to monitor gas  
6                   quality. This means that at strategic points (yet to be  
7                   determined) across the system, Columbia will have to install  
8                   sophisticated monitoring equipment to continually monitor  
9                   the individual components of the gas being delivered.

10                  ○ Will establish a new classification called “Moderate  
11                  Consequence Area” that will require increase integrity  
12                  monitoring similar to that which is required for higher class  
13                  locations in the current rules. At this time we cannot say  
14                  with any certainty how this will impact Columbia, as we  
15                  have yet to do a study that would apply the “medium  
16                  consequence area” criteria to the population base along the  
17                  line, which will ultimately determine the existence (or not)  
18                  of a medium consequence area. Columbia views it as a  
19                  virtual certainty that medium consequence areas exist in  
20                  Kentucky at the transition of high consequence areas to more

1 rural environments. Where medium consequence areas exist,  
2 Columbia will be required to perform a baseline  
3 requirement within 15 years, and reassess every 20 years.

- 4 o Increased requirement for the data elements necessary to  
5 establish MAOP.

6

7 **Q: What other significant DIMP or Transmission Integrity Management**  
8 **initiatives do you see Columbia undertaking in the future?**

9 A: I would expect additional several additional regulatory-mandated or  
10 DIMP or DIMP driven programs including:

- 11 • Transmission integrity management improvements including;  
12 making all transmission lines “Smart pig-able,” material testing  
13 and traceability that includes detailed identification of every pipe  
14 segment and pipeline component, and either pressure testing or re-  
15 placement for any pre-1970 transmission line.
- 16 • A Meter Barrier Protection program that would expand the scope  
17 of areas requiring protection and include heavily traveled residen-  
18 tial areas.

- 1           • Improving tracking and traceability of distribution lines to expand  
2           the data captured for all distribution main and service installations  
3           and repairs to require: manufacturer and materials used, manufac-  
4           turing location, lot number, manufacturing date, size and wall  
5           thickness, precise location of each component, and other important  
6           data elements.
  
- 7           • Increased focus on right-of-way maintenance, signage, and en-  
8           croachment identification, all designed to reduce third party dam-  
9           age risks, and insure appropriate separation from construction ac-  
10          tivities or the placement of permanent structures.
  
- 11          • Increasing the number of distribution system critical valves (and  
12          automating transmission mainline valves so they may be operated  
13          remotely) to shorten the time it takes to shut-down gas facilities in  
14          the event of an emergency.

15   **COLUMBIA’S SAFETY OPPORTUNITIES AND RISKS**

16   **Q:    Please summarize the results of your assessment of Columbia’s pipeline**  
17    **safety opportunities and risks.**

18    **A:    As I noted earlier in my testimony, my organization is affording NiSource,**  
19    **including Columbia, the capability to focus more attention to pipeline**

1 safety and compliance efforts than it has previously devoted in prior  
2 years. In collaborating with Columbia witness Cole, we have identified  
3 the following system enhancements for 2017 Columbia operations: reduce  
4 the rate of excavator damage that occurs in the Columbia system (our  
5 medium term goal for this risk is to achieve an overall rate of less than 2  
6 damages per thousand by January 1, 2018), including through the  
7 implementation of GPS technology; reduce and eventually eliminate  
8 Columbia's inventory of first generation facilities (principally consisting of  
9 Bare Steel, Cast Iron, Wrought Iron, and first generation plastic); locate  
10 and remediate cross-bore safety hazards; and adequately train, equip, and  
11 certify the next generation of front line employees and contractors. The  
12 pipeline safety action enhancement agenda identified above is designed to  
13 address the highest risks currently identified in Columbia's Distribution  
14 DIMP, and to continue to reduce the pipeline safety risks inherent in the  
15 Columbia system.

16

17 **Q: How does Columbia classify leaks it detects on its system?**

18 A: Gas leak classifications are defined in the Gas Piping Technology Commit-  
19 tee ("GPTC") ANSI Z380.1 "Guide for Gas Transmission and Distribution  
20 Piping Systems." The Guide is commonly utilized by gas operators and

1 state pipeline regulators, including the Commonwealth of Kentucky, as an  
2 interpretation of "DOT 192 2003 CFR Title 49, Part 192 Transportation Of  
3 Natural And Other Gas By Pipeline: Minimum Federal Safety Standards."  
4 That said however, gas leaks fall into the three basic classifications as  
5 found in 807 KAR 5:022 Section (13)(d).

6

7 **PIPELINE INFRASTRUCTURE HISTORICAL BACKGROUND**

8

9 **Q: What kinds of pipe have historically been installed in Columbia's sys-**  
10 **tem?**

11 **A:** The system comprises many different types of pipe. From the 1850s to the  
12 early 1900s, Columbia's predecessor companies, like most other utilities in  
13 the Eastern United States, most often installed cast iron pipe throughout  
14 the early distribution systems. Cast iron, wrought iron and wood were  
15 among the first materials available, and cast iron had the advantage in  
16 that it was relatively strong and was easy to install. However, it was vul-  
17 nerable to breakage from ground movement. When the pipe was buried to  
18 typical depths of between two and five feet, if the soil beneath the pipe or  
19 to its side was disturbed and pressure exerted on the pipe, it could crack.  
20 Further, each pipe section was not easily joined, so joints were prone to

1 leaks. Finally, it was determined that it was unsuitable for long-distance  
2 transportation of gas because it was unable to withstand high pressures.

3

4 **Q: How did the industry react to the problems present with the use of cast**  
5 **iron?**

6 A: By the early 1900s, the industry had adopted steel and wrought iron.  
7 Wrought iron was a transition material between cast iron and steel, hav-  
8 ing the ductility of steel, but not having as much tensile strength). Both of  
9 these materials were deemed to be stronger than cast iron, able to with-  
10 stand greater pressure, and were less vulnerable to fracture due to ground  
11 movement.

12 During this time, bare steel and wrought iron began replacing cast  
13 iron pipe as the material of choice when building a natural gas distribu-  
14 tion system. During the pre and post-World War II construction boom,  
15 gas utilities like Columbia, along with developers and customers, installed  
16 a significant amount of bare steel mains and services. Bare steel is steel  
17 pipe that has no exterior coating and has no cathodic protection installed  
18 on the pipe.

19 The use of bare steel throughout the industry was common until  
20 the 1950s, when the industry began to realize that, despite its strength,

1 bare steel was subject to corrosion and, in order to increase long-term safe-  
2 ty and reliability, coating and cathodic protection (as explained further be-  
3 low) should be applied to all new piping systems. Both exterior coatings  
4 and cathodic protection were designed to inhibit corrosion. Columbia in-  
5 stalled its last bare steel pipe in the 1960s. By 1970, the federal government  
6 prohibited the use of bare steel for natural gas distribution system infra-  
7 structure.

8

9 **Q: What did the industry do to combat the problem of corrosion in bare**  
10 **steel?**

11 A: All metals corrode as a result of the natural process of chemical interac-  
12 tions with their physical environment, most commonly caused by moist  
13 soil (which creates an electrolyte) around the pipe, causing corrosion. In  
14 these circumstances, direct electric current flows from the metal surface  
15 into the electrolyte and, as the metal ions leave the surface of the pipe, cor-  
16 rosion takes place. This current flows in the electrolyte to the site where  
17 oxygen or water is being reduced. This site is referred to as the cathode or  
18 cathodic site. In order to combat corrosion, natural gas utilities began us-  
19 ing coated steel. Unprotected coated steel (“UPCS” or “coated steel”) re-

1           fers to steel pipe with an exterior coating (intended to electrically isolate  
2           the steel from the surrounding electrolytes in the soil).

3

4   **Q:    Did the use of UPCS solve the problem?**

5   A:    No, despite the best efforts of industry, and even though it was for a time  
6           an accepted industry standard, unprotected coated steel corroded as well.  
7           Corrosion occurred on UPCS mostly at the joints when the initial coating  
8           might have been inadequate, where the coating broke down and failed  
9           over time, or where coating was damaged by excavation over time. But for  
10          the period from the 1940s through the late 1950s or early 1960s, as the in-  
11          dustry assessed its options, it was one of just a few alternative piping ma-  
12          terials available to meet the public demand for service. By 1970, Columbia  
13          had laid its last non-cathodically protected coated steel segment. Further,  
14          since that time Columbia has gone back to install active cathodic protec-  
15          tion systems (anodes and/or rectifiers) on all of the coated mains, and all  
16          but a few coated services in its system.

17

18   **Q:    What is cathodic protection?**

19   A:    Cathodic protection is a procedure by which underground metal pipe is  
20          protected against corrosion and deterioration (i.e. rusting and pitting) by

1 applying an electrical current to the pipe. Cathodic protection reduces cor-  
2 rosion by making that surface the cathode and another metal the anode of  
3 an electrochemical cell. A primary function of a coating on a cathodically  
4 protected pipe is to reduce the surface area of exposed metal on the pipe-  
5 line, thereby reducing the current necessary to cathodically protect the  
6 metal. At present, the principal methods for mitigating corrosion on un-  
7 derground steel pipelines are external coatings and cathodic protection.

8

9 **Q: Has Columbia further improved the functionality of its piping since the**  
10 **introduction of cathodically protected steel?**

11 A. Yes, it has. Cathodically protected steel has all the advantages of steel in  
12 terms of strength and, because of its impressed electrical current, is highly  
13 corrosion resistant. However, it is more costly to purchase and install, and  
14 requires more ongoing maintenance than the next generation of pipe –  
15 plastic. The pipe breakthrough for the Natural Gas Industry came in the  
16 mid-1960s with the introduction of plastic (polyethylene) pipe for gas dis-  
17 tribution applications.

18

1 **Q: What are the benefits of plastic pipe?**

2 A: Plastic pipe has proven to be very good for distribution-level pressures. It  
3 has strength and flexibility, and, as a result, is generally immune to the  
4 stress of ground movement. Plastic is also less costly to purchase and easi-  
5 er to join and install than steel pipe. Plastic does not corrode and, there-  
6 fore, does not require cathodic protection.

7

8 **Q: Does plastic pipe have any drawbacks?**

9 A: "First Generation" plastic pipe, typically installed from the 1960s through  
10 the early 1980s in most distribution systems and softer than today's "418  
11 PE" material (due to the different composition of the base plastic materi-  
12 al), has demonstrated itself to be prone to stress propagation cracking un-  
13 der some circumstances. Thus in certain limited cases, Columbia's first  
14 generation plastic pipe has generated Type-1 leaks due to significant lon-  
15 gitudinal cracking along the pipe. Columbia witness Belle discusses in  
16 more detail the specific governmental findings related to first generation  
17 plastic pipe and brittle-like cracking in those early plastic pipes. This first  
18 generation pipe contrasts with today's pipe because today's pipe is both  
19 stronger and more flexible thus making it less vulnerable to stress crack-  
20 ing.

1           Additionally, plastic is relatively vulnerable to third party damage  
2           compared to cast iron or steel. As a result, excavators who do not dig by  
3           hand (as required by One-Call or Call Before You Dig laws) in the vicinity  
4           of plastic facilities are very likely to damage them. Cast iron and steel pip-  
5           ing have greater tensile strength and thus are somewhat more likely to be  
6           able to resist external impact.

7

8   **Q:   What is Columbia doing to address concerns about excavator damage?**

9   A:   Columbia is executing a targeted improvement program for Columbia's  
10   locating performance and excavator outreach to reduce risks to the system  
11   caused by excavator damage as further described by Columbia witness  
12   Cole. In addition, under my direction Columbia has begun using "marker  
13   balls" when installing its new plastic facilities. These marker balls are  
14   placed in the ground above the pipe after it has been installed and enable  
15   Columbia to locate it later using electronic technology. Further, in late  
16   2012, as described in greater detail earlier in my testimony, some NiSource  
17   began to pilot GPS/bar-coding facilities to help demonstrate that this tech-  
18   nology was a more accurate way to perform locates to help avoid hit ser-  
19   vices by anyone who is excavating. Columbia in Kentucky was not part of  
20   this pilot, however we are confident in the benefits of this technology

1 based on our experience and plan to roll it out in all NiSource operating  
2 company states.

3

#### 4 **COLUMBIA'S ACCELERATED MAIN REPLACEMENT PROGRAM**

5 **Q: How does Columbia install pipe in its underground distribution sys-**  
6 **tem?**

7 **A:** The initial installation of natural gas distribution pipe requires the excava-  
8 tion of a trench usually under or adjacent to a public street into which the  
9 pipe is laid. Then new or existing customer services (including service  
10 lines) are connected to the new main. In some cases, mains and services  
11 are installed using "trenchless technology," where a steel rod is driven or  
12 drilled through the ground, then the gas pipe is pulled back through the  
13 hole that was made as the rods are withdrawn. This technique is typically  
14 used where there are not many intervening utilities that may be damaged  
15 by the drill and/or rod.

16 Installation of natural gas distribution pipe can be a major incon-  
17 venience for residents, business owners and municipalities. In some cir-  
18 cumstances, where smaller diameter plastic facilities are installed to re-  
19 place larger diameter steel piping, the cost and inconvenience associated  
20 with excavating a trench can be reduced by inserting the new pipe

1 through the old piping. This involves smaller street cuts for the insertion,  
2 plus cuts associated with service line and intersecting main tie-ins. Even if  
3 a replacement main must be laid rather than inserted, the use of smaller  
4 plastic pipe rather than larger steel or cast iron pipe will produce a sav-  
5 ings in material costs.

6

7 **Q: Why does Columbia need to continue to replace its bare steel and cast**  
8 **iron systems?**

9 A: In recent years, Columbia has determined that there are an increasing  
10 number of leaks in areas where unprotected steel is concentrated. Thus, it  
11 is imperative that Columbia continue to replace its first generation system  
12 aggressively to off-set the accelerating leak rate. In fact, corrosion on these  
13 first generation mains and services represents over 62% of all main leaks  
14 and 54% of all service leaks that occurs annually on the Columbia distri-  
15 bution system. As a result of this clear data, Columbia continues to believe  
16 that it needs to replace the bare steel and cast iron system more rapidly  
17 than it did in the past.

18 Taken in total, Columbia has made enormous progress in deliver-  
19 ing and maintaining a safe and reliable distribution system for its custom-  
20 ers. This progress includes improving the locating process to reduce third

1 party damage, improving emergency response rates and on-time ap-  
2 pointments for customers, and dramatically increasing the amount of bare  
3 steel and cast iron pipe that it removes from the system annually.

4 Having said all of that however, the system data is clear that as first  
5 generation bare steel and cast iron pipe continues to age, Columbia will  
6 have to continue to focus on the accelerated replacement of bare steel and  
7 cast iron to address the problems associated with aging infrastructure.  
8 Therefore, it is essential that Columbia continue to direct management ef-  
9 fort and capital resources toward this ongoing need. The synchronization  
10 of these replacement efforts with the enhanced focus on pipeline safety  
11 that Columbia has demonstrated over the last 5 years are integral parts of  
12 Columbia's DIMP Plan, and are essential planks of Columbia's ongoing  
13 efforts to enhance natural gas pipeline integrity management, and thus  
14 provide a safe, reliable distribution system for our customers, and the  
15 general public.

16

17 **Q: Is there another solution for addressing the issues with bare steel and**  
18 **cast iron short of replacement?**

19 A: No. Corrosion leakage on unprotected steel does not slow down and the  
20 rate of leakage will only accelerate as the unprotected steel facilities con-

1           tinue to deteriorate. First generation unprotected steel pipe, much of it da-  
2           ting to the turn of the last century, has reached or soon will reach the end  
3           of its useful life and must be replaced in a timely, cost-effective manner.

4                     The system is safe right now, as evidenced by our ability to address  
5           Type-1 and Type-2 leaks appropriately, as well as all of the other opera-  
6           tional improvements including more frequent leakage surveys that are de-  
7           scribed earlier in this testimony, and better emergency leak response that  
8           are described in Columbia witness Cole’s testimony. The “system” is  
9           comprised of thousands of miles of wrought iron, cast iron, bare steel, ca-  
10          thodically-protected steel, and plastic pipe. The material initially at risk is  
11          first generation bare steel. Evidence further indicates that the corrosion  
12          with respect to unprotected coated steel is accelerating, gradually causing  
13          more leaks. Cast iron pipe also is quite old and is in need of replacement  
14          due to its age and vulnerability to fractures caused by ground movement.  
15          While the system is currently safe, Columbia must, as a prudent operator,  
16          address the systemic problem of replacing its unprotected steel, cast iron,  
17          and wrought iron facilities.

18

1 **Q: Will Columbia's accelerated replacement program provide customers**  
2 **with any other benefits besides the replacement of bare steel and cast**  
3 **iron pipe with plastic and cathodically protected steel?**

4 A: Yes. Columbia is replacing the segmented, 19th and early 20th century  
5 low-pressure designs of its first generation system with a more integrated,  
6 21st century system design. This integrated, higher pressure (up to a maximum of 60 pounds) system will enable Columbia to substantially reduce  
7 the current need for district pressure regulator stations throughout its system, thereby making the system safer, easier and more reliable to operate.

10           Going forward in this type of system, each residence will have a  
11 small domestic sized regulator installed just up-stream of the meter to reduce the pressure before it enters the house. This allows Columbia to deliver higher system pressures to the customers, allowing for smaller diameter pipe to be installed, and providing a higher capacity and more secure supply. A distribution system operating at these higher pressures also will  
15 enable Columbia to install new safety devices in areas to be upgraded.

17           As part of the upgrade, Columbia is installing EFVs on nearly all  
18 services connected to the replacement mains. Customers not receiving excess flow valves are those commercial and industrial customers whose  
19 consumption is over 10,000 CFH cubic feet per hour. For approximately  
20

1           \$25 per replacement residential service, or approximately \$50 for the aver-  
2           age commercial service, these excess flow valves will shut off gas to a res-  
3           idence or business in the event of a large pressure differential, indicative  
4           of a major gas leak, or a service damaged by excavation. This results in a  
5           system where services are much less vulnerable to safety risks from third-  
6           party damage.

7

8   **Q:   How will main replacements affect Columbia’s leak repair experience?**

9   A:   Given the acceleration of corrosion-related leaks that I described previous-  
10       ly, and the realization that 72% of Columbia’s current main leakage is ex-  
11       cavator damage or corrosion related, over the next few years Columbia’s  
12       program will only slow or possibly halt the growth in main corrosion leak  
13       repair-related operations and maintenance expenses. In the short and me-  
14       dium term, however, operations and maintenance spending on leak re-  
15       pairs could increase, as current leak trend lines continue to fluctuate up  
16       and down significantly. That said, in the longer term, as the percentage of  
17       bare steel and cast iron pipe is materially diminished we would expect to  
18       see a reduction in such expenses.

19

1 **Q: What benefits inure to the public from Columbia's ongoing replace-**  
2 **ment of its aging facilities?**

3 A: Columbia is removing deteriorating portions of its system and enhancing  
4 the safety of its system by ensuring replacement of facilities with new,  
5 longer lasting and safer materials. Its system will continue to be able to  
6 provide deliverability at its MAOP. The public will receive better service,  
7 with fewer interruptions.

8 That notwithstanding, over the long term the one significant chal-  
9 lenge from an operations perspective that exists to Columbia's ability both  
10 to perform system maintenance and to replace facilities in a cost effective  
11 manner, is the recent trend we are seeing from some municipalities to en-  
12 act permitting restrictions and expanded restoration requirements. Re-  
13 placing aging facilities in coordination with planned municipal paving  
14 projects is one way Columbia is attempting to manage these rising costs.

15

16 **Q: Does this complete your Prepared Direct Testimony?**

17 A: Yes, however, I reserve the right to file rebuttal testimony.

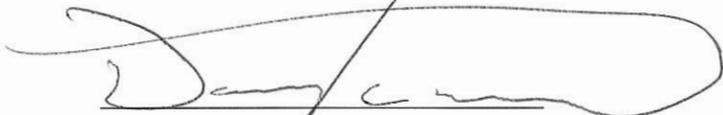
COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of adjustment of rates     )  
of Columbia Gas of Kentucky, Inc.     )     Case No. 2016-00162

CERTIFICATE AND AFFIDAVIT

The Affiant, Danny G. Cote, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
\_\_\_\_\_  
Danny G. Cote

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Danny G. Cote on this the 17<sup>TH</sup> day



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
\_\_\_\_\_  
Notary Public

My Commission expires: MARCH 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
ERIC T. BELLE  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016** Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF ERIC T. BELLE**

1 **Q: Please state your name and business address.**

2 A: My name is Eric T. Belle and my business address is 290 W. Nationwide  
3 Blvd., Columbus, Ohio 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am the Director of Capital Planning for NiSource Corporate Services Com-  
7 pany. My principal responsibilities include directing and developing the  
8 Capital Planning team to execute on operating plan initiatives related to  
9 the capital program. The Capital Planning team has a responsibility to op-  
10 timize capital spending and infrastructure investments by driving a cul-  
11 ture of continuous improvement and project management through com-  
12 mon methodologies, tools, and training that promote positive change. I al-  
13 so work collaboratively with internal stakeholders to direct the capital  
14 budgeting, forecasting, and allocation processes across NiSource's gas dis-  
15 tribution companies. I lead annual capital planning, mid-year review, and  
16 quarterly/monthly forecast processes by developing guidelines, establish-  
17 ing timelines, standardizing information requirements, and analyzing cap-  
18 ital projections submitted by the engineering department.

19

1 **Q: What is your educational background?**

2 A. I have a Bachelor of Science degree in Chemical Engineering from  
3 Syracuse University, Syracuse, New York and a Master's degree in  
4 Business Administration from Tiffin University, Tiffin, Ohio.

5

6 **Q: What is your employment history?**

7 A: In 1995, I began my career in Toledo, Ohio with Columbia Gas of Ohio,  
8 Inc. ("COH") as an Operations Engineering Trainee where I gained a  
9 broad understanding of the natural gas distribution industry. In 1997, I  
10 accepted a position as an Operations Engineer in Findlay, Ohio. As an  
11 Operations Engineer, I was responsible for evaluating, planning and de-  
12 signing natural gas distribution facilities. I also provided technical assis-  
13 tance and support to the construction staff involved in the construction,  
14 operation, and maintenance of gas distribution facilities. In 2006, I was  
15 promoted to Field Engineering Leader where I was responsible for  
16 providing technical and budgetary guidance, support, and direction to  
17 COH's Field Engineering department in northwest Ohio.

18 In 2009, I was promoted to Manager, Field Engineering for Colum-  
19 bia Gas of Kentucky, Inc. ("Columbia") and COH. In this role, I was re-  
20 sponsible for providing leadership and strategic direction to engineering

1 staff. I also monitored the performance of Columbia's and COH's infra-  
2 structure program and collaborated with peers to ensure effective execu-  
3 tion of the capital program. In 2016, I was promoted to my current role as  
4 Director of Capital Planning for NiSource.

5

6 **Q. Have you previously testified before any regulatory commissions?**

7 A: Yes, I have testified before this Commission in Case No. 2013-00167. I have  
8 also testified before the Public Utilities Commission of Ohio.

9

10 **Q: What is the purpose of your testimony in this proceeding?**

11 A: The purpose of my testimony is to provide a general overview of Colum-  
12 bia's operating territory, gas distribution system, the capital budgeting  
13 process and the Accelerated Main Replacement Program ("AMRP"). I ex-  
14 plain the engineering and management practices of Columbia as they re-  
15 late to the execution of the AMRP and the overall capital program. I dis-  
16 cuss Columbia's performance with respect to its overall goal of accelerat-  
17 ing the replacement of its aging infrastructure. I also discuss Columbia's  
18 performance in execution its capital budget over the last ten years with fo-  
19 cus on the success in minimizing the variance between budgeted versus

1 actual capital spend. I also sponsor Filing Requirements 16-(7)(b), 16-(7)(f)  
2 and 16-(7)(g).

3

4 **COLUMBIA’S OPERATING TERRITORY AND GAS DISTRIBUTION**  
5 **SYSTEM**

6 **Q: Please describe Columbia’s gas distribution system.**

7 A: Columbia’s predecessor company was incorporated in 1905. Columbia, as  
8 it stands today, is the product of consolidations of many companies over a  
9 period of time. The companies include Central Kentucky Natural Gas,  
10 Lexington Gas Company, Huntington Gas Company, Frankfort Kentucky  
11 Natural Gas Company, United Fuel Gas Company, Inland Gas Company,  
12 and Limestone Gas. As a result of these consolidations, Columbia's distri-  
13 bution system consists of many independent systems and various types of  
14 pipe. Columbia’s current service territory is described in the Application.

15 As of January 1, 2016, Columbia owns, operates, and maintains ap-  
16 proximately 2,574 miles of distribution mains. These facilities are com-  
17 prised of approximately 402 miles of bare steel and 15 miles of cast or  
18 wrought iron. The balance of the system is comprised of coated cathodi-  
19 cally protected steel, or plastic (polyethylene) mains, and approximately  
20 4.5 miles classified as “other.” Collectively, these mains are linked togeth-

1 er to form systems that deliver natural gas service to approximately  
2 135,000 residential, commercial, and industrial customers in 30 counties.

3

4 **Q: What role does Columbia serve in delivering gas to its end use custom-**  
5 **ers?**

6 A: Columbia's distribution infrastructure is the final step in the delivery of  
7 natural gas to customers from the natural gas producing regions of the  
8 United States. Columbia distributes natural gas by taking it from points of  
9 delivery, also known as "city gates," along interstate and intrastate pipe-  
10 lines then distributing it through 2,574 miles of distribution main that  
11 network underground between and through cities, towns and neighbor-  
12 hoods. The natural gas is then delivered by way of customer service lines  
13 to meet the demands of Columbia's residential, commercial and industrial  
14 end-use customers.

15 Columbia receives the natural gas commodity at the "city gate"  
16 where the transmission pressure of the gas is generally reduced to a lower  
17 pressure. An odorant known as mercaptan is often added to the natural  
18 gas at the city gate before it is delivered into the distribution system. The  
19 gas then flows through Columbia's distribution system where additional

1 pressure reduction typically occurs in a series of district regulator stations  
2 before being delivered to each customer.

3

#### 4 **COLUMBIA'S CAPITAL PROGRAM**

5 **Q: How does Columbia categorize its capital program?**

6 A: Columbia's capital expenditures are categorized and allocated across the  
7 following seven business classes:

8 1. *Growth (also referred to as "New Business")*: expenses in this category are  
9 used for any facilities that are required to serve new customers.

10 2. *Betterment ("Capacity" or "Compliance")*: expenses in this category in-  
11 clude facilities that are required to improve system reliability or provide  
12 additional capacity for existing customers.

13 3. *Replacement (also referred to as "Age and Condition")*: expenses in this cat-  
14 egory are for any facilities that must be replaced due to damage or physi-  
15 cal deterioration in situations where repair is not feasible.

16 4. *Public Improvement (also referred to as "Mandatory Relocation")*: expenses  
17 in this category are for any facilities that must be relocated or  
18 raised/lowered to meet the requirements of municipal roadway recon-  
19 struction projects.

1        *5. Support Services:* This category is used to capture capital expenditures  
2        that are not directly related to the installation of distribution facilities. This  
3        includes expenditures for capitalized tools/equipment, telemetering, re-  
4        mote control, and other distribution communication equipment.

5        *6. Shared Services:* expenses in this category include capital investments in  
6        information technology that is allocated as NiSource corporate expendi-  
7        tures and managed by NiSource Corporate IT with assistance from appli-  
8        cable operating company personnel. Expenses in this category also in-  
9        clude facility improvements that are specifically identified and sponsored  
10       by the NiSource’s management team.

11       *7. Customer Programs/Automated Meter Reading (“AMR”):* expenses in this  
12       category include the cost of targeted AMR deployment programs.

13

14    **Q:    Please describe Columbia’s capital planning and allocation process.**

15    A:    Columbia’s capital planning process is integral its overall success. In order  
16    to ensure the effectiveness of this process, a capital program management  
17    team serves as the primary administrator for the capital budget. This team  
18    facilitates consistent capital planning and allocation across NiSource, op-  
19    timizes capital spending, monitors and forecasts capital expenditure, and

1 communicates capital information to key internal departments and stake-  
2 holders.

3 The capital budgeting and planning process for NiSource is a con-  
4 tinual management process and includes key milestones in preparation  
5 for the subsequent year's capital expenditure program. Every year during  
6 the months of April and May, as Director of Capital Planning, I facilitate  
7 meetings with the Engineering Managers for each respective state to dis-  
8 cuss in detail progress on the current year's capital program and any ex-  
9 pected capital requirements for the following few years. This information  
10 is used to develop a multi-year capital investment plan that NiSource will  
11 utilize to develop its preliminary capital budget for subsequent year. As  
12 an example, I will collaborate with Columbia's senior leadership team to  
13 ensure that adequate capital is allocated to address operational and busi-  
14 ness needs.

15 The finalized capital needs for the following year will be reviewed  
16 and studied further prior to the annual corporate capital planning meeting  
17 held in July or August. These capital reviews, which are completed by the  
18 engineering department, generally include evaluation of any projected  
19 material changes in customer growth related activity, system improve-  
20 ment requirements resulting from winter operations, changes in public

1 improvement relocation activity, and age and condition related replace-  
2 ment activity that would result in significant increases in capital.

3           During this review period, the engineering department prioritizes  
4 the results from Optimain DS™, a decision support and risk analysis  
5 software provided by Opvantek, Inc. Optimain DS™ is a client-server ap-  
6 plication that runs on Windows XP or higher workstations. Columbia uti-  
7 lizes this software along with other factors to ensure consistency, continui-  
8 ty, and optimization of its capital program; with emphasis placed on ac-  
9 celerating the replacement of unprotected bare steel, cathodically protect-  
10 ed bare steel, cathodically unprotected coated steel, cast iron and wrought  
11 iron. Columbia defines these types of mains as “Priority Pipe” or “Priority  
12 Mains” and capital expenditure towards this replacement activity repre-  
13 sents a significant component of the overall capital program. AMRP relat-  
14 ed projects planned for the subsequent year will be reviewed and selected  
15 using these assessment models and other factors during the months of  
16 April, May, and June.

17           In July or August, NiSource’s formal request for capital is present-  
18 ed to NiSource executive management at the annual corporate capital  
19 planning meeting. Executive management finalizes the capital budget for  
20 the next fiscal year and submits it for NiSource Board of Directors ap-

1       proval in November or December. The approval of the annual NiSource  
2       capital program constitutes approval of the allocation to Columbia's capi-  
3       tal budget and responsibility to maintain effective oversight and man-  
4       agement of its capital expenditure at the engineering management level.

5

6   **Q:    Are Columbia's capital expenditures generally consistent with its capi-**  
7   **tal budgets?**

8   A:    Yes. Columbia has consistently demonstrated the ability to successfully  
9       manage and execute on its capital program. The aspiration of the engi-  
10      neering and construction department is to be the industry leader in the  
11      execution of gas distribution capital programs. Columbia's track record of  
12      effective capital management over the last 10 years supports this vision  
13      and clearly positions Columbia for future success. From 2006 - 2015, Co-  
14      lumbia's total capital approved budget was \$167.2 million for the seven  
15      budget classes. Columbia's capital expenditures for this same time period  
16      totaled \$176.1 million. This positive variance of \$8.9 million dollars over  
17      10 years represents a positive variance of 5.3 percent. Columbia's annual  
18      goal has been to spend capital wisely and to ensure that all prudent efforts  
19      are made to avoid an overrun or underrun of the capital program. In

1 short, Columbia has maintained its ability to perform in the area of capital  
2 budget management over this ten year period.

3

4 **Q: What is Columbia's capital program budget for the forecasted test peri-**  
5 **od ending December 2017?**

6 A: In 2017, Columbia intends to spend approximately \$31.5 million. See Co-  
7 lumbia witness Katko's testimony for additional information surrounding  
8 Columbia's incremental capital expenditures that are currently not in-  
9 cluded in the capital budget.

10

11 **Q: Describe Columbia's AMRP.**

12 A: A significant percentage of Columbia's gas distribution mains and ser-  
13 vices are reaching the end of their useful life. In 2008, Columbia began its  
14 AMRP to more aggressively replace these mains and services than in the  
15 past. In order to provide safe, reliable delivery of gas service, Columbia  
16 began replacing certain types of gas main and services through continued  
17 evaluation, planning and prioritization based on the serviceability of these  
18 systems. The types of main identified and targeted for replacement in Co-  
19 lumbia's AMRP are unprotected bare steel, cathodically protected bare  
20 steel, cathodically unprotected coated steel, cast iron and wrought iron.

1 Columbia identifies these types of mains as “Priority Pipe” or “Priority  
2 Mains.” As part of its AMRP, Columbia is also replacing all metallic ser-  
3 vice lines, and service lines that do not meet current material and con-  
4 struction standards. Columbia plans to replace these mains, service lines,  
5 and associated appurtenances over a span of approximately thirty years,  
6 which began in 2008. Columbia estimated that the total program would  
7 cost approximately \$210 million to replace 525 miles of Priority Pipe.

8

9 **Q. What progress has Columbia made in its AMRP program from 2008**  
10 **through 2015?**

11 A. Columbia’s capital expenditures during 2008 through 2015 have enabled  
12 Columbia to effectively accelerate the replacement of sections of its aging  
13 infrastructure and specifically target some of the high priority segments  
14 for replacement. Through the first eight years of the AMRP program, Co-  
15 lumbia spent approximately \$92 million and has replaced over 108 miles  
16 of Priority Pipe and associated service lines and/or appurtenances.

17

1 **Q. What are Columbia's AMRP related capital plans over the next three**  
2 **years?**

3 **A:** While annual replacement funding can vary from year-to-year, based on  
4 system condition, performance, and corporate-wide capital funding, over  
5 the next three years Columbia intends to continue our focus on the re-  
6 placement of Priority Pipe by spending \$69 million on the AMRP pro-  
7 gram. For 2017, Columbia anticipates that it will spend \$17.2 million in re-  
8 placing Priority Pipe. For 2018 and 2019, the AMRP related capital spend  
9 is estimated at \$14.2 million annually. As described previously, Colum-  
10 bia's capital allocation process focuses on optimizing the efficient use of  
11 capital to address operational needs. Although Columbia's current capital  
12 plans related to infrastructure currently show a \$3 million dollar reduction  
13 in 2018 and 2019 compared to 2017, Columbia will continue its use of Op-  
14 timain to assess the infrastructure remaining in Kentucky to ensure that  
15 capital is appropriately funded in Columbia and across the NiSource foot-  
16 print.

17

18 **Q: Are you proposing any changes to the AMRP?**

19 **A:** Yes, Columbia is proposing to include the replacement of Aldyl-A and  
20 various other types of older plastic pipe as part of the AMRP. Aldyl-A (a

1 DuPont brand name), was one of the first plastic materials to be used  
2 widely in the natural gas distribution industry as a substitute for steel pip-  
3 ing systems. Columbia installed Aldyl-A and other first generation plastic  
4 throughout its service area from the 1960s through the early 1980s.

5 The use of plastic pipe has been accepted as a generally safe and  
6 economical alternative to pipe made of steel. However, in a special inves-  
7 tigation report completed by the National Safety Board on April 23, 1998,  
8 it concluded that between the 1960's through the early 1980's, the proce-  
9 dure used in the United States by manufacturers to rate the strength of  
10 this plastic pipe may have overrated the strength and resistance to brittle-  
11 like cracking. The investigation performed further clarified that such first  
12 generation plastic pipe was susceptible to premature brittle-like failures  
13 when subjected to stress intensification and as a result represented a po-  
14 tential safety hazard.

15 Additionally, the Pipeline and Hazardous Materials Safety Admin-  
16 istration ("PHMSA") issued four advisory bulletins to owners and opera-  
17 tors of natural gas pipeline distribution systems in the past concerning the  
18 susceptibility of older plastic pipe to premature brittle-like cracking. Co-  
19 lumbia continues to perform all routine monitoring and inspecting activi-  
20 ties to ensure that the first-generation plastic pipe within our systems con-

1       tinue to operate safely. However, given the safety concerns that arise  
2       when this pipe is subjected to stress intensification, the safest course of ac-  
3       tion is for Columbia to replace first-generation pipe when it is encoun-  
4       tered within the scope of an AMRP project. Columbia also proposes to in-  
5       clude within the AMRP the replacement of first generation plastic if a leak  
6       is found on a segment of pipe or as Columbia's Optimain tool supports  
7       the replacement of isolated segments of pipe based on its Optimain risk  
8       score.

9

10   **Q:   How are AMRP replacement projects prioritized?**

11   A:   As discussed earlier, to aid in identifying and selecting AMRP projects,  
12       Columbia's engineering department utilizes the decision support software  
13       called Optimain DS™ to analyze relative risks associated with distribution  
14       systems. With Optimain DS™, Columbia is able to evaluate and rank pipe  
15       segments system-wide against a range of environmental conditions (e.g.  
16       population density, building class, surface cover type, etc.), risk factors  
17       (pipe segment leak history, pipe condition, pitting depth, depth of cover,  
18       etc.) and economic factors. Columbia's engineering department focuses on  
19       identifying areas with higher concentration of risk as the starting point of  
20       project selection. Areas with higher concentration of risk are evaluated to

1 determine the appropriate plan of action that addresses the replacement  
2 strategy for the area and desired long term system design. Columbia's en-  
3 gineering department consults with Columbia's local operations depart-  
4 ment to obtain its input on any other operational or system reliability is-  
5 sues in the area.

6

7 **Q. What factors are taken into consideration during the prioritization pro-**  
8 **cess?**

9 A. One example of an operational or system reliability issue that is taken into  
10 consideration involves the history of loss of service to customers due to  
11 ground water infiltrating existing pipe and service lines. Also identified as  
12 "water-offs" or "freeze-offs," this system reliability condition generally is  
13 a result of past leakage in an area where Columbia operates a low pres-  
14 sure system. With the completion of AMRP projects, Columbia has been  
15 able to address many of these operational or system reliability issues  
16 across its systems by replacing aging low pressure priority pipe primarily  
17 with plastic pipe that can be operated at elevated pressures, thereby elim-  
18 inating the chance of water entering the system.

19 Other factors that Columbia considers when selecting projects in-  
20 clude information received from external stakeholders on any identified

1 municipal projects within an area that would substantially influence our  
2 decision to proceed with construction. For example, planned or pending  
3 roadway improvement work, sewer line replacement work, or waterline  
4 replacement work is taken in consideration when selecting projects. Co-  
5 lumbia remains committed on collaborating with local and state public  
6 improvement stakeholders to coordinate its AMRP projects with planned  
7 or pending municipal construction projects where possible. This effort  
8 helps to minimize our need to perform additional construction or mainte-  
9 nance in areas after public improvement project has been completed.

10

11 **Q: Has Columbia maintained its ability to successfully execute on the**  
12 **AMRP?**

13 **A:** Yes. In fact, as discussed earlier, Columbia has also developed a 24-month  
14 inventory of replacement work which positions Columbia to continue to  
15 target the accelerated replacement of priority pipe. Additionally, Colum-  
16 bia continues to assess the complexity of managing AMRP projects and  
17 evaluated internal and external resource needs, construction practices,  
18 computer applications and analysis tools, communication strategies, op-  
19 portunities to leverage economies of scale for materials, and developing  
20 program plans and goals.

1            Additionally, by employing a systematic approach to replacement  
2            that integrates Columbia's program work with State and municipal im-  
3            provements, costs are minimized. Columbia is able, through the competi-  
4            tive bidding of large construction projects, to continue to secure lower unit  
5            cost contracts with various utility installation contractors. Columbia is also  
6            able to purchase larger quantities of construction materials by competitive  
7            bidding, resulting in lower cost, long-term contracts.

8

9    **Q:    Does this complete your Prepared Direct testimony?**

10   **A:**    Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Eric T. Belle, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.



Eric T. Belle

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Eric T. Belle on this the 19<sup>th</sup> day of May, 2016.



CHERYLA. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017



Notary Public

My Commission expires: MARCH 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
WILLIAM J. GRESHAM  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF WILLIAM J. GRESHAM**

1 **Q. Please state your name and business address.**

2 A. My name is William J. Gresham. My business address is 290 W. Nation-  
3 wide Blvd., Columbus, Ohio 43215.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am Manager of Forecasting for NiSource Corporate Services Company. I  
6 am responsible for developing short-range and long-range forecasts of  
7 customers, energy consumption and peak demand for seven NiSource gas  
8 distribution companies, including Columbia Gas of Kentucky (“Colum-  
9 bia”), and one NiSource electric company. I also manage other business  
10 related analyses and forecasts.

11

12 **Q. Please summarize your educational background and professional expe-  
13 rience.**

14 A. I attended Oklahoma State University where I earned a Bachelor of  
15 Science Degree in Business Administration and a Master of Science Degree  
16 in Economics. From 1978 to 1982, I worked as a forecast analyst  
17 responsible for residential and commercial customer and energy forecasts  
18 for Houston Lighting and Power Company, an investor-owned electric  
19 utility. From 1982 to 1985, I was a senior business analyst for the oilfield

1 equipment division of ARMCO, Inc. where I developed product-line  
2 forecasts and assisted in strategic planning. From 1985 to 1987, I was  
3 Director of Research at Rice Center, a consulting company affiliated with  
4 Rice University, where I supervised an economics section and managed  
5 economic and demographic consulting projects.

6 In 1987, I joined Columbia Energy Group (“CEG”) as Demand Re-  
7 search Coordinator responsible for developing forecasts of customers and  
8 energy consumption for six gas distribution companies. I was promoted to  
9 Manager of Forecasting in 1990, a post I held until the CEG merger with  
10 NiSource in 2000. Currently, I am Manager of Forecasting for all NiSource  
11 distribution companies.

12 **Q. Have you previously testified before this or any regulatory or govern-**  
13 **mental bodies?**

14 A. Yes. I have provided testimony concerning forecasting and weather nor-  
15 malization in regulatory proceedings in Virginia, Indiana, Ohio, Ken-  
16 tucky, Maryland, Pennsylvania and Massachusetts.

17 **Q. What is the purpose of your testimony in this proceeding?**

18 A. The purpose of my testimony is to explain the projection of future test year  
19 customers and volume.

1 Q. Do you sponsor Filing Requirements in this case?

2 A. Yes. I sponsor the forecasted customer counts and sales volume in Filing  
3 Requirements 16-(7)(h)14 and 16-(7)(h)15.

4

5 **FORECAST METHOD**

6 Q. How did you arrive at the forecasted number of customers and their  
7 consumption for the forecasted test period?

8 A. Using the same method as that used in Columbia's most recent general rate  
9 case (Case No. 2013-00167), the forecast is developed by Columbia's  
10 Forecasting Group with input from Columbia's Large Customers Relations  
11 Team and New Business Team. The Forecasting Group is responsible for  
12 most concepts, with the New Business Team providing a forecast of  
13 residential and commercial new customer additions and the Large  
14 Customer Relations Group providing volumetric forecasts for large  
15 commercial and industrial customers. All groups report through the  
16 corporate services function.

17 **Residential and Commercial Customers**

18 • Residential and Commercial customers are forecasted as two concepts,  
19 new customer additions and attrition. The forecasted December  
20 customer count is the actual customer count from the previous

1 December plus customer additions for the year less customer attrition.  
2 New customer additions are forecasted by the New Business Team. To  
3 arrive at the current year projected annual new customer additions, the  
4 New Business Team monitors potential projects being engineered,  
5 residential single family and multi-family construction permit  
6 applications, and outstanding natural gas service requests. Subsequent  
7 years are developed based on the Team's knowledge of the business  
8 climate, new construction activity, interviews with active builders and  
9 developers, and the potential for conversions from alternate fuels.  
10 Customer attrition is forecasted at a typical historical level by the  
11 Forecasting Group.

- 12 • The Small Volume Gas Transportation Service ("CHOICE") customer  
13 count is calibrated to the most recently observed level of CHOICE  
14 customers and a saturation rate (percent of total customers) is calculated.  
15 The forecast is obtained by applying the observed saturation rate to the  
16 forecasted total number of customers. The forecast is developed for  
17 residential and commercial customers separately with a constant  
18 saturation percentage.
- 19 • Transportation customers not in the CHOICE program are referred to as  
20 traditional transportation customers and are set equal to existing

1 traditional transportation customers plus new traditional transportation  
2 customers identified by the New Business Team.

- 3 • Sales customers = total customers less CHOICE customers less  
4 traditional transportation customers

### 5 **Residential and Commercial Mcf per Customer**

- 6 • Residential Mcf per customer is forecasted with an econometric model  
7 that incorporates weather, real price, a space heating average efficiency  
8 variable, and real personal income per capita. Residential CHOICE Mcf  
9 per customer is calibrated to the most recently observed level and then  
10 forecasted with the same annual percentage change as that for the  
11 residential class as a whole.

- 12 • Commercial Mcf per customer is forecasted with an econometric model  
13 that incorporates weather, real price, a space heating average efficiency  
14 variable, and real gross county product. Commercial CHOICE Mcf per  
15 customer is calibrated to the most recently observed level and then  
16 forecasted with the same annual percentage change as that for the  
17 commercial class as a whole. The commercial Mcf per customer analysis  
18 is performed on the class total excluding one large customer. The  
19 forecast for this customer is provided by the Large Customer Relations  
20 Group.

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**Residential and Commercial Volume.**

- Throughput forecasted for existing and new construction customers

Throughput = customers multiplied by Mcf/customer

One large customer is added to the commercial class.

- CHOICE volume forecasted as

CHOICE volume = customers multiplied by Mcf/customer

- Sales volume forecasted as residual

Sales volume = throughput less CHOICE volume less traditional transportation volume

- Nearly 90% of the traditional transportation volume for the commercial class is forecasted by the Large Customer Relations group as described in the Industrial Volume section below, and is supplemented with an “all other” forecast provided by the Forecasting Group. The “all other” portion is assigned the growth rate from the class total model.

**Industrial Volume**

- The Large Customer Relations group generates a forecast of volume for large industrial customers which represents 97% of the industrial class volume. This forecast is based upon discussions with industrial customers about their upcoming plans and expected levels of gas

1 consumption, historic consumption of the customer, and industry trends.  
2 In addition, volumes are included for identified new large customers  
3 actively planning for and expected to use gas. The Forecasting Group  
4 uses an econometric model to forecast total volume of all industrial  
5 customers. The econometric model incorporates weather, real price,  
6 manufacturing employment, and industrial production. The “all other”  
7 portion of the industrial volume, that not forecasted by the Large  
8 Customer Relations group, is assigned the growth rate from the class  
9 total model.

- 10 • The Large Customer Relations forecast provides the level of  
11 transportation service for the large customers. Industrial sales are held  
12 constant so that the growth assigned to “all other” industrial is attributed  
13 to traditional transportation. Industrial CHOICE customers and Mcf are  
14 set equal to the most recently observed level and held constant.

15  
16 **Q. What are the major assumptions in this forecast?**

17 A. The New Business Team forecast of customers is based on an improving  
18 climate for new residential and commercial construction. Although the  
19 climate is improving from the low point of the recession, construction  
20 activity is still significantly below the levels of the early 2000’s. Additional

1 challenges in the current market are that gas saturation in new  
2 construction has been falling and there has been relatively more activity in  
3 the multi-family market where gas saturations are traditionally low.

4 The large industrial forecast is based on the customer specific and  
5 new project forecasts described above, and does not attempt to forecast  
6 unknowns such as unpredictable plant closures.

7 The forecasts from the econometric models contain forecasted  
8 levels of the independent variables obtained from various sources. Gas  
9 costs are obtained from Columbia's gas supply model that uses the  
10 NYMEX strip as its estimate of gas prices. These gas costs are used in a  
11 simulation of Columbia's gas cost adjustment with current margin rates to  
12 arrive at end user prices.

13 Normal weather is set to the average of the 20 years ended 2015,  
14 which represents an update to the definition of weather used in the billing  
15 determinants underlying current rates, the 20 years ended 2012. This is  
16 different from the definition used in the NiSource corporate level forecast  
17 for all its distribution companies, which is the 35 years ended 2010.  
18 NiSource has chosen the 35-year definition for its portfolio of companies  
19 to facilitate comparisons between and among the companies. The forecast  
20 presented here also differs from the corporate forecast in that it has been

1 updated for the Btu content of the gas measured during the last actual  
2 month of the base period.

3 End use energy efficiency measures are provided by Itron, an  
4 energy industry consulting firm. Economic variables such as personal  
5 income, gross county product and industrial production are obtained  
6 from IHS Global Insight, an economic consulting firm.

7

8 **Q. What software and models are used in the forecast?**

9 A. The New Business and the Large Customer Relations teams develop  
10 custom applications with the Microsoft Office Suite. The gas supply model  
11 for gas costs is the SENDOUT Gas Planning System from Ventyx, Inc. End  
12 user prices are calculated with a custom program in mainframe  
13 FORTRAN and desktop accounting software from Longview. The  
14 forecasting group uses SAS statistical software to estimate and solve its  
15 econometric models.

16

17 **Q. Has Columbia's forecast method proven reliable?**

18 A. Yes. These summary tables show that the residential and commercial  
19 forecasts for one and two years ahead have both positive and negative  
20 variances that average about one percent. The annual volume is

1 normalized for weather. It is not surprising that the percent differences are  
 2 somewhat larger for the industrial class where results can be significantly  
 3 affected by a few large customers whose output may be sensitive to  
 4 economic and capital goods cycles. Even in industrial, the one year ahead  
 5 forecast variances average about one percent.

**Columbia Gas of Kentucky - Residential MMCF Forecast Performance**

|           | Annual<br>MMCF | Year 1<br>Forecast | Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast |
|-----------|----------------|--------------------|--------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 2009      | 8,849          | 8,931              |                    | 82                               |                                  | 0.9%                             |                                  |
| 2010      | 8,673          | 8,748              | 8,822              | 75                               | 149                              | 0.9%                             | 1.7%                             |
| 2011      | 8,793          | 8,655              | 8,496              | -138                             | -297                             | -1.6%                            | -3.4%                            |
| 2012      | 8,265          | 8,316              | 8,516              | 51                               | 251                              | 0.6%                             | 3.0%                             |
| 2013      | 8,613          | 8,533              | 8,229              | -79                              | -384                             | -0.9%                            | -4.5%                            |
| 2014      | 8,689          | 8,694              | 8,485              | 4                                | -204                             | 0.1%                             | -2.4%                            |
| 2015      | 8,685          | 8,444              | 8,607              | -242                             | -79                              | -2.8%                            | -0.9%                            |
| 6 Average | 8,652          | 8,617              | 8,526              | -35                              | -94                              | -0.4%                            | -1.1%                            |

**Columbia Gas of Kentucky - Commercial MMCF Forecast Performance**

|           | Annual<br>MMCF | Year 1<br>Forecast | Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast |
|-----------|----------------|--------------------|--------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 2009      | 7,694          | 7,625              |                    | -69                              |                                  | -0.9%                            |                                  |
| 2010      | 7,595          | 7,514              | 7,532              | -81                              | -63                              | -1.1%                            | -0.8%                            |
| 2011      | 7,534          | 7,524              | 7,398              | -10                              | -136                             | -0.1%                            | -1.8%                            |
| 2012      | 7,662          | 7,436              | 7,508              | -226                             | -154                             | -3.0%                            | -2.0%                            |
| 2013      | 8,121          | 7,942              | 7,273              | -180                             | -849                             | -2.2%                            | -10.4%                           |
| 2014      | 8,260          | 8,181              | 7,892              | -78                              | -368                             | -0.9%                            | -4.4%                            |
| 2015      | 8,225          | 8,175              | 8,315              | -49                              | 90                               | -0.6%                            | 1.1%                             |
| 7 Average | 7,870          | 7,771              | 7,653              | -99                              | -246                             | -1.3%                            | -3.1%                            |

**Columbia Gas of Kentucky - Industrial MMCF Forecast Performance**

|      | Annual<br>MMCF | Year 1<br>Forecast | Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast | Difference<br>Year 1<br>Forecast | Difference<br>Year 2<br>Forecast |       |
|------|----------------|--------------------|--------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------|
| 2009 | 15,719         | 16,637             |                    | 918                              |                                  | 5.8%                             |                                  |       |
| 2010 | 17,024         | 16,636             | 16,604             | -388                             | -420                             | -2.3%                            | -2.5%                            |       |
| 2011 | 16,225         | 16,273             | 15,563             | 48                               | -662                             | 0.3%                             | -4.1%                            |       |
| 2012 | 16,265         | 14,912             | 15,619             | -1,353                           | -646                             | -8.3%                            | -4.0%                            |       |
| 2013 | 17,394         | 17,148             | 15,592             | -245                             | -1,802                           | -1.4%                            | -10.4%                           |       |
| 2014 | 17,531         | 16,688             | 15,413             | -843                             | -2,118                           | -4.8%                            | -12.1%                           |       |
| 2015 | 17,034         | 17,587             | 15,567             | 552                              | -1,467                           | 3.2%                             | -8.6%                            |       |
| 1    | Average        | 16,742             | 16,554             | 15,726                           | -187                             | -1,186                           | -1.1%                            | -7.1% |

2 Q. Does this complete your Prepared Direct testimony?

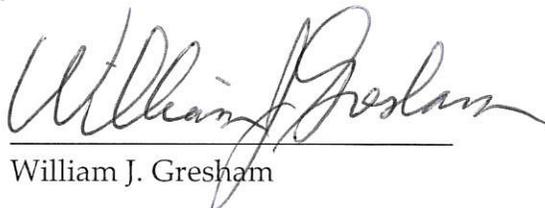
3 A. Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, William J. Gresham, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
William J. Gresham

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by William J. Gresham on this the  
19<sup>th</sup> day of MAY, 2016.



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
Notary Public

My Commission expires: MARCH 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
PAUL R. MOUL  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**MAY 27, 2016**

Attorneys for  
**COLUMBIA GAS OF KENTUCKY, INC.**

**Columbia Gas of Kentucky, Inc.**  
Direct Testimony of Paul R. Moul

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## GLOSSARY OF ACRONYMS AND DEFINED TERMS

| ACRONYM        | DEFINED TERM   |
|----------------|--|
| AFUDC          | Allowance for Funds Used During Construction   |
| AMRP           | Accelerated Main Replacement Program   |
| $\beta$        | Beta   |
| b              | represents the retention rate that consists of the fraction of earnings that are not paid out as dividends         |
| $b \times r$   | Represents internal growth   |
| CAPM           | Capital Asset Pricing Model  |
| CCR            | Corporate Credit Rating  |
| CE             | Comparable Earnings  |
| DCF            | Discounted Cash Flow   |
| g              | Growth rate  |
| GAAP           | Generally Accepted Accounting Principles   |
| IGF            | Internally Generated Funds   |
| Lev            | Leverage modification  |
| LT             | Long Term  |
| M&M            | Modigliani & Miller  |
| P-E            | Price-earnings   |
| r              | represents the expected rate of return on common equity  |
| R <sub>f</sub> | Risk-free rate of return   |
| R <sub>m</sub> | Market risk premium  |
| RP             | Risk Premium   |
| s              | Represents the new common shares expected to be issued by a firm   |
| SBBI           | Stocks, Bonds, Bills and Inflation   |
| $s \times v$   | Represents external growth   |
| S&P            | Standard & Poor's  |
| v              | Represents the value that accrues to existing shareholders from selling stock at a price different from book value |
| WNA            | Weather Normalization Adjustment   |

**PREPARED DIRECT TESTIMONY OF PAUL R. MOUL**

**INTRODUCTION AND SUMMARY OF RECOMMENDATIONS**

1   **Q: Please state your name, occupation and business address.**

2   A: My name is Paul Ronald Moul. My business address is 251 Hopkins Road,  
3       Haddonfield, New Jersey 08033-3062. I am Managing Consultant at the  
4       firm P. Moul & Associates, an independent financial and regulatory  
5       consulting firm. My educational background, business experience and  
6       qualifications are provided in Appendix A, which follows my direct  
7       testimony.

8

9   **Q: What is the purpose of your direct testimony?**

10  A: My testimony presents evidence, analysis, and a recommendation  
11       concerning the appropriate rate of return that the Public Service  
12       Commission of the Commonwealth of Kentucky (the "Commission")  
13       should allow Columbia Gas of Kentucky, Inc., ("Columbia" or the  
14       "Company") to realize as a result of this proceeding that apply to its gas  
15       distribution operations. My analysis and recommendation are supported  
16       by the detailed financial data set forth in Attachments PRM-1 through  
17       PRM-15. I also sponsor Filing Requirement 16-(7)(h)11 and 16-(8)(j).

18

1 **Q: Based upon your analysis, what is your conclusion concerning the**  
2 **appropriate rate of return for the Columbia in this case?**

3 A: My conclusion is that the Company's overall rate of return is 8.41%, which  
4 contains a cost of common equity of 11.00%. It is my opinion that the  
5 Commission should adopt this rate of return and cost of equity as part of  
6 its determination of the Company's rates. I have presented the weighted  
7 average cost of capital for the Company on page 1 of Attachment PRM-1  
8 and details of my cost equity on page 2 of Attachment PRM-2. The  
9 weighted average cost of capital that I determined is based upon  
10 Columbia's thirteen-month average capitalization for the fully forecasted  
11 test period ending December 31, 2017. The resulting overall cost of capital,  
12 which is the product of weighting the individual capital costs by the  
13 proportion of each respective type of capital; should, if adopted by the  
14 Commission, establish a compensatory level of return for the use of such  
15 capital; and should provide the Company with the ability to attract capital  
16 on reasonable terms.

17

18 **Q: What background information have you considered in reaching a**  
19 **conclusion concerning Columbia's cost of capital?**

1 A: Columbia is an indirect wholly-owned subsidiary of NiSource Inc.  
2 (“NiSource”). NiSource is a holding company that owns subsidiaries  
3 engaged in the distribution of natural gas and owns Northern Indiana  
4 Public Service Company, a combination electric and gas utility operating  
5 in Indiana.

6 The Company provides natural gas distribution service to approx-  
7 imately 135,000 customers in central and eastern Kentucky. Throughput  
8 to its customers in 2015 was represented by approximately 20% to  
9 residential sales customers, 10% to other sales customers, and 70% to  
10 transportation customers. The Company’s largest customers receive  
11 19,607,331 Mcf of deliveries, or approximately 54% of total Company  
12 throughput. This means that the Company’s throughput is highly  
13 concentrated, which can have a significant impact on the Company’s  
14 operations.

15 Columbia’s flowing gas is provided by transportation  
16 arrangements with interstate pipelines and with local producers. The  
17 Company supplements its flowing gas supplies with gas withdrawn from  
18 underground storage.

19

20 **Q: How have you determined the cost of common equity in this case?**

1 A: The cost of common equity is established using capital market and  
2 financial data relied upon by investors to assess the relative risk, and  
3 hence the cost of equity, for a gas distribution utility, such as the  
4 Company. In this regard, I have considered four (4) well-recognized  
5 measures of the cost of equity: the Discounted Cash Flow (“DCF”) model,  
6 the Risk Premium (“RP”) analysis, the Capital Asset Pricing Model  
7 (“CAPM”), and the Comparable Earnings (“CE”) approach.

8

9 **Q: In your opinion, what factors should the Commission consider when**  
10 **determining Columbia’s rate of return in this proceeding?**

11 A: The Commission’s rate of return allowance must be set to cover Colum-  
12 bia’s interest and dividend payments, provide a reasonable level of  
13 earnings retention, produce an adequate level of internally generated  
14 funds to meet capital requirements, be commensurate with the risk to  
15 which the Company’s capital is exposed, assure confidence in the  
16 financial integrity of the Company, support reasonable credit quality, and  
17 allow the Company to raise capital on reasonable terms. The return that I  
18 propose fulfills these established standards of a fair rate of return set forth  
19 by the landmark Bluefield and Hope cases.<sup>1</sup> That is to say, my proposed

---

<sup>1</sup>Bluefield Water Works & Improvement Co. v. P.S.C. of West Virginia, 262 U.S. 679 (1923) and F.P.C. v. Hope Natural Gas Co., 320 U.S. 591 (1944).

1 rate of return is commensurate with returns available on investments  
2 having corresponding risks.

3

4 **Q: How have you measured the cost of equity in this case?**

5 A: It is necessary to use a proxy group of companies to measure the  
6 Company's cost of equity because its stock is not traded. As noted above,  
7 the Company's stock is completely owned by NiSource through  
8 intermediate holding companies. The use of a proxy group to measure the  
9 Company's current cost of equity is a common practice of analysts  
10 performing these types of studies. The models that I used to measure the  
11 cost of common equity for the Company were applied with market and  
12 financial data developed from a group of eight (8) gas companies. The  
13 companies are: Atmos Energy Corp., Chesapeake Utilities Corp., Laclede  
14 Group, Inc., New Jersey Resources Corp., Northwest Natural Gas, South  
15 Jersey Industries, Inc., Southwest Gas Corporation, and WGL Holdings,  
16 Inc. I will refer to these companies as the "Gas Group" throughout my  
17 testimony.

18

19 **Q: Please explain the selection process used to assemble the Gas Group?**

1 A: I began with the universe of gas utilities contained in the basic service of  
2 The Value Line Investment Survey, which consists of twelve companies.  
3 Value Line is an investment advisory service that is a widely used source  
4 in public utility rate cases. Value Line is a database that is familiar to the  
5 Commission, and is widely available to investors. Value Line is frequently  
6 used by utility witnesses and witnesses for the Attorney General in public  
7 utility rate cases. I eliminated four companies from the Value Line group  
8 when I assembled my Gas Group. Two companies were eliminated be-  
9 cause they are the targets of acquisitions. Two others were removed due  
10 to business segment reasons. The individual eliminations were: AGL Re-  
11 sources due to the announced acquisition of it by Southern Company,  
12 NiSource Inc. due to its sizable electric operations and recent separation  
13 of the former natural gas pipeline/storage operations, Piedmont Natural  
14 Gas due to the announced acquisition of it by Duke Energy Corp., and  
15 UGI Corp. due to its diversified businesses consisting of six reportable  
16 segments, including propane, two international LPG segments, natural  
17 gas utility, energy services, and electric generation. The eliminations were  
18 attributed to operational differences and diversification, as identified in  
19 page 2 of Attachment PRM-3. The remaining eight companies are  
20 included in my Gas Group.

1

2 **Q: How have you performed your cost of equity analysis utilizing the**  
3 **market data for the Gas Group?**

4 A: I have applied the models/methods for estimating the cost of equity using  
5 the average data for the Gas Group. I have not measured separately the  
6 cost of equity for the individual companies within the Gas Group, because  
7 the determination of the cost of equity for an individual company can be  
8 problematic. The use of group average data will reduce the effect of  
9 potentially anomalous results for an individual company if a company-  
10 by-company approach were utilized. This is to say, by employing group  
11 average data, rather than individual company analysis; I have minimized  
12 the effect of extraneous influences on the market data for an individual  
13 company.

14

15 **Q: Please summarize your cost of equity analysis.**

16 A: My cost of equity determination was derived from the results of the  
17 methods/models identified above. In general, the use of more than one  
18 method provides a superior foundation to arrive at the cost of equity. At  
19 any point in time, any single method can provide an incomplete measure  
20 of the cost of equity. The following table, derived from the model results

1 presented on page 2 of Attachment PRM-1, provides a summary of the  
2 indicated costs of equity using each of these approaches.

|                               | <u>Excluding<br/>Flotation</u> | <u>Including<br/>Flotation<sup>2</sup></u> |
|-------------------------------|--------------------------------|--|
| DCF                           | 9.93%                          | 10.13%                                     |
| RP                            | 11.50%                         | 11.70%                                     |
| CAPM                          | 11.25%                         | 11.45%                                     |
| Comparable Earnings           | 12.20%                         | 12.20%                                     |
| Measures of Central Tendency: |                                |  |
| Average                       | 11.22%                         | 11.37%                                     |
| Median                        | 11.38%                         | 11.58%                                     |
| Mid-point                     | 11.07%                         | 11.17%                                     |

3 From these results, the return for the Company should be 11.00%. My  
4 recommended rate of return on common equity of 11.00% makes no  
5 provision for the prospect that the rate of return may not be achieved due  
6 to unforeseen events, such as unexpected spikes in the cost of purchased  
7 products and other expenses. To obtain new capital and retain existing  
8 capital, the rate of return on common equity must be high enough to  
9 satisfy investors' requirements.

---

<sup>2</sup>Flotation costs are defined as the out-of-pocket costs associated with the issuance of common stock. Those costs typically consist of the underwriters' discount and company issuance expenses.

1 NATURAL GAS RISK FACTORS

2 **Q: What factors currently affect the business risk of natural gas utilities?**

3 A: Gas utilities face risks arising from competition, economic regulation, the  
4 business cycle, and customer usage patterns. Today, they operate in a  
5 more complex environment with time frames for decision making  
6 considerably shortened. Their business profile is influenced by market-  
7 oriented pricing for the commodity distributed to customers and open  
8 access for the transportation of natural gas for large volume customers.  
9 Columbia witness Miller will discuss the particular challenges facing the  
10 Company.

11 Natural gas utilities have focused increased attention on safety and  
12 reliability issues. Consequently, natural gas companies are now allocating  
13 more of their resources to address new and pending pipeline safety  
14 regulations and infrastructure issues.

15  
16 **Q: How does Columbia's throughput to large volume customers affect its  
17 risk profile?**

18 A: Success in this aspect of Columbia's market is subject to the business cycle,  
19 the price of alternative energy sources, and pressures from competitors.  
20 Moreover, external factors can also influence Columbia's throughput to

1 these customers, which face competitive pressure on their operations  
2 from facilities located outside Columbia's service territory. Columbia's  
3 risk profile is strongly influenced by natural gas sold/delivered to  
4 customers engaged in petroleum refining, automobile assembly, and the  
5 manufacturing of steel, glass, and chemicals. Indeed, throughput to its  
6 largest customers represents 54% of total throughput as previously noted.  
7 Some large volume users that have traditionally used transportation  
8 service also have the ability to bypass Columbia's facilities. Columbia has  
9 experienced bypass in the past and the threat continues to exist.

10

11 **Q: Please indicate how its construction program affects Columbia's risk**  
12 **profile.**

13 A: Columbia is required to undertake investments to maintain and upgrade  
14 existing facilities in its service territories. To maintain safe and reliable  
15 service to existing customers, Columbia must invest to upgrade its  
16 infrastructure. The rehabilitation of Columbia's infrastructure represents  
17 a non-revenue producing use of capital. Columbia has approximately 411  
18 miles (or 16%) of its distribution mains constructed of unprotected bare  
19 steel and cast iron that are to be replaced pursuant to its main replacement  
20 program. Also, Columbia has 9,908 (or 7%) of its services constructed of

1 unprotected bare steel that will also be replaced along with its main  
2 replacement program. Columbia projects its construction expenditures  
3 through 2018 will be:

|       |    |             |
|-------|----|-------------|
| 2016  | \$ | 30,788,390  |
| 2017  |    | 31,536,981  |
| 2018  |    | 28,738,717  |
| 2019  |    | 27,242,480  |
| 2020  |    | 25,947,052  |
|       |    |             |
| Total | \$ | 144,253,620 |
|       |    |             |

4 Over this period, these capital expenditures will represent approximately  
5 56% ( $\$144,253,620 \div \$259,607,348$ ) of its net utility plant at December 31,  
6 2015. As previously noted, a fair rate of return represents a key to a  
7 financial profile that will provide the Company with the ability to raise  
8 the capital necessary to meet its needs on reasonable terms.

9  
10 **Q: Does your cost of equity analysis and recommendation take into**  
11 **account the weather normalization adjustment (“WNA”) that is**  
12 **presently in effect for the Company?**

13 **A:** Yes. I have done so by using the market based evidence of the cost of eq-  
14 uity derived from the Gas Group. All but two companies in my Gas Group  
15 have some form of WNA mechanism. Even these two companies have or

1 are proposing to adopt mechanisms that account for the effect of weather.  
2 In the case of Laclede Gas, it has a weather mitigated rate design that  
3 recovers its fixed costs more evenly during the heating season. In the case  
4 of Chesapeake, it is currently seeking to implement a decoupling  
5 mechanism in the Delaware division tariff. Therefore, the market prices  
6 of the companies in my Gas Group reflect the expectations of investors  
7 that these companies' revenues are stabilized to some extent by a WNA  
8 mechanism. Therefore, my analysis already reflects the impacts of WNA  
9 on investor expectations through the use of market-determined models.

10

11 **Q: Are you aware that the accelerated main replacement program**  
12 **("AMRP") is available to natural gas utilities in Kentucky, and does the**  
13 **AMRP affect the Company's cost of capital?**

14 A: I am aware that the Company is utilizing the AMRP rider. Again, I have  
15 already reflected the implications of the AMRP in my cost of equity anal-  
16 ysis. I say this because most of the proxy group companies (i.e., seven of  
17 eight companies) whose data has been used to develop the cost of equity  
18 for Columbia in this proceeding have an AMRP or similar infrastructure  
19 rehabilitation mechanisms. Indeed, Atmos Energy, Chesapeake Utilities,  
20 Laclede Group, New Jersey Resources, Northwest Natural Gas, South

1 Jersey Industries, and WGH Holdings make use of a AMRP or similar  
2 infrastructure rehabilitation mechanisms. Hence, the benefit of a AMRP,  
3 or other regulatory mechanisms, that impact the cost of equity is already  
4 reflected in the market evidence for the proxy group.

5

6 **Q: How should the Commission respond to the issues facing the natural**  
7 **gas utilities and, in particular, Columbia?**

8 A: The Commission should recognize and take into account the competitive  
9 environment and the risk it poses in the natural gas business and the  
10 Company's significant capital program in determining the cost of capital  
11 for Columbia, and provide a reasonable opportunity for Columbia to  
12 actually achieve its cost of capital.

13

14 **FUNDAMENTAL RISK ANALYSIS**

15 **Q: Is it necessary to conduct a fundamental risk analysis to provide a**  
16 **framework for a determination of a utility's cost of equity?**

17 A: Yes, it is. It is necessary to establish a company's relative risk position  
18 within its industry through a fundamental analysis of various  
19 quantitative and qualitative factors that bear upon investors' assessment  
20 of overall risk. The qualitative factors that bear upon Company risk have

1 already been discussed and are detailed in the testimony of Columbia wit-  
2 ness Miller. The quantitative risk analysis follows. For this purpose, I  
3 compared Columbia to the S&P Public Utilities, an industry-wide proxy  
4 consisting of various regulated businesses, and to the Gas Group.

5

6 **Q: What are the components of the S&P Public Utilities?**

7 A: The S&P Public Utilities is a widely recognized index that is comprised of  
8 electric power and natural gas companies. These companies are identified  
9 on page 3 of Attachment PRM-4.

10

11 **Q: Is knowledge of a utility's bond rating an important factor in assessing**  
12 **its risk and cost of capital?**

13 A: Yes. Knowledge of a company's credit quality rating is important because  
14 the cost of each type of capital is directly related to the associated risk of  
15 the firm. So while a company's credit quality risk is shown directly by the  
16 rating and yield on its bonds, these relative risk assessments also bear  
17 upon the cost of equity. This is because a firm's cost of equity is  
18 represented by its borrowing cost plus compensation to recognize the  
19 higher risk of an equity investment compared to debt.

20

1 **Q: How do the bond ratings compare for Columbia, the Gas Group, and**  
2 **the S&P Public Utilities?**

3 A: The Company obtains its external capital not funded by internal sources  
4 from NiSource Finance Corp. Presently, the NiSource credit quality  
5 ratings are Baa2 from Moody's Investors Service ("Moody's") and BBB+  
6 from Standard & Poor's Corporation ("S&P"). These ratings for NiSource  
7 represent the Long Term ("LT") issuer rating by Moody's and the  
8 corporate credit rating ("CCR") designation by S&P, which focuses upon  
9 the credit quality of the issuer of the debt rather than upon the debt  
10 obligation itself.

11 For the Gas Group, the average LT issuer rating is A2 by Moody's  
12 and the average CCR is A- by S&P, as displayed on page 2 of Attachment  
13 PRM-3. For the S&P Public Utilities, the average credit quality rating is  
14 A3 by Moody's and BBB+ by S&P, as displayed on page 3 of Attachment  
15 PRM-4. Many of the financial indicators that I will subsequently discuss  
16 are considered during the rating process.

17

18 **Q: How do the financial data compare for Columbia, the Gas Group, and**  
19 **the S&P Public Utilities?**

1 A: The broad categories of financial data that I will discuss are shown on  
2 Attachments PRM-2, PRM-3, and PRM-4. The important categories of  
3 relative risk may be summarized as follows:

4 Size. In terms of capitalization, Columbia is much smaller than the  
5 average size of the Gas Group, and very much smaller than the average  
6 size of the S&P Public Utilities. All other things being equal, a smaller  
7 company is riskier than a larger company because a given change in  
8 revenue and expense has a proportionately greater impact on a small firm.  
9 As I will demonstrate later, the size of a firm can impact its cost of equity.  
10 This is the case for Columbia and the Gas Group.

11 Market Ratios. Market-based financial ratios, such as  
12 earnings/price ratios and dividend yields, provide a partial measure of  
13 the investor-required cost of equity. If all other factors are equal, investors  
14 will require a higher rate of return for companies that exhibit greater risk,  
15 in order to compensate for that risk. That is to say, a firm that investors  
16 perceive to have higher risks will experience a lower price per share in  
17 relation to expected earnings.<sup>3</sup>

---

<sup>3</sup>For example, two otherwise similarly situated firms each reporting \$1.00 in earnings per share would have different market prices at varying levels of risk (i.e., the firm with a higher level of risk will have a lower share value, while the firm with a lower risk profile will have a higher share value).

1           There are no market ratios available for Columbia because  
2           NiSource owns its stock. The five-year average price-earnings multiple  
3           for the Gas Group was fairly similar to that of the S&P Public Utilities.  
4           The five-year average dividend yields were lower for the Gas Group as  
5           compared to the S&P Public Utilities. The average market-to-book ratios  
6           were also fairly similar for the Gas Group and the S&P Public Utilities.

7           Common Equity Ratio. The level of financial risk is measured by  
8           the proportion of long-term debt and other senior capital that is contained  
9           in a company's capitalization. Financial risk is also analyzed by  
10          comparing common equity ratios (the complement of the ratio of debt and  
11          other senior capital). That is to say, a firm with a high common equity  
12          ratio has lower financial risk, while a firm with a low common equity ratio  
13          has higher financial risk. The five-year average common equity ratios,  
14          based on total capital were 52.4% for Columbia of Kentucky, 57.6% for the  
15          Gas Group, and 44.9% for the S&P Public Utilities.

16          Return on Book Equity. Greater variability (i.e., uncertainty) of a  
17          firm's earned returns signifies relatively greater levels of risk, as shown  
18          by the coefficient of variation (standard deviation ÷ mean) of the rate of  
19          return on book common equity. The higher the coefficients of variation,  
20          the greater degree of variability. For the five-year period, the coefficients

1 of variation were 0.099 (1.1% ÷ 11.1%) for Columbia, 0.058 (0.6% ÷ 10.4%)  
2 for the Gas Group, and 0.100 (1.0% ÷ 10.0%) for the S&P Public Utilities.  
3 The Company's rates of return were more variable than the Gas Group  
4 and close to the S&P Public Utilities.

5 Operating Ratios. I have also compared operating ratios (the  
6 percentage of revenues consumed by operating expense, depreciation,  
7 and taxes other than income).<sup>4</sup> The five-year average operating ratios  
8 were 86.3% for Columbia, 88.3% for the Gas Group, and 80.8% for the S&P  
9 Public Utilities. Columbia and the Gas Group had higher operating ratios  
10 than the S&P Public Utilities.

11 Coverage. The level of fixed charge coverage (i.e., the multiple by  
12 which available earnings cover fixed charges, such as interest expense)  
13 provides an indication of the earnings protection for creditors. Higher  
14 levels of coverage, and hence earnings protection for fixed charges, are  
15 usually associated with superior grades of creditworthiness. The five-year  
16 average interest coverage (excluding Allowance for Funds Used During  
17 Construction ("AFUDC")) was 4.41 times for Columbia, 4.90 times for the  
18 Gas Group, and 3.19 times for the S&P Public Utilities.

---

<sup>4</sup>The complement of the operating ratio is the operating margin which provides a measure of profitability. The higher the operating ratio, the lower the operating margin.

1           Quality of Earnings. Measures of earnings quality usually are  
2 revealed by the percentage of AFUDC related to income available for  
3 common equity, the effective income tax rate, and other cost deferrals.  
4 These measures of earnings quality usually influence a firm's internally  
5 generated funds because poor quality of earnings would not generate  
6 high levels of cash flow. Quality of earnings has not been a significant  
7 concern for Columbia, the Gas Group and the S&P Public Utilities.

8           Internally Generated Funds. Internally generated funds ("IGF")  
9 provide an important source of new investment capital for a utility and  
10 represent a key measure of credit strength. Historically, the five-year  
11 average percentage of IGF to capital expenditures was 84.2% for  
12 Columbia, 90.0% for the Gas Group, and 87.5% for the S&P Public  
13 Utilities.

14           Betas. The financial data that I have been discussing relate  
15 primarily to company-specific risks. Market risk for firms with publicly-  
16 traded stock is measured by beta coefficients. Beta coefficients attempt to  
17 identify systematic risk, i.e., the risk associated with changes in the overall  
18 market for common equities.<sup>5</sup> Value Line publishes such a statistical

---

<sup>5</sup> Beta is a relative measure of the historical sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Index. The "Beta coefficient" is derived from a regression analysis of the relationship between weekly percentage changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. The betas

1       measure of a stock's relative historical volatility to the rest of the market.  
2       A comparison of market risk is shown by the Value Line beta of 0.76 as  
3       the average for the Gas Group (see page 2 of Attachment PRM-3) and 0.75  
4       as the average for the S&P Public Utilities (see page 3 of Attachment PRM-  
5       4).

6  
7       **Q: Please summarize your risk evaluation.**

8       A: While the Gas Group in certain respects provides useful evidence of the  
9       cost of equity, Columbia's capital costs are higher due to its greater risk.  
10      Columbia's higher risk as compared to the Gas Group is revealed by the  
11      lower credit quality ratings of NiSource, its smaller size, its lower com-  
12      mon equity ratio, its higher earnings variability, its lower interest cover-  
13      age, and its lower IGF to construction. As such, the cost of equity for the  
14      Gas Group would only partially compensate for Columbia's higher risk.  
15      Therefore, the Gas Group's indicated cost of equity provides a  
16      conservative representation of the risk for Columbia in this case.

---

are adjusted for their long-term tendency to converge toward 1.00. A common stock that has a beta less than 1.0 is considered to have less systematic risk than the market as a whole and would be expected to rise and fall more slowly than the rest of the market. A stock with a beta above 1.0 would have more systematic risk.

1 CAPITAL STRUCTURE RATIOS

2 **Q: Does Attachment PRM-5 provide Columbia's capitalization and capital**  
3 **structure ratios?**

4 A: Yes. Attachment PRM-5 presents Columbia's capitalization and related  
5 capital structure ratios. The February 29, 2016 capitalization corresponds  
6 with the actual data in the base period for the Company. The August 31,  
7 2016 capital structure is estimated at the end of the base period that  
8 consists of six-months of actual data and six-months of projected data. The  
9 December 31, 2017 capital structure is estimated at the end of the fully  
10 forecasted test period. Prior to the end of the fully forecasted test period,  
11 the Company plans to issue \$31 million of long-term debt that will take  
12 place in September 2016. There is also a debt maturity of \$4.210 million  
13 that will occur early in 2017. The resulting capital structure ratios are  
14 46.32% long-term debt, 1.26% short-term debt, and 52.42% common  
15 equity, based upon the thirteen month average balance for the 2017 test  
16 year.

17  
18 **Q: Are these capital structure ratios reasonable?**

19 A: Yes. I have verified the reasonableness of the Company's common equity  
20 ratio by considering the historical capital structure ratios for the Gas

1 Group and with analysts' forecasts, which influence investor  
2 expectations. For the historical comparison, the Gas Group had a 54.9%  
3 common equity ratio at year-end 2014 calculated without short-term debt.  
4 My comparison of these ratios rests on a calculation without short-term  
5 debt because the Company uses a thirteen-month average for ratesetting  
6 purposes, while the GAAP financial reports for the Gas Group use fiscal  
7 year-end balances of short-term debt. This comparison shows that the  
8 Company's common equity ratio is reasonable. I have also compared the  
9 Company's proposed common equity ratio to that of the Gas Group based  
10 upon forecast data widely available to investors from Value Line. In the  
11 case of the Value Line forecasts, the common equity ratios are computed  
12 without regard to short-term debt. Those ratios are:

| Company                       | 2016  | 2017  | 2019-21 |
|-------------------------------|-------|-------|---------|
| Atmos Energy Corporation      | 55.0% | 55.0% | 55.0%   |
| Chesapeake Utilities          | 71.0% | 71.0% | 70.0%   |
| Laclede Group, Inc.           | 45.5% | 47.5% | 48.5%   |
| New Jersey Resources Corp.    | 56.5% | 56.5% | 59.0%   |
| Northwest Natural Gas Co.     | 55.5% | 55.5% | 56.5%   |
| South Jersey Industries, Inc. | 51.0% | 51.5% | 52.5%   |
| Southwest Gas Corporation     | 50.5% | 50.5% | 51.5%   |
| WGL Holdings, Inc.            | 56.0% | 55.0% | 51.0%   |
| <b>Average</b>                | 55.1% | 55.3% | 55.5%   |

Source: The Value Line Investment Survey, March 4, 2016

1 These forecasts show that the 52.42% common equity ratio for Columbia,  
2 which includes short-term debt, is reasonable by reference to the forecast  
3 ratios of the Gas Group.

4  
5 **Q: What capital structure ratios do you recommend be adopted for rate of**  
6 **return purposes in this proceeding?**

7 A: Since rate setting is prospective, the rate of return should, at a minimum,  
8 reflect known or reasonably foreseeable changes which will occur during  
9 the course of the fully forecasted test period. As a result, I will adopt the  
10 Company's fully forecast test period capital structure ratios of 46.32%  
11 long-term debt, 1.26% short-term debt and 52.42% common equity. These  
12 capital structure ratios are the best approximation of the mix of capital the  
13 Company will employ to finance its rate base during the period new rates  
14 are in effect.

15  
16 **COST OF SENIOR CAPITAL**

17 **Q: What cost rate have you assigned to the debt portion of Columbia of**  
18 **Kentucky's capital structure?**

19 A: The determination of the long-term debt cost rate is essentially an arith-  
20 metic exercise. This is due to the fact that the Company has contracted for

1 the use of this capital for a specific period of time at a specified cost rate.  
2 As shown on page 1 of Attachment PRM-6, I have computed the actual  
3 embedded cost rate of debt at February 29, 2016, and estimated at August  
4 31, 2016 and December 31, 2017. On page 2 of Attachment PRM-6, the em-  
5 bedded cost of debt is shown for December 31, 2017 using the thirteen-  
6 month average balances. For the new issue of long-term debt, I have used  
7 an estimated cost of 4.95% for the issue in September. This interest rate  
8 reflects the formula used by the Company for issuing debt to NiSource  
9 Finance.

10 I will adopt the 5.64% embedded cost of long-term debt, as shown  
11 on page 2 of Attachment PRM-6. This rate is related to the amount of long-  
12 term debt shown on Attachment PRM-5 which provides the basis for the  
13 46.32% long-term debt ratio.

14  
15 **Q: What cost rate have you assigned to the short-term debt?**

16 **A:** I have used a cost of short-term debt of 2.50%, which represents the Com-  
17 pany's estimate for the fully forecasted test period. The Company obtains  
18 its short-term debt from the NiSource money pool, which has a credit fa-  
19 cility with a syndicate of banks. The interest rate is established as the one-

1 month LIBOR of 1.425% plus 1.075%, which represents the credit facility  
2 spread.

3  
4 **COST OF EQUITY – GENERAL APPROACH**

5 **Q: Please describe how you determined the cost of equity for**  
6 **the Company.**

7 A: Although my fundamental financial analysis provides the required  
8 framework to establish the risk relationships among Columbia, the Gas  
9 Group, and the S&P Public Utilities, the cost of equity must be measured  
10 by standard financial models that I identified above. Differences in risk  
11 traits, such as size, business diversification, geographical diversity, regu-  
12 latory policy, financial leverage, and bond ratings must be considered  
13 when analyzing the cost of equity.

14 It is also important to reiterate that no one method or model of the  
15 cost of equity can be applied in an isolated manner. Rather, informed  
16 judgment must be used to take into consideration the relative risk traits  
17 of the firm. It is for this reason that I have used more than one method to  
18 measure the Company's cost of equity. As I describe below, each of the  
19 methods used to measure the cost of equity contains certain incomplete

1 and/or overly restrictive assumptions and constraints that are not opti-  
2 mal. Therefore, I favor considering the results from a variety of methods.  
3 In this regard, I applied each of the methods with data taken from the Gas  
4 Group and arrived at a cost of equity of 11.00% for the Company.

### 6 DISCOUNTED CASH FLOW

7 **Q: Please describe the Discounted Cash Flow model.**

8 A: The DCF model seeks to explain the value of an asset as the present value  
9 of future expected cash flows discounted at the appropriate risk-adjusted  
10 rate of return. In its simplest form, the DCF return on common stock con-  
11 sists of a current cash (dividend) yield and future price appreciation  
12 (growth) of the investment. The dividend discount equation is the famil-  
13 iar DCF valuation model and assumes future dividends are systematically  
14 related to one another by a constant growth rate. The DCF formula is de-  
15 rived from the standard valuation model:  $P = D/(k-g)$ , where  $P$  = price,  $D$   
16 = dividend,  $k$  = the cost of equity, and  $g$  = growth in cash flows. By rear-  
17 ranging the terms, we obtain the familiar DCF equation:  $k = D/P + g$ . All of  
18 the terms in the DCF equation represent investors' assessment of expected  
19 future cash flows that they will receive in relation to the value that they  
20 set for a share of stock ( $P$ ). The DCF equation is sometimes referred to as

1 the "Gordon" model.<sup>6</sup> My DCF results are provided on page 2 of Attach-  
2 ment PRM-1 for the Gas Group. The DCF return is 10.13% including flo-  
3 tation costs.

4 Among other limitations of the model, there is a certain element of  
5 circularity in the DCF method when applied in rate cases. This is because  
6 investors' expectations for the future depend upon regulatory decisions.  
7 In turn, when regulators depend upon the DCF model to set the cost of  
8 equity, they rely upon investor expectations that include an assessment of  
9 how regulators will decide rate cases. Due to this circularity, the DCF  
10 model may not fully reflect the true risk of a utility.

11  
12 **Q: What is the dividend yield component of a DCF analysis?**

13 A: The dividend yield reveals the portion of investors' cash flow that is gen-  
14 erated by the return provided by dividend receipts. It is measured by the  
15 dividends per share relative to the price per share. The DCF methodology  
16 requires the use of an expected dividend yield to establish the investor-  
17 required cost of equity. For the twelve months ended March 2016, the  
18 monthly dividend yields are shown on Attachment PRM-7 and reflect an

---

<sup>6</sup> Although the popular application of the DCF model is often attributed to the work of Myron J. Gordon in the mid-1950's, J. B. Williams explicated the DCF model in its present form nearly two decades earlier.

1 adjustment to the month-end prices to reflect the buildup of the dividend  
2 in the price that has occurred since the last ex-dividend date (i.e., the date  
3 by which a shareholder must own the shares to be entitled to the dividend  
4 payment – usually about two to three weeks prior to the actual payment).

5 For the twelve months ended March 2016 the average dividend  
6 yield was 3.15% for the Gas Group based upon a calculation using annu-  
7 alized dividend payments and adjusted month-end stock prices. The div-  
8 idend yields for the more recent six- and three-month periods were 3.01%  
9 and 2.87%, respectively. I have used, for the purpose of the DCF model,  
10 the six-month average dividend yield of 3.01% for the Gas Group. The use  
11 of this dividend yield will reflect current capital costs, while avoiding spot  
12 yields. For the purpose of a DCF calculation, the average dividend yield  
13 must be adjusted to reflect the prospective nature of the dividend pay-  
14 ments, i.e., the higher expected dividends for the future. Recall that the  
15 DCF is an expectational model that must reflect investor anticipated cash  
16 flows for the Gas Group. I have adjusted the six-month average dividend  
17 yield in three different, but generally accepted, manners and used the av-  
18 erage of the three adjusted values as calculated in the lower panel of data  
19 presented on Attachment PRM-7. This adjustment adds ten basis points

1 to the six-month average historical yield, thus producing the 3.11% ad-  
2 justed dividend yield for the Gas Group.

3

4 **Q: What factors influence investors' growth expectations?**

5 A: As noted previously, investors are interested principally in the dividend  
6 yield and future growth of their investment (i.e., the price per share of the  
7 stock). Future earnings per share growth represent the DCF model's pri-  
8 mary focus because under the constant price-earnings multiple assump-  
9 tion of the model, the price per share of stock will grow at the same rate  
10 as earnings per share. In conducting a growth rate analysis, a wide variety  
11 of variables can be considered when reaching a consensus of prospective  
12 growth, including: earnings, dividends, book value, and cash flow stated  
13 on a per share basis. Historical values for these variables can be consid-  
14 ered, as well as analysts' forecasts that are widely available to investors.  
15 A fundamental growth rate analysis is sometimes represented by the in-  
16 ternal growth (" $b \times r$ "), where " $r$ " represents the expected rate of return  
17 on common equity and " $b$ " is the retention rate that consists of the fraction  
18 of earnings that are not paid out as dividends. To be complete, the internal  
19 growth rate should be modified to account for sales of new common stock  
20 -- this is called external growth (" $s \times v$ "), where " $s$ " represents the new

1 common shares expected to be issued by a firm and “v” represents the  
2 value that accrues to existing shareholders from selling stock at a price  
3 different from book value. Fundamental growth, which combines internal  
4 and external growth, provides an explanation of the factors that cause  
5 book value per share to grow over time.

6 Growth also can be expressed in multiple stages. This expression  
7 of growth consists of an initial “growth” stage where a firm enjoys rapidly  
8 expanding markets, high profit margins, and abnormally high growth in  
9 earnings per share. Thereafter, a firm enters a “transition” stage where  
10 fewer technological advances and increased product saturation begin to  
11 reduce the growth rate and profit margins come under pressure. During  
12 the “transition” phase, investment opportunities begin to mature, capital  
13 requirements decline, and a firm begins to pay out a larger percentage of  
14 earnings to shareholders. Finally, the mature or “steady-state” stage is  
15 reached when a firm’s earnings growth, payout ratio, and return on eq-  
16 uity stabilizes at levels where they remain for the life of a firm. The three  
17 stages of growth assume a step-down of high initial growth to lower sus-  
18 tainable growth. Even if these three stages of growth can be envisioned  
19 for a firm, the third “steady-state” growth stage, which is assumed to re-  
20 main fixed in perpetuity, represents an unrealistic expectation because the

1 three stages of growth can be repeated. That is to say, the stages can be  
2 repeated where growth for a firm ramps-up and ramps-down in cycles  
3 over time.

4  
5 **Q: How did you determine an appropriate growth rate?**

6 A: The growth rate used in a DCF calculation should measure investor ex-  
7 pectations. Investors consider both company-specific variables and over-  
8 all market sentiment (i.e., level of inflation rates, interest rates, economic  
9 conditions, etc.) when balancing their capital gains expectations with their  
10 dividend yield requirements. Investors are not influenced solely by a sin-  
11 gle set of company-specific variables weighted in a formulaic manner.  
12 Therefore, all relevant growth rate indicators using a variety of techniques  
13 must be evaluated when formulating a judgment of investor-expected  
14 growth.

15  
16 **Q: Did you consider company-specific data in your growth rate analysis?**

17 A: Yes. As presented on Attachments PRM-8 and Attachment PRM-9, I have  
18 considered both historical and projected growth rates in earnings per  
19 share, dividends per share, book value per share, and cash flow per share  
20 for the Gas Group. While analysts will review all measures of growth as I

1        have done, it is earnings per share growth that influences directly the ex-  
2        pectations of investors for utility stocks. Forecasts of earnings growth are  
3        required within the context of the DCF because the model is a forward-  
4        looking concept, and with a constant price-earnings multiple and payout  
5        ratio, all other measures of growth will mirror earnings growth. So with  
6        the assumptions underlying the DCF, all forward-looking projections  
7        should be similar with a constant price-earnings multiple, earned return,  
8        and payout ratio.

9                As to the issue of historical data, investors cannot purchase past  
10       earnings of a utility, rather they are only entitled to future earnings. In  
11       addition, assigning significant weight to historical performance results in  
12       double counting of the historical data. While history cannot be ignored, it  
13       is already factored into the analysts' forecasts of earnings growth. In de-  
14       veloping a forecast of future earnings growth, an analyst would first ap-  
15       prise himself/herself of the historical performance of a company. Hence,  
16       there is no need to count historical growth rates a second time, because  
17       historical performance is already reflected in analysts' forecasts which re-  
18       flect an assessment of how the future will diverge from historical perfor-  
19       mance.

1 Attachment PRM-8 shows the historical growth rates in earnings  
2 per share, dividends per share, book value per share, and cash flow per  
3 share for the Gas Group. The historical growth rates were taken from the  
4 Value Line publication that provides these data. As shown on Attachment  
5 PRM-8, the historical growth of earnings per share was in the range of  
6 4.88% to 5.88% for the Gas Group.

7  
8 **Q: Did you also consider analysts' expectations of expected growth?**

9 A: Yes. Attachment PRM-9 provides projected earnings per share growth  
10 rates taken from analysts' five year forecasts compiled by IBES/First Call,  
11 Zacks, Morningstar, SNL, and Value Line. IBES/First Call, Zacks, Morn-  
12 ingstar, and SNL represent reliable authorities of projected growth upon  
13 which investors rely. The IBES/First Call, Zacks, and SNL growth rates  
14 are consensus forecasts taken from a survey of analysts that make projec-  
15 tions of growth for these companies. The IBES/First Call, Zacks, Morn-  
16 ingstar, and SNL estimates are obtained from the Internet and are widely  
17 available to investors. First Call probably is quoted most frequently in the  
18 financial press when reporting on earnings forecasts. The Value Line fore-  
19 casts also are widely available to investors and can be obtained by sub-  
20 scription or free-of-charge at most public and collegiate libraries. The

1 IBES/First Call, Zacks, Morningstar, and SNL forecasts are limited to earn-  
2 ings per share growth, while Value Line makes projections of other finan-  
3 cial variables. The Value Line forecasts of dividends per share, book value  
4 per share, and cash flow per share have also been included on Attachment  
5 PRM-9 for the Gas Group.

6  
7 **Q: Is a five-year investment horizon associated with the analysts' forecasts**  
8 **consistent with the traditional DCF model?**

9 A: Yes. The constant form of the DCF assumes an infinite stream of cash  
10 flows, but investors do not expect to hold an investment indefinitely. Ra-  
11 ther than viewing the DCF in the context of an endless stream of growing  
12 dividends (e.g., a century of cash flows), the growth in the share value  
13 (i.e., capital appreciation, or capital gains yield) is most relevant to inves-  
14 tors' total return expectations. Hence, the sale price of a stock can be  
15 viewed as a liquidating dividend that can be discounted along with the  
16 annual dividend receipts during the investment-holding period to arrive  
17 at the investor expected return. The growth in the price per share will  
18 equal the growth in earnings per share absent any change in price-earn-  
19 ings ("P-E") multiple -- a necessary assumption of the DCF. As such, my  
20 company-specific growth analysis, which focuses principally upon five-

1 year forecasts of earnings per share growth, conforms with the type of  
2 analysis that influences the actual total return expectation of investors.  
3 Moreover, academic research focuses on five-year growth rates as they  
4 influence stock prices. Indeed, if investors really required forecasts which  
5 extended beyond five years in order to properly value common stocks,  
6 then I am sure that some investment advisory service would begin pub-  
7 lishing that information for individual stocks in order to meet the de-  
8 mands of investors. The absence of such a publication suggests that there  
9 is no market for this information, because investors do not require infinite  
10 forecasts in order to purchase and sell stocks in the marketplace.

11

12 **Q: What are the projected growth rates published by the sources you dis-**  
13 **cussed?**

14 A: As to the five-year forecast growth rates, Attachment PRM-9 indicates  
15 that the projected earnings per share growth rates for the Gas Group are  
16 5.33% by IBES/First Call, 5.74% by Zacks, 4.68% by Morningstar, 5.53% by  
17 SNL and 5.94%% by Value Line. As noted earlier, with the constant price-  
18 earnings multiple assumption of the DCF model, growth for these com-  
19 panies will occur at the higher earnings per share growth rate, thus pro-  
20 ducing the capital gains yield expected by investors.

1

2 **Q: What other factors did you consider in developing a growth rate?**

3 A: A variety of factors should be examined to reach a conclusion on the DCF  
4 growth rate. However, certain growth rate variables should be empha-  
5 sized when reaching a conclusion on an appropriate growth rate. From  
6 the various alternative measures of growth identified above, earnings per  
7 share should receive greatest emphasis. Earnings per share growth are the  
8 primary determinant of investors' expectations regarding their total re-  
9 turns in the stock market. This is because the capital gains yield (i.e., price  
10 appreciation) will track earnings growth with a constant price earnings  
11 multiple (a key assumption of the DCF model). Moreover, earnings per  
12 share (derived from net income) are the source of dividend payments and  
13 are the primary driver of retention growth and its surrogate, i.e., book  
14 value per share growth. As such, under these circumstances, greater em-  
15 phasis must be placed upon projected earnings per share growth. In this  
16 regard, it is worthwhile to note that Professor Myron Gordon, the fore-  
17 most proponent of the DCF model in rate cases, concluded that the best  
18 measure of growth in the DCF model is a forecast of earnings per share  
19 growth.<sup>7</sup> Hence, to follow Professor Gordon's findings, projections of

---

<sup>7</sup> Gordon, Gordon & Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management* (Spring 1989).

1 earnings per share growth, such as those published by IBES/First Call,  
2 Zacks, Morningstar, and Value Line, represent a reasonable assessment of  
3 investor expectations.

4  
5 **Q: What growth rate do you use in your DCF model?**

6 A: The forecasts of earnings per share growth, as shown on Attachment  
7 PRM-9, provide a range of average growth rates of 4.68% to 5.94%. Alt-  
8 hough the DCF growth rates cannot be established solely with a mathe-  
9 matical formulation, it is my opinion that an investor-expected growth  
10 rate of 6.00%, which is near the top of the range, is a reasonable estimate  
11 of investor expected growth within the array of earnings per share growth  
12 rates shown by the analysts' forecasts. The improved economic growth  
13 argues for a higher DCF growth rate. Moreover, for natural gas distribu-  
14 tion utilities, additional emphasis on infrastructure rehabilitation sug-  
15 gests that growth will be near the top of the range.

16  
17 **Q: Are the dividend yield and growth components of the DCF adequate to**  
18 **explain the rate of return on common equity when it is used in the cal-**  
19 **ulation of the weighted average cost of capital?**

1 A: Only if the capital structure ratios are measured with the market value of  
2 debt and equity. In the case of the Gas Group, those average capital struc-  
3 ture ratios are 31.77% long-term debt, 0.09% preferred stock, and 68.14%  
4 common equity, as shown on Attachment PRM-10. If book values are  
5 used to compute the capital structure ratios, then a leverage adjustment is  
6 required.

7  
8 **Q: What is a leverage adjustment?**

9 A: Where a firm's capitalization as measured by its stock price diverges from  
10 its book value capitalization, the potential exists for a financial risk differ-  
11 ence, because the capitalization of a utility measured at its market value  
12 contains more equity, less debt and therefore less risk than the capitaliza-  
13 tion measured at its book value. A leverage adjustment accounts for this  
14 difference between market value and book value capital structures.

15  
16 **Q: Why is a leverage adjustment necessary?**

17 A: In order to make the DCF results relevant to the capitalization measured  
18 at book value (as is done for rate setting purposes) the market-derived  
19 cost rate must be adjusted to account for this difference in financial risk.  
20 The only perspective that is important to investors is the return that they

1 can realize on the market value of their investment. As I have measured  
2 the DCF, the simple yield (D/P) plus growth (g) provides a return appli-  
3 cable strictly to the price (P) that an investor is willing to pay for a share  
4 of stock. The need for the leverage adjustment arises when the results of  
5 the DCF model (k) are to be applied to a capital structure that is different  
6 than indicated by the market price (P). From the market perspective, the  
7 financial risk of the Gas Group is accurately measured by the capital struc-  
8 ture ratios calculated from the market capitalization of a firm. If the rate  
9 setting process utilized the market capitalization ratios, then no addi-  
10 tional analysis or adjustment would be required, and the simple yield  
11 (D/P) plus growth (g) components of the DCF would satisfy the financial  
12 risk associated with the market value of the equity capitalization. Because  
13 the rate setting process uses a different set of ratios calculated from the  
14 book value capitalization, then further analysis is required to synchronize  
15 the financial risk of the book capitalization with the required return on  
16 the book value of the equity. This adjustment is developed through pre-  
17 cise mathematical calculations, using well recognized analytical proce-  
18 dures that are widely accepted in the financial literature. To arrive at that  
19 return, the rate of return on common equity is the unleveraged cost of  
20 capital (or equity return at 100% equity) plus one or more terms reflecting

1 the increase in financial risk resulting from the use of leverage in the cap-  
2 ital structure. The calculations presented in the lower panel of data shown  
3 on Attachment PRM-10, under the heading "M&M," provides a return of  
4 7.98% when applicable to a capital structure with 100% common equity.

5  
6 **Q: Are there specific factors that influence market-to-book ratios that de-**  
7 **termine whether the leverage adjustment should be made?**

8 A: No. The leverage adjustment is not intended, nor was it designed, to ad-  
9 dress the reasons that stock prices vary from book value. Hence, any ob-  
10 servations concerning market prices relative to book are not on point. The  
11 leverage adjustment deals with the issue of financial risk and does not  
12 transform the DCF result to a book value return through a market-to-book  
13 adjustment. Again, the leverage adjustment that I propose is based on the  
14 fundamental financial precept that the cost of equity is equal to the rate of  
15 return for an unleveraged firm (i.e., where the overall rate of return  
16 equates to the cost of equity with a capital structure that contains 100%  
17 equity) plus the additional return required for introducing debt and/or  
18 preferred stock leverage into the capital structure.

1 Further, as noted previously, the relatively high market prices of  
2 utility stocks cannot be attributed solely to the notion that these compa-  
3 nies are expected to earn a return on equity that differs from their cost of  
4 equity. Stock prices above book value are common for utility stocks, and  
5 indeed the stock prices of non-regulated companies exceed book values  
6 by even greater margins. In this regard, according to the Barron's issue of  
7 April 4, 2016, the major market indices' market-to-book ratios are well  
8 above unity. The Dow Jones Utility index traded at a multiple of 2.02  
9 times book value, which is below the market multiple of other indices. For  
10 example, the S&P Industrial index was at 3.76 times book value, and the  
11 Dow Jones Industrial index was at 3.26 times book value. It is difficult to  
12 accept that the vast majority of all firms operating in our economy are  
13 generating returns far in excess of their cost of capital. Certainly, in our  
14 free-market economy, competition should contain such "excesses" if they  
15 indeed exist.

16 Finally, the leverage adjustment adds stability to the final DCF cost  
17 rate. That is to say, as the market capitalization increases relative to its  
18 book value, the leverage adjustment increases while the simple yield  
19  $(D/P)$  plus growth  $(g)$  result declines. The reverse is also true that when

1 the market capitalization declines, the leverage adjustment also declines  
2 as the simple yield (D/P) plus growth (g) result increases.

3

4 **Q: Is the leverage adjustment that you propose designed to transform the**  
5 **market return into one that is designed to produce a particular market-**  
6 **to-book ratio?**

7 A: No, it is not. The adjustment that I label as a “leverage adjustment” is  
8 merely a convenient way of showing the amount that must be added to  
9 (or subtracted from) the result of the simple DCF model (i.e.,  $D/P + g$ ), in  
10 the context of a return that applies to the capital structure used in rate-  
11 making, which is computed with book value weights rather than market  
12 value weights, in order to arrive at the utility’s total cost of equity. I spec-  
13 ify a separate factor, which I call the leverage adjustment, but there is no  
14 need to do so other than providing identification for this factor. If I ex-  
15 pressed my return solely in the context of the book value weights that we  
16 use to calculate the weighted average cost of capital, and ignore the famil-  
17 iar  $D/P + g$  expression entirely, then there would be no separate element  
18 to reflect the financial leverage change from market value to book value  
19 capitalization. As shown in the bottom panel of data on Attachment PRM-  
20 10, the equity return applicable to the book value common equity ratio is

1 equal to 7.98%, which is the return for the Gas Group applicable to its  
2 equity with no debt in its capital structure (i.e., the cost of capital is equal  
3 to the cost of equity with a 100% equity ratio) plus 1.94% compensation  
4 for having a 44.46% debt ratio, plus 0.01% for having a 0.16% preferred  
5 stock ratio. The sum of the parts is 9.93% (7.98% + 1.94% + 0.01%) and  
6 there is no need to even address the cost of equity in terms of  $D/P + g$ . To  
7 express this same return in the context of the familiar DCF model, I  
8 summed the 3.11% dividend yield, the 6.00% growth rate, and the 0.82%  
9 for the leverage adjustment in order to arrive at the same 9.93% (3.11% +  
10 6.00% + 0.82%) return. I know of no means to mathematically solve for the  
11 0.82% leverage adjustment by expressing it in the terms of any particular  
12 relationship of market price to book value. The 0.82% adjustment is  
13 merely a convenient way to compare the 9.93% return computed directly  
14 with the Modigliani & Miller formulas to the 9.11% return generated by  
15 the DCF model (i.e.,  $D_1/P_0 + g$ , or the traditional form of the DCF -- see  
16 page 1 of Attachment PRM-7) based on a market value capital structure.  
17 A 9.11% return assigned to anything other than the market value of equity  
18 cannot equate to a reasonable return on book value that has higher finan-  
19 cial risk. My point is that when we use a market-determined cost of equity  
20 developed from the DCF model, it reflects a level of financial risk that is

1 different (in this case, lower) from the capital structure stated at book  
2 value. This process has nothing to do with targeting any particular mar-  
3 ket-to-book ratio.

4

5 **Q: What does your DCF analysis show?**

6 A: As explained previously, I have utilized a six-month average dividend  
7 yield ("D<sub>1</sub>/P<sub>0</sub>") adjusted in a forward-looking manner for my DCF calcula-  
8 tion. This dividend yield is used in conjunction with the growth rate ("g")  
9 previously developed. The DCF also includes the leverage modification  
10 ("lev.") required when the book value equity ratio is used in determining  
11 the weighted average cost of capital in the rate setting process rather than  
12 the market value equity ratio related to the price of stock. In addition, flo-  
13 tation costs ("flot.") have also been recognized in the DCF return. The re-  
14 sulting DCF cost rate is:

$$\begin{array}{rcccccccccccc} & D_1/P_0 & + & g & + & lev. & = & k & \times & flot. & = & K \\ \text{Gas Group} & 3.11\% & + & 6.00\% & + & 0.82\% & = & 9.93\% & \times & 1.02 & = & 10.13\% \end{array}$$

15 The DCF result shown above represents the simplified (i.e., Gor-  
16 don) form of the model that contains a constant growth assumption. I  
17 should reiterate, however, that the DCF-indicated cost rate provides an

1 explanation of the rate of return on common stock market prices without  
2 regard to the prospect of a change in the price-earnings multiple. An as-  
3 sumption that there will be no change in the price-earnings multiple is not  
4 supported by the realities of the equity market, because price-earnings  
5 multiples do not remain constant. This is one of the constraints of this  
6 model that makes it important to consider other model results when de-  
7 termining a company's cost of equity.

8  
9 **Q: How have you measured the flotation cost allowance for the DCF re-**  
10 **turn?**

11 A: The flotation cost adjustment adds 0.20% (10.13% - 9.93%) to the rate of  
12 return on common equity for the Gas Group as shown by the calculations  
13 provided on page 2 of Attachment PRM-1. In my opinion, this adjustment  
14 is reasonable and supported by the analysis of natural gas utility stock  
15 issue shown on Attachment PRM-11. On that Attachment, I show that the  
16 average underwriters' discount and commission and company issuance  
17 expenses are 3.9% for the twelve issues of common stock shown there for  
18 the Gas Group. Since I apply the flotation cost to the entire DCF result, I  
19 have utilized an adjustment factor that is approximately one-half of the

1 3.9% as measured on Attachment PRM-11. Hence, my flotation cost ad-  
2 justment factor is 1.02, which is used on page 2 of Attachment PRM-1.

3  
4 **RISK PREMIUM ANALYSIS**

5 **Q: Please describe your use of the risk premium approach to determine the**  
6 **cost of equity.**

7 A: With the Risk Premium approach, the cost of equity capital is determined  
8 by corporate bond yields plus a premium to account for the fact that com-  
9 mon equity is exposed to greater investment risk than debt capital. The  
10 result of my Risk Premium study is shown on page 2 of Attachment PRM-  
11 1. That result is 11.70% including flotation costs.

12  
13 **Q: What long-term public utility debt cost rate did you use in your risk**  
14 **premium analysis?**

15 A: In my opinion, a 5.00% yield represents a reasonable estimate of the pro-  
16 spective yield on long-term A-rated public utility bonds.

17  
18 **Q: What historical data is shown by the Moody's data?**

19 A: I have analyzed the historical yields on the Moody's index of long-term  
20 public utility debt as shown on page 1 of Attachment PRM-12. For the

1 twelve months ended March 2016, the average monthly yield on Moody's  
2 index of A-rated public utility bonds was 4.24%. For the six and three-  
3 month periods ended March 2016, the yields were 4.26% and 4.18%, re-  
4 spectively. During the twelve-months ended March 2016, the range of the  
5 yields on A-rated public utility bonds was 3.75% to 4.40%. Page 2 of At-  
6 tachment PRM-12 shows the long-run spread in yields between A-rated  
7 public utility bonds and long-term Treasury bonds. As shown on page 3  
8 of Attachment PRM-12, the yields on A-rated public utility bonds have  
9 exceeded those on Treasury bonds by 1.36% on a twelve-month average  
10 basis, 1.42% on a six-month average basis, and 1.46% on a three-month  
11 average basis. From these averages, 1.25% represents a conservative  
12 spread for the yield on A-rated public utility bonds over Treasury bonds.

13

14 **Q: What forecasts of interest rates have you considered in your analysis?**

15 A: I have determined the prospective yield on A-rated public utility debt by  
16 using the Blue Chip Financial Forecasts ("Blue Chip") along with the  
17 spread in the yields that I describe below. The Blue Chip is a reliable au-  
18 thority and contains consensus forecasts of a variety of interest rates com-  
19 piled from a panel of banking, brokerage, and investment advisory ser-  
20 vices. In early 1999, Blue Chip stopped publishing forecasts of yields on

1 A-rated public utility bonds because the Federal Reserve deleted these  
 2 yields from its Statistical Release H.15. To independently project a forecast  
 3 of the yields on A-rated public utility bonds, I have combined the forecast  
 4 yields on long-term Treasury bonds published on April 1, 2016, and a  
 5 yield spread of 1.25%, derived from historical data.

6  
 7 **Q: How have you used these data to project the yield on A-rated public**  
 8 **utility bonds for the purpose of your Risk Premium analyses?**

9 A: Shown below is my calculation of the prospective yield on A-rated public  
 10 utility bonds using the building blocks discussed above, i.e., the Blue Chip  
 11 forecast of Treasury bond yields and the public utility bond yield spread.  
 12 For comparative purposes, I also have shown the Blue Chip forecasts of  
 13 Aaa-rated and Baa-rated corporate bonds. These forecasts are:

|      |         | Blue Chip Financial Forecasts |           |          | A-rated Public Utility |       |
|------|---------|-------------------------------|-----------|----------|------------------------|-------|
| Year | Quarter | Corporate                     |           | 30-Year  | Spread                 | Yield |
|      |         | Aaa-rated                     | Baa-rated | Treasury |                        |       |
| 2016 | Second  | 3.9%                          | 5.3%      | 2.8%     | 1.25%                  | 4.05% |
| 2016 | Third   | 4.1%                          | 5.4%      | 3.0%     | 1.25%                  | 4.25% |
| 2016 | Fourth  | 4.3%                          | 5.5%      | 3.1%     | 1.25%                  | 4.35% |
| 2017 | First   | 4.5%                          | 5.7%      | 3.3%     | 1.25%                  | 4.55% |
| 2017 | Second  | 4.6%                          | 5.8%      | 3.5%     | 1.25%                  | 4.75% |
| 2017 | Third   | 4.8%                          | 5.9%      | 3.6%     | 1.25%                  | 4.85% |

14 **Q: Are there additional forecasts of interest rates that extend beyond those**  
 15 **shown above?**

1 A: Yes. Twice yearly, Blue Chip provides long-term forecasts of interest  
 2 rates. In its December 1, 2015 publication, Blue Chip published longer-  
 3 term forecasts of interest rates, which were reported to be:

| Blue Chip Financial Forecasts |           |           |          |
|-------------------------------|-----------|-----------|----------|
| Averages                      | Corporate |           | 30-Year  |
|                               | Aaa-rated | Baa-rated | Treasury |
| 2017-2021                     | 5.6%      | 6.5%      | 4.5%     |
| 2022-2026                     | 5.8%      | 6.8%      | 4.8%     |

4 The longer term forecasts by Blue Chip suggest that interest rates  
 5 will move up from the levels revealed by the near term forecasts. By fo-  
 6 cusing more on these forecasts, a 5.00% yield on A-rated public utility  
 7 bonds represents a conservative benchmark for measuring the cost of eq-  
 8 uity in this case.

9  
 10 **Q: What equity risk premium have you determined for public utilities?**

11 A: To develop an appropriate equity risk premium, I analyzed the results  
 12 from Stocks, Bonds, Bills and Inflation (“SBBI”) 2015 Classic Yearbook  
 13 published by Ibbotson Associates that is part of Morningstar. My investi-  
 14 gation reveals that the equity risk premium varies according to the level  
 15 of interest rates. That is to say, the equity risk premium increases as inter-

1 est rates decline and it declines as interest rates increase. This inverse re-  
2 lationship is revealed by the summary data presented below and shown  
3 on page 1 of Attachment PRM-13.

| <b>Common Equity Risk Premiums</b> |  |       |
|------------------------------------|--|-------|
| Low Interest Rates                 |  | 7.36% |
| Average Across All Interest Rates  |  | 5.69% |
| High Interest Rates                |  | 3.98% |

4 Based on my analysis of the historical data, the equity risk pre-  
5 mium was 7.36% when the marginal cost of long-term government bonds  
6 was low (i.e., 3.00%, which was the average yield during periods of low  
7 rates). Conversely, when the yield on long-term government bonds was  
8 high (i.e., 7.28% on average during periods of high interest rates) the  
9 spread narrowed to 3.98%. Over the entire spectrum of interest rates, the  
10 equity risk premium was 5.69% when the average government bond yield  
11 was 5.12%. With the forecast indicating an upward movement of interest  
12 rates that I described above from historically low levels, I have utilized a  
13 6.50% equity risk premium. This equity risk premium is between the  
14 7.36% premium related to periods of low interest rates and the 5.69% pre-  
15 mium related to average interest rates across all levels.

16

1 **Q: What common equity cost rate did you determine based on your risk**  
2 **premium analysis?**

3 A: The cost of equity (i.e., “k”) is represented by the sum of the prospective  
4 yield for long-term public utility debt (i.e., “i”), the equity risk premium  
5 (i.e., “RP”), and flotation costs (i.e., “flot.”). The Risk Premium approach  
6 provides a cost of equity of:

$$i + RP = k + flot. = K$$

$$\text{Gas Group } 5.00\% + 6.50\% = 11.50\% + 0.20\% = 11.70\%$$

7 **CAPITAL ASSET PRICING MODEL**

8 **Q: How is the CAPM used to measure the cost of equity?**

9 A: The CAPM uses the yield on a risk-free interest bearing obligation plus a  
10 rate of return premium that is proportional to the systematic risk of an  
11 investment. As shown on page 2 of Attachment PRM-1, the result of the  
12 CAPM is 11.45% including flotation costs. To compute the cost of equity  
13 with the CAPM, three components are necessary: a risk-free rate of return  
14 (“Rf”), the beta measure of systematic risk (“β”), and the market risk pre-  
15 mium (“Rm-Rf”) derived from the total return on the market of equities  
16 reduced by the risk-free rate of return. The CAPM specifically accounts  
17 for differences in systematic risk (i.e., market risk as measured by the beta)

1 between an individual firm or group of firms and the entire market of  
2 equities.

3

4 **Q: What betas have you considered in the CAPM?**

5 A: For my CAPM analysis, I initially considered the Value Line betas. As  
6 shown on page 2 of Attachment PRM-3, the average beta is 0.76 for the  
7 Gas Group.

8

9 **Q: Did you use the Value Line betas in the CAPM determined cost of eq-  
10 uity?**

11 A: I used the Value Line betas as a foundation for the leverage adjusted betas  
12 that I used in the CAPM. The betas must be reflective of the financial risk  
13 associated with the rate setting capital structure that is measured at book  
14 value. Therefore, Value Line betas cannot be used directly in the CAPM,  
15 unless the cost rate developed using those betas is applied to a capital  
16 structure measured with market values. To develop a CAPM cost rate ap-  
17 plicable to a book-value capital structure, the Value Line (market value)  
18 betas have been unleveraged and releveraged for the book value common  
19 equity ratios using the Hamada formula,<sup>8</sup> as follows:

---

<sup>8</sup> Robert S. Hamada, "The Effects of the Firm's Capital Structure on the Systematic Risk of Common Stocks" *The Journal of Finance* Vol. 27, No. 2, Papers and Proceedings of the Thirtieth Annual Meeting

1 
$$\beta_l = \beta_u [1 + (1 - t) D/E + P/E]$$

2 where  $\beta_l$  = the leveraged beta,  $\beta_u$  = the unleveraged beta,  $t$  = income tax  
3 rate,  $D$  = debt ratio,  $P$  = preferred stock ratio, and  $E$  = common equity ratio.

4 The betas published by Value Line have been calculated with the market  
5 price of stock and are related to the market value capitalization. By using  
6 the formula shown above and the capital structure ratios measured at  
7 market value, the beta would become 0.58 for the Gas Group if it em-  
8 ployed no leverage and was 100% equity financed. Those calculations are  
9 shown on Attachment PRM-10 under the section labeled "Hamada" who  
10 is credited with developing those formulas. With the unleveraged beta as  
11 a base, I calculated the leveraged beta of 0.88 for the book value capital  
12 structure of the Gas Group. The book value leveraged beta that I will em-  
13 ploy in the CAPM cost of equity is 0.88 for the Gas Group.

14

15 **Q: What risk-free rate have you used in the CAPM?**

16 A: As shown on page 1 of Attachment PRM-14, I provided the historical  
17 yields on Treasury notes and bonds. For the twelve months ended March  
18 2016, the average yield on 30-year Treasury bonds was 2.88%. For the six-

---

of the American Finance Association, New Orleans, Louisiana, December 27-29, 1971. (May 1972), pp.435-452.

1 and three-months ended March 2016, the yields on 30-year Treasury  
2 bonds were 2.84% and 2.72%, respectively. During the twelve-months  
3 ended March 2016, the range of the yields on 30-year Treasury bonds was  
4 2.59% to 3.11%. The low yields that existed during recent periods can be  
5 traced to the financial crisis and its aftermath commonly referred to as the  
6 Great Recession. The resulting decline in the yields on Treasury obliga-  
7 tions was attributed to a number of factors, including: the sovereign debt  
8 crisis in the euro zone, concern over a possible double dip recession, the  
9 potential for deflation, and the Federal Reserve's large balance sheet that  
10 was expanded through the purchase of Treasury obligations and mort-  
11 gage-backed securities (also known as QEI, QEII, and QEIII), and the re-  
12 investment of the proceeds from maturing obligations and the lengthen-  
13 ing of the maturity of the Fed's bond portfolio through the sale of short-  
14 term Treasuries and the purchase of long-term Treasury obligations (also  
15 known as "operation twist"). Essentially, low interest rates were the prod-  
16 uct of the policy of the Federal Open Market Committee in its attempt to  
17 deal with stagnant job growth, which is part of its dual mandate. The Fed-  
18 eral Open Market Committee has ended its bond purchasing program.  
19 And, at its December 16, 2015 meeting, the Federal Open Market Commit-  
20 tee increased the federal funds rate range by 0.25 percentage points. The

1 prospect exists that future increases in the federal funds rate will likely  
2 occur.

3 As shown on page 2 of Attachment PRM-14, forecasts published  
4 by Blue Chip on April 1, 2016 indicate that the yields on long-term Treas-  
5 ury bonds are expected to be in the range of 2.8% to 3.6% during the next  
6 six quarters. The longer term forecasts described previously show that the  
7 yields on 30-year Treasury bonds will average 4.5% from 2017 through  
8 2021 and 4.8% from 2022 to 2026. For the reasons explained previously,  
9 forecasts of interest rates should be emphasized at this time in selecting  
10 the risk-free rate of return in CAPM. Hence, I have used a 3.75% risk-free  
11 rate of return for CAPM purposes, which considers the Blue Chip fore-  
12 casts.

13

14 **Q: What market premium have you used in the CAPM?**

15 A: As shown in the lower panel of data presented on page 2 of Attachment  
16 PRM-14, the market premium is derived from historical data and the  
17 Value Line and S&P 500 returns. For the historically based market pre-  
18 mium, I have used the arithmetic mean obtained from the data presented  
19 on page 1 of Attachment PRM-13. On that schedule, the market return  
20 was 12.21% on large stocks during periods of low interest rates. During

1 those periods, the yield on long-term government bonds was 3.00% when  
2 interest rates were low. As I describe above, interest rates are forecast to  
3 trend upward in the future. To recognize that trend, I have given weight  
4 to the average returns and yields that existed across all interest rate levels.  
5 As such, I carried over to page 2 of Attachment PRM-14 the average large  
6 common stock returns of 12.14% ( $12.21\% + 12.07\% = 24.28\% \div 2$ ) and the  
7 average yield on long-term government bonds of 4.06% ( $3.00\% + 5.12\% =$   
8  $8.12\% \div 2$ ). These financial returns rest between those experienced during  
9 periods of low interest rates and those experienced across all levels of in-  
10 terest rates. The resulting market premium is 8.08% ( $12.14\% - 4.06\%$ )  
11 based on historical data, as shown on page 2 of Attachment PRM-14. For  
12 the forecast returns, I calculated a 12.97% total market return from the  
13 Value Line data and a DCF return of 7.44% for the S&P 500. However, I  
14 note that a projected DCF return of 7.44% clearly is insufficient to capture  
15 the cost of equity capital, making the forecast return conservative. With  
16 the average forecast return of 10.21% ( $12.97\% + 7.44\% = 20.41\% \div 2$ ), I cal-  
17 culated a market premium of 6.46% ( $10.21\% - 3.75\%$ ) using forecast data.  
18 The market premium applicable to the CAPM derived from these sources  
19 equals 7.27% ( $6.46\% + 8.08\% = 14.54\% \div 2$ ).

20

1 **Q: Are adjustments to the CAPM necessary to fully reflect the rate of re-**  
2 **turn on common equity?**

3 A: Yes. The technical literature supports an adjustment relating to the size of  
4 the company or portfolio for which the calculation is performed. As the  
5 size of a firm decreases, its risk and required return increases. Moreover,  
6 in his discussion of the cost of capital, Professor Brigham has indicated  
7 that smaller firms have higher capital costs than otherwise similar larger  
8 firms.<sup>9</sup> Also, the Fama/French study (see "The Cross-Section of Expected  
9 Stock Returns"; The Journal of Finance, June 1992) established that the size  
10 of a firm helps explain stock returns. In an October 15, 1995 article in Pub-  
11 lic Utility Fortnightly, entitled "Equity and the Small-Stock Effect," it was  
12 demonstrated that the CAPM could understate the cost of equity signifi-  
13 cantly according to a company's size. Indeed, it was demonstrated in the  
14 SBBI Yearbook that the returns for stocks in lower deciles (i.e., smaller  
15 stocks) were in excess of those shown by the simple CAPM. In this regard,  
16 the Gas Group has a market-based average equity capitalization of \$2,520  
17 million. The mid-cap adjustment of 1.10%, as revealed on page 3 of At-

---

<sup>9</sup> See Fundamentals of Financial Management, Fifth Edition, at 623.

1 attachment PRM-14, would be warranted at a minimum. As noted previ-  
2 ously, the Company is a small fraction of the size of the Gas Group, which  
3 makes it much more risky.

4

5 **Q: What does your CAPM analysis show?**

6 A: Using the 3.75% risk-free rate of return, the leverage adjusted beta of 0.88  
7 for the Gas Group, the 7.27% market premium, the 1.10% size adjustment,  
8 and flotation cost adjustment, the following result is indicated.

$$\begin{array}{r} Rf + \beta \times ( Rm-Rf ) + size = k + flot. = K \\ \text{Gas Group } 3.75\% + 0.88 \times ( 7.27\% ) + 1.10\% = 11.25\% + 0.20\% = 11.45\% \end{array}$$

9

### COMPARABLE EARNINGS APPROACH

10 **Q: What is the Comparable Earnings approach?**

11 A: The Comparable Earnings approach estimates a fair return on equity by  
12 comparing returns realized by non-regulated companies to returns that a  
13 public utility with similar risks characteristics would need to realize in  
14 order to compete for capital. Because regulation is a substitute for com-  
15 petitively determined prices, the returns realized by non-regulated firms  
16 with comparable risks to a public utility provide useful insight into inves-  
17 tor expectations for public utility returns. The firms selected for the Com-  
18 parable Earnings approach should be companies whose prices are not

1 subject to cost-based price ceilings (i.e., non-regulated firms) so that cir-  
2 cularity is avoided.

3           There are two avenues available to implement the Comparable  
4 Earnings approach. One method involves the selection of another indus-  
5 try (or industries) with comparable risks to the public utility in question,  
6 and the results for all companies within that industry serve as a bench-  
7 mark. The second approach requires the selection of parameters that rep-  
8 resent similar risk traits for the public utility and the comparable risk com-  
9 panies. Using this approach, the business lines of the comparable compa-  
10 nies become unimportant. The latter approach is preferable with the fur-  
11 ther qualification that the comparable risk companies exclude regulated  
12 firms in order to avoid the circular reasoning implicit in the use of the  
13 achieved earnings/book ratios of other regulated firms. The United States  
14 Supreme Court has held that:

15           A public utility is entitled to such rates as will permit  
16 it to earn a return on the value of the property which it  
17 employs for the convenience of the public equal to that  
18 generally being made at the same time and in the same  
19 general part of the country on investments in other  
20 business undertakings which are attended by corre-  
21 sponding risks and uncertainties. The return should be  
22 reasonably sufficient to assure confidence in the finan-  
23 cial soundness of the utility and should be adequate,  
24 under efficient and economical management, to main-  
25 tain and support its credit and enable it to raise the  
26 money necessary for the proper discharge of its public

1                   duties. Bluefield Water Works vs. Public Service Com-  
2                   mission, 262 U.S. 668 (1923).

3  
4                   It is important to identify the returns earned by firms that compete  
5                   for capital with a public utility. This can be accomplished by analyzing  
6                   the returns of non-regulated firms that are subject to the competitive  
7                   forces of the marketplace.

8

9   **Q: Did you compare the results of your DCF and CAPM analyses to the**  
10 **results indicated by a Comparable Earnings approach?**

11 A: Yes. I selected companies from The Value Line Investment Survey for  
12 Windows that have six categories of comparability designed to reflect the  
13 risk of the Gas Group. These screening criteria were based upon the range  
14 as defined by the rankings of the companies in the Gas Group. The items  
15 considered were: Timeliness Rank, Safety Rank, Financial Strength, Price  
16 Stability, Value Line betas, and Technical Rank. The definition for these  
17 parameters is provided on page 3 of Attachment PRM-15. The identities  
18 of the companies comprising the Comparable Earnings group and their  
19 associated rankings within the ranges are identified on page 1 of Attach-  
20 ment PRM-15.

1            Value Line data was relied upon because it provides a comprehen-  
2            sive basis for evaluating the risks of the comparable firms. As to the re-  
3            turns calculated by Value Line for these companies, there is some down-  
4            ward bias in the figures shown on page 2 of Attachment PRM-15, because  
5            Value Line computes the returns on year-end rather than average book  
6            value. If average book values had been employed, the rates of return  
7            would have been slightly higher. Nevertheless, these are the returns con-  
8            sidered by investors when taking positions in these stocks. Because many  
9            of the comparability factors, as well as the published returns, are used by  
10           investors in selecting stocks, and the fact that investors rely on the Value  
11           Line service to gauge returns, it is an appropriate database for measuring  
12           comparable return opportunities.

13

14    **Q: What data did you consider in your Comparable Earnings analysis?**

15    A: I used both historical realized returns and forecasted returns for non-util-  
16           ity companies. As noted previously, I have not used returns for utility  
17           companies in order to avoid the circularity that arises from using regula-  
18           tory-influenced returns to determine a regulated return. It is appropriate  
19           to consider a relatively long measurement period in the Comparable  
20           Earnings approach in order to cover conditions over an entire business

1 cycle. A ten-year period (five historical years and five projected years) is  
2 sufficient to cover an average business cycle. Unlike the DCF and CAPM,  
3 the results of the Comparable Earnings method can be applied directly to  
4 the book value capitalization. In other words, the Comparable Earnings  
5 approach does not contain the potential misspecification contained in  
6 market models when the market capitalization and book value capitaliza-  
7 tion diverge significantly. A point of demarcation was chosen to eliminate  
8 the results of highly profitable enterprises, which the Bluefield case stated  
9 were not the type of returns that a utility was entitled to earn. For this  
10 purpose, I used 20% as the point where those returns could be viewed as  
11 highly profitable and should be excluded from the Comparable Earnings  
12 approach. The average historical rate of return on book common equity  
13 was 11.7% using only the returns that were less than 20%, as shown on  
14 page 2 of Attachment PRM-15. The average forecasted rate of return as  
15 published by Value Line is 12.7% also using values less than 20%, as pro-  
16 vided on page 2 of Attachment PRM-15. Using the average of these data  
17 my Comparable Earnings result is 12.2%, as shown on page 2 of Attach-  
18 ment PRM-1.

1 CONCLUSION

2 **Q: What is your conclusion regarding the Company's cost of common**  
3 **equity?**

4 A: Based upon the application of a variety of methods and models described  
5 previously, it is my opinion that a reasonable cost of common equity for  
6 the Company is 11.00%. My cost of equity recommendation is obtained  
7 from a range of results and should be considered in the context of the  
8 Company's risk characteristics, as well as the general condition of the cap-  
9 ital markets. It is essential that the Commission employ a variety of tech-  
10 niques to measure the Company's cost of equity because of the limita-  
11 tions/infirmities that are inherent in each method.

12  
13 **Q: Does this complete your direct testimony?**

14 A: Yes. However, I reserve the right to supplement my testimony, if neces-  
15 sary, and to respond to witnesses presented by other parties.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

|  |                     |
|--|---------------------|
| In the matter of adjustment of rates ) | Case No. 2016-00162 |
| of Columbia Gas of Kentucky, Inc. )    |                     |

CERTIFICATE AND AFFIDAVIT

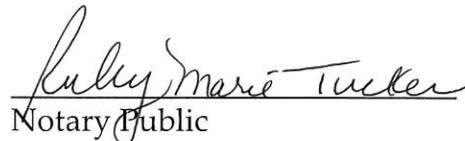
The Affiant, Paul R. Moul, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
Paul R. Moul

STATE OF NEW JERSEY

COUNTY OF CAMDEN

SUBSCRIBED AND SWORN to before me by Paul R. Moul on this the 20<sup>th</sup> day of May, 2016.

  
Notary Public

My Commission expires: May 12, 2019

**RUBY MARIE TUCKER**  
ID # 2165661  
NOTARY PUBLIC  
STATE OF NEW JERSEY  
My Commission Expires May 12, 2019

## APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

### 1 EDUCATIONAL BACKGROUND, BUSINESS EXPERIENCE 2 AND QUALIFICATIONS

3 I was awarded a degree of Bachelor of Science in Business Administration by  
4 Drexel University in 1971. While at Drexel, I participated in the Cooperative Educa-  
5 tion Program which included employment, for one year, with American Water  
6 Works Service Company, Inc., as an internal auditor, where I was involved in the  
7 audits of several operating water companies of the American Water Works System  
8 and participated in the preparation of annual reports to regulatory agencies and as-  
9 sisted in other general accounting matters.

10 Upon graduation from Drexel University, I was employed by American Water  
11 Works Service Company, Inc., in the Eastern Regional Treasury Department where  
12 my duties included preparation of rate case exhibits for submission to regulatory  
13 agencies, as well as responsibility for various treasury functions of the thirteen New  
14 England operating subsidiaries.

15 In 1973, I joined the Municipal Financial Services Department of Betz Environ-  
16 mental Engineers, a consulting engineering firm, where I specialized in financial  
17 studies for municipal water and wastewater systems.

18 In 1974, I joined Associated Utility Services, Inc., now known as AUS Consult-  
19 ants. I held various positions with the Utility Services Group of AUS Consultants,  
20 concluding my employment there as a Senior Vice President.

## APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

1           In 1994, I formed P. Moul & Associates, an independent financial and regula-  
2 tory consulting firm. In my capacity as Managing Consultant and for the past forty-  
3 two years, I have continuously studied the rate of return requirements for cost of  
4 service-regulated firms. In this regard, I have supervised the preparation of rate of  
5 return studies, which were employed, in connection with my testimony and in the  
6 past for other individuals. I have presented direct testimony on the subject of fair rate  
7 of return, evaluated rate of return testimony of other witnesses, and presented rebut-  
8 tal testimony.

9           My studies and prepared direct testimony have been presented before thirty-  
10 seven (37) federal, state and municipal regulatory commissions, consisting of: the  
11 Federal Energy Regulatory Commission; state public utility commissions in Ala-  
12 bama, Alaska, California, Colorado, Connecticut, Delaware, Florida, Georgia, Ha-  
13 waii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts,  
14 Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Car-  
15 olina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee,  
16 Texas, Virginia, West Virginia, Wisconsin, and the Philadelphia Gas Commission,  
17 and the Texas Commission on Environmental Quality. My testimony has been of-  
18 fered in over 300 rate cases involving electric power, natural gas distribution and  
19 transmission, resource recovery, solid waste collection and disposal, telephone,  
20 wastewater, and water service utility companies. While my testimony has involved

## APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

1 principally fair rate of return and financial matters, I have also testified on capital  
2 allocations, capital recovery, cash working capital, income taxes, factoring of ac-  
3 counts receivable, and take-or-pay expense recovery. My testimony has been offered  
4 on behalf of municipal and investor-owned public utilities and for the staff of a reg-  
5 ulatory commission. I have also testified at an Executive Session of the State of New  
6 Jersey Commission of Investigation concerning the BPU regulation of solid waste col-  
7 lection and disposal.

8 I was a co-author of a verified statement submitted to the Interstate Commerce  
9 Commission concerning the 1983 Railroad Cost of Capital (Ex Parte No. 452). I was  
10 also co-author of comments submitted to the Federal Energy Regulatory Commission  
11 regarding the Generic Determination of Rate of Return on Common Equity for Public  
12 Utilities in 1985, 1986 and 1987 (Docket Nos. RM85-19-000, RM86-12-000, RM87-35-  
13 000 and RM88-25-000). Further, I have been the consultant to the New York Chapter  
14 of the National Association of Water Companies, which represented the water utility  
15 group in the Proceeding on Motion of the Commission to Consider Financial Regu-  
16 latory Policies for New York Utilities (Case 91-M-0509). I have also submitted com-  
17 ments to the Federal Energy Regulatory Commission in its Notice of Proposed Rule-  
18 making (Docket No. RM99-2-000) concerning Regional Transmission Organizations  
19 and on behalf of the Edison Electric Institute in its intervention in the case of Southern  
20 California Edison Company (Docket No. ER97-2355-000). Also, I was a member of

## APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

1 the panel of participants at the Technical Conference in Docket No. PL07-2 on the  
2 Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Eq-  
3 uity.

4 In late 1978, I arranged for the private placement of bonds on behalf of an in-  
5 vestor-owned public utility. I have assisted in the preparation of a report to the Del-  
6 aware Public Service Commission relative to the operations of the Lincoln and Ellen-  
7 dale Electric Company. I was also engaged by the Delaware P.S.C. to review and re-  
8 port on the proposed financing and disposition of certain assets of Sussex Shores Wa-  
9 ter Company (P.S.C. Docket Nos. 24-79 and 47-79). I was a co-author of a Report on  
10 Proposed Mandatory Solid Waste Collection Ordinance prepared for the Board of  
11 County Commissioners of Collier County, Florida.

12 I have been a consultant to the Bucks County Water and Sewer Authority con-  
13 cerning rates and charges for wholesale contract service with the City of Philadelphia.  
14 My municipal consulting experience also included an assignment for Baltimore  
15 County, Maryland, regarding the City/County Water Agreement for Metropolitan  
16 District customers (Circuit Court for Baltimore County in Case 34/153/87-CSP-2636).

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

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**ATTACHMENTS TO ACCOMPANY THE  
TESTIMONY OF PAUL R. MOUL  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General  
Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

Attorneys for  
**COLUMBIA GAS OF KENTUCKY, INC.**

Columbia Gas of Kentucky, Inc.  
Index of Attachments

|  | <u>Attachment<br/>Number</u> |
|--|------------------------------|
| Summary Cost of Capital  | PRM-1                        |
| Columbia Gas of Kentucky, Inc.<br>Historical Capitalization and Financial Statistics     | PRM-2                        |
| Gas Group<br>Historical Capitalization and Financial Statistics                          | PRM-3                        |
| Standard & Poor's Public Utilities<br>Historical Capitalization and Financial Statistics | PRM-4                        |
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**Columbia Gas of Kentucky, Inc.**  
Summary Cost of Capital

| <u>Type of Capital</u> | <u>Ratios</u>  | <u>Cost Rate</u> | <u>Weighted Cost Rate</u> |
|------------------------|----------------|------------------|---------------------------|
| Long-Term Debt         | 46.32%         | 5.64%            | 2.61%                     |
| Short-Term Debt        | <u>1.26%</u>   | 2.50%            | <u>0.03%</u>              |
| Total Debt             | 47.58%         |                  | 2.64%                     |
| Common Equity          | <u>52.42%</u>  | 11.00%           | <u>5.77%</u>              |
| Total                  | <u>100.00%</u> |                  | <u>8.41%</u>              |

Indicated levels of fixed charge coverage assuming that the Company could actually achieve its overall cost of capital:

|  |        |
|--|--------|
| Pre-tax coverage of interest expense based upon a 35.0000% income tax rate<br>( 11.52% ÷ 2.64% ) | 4.36 x |
| Post-tax coverage of interest expense<br>( 8.41% ÷ 2.64% )                                       | 3.19 x |

**Columbia Gas of Kentucky, Inc.**

Cost of Equity  
as of March 31, 2016

|   |           |                |   |         |                |   |        |                |                |        |   |                   |                 |                 |                 |                |         |  |   |        |
|---|-----------|----------------|---|---------|----------------|---|--------|----------------|----------------|--------|---|-------------------|-----------------|-----------------|-----------------|----------------|---------|--|---|--------|
| <b>Discounted Cash Flow (DCF)</b>         | $D_1/P_0$ | <sup>(1)</sup> | + | $g$     | <sup>(2)</sup> | + | $lev.$ | <sup>(3)</sup> | =              | $k$    | x | $flot.$           | <sup>(4)</sup>  | =               | $k$             |                |         |  |   |        |
| Gas Group                                 | 3.11%     |                | + | 6.00%   |                | + | 0.82%  |                | =              | 9.93%  | x | 1.02              |                 | =               | 10.13%          |                |         |  |   |        |
| <b>Risk Premium (RP)</b>                  |           |                |   | $I$     | <sup>(5)</sup> | + | $RP$   | <sup>(6)</sup> | =              | $k$    | + | $flot.$           |                 | =               | $k$             |                |         |  |   |        |
| Gas Group                                 |           |                |   | 5.00%   |                | + | 6.50%  |                | =              | 11.50% | + | 0.20%             |                 | =               | 11.70%          |                |         |  |   |        |
| <b>Capital Asset Pricing Model (CAPM)</b> | $Rf$      | <sup>(7)</sup> | + | $\beta$ | <sup>(8)</sup> | x | (      | $Rm-Rf$        | <sup>(9)</sup> | )      | + | $size$            | <sup>(10)</sup> | =               | $k$             | +              | $flot.$ |  | = | $k$    |
| Gas Group                                 | 3.75%     |                | + | 0.88    |                | x | (      | 7.27%          |                | )      | + | 1.10%             |                 | =               | 11.25%          | +              | 0.20%   |  | = | 11.45% |
| <b>Comparable Earnings (CE)</b>           |           |                |   |         |                |   |        |                |                |        |   | <b>Historical</b> | <sup>(11)</sup> | <b>Forecast</b> | <sup>(11)</sup> | <b>Average</b> |         |  |   |        |
| Comparable Earnings Group                 |           |                |   |         |                |   |        |                |                |        |   | 11.7%             |                 | 12.7%           |                 | 12.20%         |         |  |   |        |

- References
- <sup>(1)</sup> Attachment PRM-7 page 1
  - <sup>(2)</sup> Attachment PRM-9 page 1
  - <sup>(3)</sup> Attachment PRM-10 page 1
  - <sup>(4)</sup> Attachment PRM-11 page 1
  - <sup>(5)</sup> A-rated public utility bond yield comprised of a 3.75% risk-free rate of return (Attachment PRM-14 page 2) and a yield spread of 1.25% (Attachment PRM-12 page 3)
  - <sup>(6)</sup> Attachment PRM-13 page 1
  - <sup>(7)</sup> Attachment PRM-14 pages 1 & 2
  - <sup>(8)</sup> Attachment PRM-10 page 1
  - <sup>(9)</sup> Attachment PRM-14 page 2
  - <sup>(10)</sup> Attachment PRM-14 page 3
  - <sup>(11)</sup> Attachment PRM-15 page 2

Columbia Gas of Kentucky, Inc.  
Capitalization and Financial Statistics  
2010-2014, Inclusive

|  | <u>2014</u>           | <u>2013</u>     | <u>2012</u>     | <u>2011</u>     | <u>2010</u>     |                |
|--|-----------------------|-----------------|-----------------|-----------------|-----------------|----------------|
|  | (Millions of Dollars) |                 |                 |                 |                 |                |
| Amount of Capital Employed                           |                       |                 |                 |                 |                 |                |
| Permanent Capital                                    | \$ 208.8              | \$ 193.7        | \$ 173.9        | \$ 172.4        | \$ 171.5        |                |
| Short-Term Debt                                      | \$ -                  | \$ -            | \$ -            | \$ -            | \$ -            |                |
| Total Capital  | <u>\$ 208.8</u>       | <u>\$ 193.7</u> | <u>\$ 173.9</u> | <u>\$ 172.4</u> | <u>\$ 171.5</u> |                |
| Capital Structure Ratios                             |                       |                 |                 |                 |                 | <u>Average</u> |
| Based on Permanent Capital:                          |                       |                 |                 |                 |                 |                |
| Long-Term Debt                                       | 47.1%                 | 48.2%           | 47.2%           | 47.6%           | 47.9%           | 47.6%          |
| Common Equity <sup>(1)</sup>                         | <u>52.9%</u>          | <u>51.8%</u>    | <u>52.8%</u>    | <u>52.4%</u>    | <u>52.1%</u>    | <u>52.4%</u>   |
|  | <u>100.0%</u>         | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>  |
| Based on Total Capital:                              |                       |                 |                 |                 |                 |                |
| Total Debt incl. Short Term                          | 47.1%                 | 48.2%           | 47.2%           | 47.6%           | 47.9%           | 47.6%          |
| Common Equity <sup>(1)</sup>                         | <u>52.9%</u>          | <u>51.8%</u>    | <u>52.8%</u>    | <u>52.4%</u>    | <u>52.1%</u>    | <u>52.4%</u>   |
|  | <u>100.0%</u>         | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>   | <u>100.0%</u>  |
| Rate of Return on Book Common Equity <sup>(1)</sup>  | 11.4%                 | 10.9%           | 9.3%            | 12.1%           | 12.0%           | 11.1%          |
| Operating Ratio <sup>(2)</sup>                       | 85.9%                 | 86.9%           | 84.5%           | 86.8%           | 87.4%           | 86.3%          |
| Coverage incl. AFUDC <sup>(3)</sup>                  |                       |                 |                 |                 |                 |                |
| Pre-tax: All Interest Charges                        | 4.64 x                | 4.05 x          | 3.83 x          | 4.61 x          | 5.01 x          | 4.43 x         |
| Post-tax: All Interest Charges                       | 3.19 x                | 3.06 x          | 2.79 x          | 3.25 x          | 3.52 x          | 3.16 x         |
| Coverage excl. AFUDC <sup>(3)</sup>                  |                       |                 |                 |                 |                 |                |
| Pre-tax: All Interest Charges                        | 4.61 x                | 4.03 x          | 3.82 x          | 4.60 x          | 5.01 x          | 4.41 x         |
| Post-tax: All Interest Charges                       | 3.16 x                | 3.04 x          | 2.78 x          | 3.24 x          | 3.51 x          | 3.15 x         |
| Quality of Earnings & Cash Flow                      |                       |                 |                 |                 |                 |                |
| AFC/Income Avail. for Common Equity                  | 1.3%                  | 0.9%            | 0.5%            | 0.2%            | 0.3%            | 0.6%           |
| Effective Income Tax Rate                            | 39.8%                 | 32.4%           | 36.8%           | 37.6%           | 37.2%           | 36.8%          |
| Internal Cash Generation/Construction <sup>(4)</sup> | 74.3%                 | 84.9%           | 80.9%           | 93.3%           | 87.8%           | 84.2%          |
| Gross Cash Flow/ Avg. Total Debt <sup>(5)</sup>      | 28.0%                 | 27.1%           | 27.9%           | 29.3%           | 25.0%           | 27.5%          |
| Gross Cash Flow Interest Coverage <sup>(6)</sup>     | 5.84 x                | 5.65 x          | 5.81 x          | 5.98 x          | 5.53 x          | 5.76 x         |

See Page 2 for Notes.

Columbia Gas of Kentucky, Inc.  
Capitalization and Financial Statistics  
2010-2014, Inclusive

Notes:

- (1) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
- (2) Total operating expenses, maintenance, depreciation and taxes other than income as a percentage of operating revenues.
- (3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (4) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (5) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFUDC) as a percentage of average total debt.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Common dividend coverage is the relationship of internally generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: FERC Form 2

Gas Group  
Capitalization and Financial Statistics <sup>(1)</sup>  
2010-2014, Inclusive

|  | <u>2014</u>           | <u>2013</u>       | <u>2012</u>       | <u>2011</u>       | <u>2010</u>       |                |
|--|-----------------------|-------------------|-------------------|-------------------|-------------------|----------------|
|  | (Millions of Dollars) |                   |                   |                   |                   |                |
| Amount of Capital Employed                           |                       |                   |                   |                   |                   |                |
| Permanent Capital                                    | \$ 2,452.5            | \$ 2,082.4        | \$ 1,811.1        | \$ 1,747.1        | \$ 1,673.1        |                |
| Short-Term Debt                                      | \$ 226.5              | \$ 228.6          | \$ 216.1          | \$ 118.6          | \$ 134.5          |                |
| Total Capital  | <u>\$ 2,679.0</u>     | <u>\$ 2,311.0</u> | <u>\$ 2,027.2</u> | <u>\$ 1,865.7</u> | <u>\$ 1,807.6</u> |                |
| Market-Based Financial Ratios                        |                       |                   |                   |                   |                   | <u>Average</u> |
| Price-Earnings Multiple                              | 19 x                  | 19 x              | 17 x              | 16 x              | 15 x              | 17 x           |
| Market/Book Ratio                                    | 192.3%                | 178.9%            | 177.4%            | 179.3%            | 169.7%            | 179.5%         |
| Dividend Yield                                       | 3.2%                  | 3.5%              | 3.6%              | 3.6%              | 3.8%              | 3.5%           |
| Dividend Payout Ratio                                | 63.6%                 | 68.8%             | 59.7%             | 57.6%             | 57.1%             | 61.4%          |
| Capital Structure Ratios                             |                       |                   |                   |                   |                   |                |
| Based on Permanent Capital:                          |                       |                   |                   |                   |                   |                |
| Long-Term Debt                                       | 44.9%                 | 42.7%             | 40.7%             | 41.2%             | 41.7%             | 42.3%          |
| Preferred Stock                                      | 0.2%                  | 0.2%              | 0.2%              | 0.2%              | 0.2%              | 0.2%           |
| Common Equity <sup>(2)</sup>                         | 54.9%                 | 57.1%             | 59.1%             | 58.6%             | 58.1%             | 57.6%          |
|  | <u>100.0%</u>         | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>  |
| Based on Total Capital:                              |                       |                   |                   |                   |                   |                |
| Total Debt incl. Short Term                          | 51.2%                 | 50.1%             | 47.4%             | 45.9%             | 48.0%             | 48.5%          |
| Preferred Stock                                      | 0.1%                  | 0.1%              | 0.2%              | 0.2%              | 0.2%              | 0.2%           |
| Common Equity <sup>(2)</sup>                         | 48.7%                 | 49.8%             | 52.4%             | 53.9%             | 51.8%             | 51.3%          |
|  | <u>100.0%</u>         | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>     | <u>100.0%</u>  |
| Rate of Return on Book Common Equity <sup>(2)</sup>  | 10.1%                 | 9.5%              | 10.5%             | 10.9%             | 11.1%             | 10.4%          |
| Operating Ratio <sup>(3)</sup>                       | 87.9%                 | 88.5%             | 87.2%             | 88.8%             | 89.0%             | 88.3%          |
| Coverage incl. AFUDC <sup>(4)</sup>                  |                       |                   |                   |                   |                   |                |
| Pre-tax: All Interest Charges                        | 5.03 x                | 4.70 x            | 4.97 x            | 5.01 x            | 4.99 x            | 4.94 x         |
| Post-tax: All Interest Charges                       | 3.75 x                | 3.62 x            | 3.79 x            | 3.67 x            | 3.54 x            | 3.67 x         |
| Overall Coverage: All Int. & Pfd. Div.               | 3.74 x                | 3.61 x            | 3.77 x            | 3.65 x            | 3.52 x            | 3.66 x         |
| Coverage excl. AFUDC <sup>(4)</sup>                  |                       |                   |                   |                   |                   |                |
| Pre-tax: All Interest Charges                        | 4.99 x                | 4.64 x            | 4.92 x            | 4.97 x            | 4.97 x            | 4.90 x         |
| Post-tax: All Interest Charges                       | 3.72 x                | 3.55 x            | 3.74 x            | 3.64 x            | 3.52 x            | 3.63 x         |
| Overall Coverage: All Int. & Pfd. Div.               | 3.70 x                | 3.54 x            | 3.72 x            | 3.62 x            | 3.50 x            | 3.62 x         |
| Quality of Earnings & Cash Flow                      |                       |                   |                   |                   |                   |                |
| AFC/Income Avail. for Common Equity                  | 1.2%                  | 2.2%              | 1.6%              | 1.0%              | 0.7%              | 1.3%           |
| Effective Income Tax Rate                            | 31.3%                 | 26.5%             | 30.1%             | 34.2%             | 36.5%             | 31.7%          |
| Internal Cash Generation/Construction <sup>(5)</sup> | 86.2%                 | 66.4%             | 72.7%             | 99.5%             | 125.0%            | 90.0%          |
| Gross Cash Flow/ Avg. Total Debt <sup>(6)</sup>      | 26.9%                 | 24.6%             | 28.8%             | 30.1%             | 31.0%             | 28.3%          |
| Gross Cash Flow Interest Coverage <sup>(7)</sup>     | 7.97 x                | 7.07 x            | 7.02 x            | 6.92 x            | 7.18 x            | 7.23 x         |
| Common Dividend Coverage <sup>(8)</sup>              | 4.78 x                | 4.17 x            | 4.33 x            | 4.52 x            | 4.90 x            | 4.54 x         |

See Page 2 for Notes.

Gas Group  
Capitalization and Financial Statistics  
2010-2014, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (7) Gross Cash Flow plus interest charges divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:

The Gas Group includes companies that are contained in The Value Line Investment Survey within the industry group "Natural Gas Utility," they are not currently the target of a publicly-announced merger or acquisition, and after eliminating NiSource due to its electric operations and recent separation of the former natural gas pipeline/storage operations and UGI Corp. due to its highly diversified businesses.

| <u>Company</u>                | <u>Corporate Credit Ratings</u> |                | <u>Stock Traded</u> | <u>S&amp;P Stock Ranking</u> | <u>Value Line Beta</u> |
|-------------------------------|---------------------------------|----------------|---------------------|------------------------------|------------------------|
|                               | <u>Moody's</u>                  | <u>S&amp;P</u> |                     |                              |                        |
| Atmos Energy Corp.            | A2                              | A-             | NYSE                | A-                           | 0.80                   |
| Chesapeake Utilities Corp.    |                                 |                | NYSE                | A                            | 0.65                   |
| Laclede Group                 | A3                              | A-             | NYSE                | B+                           | 0.70                   |
| New Jersey Resources Corp.    | Aa2                             | A              | NYSE                | B+                           | 0.80                   |
| Northwest Natural Gas Co.     | A3                              | A+             | NYSE                | A-                           | 0.65                   |
| South Jersey Industries, Inc. | A2                              | BBB+           | NYSE                | A-                           | 0.85                   |
| Southwest Gas Corporation     | A3                              | BBB+           | NYSE                | B+                           | 0.80                   |
| WGL Holdings, Inc.            | A1                              | A+             | NYSE                | B+                           | 0.80                   |
| Average                       | <u>A2</u>                       | <u>A-</u>      |                     | <u>B+</u>                    | <u>0.76</u>            |

Note: Ratings are those of utility subsidiaries

Source of Information: Utility COMPUSTAT  
Moody's Investors Service  
Standard & Poor's Corporation

Standard & Poor's Public Utilities  
Capitalization and Financial Statistics <sup>(1)</sup>  
2010-2014, Inclusive

|  | <u>2014</u>           | <u>2013</u>        | <u>2012</u>        | <u>2011</u>        | <u>2010</u>        |                |
|--|-----------------------|--------------------|--------------------|--------------------|--------------------|----------------|
|  | (Millions of Dollars) |                    |                    |                    |                    |                |
| Amount of Capital Employed                           |                       |                    |                    |                    |                    |                |
| Permanent Capital                                    | \$ 24,871.4           | \$ 23,512.0        | \$ 22,613.8        | \$ 19,661.6        | \$ 18,313.1        |                |
| Short-Term Debt                                      | \$ 912.6              | \$ 721.6           | \$ 643.8           | \$ 532.3           | \$ 446.7           |                |
| Total Capital  | <u>\$ 25,784.0</u>    | <u>\$ 24,233.6</u> | <u>\$ 23,257.6</u> | <u>\$ 20,193.9</u> | <u>\$ 18,759.8</u> |                |
| Market-Based Financial Ratios                        |                       |                    |                    |                    |                    | <u>Average</u> |
| Price-Earnings Multiple                              | 21 x                  | 21 x               | 18 x               | 15 x               | 14 x               | 18 x           |
| Market/Book Ratio                                    | 205.2%                | 179.0%             | 166.8%             | 158.1%             | 145.1%             | 170.8%         |
| Dividend Yield                                       | 3.5%                  | 3.8%               | 4.0%               | 4.3%               | 4.7%               | 4.1%           |
| Dividend Payout Ratio                                | 72.8%                 | 75.9%              | 72.3%              | 62.6%              | 67.6%              | 70.2%          |
| Capital Structure Ratios                             |                       |                    |                    |                    |                    |                |
| Based on Permanent Capital:                          |                       |                    |                    |                    |                    |                |
| Long-Term Debt                                       | 53.0%                 | 52.9%              | 53.3%              | 53.5%              | 53.8%              | 53.3%          |
| Preferred Stock                                      | 2.9%                  | 2.0%               | 1.7%               | 1.4%               | 1.4%               | 1.9%           |
| Common Equity <sup>(2)</sup>                         | 44.2%                 | 45.1%              | 45.0%              | 45.2%              | 44.9%              | 44.9%          |
|  | <u>100.0%</u>         | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>  |
| Based on Total Capital:                              |                       |                    |                    |                    |                    |                |
| Total Debt incl. Short Term                          | 54.8%                 | 54.4%              | 54.7%              | 54.8%              | 55.1%              | 54.8%          |
| Preferred Stock                                      | 2.7%                  | 2.0%               | 1.6%               | 1.3%               | 1.3%               | 1.8%           |
| Common Equity <sup>(2)</sup>                         | 42.5%                 | 43.7%              | 43.6%              | 43.8%              | 43.6%              | 43.4%          |
|  | <u>100.0%</u>         | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>      | <u>100.0%</u>  |
| Rate of Return on Book Common Equity <sup>(2)</sup>  | 10.1%                 | 8.6%               | 9.3%               | 10.7%              | 11.1%              | 10.0%          |
| Operating Ratio <sup>(3)</sup>                       | 80.5%                 | 80.9%              | 80.8%              | 80.7%              | 80.9%              | 80.8%          |
| Coverage incl. AFUDC <sup>(4)</sup>                  |                       |                    |                    |                    |                    |                |
| Pre-tax: All Interest Charges                        | 3.60 x                | 3.20 x             | 2.89 x             | 3.36 x             | 3.40 x             | 3.29 x         |
| Post-tax: All Interest Charges                       | 2.73 x                | 2.45 x             | 2.32 x             | 2.61 x             | 2.56 x             | 2.53 x         |
| Overall Coverage: All Int. & Pfd. Div.               | 2.69 x                | 2.43 x             | 2.29 x             | 2.58 x             | 2.53 x             | 2.50 x         |
| Coverage excl. AFUDC <sup>(4)</sup>                  |                       |                    |                    |                    |                    |                |
| Pre-tax: All Interest Charges                        | 3.50 x                | 3.11 x             | 2.79 x             | 3.26 x             | 3.31 x             | 3.19 x         |
| Post-tax: All Interest Charges                       | 2.63 x                | 2.36 x             | 2.22 x             | 2.51 x             | 2.46 x             | 2.44 x         |
| Overall Coverage: All Int. & Pfd. Div.               | 2.60 x                | 2.33 x             | 2.19 x             | 2.49 x             | 2.44 x             | 2.41 x         |
| Quality of Earnings & Cash Flow                      |                       |                    |                    |                    |                    |                |
| AFC/Income Avail. for Common Equity                  | 7.6%                  | 7.4%               | 7.3%               | 5.7%               | 6.6%               | 6.9%           |
| Effective Income Tax Rate                            | 29.7%                 | 33.7%              | 31.6%              | 33.3%              | 35.1%              | 32.7%          |
| Internal Cash Generation/Construction <sup>(5)</sup> | 86.1%                 | 81.0%              | 76.5%              | 87.5%              | 106.3%             | 87.5%          |
| Gross Cash Flow/ Avg. Total Debt <sup>(6)</sup>      | 23.4%                 | 22.8%              | 22.1%              | 23.2%              | 24.2%              | 23.1%          |
| Gross Cash Flow Interest Coverage <sup>(7)</sup>     | 5.72 x                | 5.46 x             | 5.41 x             | 5.10 x             | 5.13 x             | 5.36 x         |
| Common Dividend Coverage <sup>(8)</sup>              | 7.22 x                | 6.56 x             | 4.40 x             | 4.66 x             | 4.98 x             | 5.56 x         |

See Page 2 for Notes.

Standard & Poor's Public Utilities  
Capitalization and Financial Statistics  
2010-2014, Inclusive

Notes:

- (1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
- (2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
- (3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
- (4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
- (5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
- (6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
- (7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
- (8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders  
Utility COMPUSTAT

**Standard & Poor's Public Utilities**

Company Identities

|                              | Ticker | Credit Rating <sup>(1)</sup> |             | Common<br>Stock<br>Traded | S&P<br>Stock<br>Ranking | Value<br>Line<br>Beta |
|------------------------------|--------|------------------------------|-------------|---------------------------|-------------------------|-----------------------|
|                              |        | Moody's                      | S&P         |                           |                         |                       |
| AGL Resources Inc.           | GAS    | A2                           | BBB+        | NYSE                      | A                       | 0.60                  |
| Ameren Corporation           | AEE    | Baa1                         | BBB+        | NYSE                      | B                       | 0.75                  |
| American Electric Power      | AEP    | Baa1                         | BBB         | NYSE                      | B                       | 0.70                  |
| CMS Energy                   | CMS    | A3                           | BBB         | NYSE                      | B                       | 0.75                  |
| CenterPoint Energy           | CNP    | A3                           | A-          | NYSE                      | B                       | 0.85                  |
| Consolidated Edison          | ED     | A2                           | A-          | NYSE                      | B+                      | 0.60                  |
| DTE Energy Co.               | DTE    | A2                           | BBB+        | NYSE                      | B+                      | 0.75                  |
| Dominion Resources           | D      | A2                           | A-          | NYSE                      | B+                      | 0.70                  |
| Duke Energy                  | DUK    | A1                           | BBB+        | NYSE                      | B                       | 0.65                  |
| Edison Int'l                 | EIX    | A2                           | BBB+        | NYSE                      | B                       | 0.70                  |
| Entergy Corp.                | ETR    | Baa1                         | BBB         | NYSE                      | A                       | 0.70                  |
| EQT Corp.                    | EQT    | Baa3                         | BBB         | NYSE                      | B+                      | 1.20                  |
| Exelon Corp.                 | EXC    | A2                           | BBB         | NYSE                      | B+                      | 0.70                  |
| Eversource                   | NU     | Baa1                         | A-          | NYSE                      | B                       | 0.75                  |
| FirstEnergy Corp.            | FE     | Baa2                         | BBB-        | NYSE                      | B+                      | 0.70                  |
| NextEra Energy Inc.          | NEE    | A1                           | A-          | NYSE                      | A                       | 0.75                  |
| NiSource Inc.                | NI     | Baa1                         | BBB-        | NYSE                      | B                       | NMF                   |
| NRG Energy Inc.              | NRG    | Ba3                          | BB-         | NYSE                      | B                       | 1.00                  |
| ONEOK, Inc.                  | OKE    | Baa3                         | BB+         | NYSE                      | A-                      | 0.85                  |
| PG&E Corp.                   | PCG    | A3                           | BBB         | NYSE                      | B                       | 0.65                  |
| PPL Corp.                    | PPL    | Baa1                         | BBB         | NYSE                      | B+                      | 0.70                  |
| Pinnacle West Capital        | PNW    | A3                           | A-          | NYSE                      | B                       | 0.75                  |
| Public Serv. Enterprise Inc. | PEG    | A2                           | BBB+        | NYSE                      | B+                      | 0.75                  |
| SCANA Corp.                  | SCG    | Baa2                         | BBB+        | NYSE                      | A-                      | 0.75                  |
| Sempra Energy                | SRE    | A1                           | A           | NYSE                      | B+                      | 0.80                  |
| Southern Co.                 | SO     | A3                           | A           | NYSE                      | A-                      | 0.60                  |
| TECO Energy                  | TE     | A2                           | BBB+        | NYSE                      | B                       | 0.85                  |
| Wisconsin Energy Corp.       | WEC    | A1                           | A-          | NYSE                      | A                       | 0.70                  |
| Xcel Energy Inc              | XEL    | A2                           | A-          | NYSE                      | B+                      | 0.65                  |
| Average for S&P Utilities    |        | <u>A3</u>                    | <u>BBB+</u> |                           | <u>B+</u>               | <u>0.75</u>           |

Note: <sup>(1)</sup> Ratings are those of utility subsidiaries

Source of Information: Moody's Investors Service  
Standard & Poor's Corporation  
Standard & Poor's Stock Guide  
Value Line Investment Survey for Windows

**Columbia Gas of Kentucky, Inc.**  
Investor-provided Capitalization  
Actual at February 29, 2016 and Projected at August 31, 2016 and December 31, 2017

|                                | Actual at February 29, 2016 |                | Projected at August 31, 2016 |                | Projected at Dec.31, 2017 |               | Thirteen-month Average<br>December 31, 2017 |                |
|--------------------------------|-----------------------------|----------------|------------------------------|----------------|---------------------------|---------------|---|----------------|
|                                | Amount<br>Outstanding       | Ratios         | Amount<br>Outstanding        | Ratios         | Amount<br>Outstanding     | Ratios        | Amount<br>Outstanding                       | Ratios         |
| Long Term Debt                 | <u>\$ 87,585,000</u>        | 42.00%         | <u>\$ 87,585,000</u>         | 41.51%         | <u>\$ 114,375,000</u>     | 45.28%        | <u>\$ 114,698,846</u>                       | 46.32%         |
| Common Stock Equity            |                             |                |                              |                |                           |               |   |                |
| Common Stock                   | 23,806,000                  |                | 23,806,000                   |                | 23,806,000                |               | 23,806,000                                  |                |
| Additional Paid in Capital     | 6,519,000                   |                | 6,519,000                    |                | 6,519,000                 |               | 6,519,000                                   |                |
| Retained Earnings              | <u>90,292,000</u>           |                | <u>87,289,000</u>            |                | <u>104,758,000</u>        |               | <u>99,453,000</u>                           |                |
| Total Common Equity            | <u>120,617,000</u>          | 57.83%         | <u>117,614,000</u>           | 55.75%         | <u>135,083,000</u>        | 53.48%        | <u>129,778,000</u>                          | 52.42%         |
| Total Permanent Capital        | 208,202,000                 | 99.83%         | 205,199,000                  | 97.26%         | 249,458,000               | 98.76%        | 244,476,846                                 | 98.74%         |
| Short Term Debt <sup>(1)</sup> | <u>353,538</u>              | 0.17%          | <u>5,779,000</u>             | 2.74%          | <u>3,114,231</u>          | 1.23%         | <u>3,114,231</u>                            | 1.26%          |
| Total Capital Employed         | <u>\$ 208,555,538</u>       | <u>100.00%</u> | <u>\$ 210,978,000</u>        | <u>100.00%</u> | <u>\$ 252,572,231</u>     | <u>99.99%</u> | <u>\$ 247,591,077</u>                       | <u>100.00%</u> |

Note: (1) Thirteen month average.

Source of information: Company provided data

**Columbia Gas of Kentucky, Inc.**

Long-term Debt Outstanding

Actual at February 29, 2016 and Projected at August 31, 2016 and December 31, 2017

| <u>Date of Issuance</u>                             | <u>Date of Maturity</u> | <u>Coupon Rate</u> | <u>Amount Outstanding</u> | <u>Annualized Debt Service</u> | <u>Embedded Cost of Debt</u> |
|---|-------------------------|--------------------|---------------------------|--------------------------------|------------------------------|
| January 5, 2006                                     | January 5, 2017         | 5.45%              | \$ 4,210,000              | \$ 229,445                     |                              |
| January 5, 2006                                     | January 5, 2026         | 5.92%              | 12,375,000                | 732,600                        |                              |
| November 1, 2006                                    | November 1, 2021        | 6.015%             | 16,000,000                | 962,400                        |                              |
| December 16, 2010                                   | December 16, 2030       | 6.02%              | 10,000,000                | 602,000                        |                              |
| January 7, 2013                                     | January 7, 2043         | 5.77%              | 20,000,000                | 1,154,000                      |                              |
| December 23, 2013                                   | December 23, 2043       | 6.20%              | 20,000,000                | 1,240,000                      |                              |
| December 18, 2014                                   | December 16, 2044       | 4.43%              | 5,000,000                 | 221,500                        |                              |
| Long-Term Debt at Feb. 29, 2016 and August 31, 2016 |                         |                    | 87,585,000                | 5,141,945                      | 5.87%                        |
| September 1, 2016                                   | September 1, 2046       | 4.95%              | 31,000,000                | 1,534,500                      |                              |
| January 5, 2006                                     | January 5, 2017         | 5.45%              | (4,210,000)               | (229,445)                      |                              |
| Long-Term Debt at December 31, 2017                 |                         |                    | <u>\$ 114,375,000</u>     | <u>\$ 6,447,000</u>            | 5.64%                        |

Source of information: Company provided data

**Columbia Gas of Kentucky, Inc.**  
Long-term Debt Outstanding  
Thirteen-month Average December 31, 2017

| <u>Date of Issuance</u>               | <u>Date of Maturity</u> | <u>Coupon Rate</u> | <u>Amount Outstanding</u> | <u>Annualized Debt Service</u> | <u>Embedded Cost of Debt</u> |
|---------------------------------------|-------------------------|--------------------|---------------------------|--------------------------------|------------------------------|
| January 5, 2006                       | January 5, 2026         | 5.45%              | \$ 323,846                | \$ 17,650                      |                              |
| January 5, 2006                       | January 5, 2026         | 5.92%              | 12,375,000                | 732,600                        |                              |
| November 1, 2006                      | November 1, 2021        | 6.015%             | 16,000,000                | 962,400                        |                              |
| December 16, 2010                     | December 16, 2030       | 6.02%              | 10,000,000                | 602,000                        |                              |
| January 7, 2013                       | January 7, 2043         | 5.77%              | 20,000,000                | 1,154,000                      |                              |
| December 23, 2013                     | December 23, 2043       | 6.20%              | 20,000,000                | 1,240,000                      |                              |
| December 18, 2014                     | December 16, 2044       | 4.43%              | 5,000,000                 | 221,500                        |                              |
| September 1, 2016                     | September 1, 2046       | 4.95%              | 31,000,000                | 1,534,500                      |                              |
| Thirteen-month Average Long-Term Debt |                         |                    | <u>\$ 114,698,846</u>     | <u>\$ 6,464,650</u>            | 5.64%                        |

Source of information: Company provided data

**Monthly Dividend Yields for  
Gas Group  
for the Twelve Months Ending March 2016**

| <u>Company</u>                         | <u>Apr-15</u>       | <u>May-15</u>       | <u>Jun-15</u>       | <u>Jul-15</u>       | <u>Aug-15</u>       | <u>Sep-15</u>       | <u>Oct-15</u>       | <u>Nov-15</u>       | <u>Dec-15</u>       | <u>Jan-16</u>       | <u>Feb-16</u>       | <u>Mar-16</u>       | <u>12-Month<br/>Average</u> | <u>6-Month<br/>Average</u> | <u>3-Month<br/>Average</u> |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------------|----------------------------|----------------------------|
| Atmos Energy Corp (ATO)                | 2.91%               | 2.89%               | 3.05%               | 2.84%               | 2.85%               | 2.69%               | 2.68%               | 2.70%               | 2.67%               | 2.44%               | 2.42%               | 2.27%               | 2.74%                       | 2.60%                      | 2.51%                      |
| Chesapeake Utilities Corp (CPK)        | 2.41%               | 2.20%               | 2.14%               | 2.24%               | 2.35%               | 2.17%               | 2.21%               | 2.17%               | 2.03%               | 1.83%               | 1.85%               | 1.83%               | 2.15%                       | 2.04%                      | 1.90%                      |
| Laclede Group Inc (LG)                 | 3.56%               | 3.47%               | 3.54%               | 3.42%               | 3.50%               | 3.38%               | 3.36%               | 3.38%               | 3.31%               | 3.08%               | 3.01%               | 2.90%               | 3.36%                       | 3.25%                      | 3.13%                      |
| New Jersey Resources Corporation (NJR) | 2.96%               | 3.01%               | 3.27%               | 3.34%               | 3.42%               | 3.20%               | 3.04%               | 3.22%               | 2.92%               | 2.74%               | 2.79%               | 2.64%               | 3.08%                       | 2.99%                      | 2.82%                      |
| Northwest Natural Gas (NWN)            | 3.98%               | 4.18%               | 4.44%               | 4.30%               | 4.25%               | 4.09%               | 3.92%               | 3.85%               | 3.72%               | 3.60%               | 3.76%               | 3.49%               | 4.01%                       | 3.82%                      | 3.69%                      |
| South Jersey Industries Inc (SJI)      | 3.83%               | 3.84%               | 4.07%               | 4.17%               | 4.21%               | 3.99%               | 4.00%               | 4.64%               | 4.50%               | 4.27%               | 4.19%               | 3.71%               | 4.16%                       | 4.27%                      | 4.32%                      |
| Southwest Gas Corp (SWX)               | 2.96%               | 2.98%               | 3.06%               | 2.89%               | 2.94%               | 2.79%               | 2.65%               | 2.89%               | 2.95%               | 2.77%               | 2.66%               | 2.47%               | 2.87%                       | 2.79%                      | 2.79%                      |
| WGL Holdings Inc (WGL)                 | 3.37%               | 3.23%               | 3.43%               | 3.32%               | 3.43%               | 3.23%               | 2.98%               | 3.01%               | 2.96%               | 2.78%               | 2.72%               | 2.57%               | 3.13%                       | 2.95%                      | 2.82%                      |
| <b>Average</b>                         | <b><u>3.25%</u></b> | <b><u>3.23%</u></b> | <b><u>3.38%</u></b> | <b><u>3.32%</u></b> | <b><u>3.37%</u></b> | <b><u>3.19%</u></b> | <b><u>3.11%</u></b> | <b><u>3.23%</u></b> | <b><u>3.13%</u></b> | <b><u>2.94%</u></b> | <b><u>2.93%</u></b> | <b><u>2.74%</u></b> | <b><u>3.15%</u></b>         | <b><u>3.01%</u></b>        | <b><u>2.87%</u></b>        |

Note: Monthly dividend yields are calculated by dividing the annualized quarterly dividend by the month-end closing stock price adjusted by the fraction of the ex-dividend.

Source of Information: <http://performance.morningstar.com/stock/performance-return>  
<http://www.snl.com/interactivex/dividends>

| <b>Forward-looking Dividend Yield</b> | 1/2 Growth         | $D_0/P_0$ | (.5g)    | $D_1/P_0$    | $K = \frac{D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^2 + D_0(1+g)^3}{P_0} + g$               |
|---------------------------------------|--------------------|-----------|----------|--------------|---|
|                                       |                    | 3.01%     | 1.030000 | 3.10%        |   |
|                                       | Discrete           | $D_0/P_0$ | Adj.     | $D_1/P_0$    | $K = \frac{D_0(1+g)^{25} + D_0(1+g)^{50} + D_0(1+g)^{75} + D_0(1+g)^{1.00}}{P_0} + g$ |
|                                       |                    | 3.01%     | 1.037227 | 3.13%        |   |
|                                       | Quarterly          | $D_0/P_0$ | Adj.     | $D_1/P_0$    | $K = \left[ \left( 1 + \frac{D_0(1+g)^{25}}{P_0} \right)^4 - 1 \right] + g$           |
|                                       | Average            | 0.7533%   | 1.014674 | <u>3.09%</u> |   |
|                                       |                    |           |          | 3.11%        |   |
|                                       | <b>Growth rate</b> |           |          | <u>6.00%</u> |   |
|                                       | <b>K</b>           |           |          | <u>9.11%</u> |   |

**Historical Growth Rates**

Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

| <b>Gas Group</b>              | <b>Earnings per Share</b> |              | <b>Dividends per Share</b> |              | <b>Book Value per Share</b> |              | <b>Cash Flow per Share</b> |              |
|-------------------------------|---------------------------|--------------|----------------------------|--------------|-----------------------------|--------------|----------------------------|--------------|
|                               | Value Line                |              | Value Line                 |              | Value Line                  |              | Value Line                 |              |
|                               | 5 Year                    | 10 Year      | 5 Year                     | 10 Year      | 5 Year                      | 10 Year      | 5 Year                     | 10 Year      |
| Atmos Energy Corp.            | 7.00%                     | 5.50%        | 2.50%                      | 2.00%        | 5.00%                       | 5.00%        | 4.50%                      | 5.00%        |
| Chesapeake Utilities Corp.    | 10.50%                    | 8.50%        | 4.50%                      | 3.00%        | 8.50%                       | 8.50%        | 12.50%                     | 7.00%        |
| Laclede Group                 | -1.00%                    | 3.00%        | 3.00%                      | 2.50%        | 8.00%                       | 7.50%        | 0.50%                      | 4.00%        |
| New Jersey Resources Corp.    | 7.50%                     | 7.50%        | 7.50%                      | 7.00%        | 5.50%                       | 8.00%        | 7.00%                      | 6.50%        |
| Northwest Natural Gas         | -4.00%                    | 2.50%        | 3.50%                      | 3.50%        | 3.00%                       | 3.50%        | -1.00%                     | 3.00%        |
| South Jersey Industries, Inc. | 6.50%                     | 8.00%        | 10.00%                     | 8.50%        | 8.00%                       | 8.50%        | 7.50%                      | 8.00%        |
| Southwest Gas Corp.           | 11.00%                    | 8.50%        | 8.00%                      | 5.00%        | 5.00%                       | 5.00%        | 6.00%                      | 4.50%        |
| WGL Holdings, Inc.            | 1.50%                     | 3.50%        | 3.00%                      | 2.50%        | 3.00%                       | 4.00%        | 1.50%                      | 2.50%        |
| Average                       | <u>4.88%</u>              | <u>5.88%</u> | <u>5.25%</u>               | <u>4.25%</u> | <u>5.75%</u>                | <u>6.25%</u> | <u>4.81%</u>               | <u>5.06%</u> |

Source of Information: Value Line Investment Survey, March 4, 2016

**Analysts' Five-Year Projected Growth Rates**

Earnings Per Share, Dividends Per Share,  
Book Value Per Share, and Cash Flow Per Share

| <u>Gas Group</u>              | <u>I/B/E/S<br/>First<br/>Call</u> | <u>Zacks</u> | <u>Morningstar</u> | <u>SNL</u>   | <u>Value Line</u>             |                                |                                     |                                    |  |
|-------------------------------|-----------------------------------|--------------|--------------------|--------------|-------------------------------|--------------------------------|-------------------------------------|------------------------------------|--|
|                               |                                   |              |                    |              | <u>Earnings<br/>Per Share</u> | <u>Dividends<br/>Per Share</u> | <u>Book<br/>Value<br/>Per Share</u> | <u>Cash<br/>Flow<br/>Per Share</u> | <u>Percent<br/>Retained to<br/>Common Equity</u> |
| Atmos Energy Corp.            | 6.40%                             | 6.60%        | 6.20%              | 7.00%        | 6.00%                         | 6.50%                          | 3.50%                               | 5.00%                              | 5.00%  |
| Chesapeake Utilities Corp.    | 3.00%                             | NA           | 3.00%              | NA           | 8.50%                         | 6.00%                          | 7.00%                               | 7.00%                              | 8.00%  |
| Laclede Group, Inc.           | 4.70%                             | 4.80%        | -                  | 4.70%        | 9.00%                         | 3.50%                          | 4.50%                               | 9.50%                              | 4.50%  |
| New Jersey Resources Corp.    | 6.50%                             | 6.50%        | 3.30%              | 6.00%        | 1.50%                         | 3.00%                          | 6.50%                               | 2.00%                              | 5.00%  |
| Northwest Natural Gas         | 4.00%                             | 4.00%        | 4.00%              | 4.00%        | 5.00%                         | 1.50%                          | 3.50%                               | 3.50%                              | 3.00%  |
| South Jersey Industries, Inc. | 6.00%                             | 6.00%        | 6.00%              | 6.00%        | 5.50%                         | 6.50%                          | 5.50%                               | 5.00%                              | 4.00%  |
| Southwest Gas Corp.           | 4.00%                             | 5.00%        | -                  | 4.00%        | 7.00%                         | 7.50%                          | 3.00%                               | 5.00%                              | 6.50%  |
| WGL Holdings, Inc.            | 8.00%                             | 7.30%        | 5.60%              | 7.00%        | 5.00%                         | 2.50%                          | 4.50%                               | 5.00%                              | 4.50%  |
| Average                       | <u>5.33%</u>                      | <u>5.74%</u> | <u>4.68%</u>       | <u>5.53%</u> | <u>5.94%</u>                  | <u>4.63%</u>                   | <u>4.75%</u>                        | <u>5.25%</u>                       | <u>5.06%</u>                                     |

Source of Information :

Yahoo Finance, March 29, 2016

Zacks, March 29, 2016

Morningstar, March 29, 2016

SNL, March 29, 2016

Value Line Investment Survey, March 4, 2016

**Gas Group**  
Financial Risk Adjustment

| Fiscal Year                               | Chesapeake                 |                         | New Jersey                 |                         | Northwest                 |                          | South Jersey           |                  | WGL Holdings<br>(NYSE:WGL) | Average          |
|---|----------------------------|-------------------------|----------------------------|-------------------------|---------------------------|--------------------------|------------------------|------------------|----------------------------|------------------|
|   | ATMOS Energy<br>(NYSE:ATO) | Utilities<br>(NYSE:CPK) | Laclede Group<br>(NYSE:LG) | Resources<br>(NYSE:NJR) | Natural Gas<br>(NYSE:NWN) | Industries<br>(NYSE:SJI) | Southwest Gas<br>(SWX) |                  |                            |                  |
|   | 09/30/15                   | 12/31/15                | 09/30/15                   | 09/30/15                | 12/31/15                  | 12/31/15                 | 12/31/15               | 09/30/15         |                            |                  |
| <b>Capitalization at Fair Values</b>      |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Debt(D)                                   | 2,669,323                  | 165,100                 | 1,944,200                  | 817,319                 | 667,168                   | 1,079,000                | 1,645,684              | 1,057,900        |                            | 1,255,712        |
| Preferred(P)                              | 0                          | 0                       | 0                          | 0                       | 0                         | 0                        | 0                      | 28,173           |                            | 3,522            |
| Equity(E)                                 | 5,904,038                  | 866,610                 | 2,363,058                  | 2,484,279               | 1,388,080                 | 1,669,111                | 2,613,347              | 2,867,852        |                            | 2,519,547        |
| Total                                     | <u>8,573,361</u>           | <u>1,031,710</u>        | <u>4,307,258</u>           | <u>3,301,598</u>        | <u>2,055,248</u>          | <u>2,748,111</u>         | <u>4,259,031</u>       | <u>3,953,925</u> |                            | <u>3,778,780</u> |
| <b>Capital Structure Ratios</b>           |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Debt(D)                                   | 31.14%                     | 16.00%                  | 45.14%                     | 24.76%                  | 32.46%                    | 39.26%                   | 38.64%                 | 26.76%           |                            | 31.77%           |
| Preferred(P)                              | 0.00%                      | 0.00%                   | 0.00%                      | 0.00%                   | 0.00%                     | 0.00%                    | 0.00%                  | 0.71%            |                            | 0.09%            |
| Equity(E)                                 | <u>68.86%</u>              | <u>84.00%</u>           | <u>54.86%</u>              | <u>75.24%</u>           | <u>67.54%</u>             | <u>60.74%</u>            | <u>61.36%</u>          | <u>72.53%</u>    |                            | <u>68.14%</u>    |
| Total                                     | <u>100.00%</u>             | <u>100.00%</u>          | <u>100.00%</u>             | <u>100.00%</u>          | <u>100.00%</u>            | <u>100.00%</u>           | <u>100.00%</u>         | <u>100.00%</u>   |                            | <u>100.00%</u>   |
| <b>Common Stock</b>                       |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Issued                                    | 101,478,818                | 15,270,659              | 43,335,012                 | 85,531,423              | 27,427,000                | 70,965,622               | 47,377,575             | 49,728,662       |                            |                  |
| Treasury                                  | 0.000                      | 0.000                   | 0.000                      | 2,804,847               | 0.000                     | 0.000                    | 0.000                  | 0.000            |                            |                  |
| Outstanding                               | 101,478,818                | 15,270,659              | 43,335,012                 | 82,726,576              | 27,427,000                | 70,965,622               | 47,377,575             | 49,728,662       |                            |                  |
| Market Price                              | \$ 58.18                   | \$ 56.75                | \$ 54.53                   | \$ 30.03                | \$ 50.61                  | \$ 23.52                 | \$ 55.16               | \$ 57.67         |                            |                  |
| <b>Capitalization at Carrying Amounts</b> |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Debt(D)                                   | 2,460,000                  | 153,700                 | 1,851,500                  | 807,845                 | 601,700                   | 1,035,800                | 1,581,454              | 944,200          |                            | 1,179,525        |
| Preferred(P)                              | 0                          | 0                       | 0                          | 0                       | 0                         | 0                        | 0                      | 28,173           |                            | 3,522            |
| Equity(E)                                 | <u>3,194,797</u>           | <u>358,138</u>          | <u>1,573,600</u>           | <u>1,106,956</u>        | <u>780,972</u>            | <u>1,037,539</u>         | <u>1,594,408</u>       | <u>1,243,247</u> |                            | <u>1,361,207</u> |
| Total                                     | <u>5,654,797</u>           | <u>511,838</u>          | <u>3,425,100</u>           | <u>1,914,801</u>        | <u>1,382,672</u>          | <u>2,073,339</u>         | <u>3,175,862</u>       | <u>2,215,620</u> |                            | <u>2,544,254</u> |
| <b>Capital Structure Ratios</b>           |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Debt(D)                                   | 43.50%                     | 30.03%                  | 54.06%                     | 42.19%                  | 43.52%                    | 49.96%                   | 49.80%                 | 42.62%           |                            | 44.46%           |
| Preferred(P)                              | 0.00%                      | 0.00%                   | 0.00%                      | 0.00%                   | 0.00%                     | 0.00%                    | 0.00%                  | 1.27%            |                            | 0.16%            |
| Equity(E)                                 | <u>56.50%</u>              | <u>69.97%</u>           | <u>45.94%</u>              | <u>57.81%</u>           | <u>56.48%</u>             | <u>50.04%</u>            | <u>50.20%</u>          | <u>56.11%</u>    |                            | <u>55.38%</u>    |
| Total                                     | <u>100.00%</u>             | <u>100.00%</u>          | <u>100.00%</u>             | <u>100.00%</u>          | <u>100.00%</u>            | <u>100.00%</u>           | <u>100.00%</u>         | <u>100.00%</u>   |                            | <u>100.00%</u>   |
| <b>Betas</b>                              |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| Value Line                                | 0.80                       | 0.65                    | 0.70                       | 0.80                    | 0.65                      | 0.85                     | 0.80                   | 0.80             |                            | 0.76             |
| <b>Hamada</b>                             |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| BI  | =                          | Bu                      | [1+ (1 - t)]               | D/E                     | +                         | P/E                      | ]                      |                  |                            |                  |
| 0.76                                      | =                          | Bu                      | [1+ (1-0.35)]              | 0.4662                  | +                         | 0.0013                   | ]                      |                  |                            |                  |
| 0.76                                      | =                          | Bu                      | [1+ 0.65]                  | 0.4662                  | +                         | 0.0013                   | ]                      |                  |                            |                  |
| 0.76                                      | =                          | Bu                      | 1.3043                     |                         |                           |                          |                        |                  |                            |                  |
| 0.58                                      | =                          | Bu                      |                            |                         |                           |                          |                        |                  |                            |                  |
| <b>Hamada</b>                             |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| BI  | =                          | 0.58                    | [1+ (1 - t)]               | D/E                     | +                         | P/E                      | ]                      |                  |                            |                  |
| BI  | =                          | 0.58                    | [1+ 0.65]                  | 0.8028                  | +                         | 0.0029                   | ]                      |                  |                            |                  |
| BI  | =                          | 0.58                    | 1.5247                     |                         |                           |                          |                        |                  |                            |                  |
| BI  | =                          | 0.88                    |                            |                         |                           |                          |                        |                  |                            |                  |
| <b>M&amp;M</b>                            |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| ku  | =                          | ke                      | - (((                      | ku                      | -                         | i                        | )                      | 1-t              | )                          | D / E            |
| 7.98%                                     | =                          | 9.11%                   | - (((                      | 7.98%                   | -                         | 4.26%                    | )                      | 0.65             | )                          | 31.77% / 68.14%  |
| 7.98%                                     | =                          | 9.11%                   | - (((                      | 3.72%                   | -                         |                          | )                      | 0.65             | )                          | 0.4662 / 2.30%   |
| 7.98%                                     | =                          | 9.11%                   | - ((                       | 2.42%                   | -                         |                          | )                      |                  | )                          | 0.4662 / 2.30%   |
| 7.98%                                     | =                          | 9.11%                   | -                          | 1.13%                   | -                         |                          |                        |                  |                            | 0.00%            |
| <b>M&amp;M</b>                            |                            |                         |                            |                         |                           |                          |                        |                  |                            |                  |
| ke  | =                          | ku                      | + (((                      | ku                      | -                         | i                        | )                      | 1-t              | )                          | D / E            |
| 9.93%                                     | =                          | 7.98%                   | + (((                      | 7.98%                   | -                         | 4.26%                    | )                      | 0.65             | )                          | 44.46% / 55.38%  |
| 9.93%                                     | =                          | 7.98%                   | + (((                      | 3.72%                   | -                         |                          | )                      | 0.65             | )                          | 0.8028 / 2.30%   |
| 9.93%                                     | =                          | 7.98%                   | + ((                       | 2.42%                   | -                         |                          | )                      |                  | )                          | 0.8028 / 2.30%   |
| 9.93%                                     | =                          | 7.98%                   | +                          | 1.94%                   | -                         |                          |                        |                  |                            | 0.01%            |

**Gas Group**  
Analysis of Public Offerings of Common Stock

| Company                            | Date of Offering | No. of shares offered | Dollar amount of offering | Price to public | Underwriters' discount and commission | Gross Proceeds per share | Estimated company issuance expenses | Net proceeds per share | Percent of offering price             |                                     |                                    |
|------------------------------------|------------------|-----------------------|---------------------------|-----------------|---------------------------------------|--------------------------|-------------------------------------|------------------------|---------------------------------------|-------------------------------------|------------------------------------|
|                                    |                  |                       |                           |                 |                                       |                          |                                     |                        | Underwriters' discount and commission | Estimated company issuance expenses | Total Issuance and selling expense |
| Piedmont Natural Gas Company, Inc. | 01/29/13         | 4,000,000             | \$ 128,000,000            | \$ 32.00        | \$ 1.120                              | \$ 30.880                | \$ 0.088                            | \$ 30.792              | 3.5%                                  | 0.3%                                | 3.8%                               |
| Atmos Energy Corporation           | 12/07/06         | 5,500,000             | \$ 173,250,000            | \$ 31.50        | \$ 1.103                              | \$ 30.398                | \$ 0.073                            | \$ 30.325              | 3.5%                                  | 0.2%                                | 3.7%                               |
| AGL Resources Inc.                 | 11/19/04         | 9,600,000             | \$ 297,696,000            | \$ 31.01        | \$ 0.930                              | \$ 30.080                | \$ 0.042                            | \$ 30.038              | 3.0%                                  | 0.1%                                | 3.1%                               |
| Atmos Energy Corporation           | 10/21/04         | 14,000,000            | \$ 346,500,000            | \$ 24.75        | \$ 0.990                              | \$ 23.760                | \$ 0.029                            | \$ 23.731              | 4.0%                                  | 0.1%                                | 4.1%                               |
| Atmos Energy Corporation           | 07/19/04         | 8,650,000             | \$ 214,087,500            | \$ 24.75        | \$ 0.990                              | \$ 23.760                | \$ 0.046                            | \$ 23.714              | 4.0%                                  | 0.2%                                | 4.2%                               |
| The Laclede Group, Inc.            | 05/25/04         | 1,500,000             | \$ 40,200,000             | \$ 26.80        | \$ 0.871                              | \$ 25.929                | \$ 0.067                            | \$ 25.862              | 3.3%                                  | 0.3%                                | 3.6%                               |
| Northwest Natural Gas Company      | 03/30/04         | 1,200,000             | \$ 37,200,000             | \$ 31.00        | \$ 1.010                              | \$ 29.99                 | \$ 0.146                            | \$ 29.844              | 3.3%                                  | 0.5%                                | 3.8%                               |
| Piedmont Natural Gas Company, Inc. | 01/23/04         | 4,250,000             | \$ 180,625,000            | \$ 42.50        | \$ 1.490                              | \$ 41.010                | \$ 0.082                            | \$ 40.928              | 3.5%                                  | 0.2%                                | 3.7%                               |
| Atmos Energy Corporation           | 06/18/03         | 4,000,000             | \$ 101,240,000            | \$ 25.31        | \$ 1.0124                             | \$ 24.298                | \$ 0.095                            | \$ 24.203              | 4.0%                                  | 0.4%                                | 4.4%                               |
| AGL Resources Inc.                 | 02/11/03         | 5,600,000             | \$ 123,200,000            | \$ 22.00        | \$ 0.770                              | \$ 21.230                | \$ 0.045                            | \$ 21.185              | 3.5%                                  | 0.2%                                | 3.7%                               |
| WGL Holdings, Inc                  | 06/26/01         | 1,790,000             | \$ 47,846,700             | \$ 26.73        | \$ 0.895                              | \$ 25.835                | \$ 0.031                            | \$ 25.804              | 3.3%                                  | 0.1%                                | 3.4%                               |
| Atmos Energy Corporation           | 11/07/00         | 6,000,000             | \$ 133,500,000            | \$ 22.25        | \$ 1.110                              | \$ 21.140                | \$ 0.058                            | \$ 21.082              | 5.0%                                  | 0.3%                                | 5.3%                               |
| Average                            |                  |                       |                           |                 |                                       |                          |                                     |                        | 3.7%                                  | 0.2%                                | 3.9%                               |

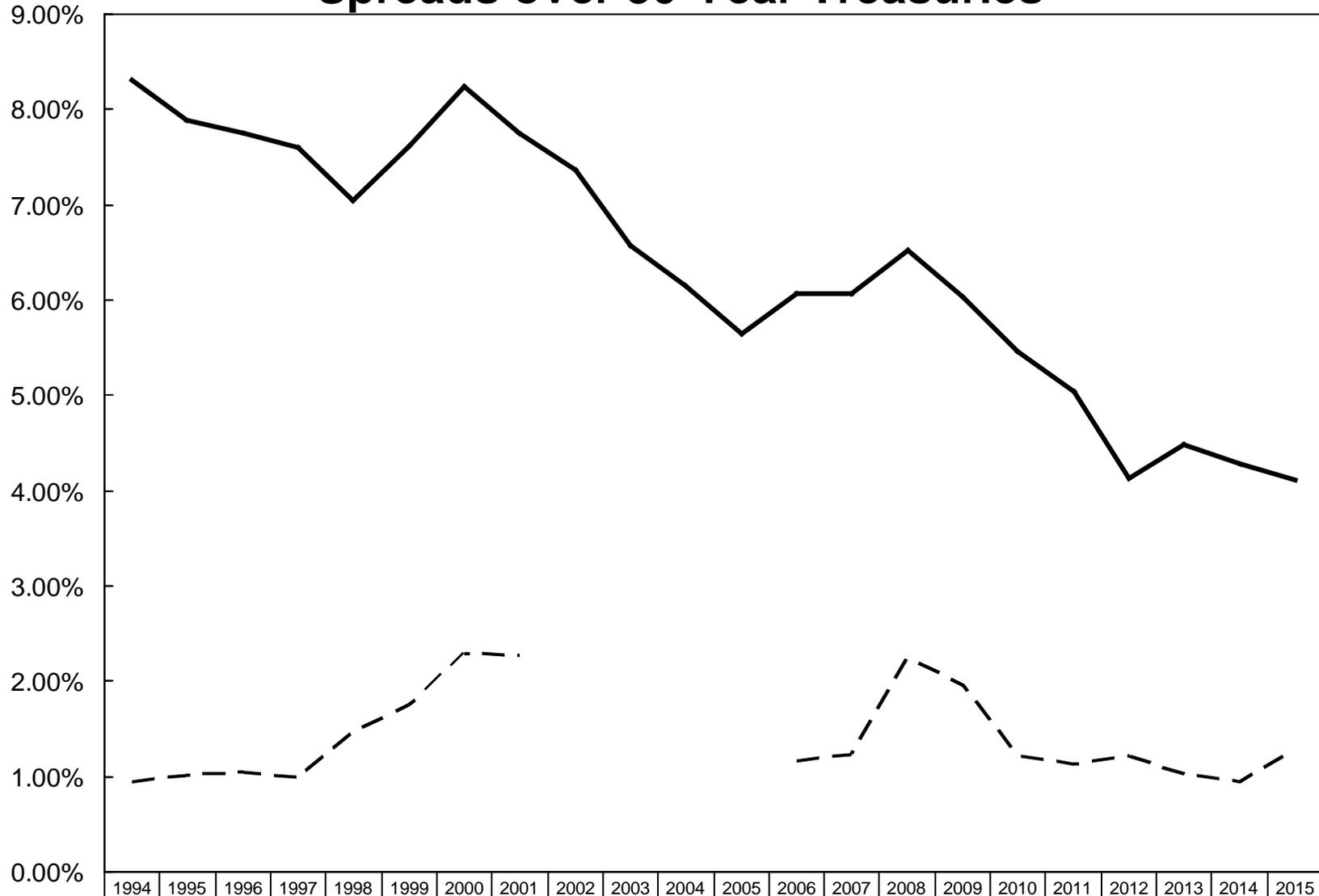
Source of Information: SNL Financial and SEC filings

**Interest Rates for Investment Grade Public Utility Bonds  
Yearly for 2010-2014 and 2015  
and the Twelve Months Ended March 2016**

| <u>Years</u>                    | <u>Aa<br/>Rated</u> | <u>A<br/>Rated</u> | <u>Baa<br/>Rated</u> | <u>Average</u> |
|---------------------------------|---------------------|--------------------|----------------------|----------------|
| 2010                            | 5.24%               | 5.46%              | 5.96%                | 5.55%          |
| 2011                            | 4.78%               | 5.04%              | 5.57%                | 5.13%          |
| 2012                            | 3.83%               | 4.13%              | 4.86%                | 4.27%          |
| 2013                            | 4.24%               | 4.48%              | 4.98%                | 4.57%          |
| 2014                            | 4.19%               | 4.28%              | 4.80%                | 4.42%          |
| <b>Five-Year<br/>Average</b>    | <u>4.46%</u>        | <u>4.68%</u>       | <u>5.23%</u>         | <u>4.79%</u>   |
| 2015                            | 4.00%               | 4.12%              | 5.03%                | 4.38%          |
| <b><u>Months</u></b>            |                     |                    |                      |                |
| Apr-15                          | 3.63%               | 3.75%              | 4.51%                | 3.96%          |
| May-15                          | 4.05%               | 4.17%              | 4.91%                | 4.38%          |
| Jun-15                          | 4.29%               | 4.39%              | 5.13%                | 4.60%          |
| Jul-15                          | 4.27%               | 4.40%              | 5.22%                | 4.63%          |
| Aug-15                          | 4.13%               | 4.25%              | 5.23%                | 4.54%          |
| Sep-15                          | 4.25%               | 4.39%              | 5.42%                | 4.68%          |
| Oct-15                          | 4.13%               | 4.29%              | 5.47%                | 4.63%          |
| Nov-15                          | 4.22%               | 4.40%              | 5.57%                | 4.73%          |
| Dec-15                          | 4.16%               | 4.35%              | 5.55%                | 4.69%          |
| Jan-16                          | 4.09%               | 4.27%              | 5.49%                | 4.62%          |
| Feb-16                          | 3.94%               | 4.11%              | 5.28%                | 4.44%          |
| Mar-16                          | 3.93%               | 4.16%              | 5.12%                | 4.40%          |
| <b>Twelve-Month<br/>Average</b> | <u>4.09%</u>        | <u>4.24%</u>       | <u>5.24%</u>         | <u>4.53%</u>   |
| <b>Six-Month<br/>Average</b>    | <u>4.08%</u>        | <u>4.26%</u>       | <u>5.41%</u>         | <u>4.59%</u>   |
| <b>Three-Month<br/>Average</b>  | <u>3.99%</u>        | <u>4.18%</u>       | <u>5.30%</u>         | <u>4.49%</u>   |

Source: Mergent Bond Record

# Yields on A-rated Public Utility Bonds and Spreads over 30-Year Treasuries



|                          | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| — A-rated Public Utility | 8.31% | 7.89% | 7.75% | 7.60% | 7.04% | 7.62% | 8.24% | 7.76% | 7.37% | 6.58% | 6.16% | 5.65% | 6.07% | 6.07% | 6.53% | 6.04% | 5.46% | 5.04% | 4.13% | 4.48% | 4.28% | 4.12% |
| - - Spread vs. 30-year   | 0.94% | 1.01% | 1.04% | 0.99% | 1.46% | 1.75% | 2.30% | 2.27% |       |       |       |       | 1.16% | 1.23% | 2.25% | 1.96% | 1.21% | 1.13% | 1.21% | 1.03% | 0.94% | 1.28% |



**Common Equity Risk Premiums**  
**Years 1926-2014**

|                                   | <b><u>Large<br/>Common<br/>Stocks</u></b> | <b><u>Long-<br/>Term<br/>Corp.<br/>Bonds</u></b> | <b><u>Equity<br/>Risk<br/>Premium</u></b> | <b><u>Long-<br/>Term<br/>Govt.<br/>Bonds<br/>Yields</u></b> |
|-----------------------------------|---|--|---|---|
| Low Interest Rates                | 12.21%                                    | 4.85%  | 7.36%                                     | 3.00%   |
| Average Across All Interest Rates | 12.07%                                    | 6.38%  | 5.69%                                     | 5.12%   |
| High Interest Rates               | 11.93%                                    | 7.95%  | 3.98%                                     | 7.28%   |

Source of Information: Stocks, Bonds, Bills, and Inflation (S&B) 2015 Classic Yearbook

**Basic Series**  
**Annual Total Returns (except yields)**

| <u>Year</u> | <u>Large<br/>Common<br/>Stocks</u> | <u>Long-<br/>Term<br/>Corp.<br/>Bonds</u> | <u>Long-<br/>Term<br/>Govt.<br/>Bonds<br/>Yields</u> |
|-------------|------------------------------------|---|--|
| 1940        | -9.78%                             | 3.39%                                     | 1.94%  |
| 1945        | 36.44%                             | 4.08%                                     | 1.99%  |
| 1941        | -11.59%                            | 2.73%                                     | 2.04%  |
| 1949        | 18.79%                             | 3.31%                                     | 2.09%  |
| 1946        | -8.07%                             | 1.72%                                     | 2.12%  |
| 1950        | 31.71%                             | 2.12%                                     | 2.24%  |
| 1939        | -0.41%                             | 3.97%                                     | 2.26%  |
| 1948        | 5.50%                              | 4.14%                                     | 2.37%  |
| 2013        | 13.69%                             | 17.28%                                    | 2.40%  |
| 2012        | 16.00%                             | 10.68%                                    | 2.41%  |
| 1947        | 5.71%                              | -2.34%                                    | 2.43%  |
| 1942        | 20.34%                             | 2.60%                                     | 2.46%  |
| 1944        | 19.75%                             | 4.73%                                     | 2.46%  |
| 1943        | 25.90%                             | 2.83%                                     | 2.48%  |
| 2011        | 2.11%                              | 17.95%                                    | 2.48%  |
| 1938        | 31.12%                             | 6.13%                                     | 2.52%  |
| 1936        | 33.92%                             | 6.74%                                     | 2.55%  |
| 1951        | 24.02%                             | -2.69%                                    | 2.69%  |
| 1954        | 52.62%                             | 5.39%                                     | 2.72%  |
| 1937        | -35.03%                            | 2.75%                                     | 2.73%  |
| 1953        | -0.99%                             | 3.41%                                     | 2.74%  |
| 1935        | 47.67%                             | 9.61%                                     | 2.76%  |
| 1952        | 18.37%                             | 3.52%                                     | 2.79%  |
| 1934        | -1.44%                             | 13.84%                                    | 2.93%  |
| 1955        | 31.56%                             | 0.48%                                     | 2.95%  |
| 2008        | -37.00%                            | 8.78%                                     | 3.03%  |
| 1932        | -8.19%                             | 10.82%                                    | 3.15%  |
| 1927        | 37.49%                             | 7.44%                                     | 3.16%  |
| 1957        | -10.78%                            | 8.71%                                     | 3.23%  |
| 1930        | -24.90%                            | 7.98%                                     | 3.30%  |
| 1933        | 53.99%                             | 10.38%                                    | 3.36%  |
| 1928        | 43.61%                             | 2.84%                                     | 3.40%  |
| 1929        | -8.42%                             | 3.27%                                     | 3.40%  |
| 1956        | 6.56%                              | -6.81%                                    | 3.45%  |
| 1926        | 11.62%                             | 7.37%                                     | 3.54%  |
| 2013        | 32.39%                             | -7.07%                                    | 3.67%  |
| 1960        | 0.47%                              | 9.07%                                     | 3.80%  |
| 1958        | 43.36%                             | -2.22%                                    | 3.82%  |
| 1962        | -8.73%                             | 7.95%                                     | 3.95%  |
| 1931        | -43.34%                            | -1.85%                                    | 4.07%  |
| 2010        | 15.06%                             | 12.44%                                    | 4.14%  |
| 1961        | 26.89%                             | 4.82%                                     | 4.15%  |
| 1963        | 22.80%                             | 2.19%                                     | 4.17%  |
| 1964        | 16.48%                             | 4.77%                                     | 4.23%  |
| 1959        | 11.96%                             | -0.97%                                    | 4.47%  |
| 1965        | 12.45%                             | -0.46%                                    | 4.50%  |
| 2007        | 5.49%                              | 2.60%                                     | 4.50%  |
| 1966        | -10.06%                            | 0.20%                                     | 4.55%  |
| 2009        | 26.46%                             | 3.02%                                     | 4.58%  |
| 2005        | 4.91%                              | 5.87%                                     | 4.61%  |
| 2002        | -22.10%                            | 16.33%                                    | 4.84%  |
| 2004        | 10.88%                             | 8.72%                                     | 4.84%  |
| 2006        | 15.79%                             | 3.24%                                     | 4.91%  |
| 2003        | 28.68%                             | 5.27%                                     | 5.11%  |
| 1998        | 28.58%                             | 10.76%                                    | 5.42%  |
| 1967        | 23.98%                             | -4.95%                                    | 5.56%  |
| 2000        | -9.10%                             | 12.87%                                    | 5.58%  |
| 2001        | -11.89%                            | 10.65%                                    | 5.75%  |
| 1971        | 14.30%                             | 11.01%                                    | 5.97%  |
| 1968        | 11.06%                             | 2.57%                                     | 5.98%  |
| 1972        | 18.99%                             | 7.26%                                     | 5.99%  |
| 1997        | 33.36%                             | 12.95%                                    | 6.02%  |
| 1995        | 37.58%                             | 27.20%                                    | 6.03%  |
| 1970        | 3.86%                              | 18.37%                                    | 6.48%  |
| 1993        | 10.08%                             | 13.19%                                    | 6.54%  |
| 1996        | 22.96%                             | 1.40%                                     | 6.73%  |
| 1999        | 21.04%                             | -7.45%                                    | 6.82%  |
| 1969        | -8.50%                             | -8.09%                                    | 6.87%  |
| 1976        | 23.93%                             | 18.65%                                    | 7.21%  |
| 1973        | -14.69%                            | 1.14%                                     | 7.26%  |
| 1992        | 7.62%                              | 9.39%                                     | 7.26%  |
| 1991        | 30.47%                             | 19.89%                                    | 7.30%  |
| 1974        | -26.47%                            | -3.06%                                    | 7.60%  |
| 1986        | 18.67%                             | 19.85%                                    | 7.89%  |
| 1994        | 1.32%                              | -5.76%                                    | 7.99%  |
| 1977        | -7.16%                             | 1.71%                                     | 8.03%  |
| 1975        | 37.23%                             | 14.64%                                    | 8.05%  |
| 1989        | 31.69%                             | 16.23%                                    | 8.16%  |
| 1990        | -3.10%                             | 6.78%                                     | 8.44%  |
| 1978        | 6.57%                              | -0.07%                                    | 8.98%  |
| 1988        | 16.61%                             | 10.70%                                    | 9.18%  |
| 1987        | 5.25%                              | -0.27%                                    | 9.20%  |
| 1985        | 31.73%                             | 30.09%                                    | 9.56%  |
| 1979        | 18.61%                             | -4.18%                                    | 10.12%   |
| 1982        | 21.55%                             | 42.56%                                    | 10.95%   |
| 1984        | 6.27%                              | 16.86%                                    | 11.70%   |
| 1983        | 22.56%                             | 6.26%                                     | 11.97%   |
| 1980        | 32.50%                             | -2.76%                                    | 11.99%   |
| 1981        | -4.92%                             | -1.24%                                    | 13.34%   |

**Yields for Treasury Constant Maturities  
Yearly for 2010-2014 and 2015  
and the Twelve Months Ended March 2016**

| <u>Years</u>                    | <u>1-Year</u> | <u>2-Year</u> | <u>3-Year</u> | <u>5-Year</u> | <u>7-Year</u> | <u>10-Year</u> | <u>20-Year</u> | <u>30-Year</u> |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| 2010                            | 0.32%         | 0.70%         | 1.11%         | 1.93%         | 2.62%         | 3.22%          | 4.03%          | 4.25%          |
| 2011                            | 0.18%         | 0.45%         | 0.75%         | 1.52%         | 2.16%         | 2.78%          | 3.62%          | 3.91%          |
| 2012                            | 0.17%         | 0.28%         | 0.38%         | 0.76%         | 1.22%         | 1.80%          | 2.54%          | 2.92%          |
| 2013                            | 0.13%         | 0.31%         | 0.54%         | 1.17%         | 1.74%         | 2.35%          | 3.12%          | 3.45%          |
| 2014                            | 0.12%         | 0.46%         | 0.90%         | 1.64%         | 2.14%         | 2.54%          | 3.07%          | 3.34%          |
| <b>Five-Year<br/>Average</b>    | <u>0.18%</u>  | <u>0.44%</u>  | <u>0.74%</u>  | <u>1.40%</u>  | <u>1.98%</u>  | <u>2.54%</u>   | <u>3.28%</u>   | <u>3.57%</u>   |
| 2015                            | 0.32%         | 0.69%         | 1.03%         | 1.53%         | 1.89%         | 2.14%          | 2.55%          | 2.84%          |
| <b><u>Months</u></b>            |               |               |               |               |               |                |                |                |
| Apr-15                          | 0.23%         | 0.54%         | 0.87%         | 1.35%         | 1.69%         | 1.94%          | 2.33%          | 2.59%          |
| May-15                          | 0.24%         | 0.61%         | 0.98%         | 1.54%         | 1.93%         | 2.20%          | 2.69%          | 2.96%          |
| Jun-15                          | 0.28%         | 0.69%         | 1.07%         | 1.68%         | 2.10%         | 2.36%          | 2.85%          | 3.11%          |
| Jul-15                          | 0.30%         | 0.67%         | 1.03%         | 1.63%         | 2.04%         | 2.32%          | 2.77%          | 3.07%          |
| Aug-15                          | 0.38%         | 0.70%         | 1.03%         | 1.54%         | 1.91%         | 2.17%          | 2.55%          | 2.86%          |
| Sep-15                          | 0.37%         | 0.71%         | 1.01%         | 1.49%         | 1.88%         | 2.17%          | 2.62%          | 2.95%          |
| Oct-15                          | 0.26%         | 0.64%         | 0.93%         | 1.39%         | 1.76%         | 2.07%          | 2.50%          | 2.89%          |
| Nov-15                          | 0.48%         | 0.88%         | 1.20%         | 1.67%         | 2.02%         | 2.26%          | 2.69%          | 3.03%          |
| Dec-15                          | 0.65%         | 0.98%         | 1.28%         | 1.70%         | 2.04%         | 2.24%          | 2.61%          | 2.97%          |
| Jan-16                          | 0.54%         | 0.90%         | 1.14%         | 1.52%         | 1.85%         | 2.09%          | 2.49%          | 2.86%          |
| Feb-16                          | 0.53%         | 0.73%         | 0.90%         | 1.22%         | 1.53%         | 1.78%          | 2.20%          | 2.62%          |
| Mar-16                          | 0.66%         | 0.88%         | 1.04%         | 1.38%         | 1.68%         | 1.89%          | 2.28%          | 2.68%          |
| <b>Twelve-Month<br/>Average</b> | <u>0.41%</u>  | <u>0.74%</u>  | <u>1.04%</u>  | <u>1.51%</u>  | <u>1.87%</u>  | <u>2.12%</u>   | <u>2.55%</u>   | <u>2.88%</u>   |
| <b>Six-Month<br/>Average</b>    | <u>0.52%</u>  | <u>0.84%</u>  | <u>1.08%</u>  | <u>1.48%</u>  | <u>1.81%</u>  | <u>2.06%</u>   | <u>2.46%</u>   | <u>2.84%</u>   |
| <b>Three-Month<br/>Average</b>  | <u>0.58%</u>  | <u>0.84%</u>  | <u>1.03%</u>  | <u>1.37%</u>  | <u>1.69%</u>  | <u>1.92%</u>   | <u>2.32%</u>   | <u>2.72%</u>   |

Source: Federal Reserve statistical release H.15

**Measures of the Risk-Free Rate & Corporate Bond Yields**

The forecast of Treasury and Corporate yields  
per the consensus of nearly 50 economists  
reported in the Blue Chip Financial Forecasts dated April 1, 2016

| Year | Quarter | Treasury    |             |             |              |              | Corporate |          |
|------|---------|-------------|-------------|-------------|--------------|--------------|-----------|----------|
|      |         | 1-Year Bill | 2-Year Note | 5-Year Note | 10-Year Note | 30-Year Bond | Aaa Bond  | Baa Bond |
| 2016 | Second  | 0.7%        | 1.0%        | 1.5%        | 2.0%         | 2.8%         | 3.9%      | 5.3%     |
| 2016 | Third   | 0.9%        | 1.2%        | 1.7%        | 2.2%         | 3.0%         | 4.1%      | 5.4%     |
| 2016 | Fourth  | 1.1%        | 1.4%        | 1.9%        | 2.4%         | 3.1%         | 4.3%      | 5.5%     |
| 2017 | First   | 1.3%        | 1.6%        | 2.1%        | 2.6%         | 3.3%         | 4.5%      | 5.7%     |
| 2017 | Second  | 1.6%        | 1.8%        | 2.3%        | 2.8%         | 3.5%         | 4.6%      | 5.8%     |
| 2017 | Third   | 1.8%        | 2.0%        | 2.5%        | 2.9%         | 3.6%         | 4.8%      | 5.9%     |

**Measures of the Market Premium**

Value Line Return

| As of:        | Dividend Yield | + | Median Appreciation Potential | = | Median Total Return |
|---------------|----------------|---|-------------------------------|---|---------------------|
| April 1, 2016 | 2.3%           |   | 10.67%                        |   | 12.97%              |

DCF Result for the S&P 500 Composite

| D/P   | ( 1+5g )   | + | g     | = | k     |
|-------|------------|---|-------|---|-------|
| 2.20% | ( 1.0259 ) |   | 5.18% |   | 7.44% |

|        |              |     |              |   |         |
|--------|--------------|-----|--------------|---|---------|
| where: | Price (P)    | at  | 31-Mar-16    | = | 2059.74 |
|        | Dividend (D) | for | 4th Qtr. '15 | = | 11.35   |
|        | Dividend (D) |     | annualized   | = | 45.40   |
|        | Growth (g)   | by  | First Call   | = | 5.18%   |

Summary

|                                |        |        |
|--------------------------------|--------|--------|
| Value Line                     |        | 12.97% |
| S&P 500                        |        | 7.44%  |
| Average                        |        | 10.21% |
| Risk-free Rate of Return (Rf)  |        | 3.75%  |
| Forecast Market Premium        |        | 6.46%  |
| Historical Market Premium (Rm) | (Rf)   |        |
| 1926-2014 Arith. mean          | 12.14% | 4.06%  |
|                                |        | 8.08%  |
| Average - Forecast/Historical  |        | 7.27%  |

This phenomenon can also be viewed graphically, as depicted in the Graph 7-2. The security market line is based on the pure CAPM without adjusting for the size premium. Based on the risk (or beta) of a security, the expected return should fluctuate along the security market line. However, the expected returns for the smaller deciles of the NYSE/AMEX/NASDAQ lie above the line, indicating that these deciles have had returns in excess of those appropriate for their systematic risk.

**Table 7-6:** Size-Decile Portfolios of the NYSE/AMEX/NASDAQ Long-Term Returns in Excess of CAPM

| Decile          | Beta* | Arithmetic Mean Return (%) | Actual Return in Excess of Riskless Rate** (%) | CAPM Return in Excess of Riskless Rate† (%) | Size Premium (Return in Excess of CAPM) (%) |
|-----------------|-------|----------------------------|--|---|---|
| 1               | 0.91  | 11.15                      | 6.08   | 6.40  | -0.32                                       |
| 2               | 1.04  | 12.96                      | 7.89   | 7.24  | 0.65  |
| 3               | 1.10  | 13.71                      | 8.64   | 7.70  | 0.94  |
| 4               | 1.13  | 14.01                      | 8.93   | 7.88  | 1.05  |
| 5               | 1.16  | 14.84                      | 9.76   | 8.11  | 1.65  |
| 6               | 1.19  | 15.01                      | 9.94   | 8.31  | 1.63  |
| 7               | 1.24  | 15.53                      | 10.46  | 8.69  | 1.77  |
| 8               | 1.30  | 16.35                      | 11.27  | 9.10  | 2.18  |
| 9               | 1.35  | 17.13                      | 12.06  | 9.42  | 2.64  |
| 10              | 1.40  | 20.62                      | 15.54  | 9.82  | 5.72  |
| Mid-Cap, 3-5    | 1.12  | 14.00                      | 8.93   | 7.83  | 1.10  |
| Low-Cap, 6-8    | 1.23  | 15.44                      | 10.36  | 8.59  | 1.77  |
| Micro-Cap, 9-10 | 1.36  | 18.26                      | 13.18  | 9.49  | 3.69  |

Data from 1926–2014.

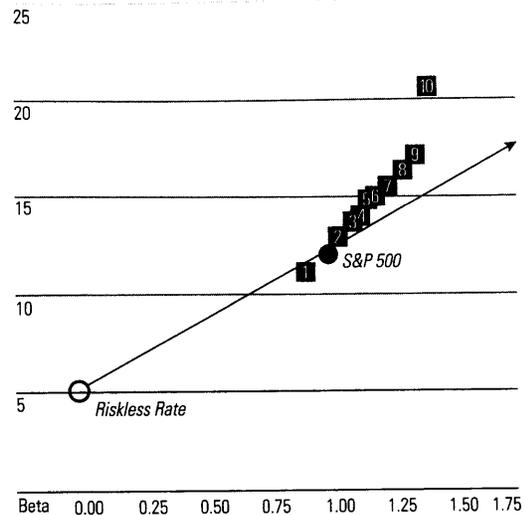
\*Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2014.

\*\*Historical riskless rate measured by the 89-year arithmetic mean income return component of 20-year government bonds (5.07%).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (12.07%) minus the arithmetic mean income return component of 20-year government bonds (5.07%) from 1926–2014.

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2015 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

**Graph 7-2:** Security Market Line Versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ



Data from 1926–2014.

**Serial Correlation in Small-Cap Stock Returns**

In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected. For instance, large-cap stocks have outperformed small-cap stocks in nearly half of the years since 1926. It should be noted, however, that large-cap stocks' average historical outperformance has been less than the average historical outperformance of small-cap stocks.

History tells us that small companies are riskier than large companies. Table 7-1 [see page 100] shows the standard deviation (a measure of risk) for each decile of the NYSE/AMEX/NASDAQ. As one moves from larger to smaller deciles, the standard deviation of return grows. Investors are compensated for taking on this additional risk by the higher returns provided by small companies. It is important to note, however, that the risk/return profile is over the long term. If small companies did not provide higher long-term returns, investors would be more inclined to invest in the less-risky stocks of large companies.

**Comparable Earnings Approach**

Using Non-Utility Companies with

Timeliness of 2 & 3; Safety Rank of 1, 2 & 3; Financial Strength of B++, A & A+;

Timeliness of 2 & 3; Safety Rank of 1, 2 & 3; Financial Strength of B++, A & A+;

| Company                          | Industry              | Timeliness Rank | Safety Rank | Financial Strength | Price Stability | Beta | Technical Rank |
|----------------------------------|-----------------------|-----------------|-------------|--------------------|-----------------|------|----------------|
| ABM Industries Inc               | Industrial Services   | 3               | 3           | B++                | 85              | 0.85 | 2              |
| Alleghany Corp                   | Insurance (Prop/Cas.) | 3               | 1           | A                  | 100             | 0.80 | 2              |
| AmerisourceBergen Corp           | Med Supp Non-Invasive | 3               | 1           | A                  | 95              | 0.80 | 3              |
| Bio-Techne Corp.                 | Biotechnology         | 3               | 1           | A+                 | 90              | 0.85 | 3              |
| Campbell Soup Co                 | Food Processing       | 2               | 2           | B++                | 100             | 0.65 | 2              |
| Church and Dwight Co Inc         | Household Products    | 2               | 1           | A+                 | 100             | 0.70 | 2              |
| Costco Wholesale Corporation     | Retail Store          | 2               | 1           | A+                 | 100             | 0.75 | 2              |
| CR Bard Inc                      | Med Supp Invasive     | 2               | 1           | A+                 | 90              | 0.80 | 2              |
| CVS Caremark Corporation         | Pharmacy Services     | 2               | 1           | A+                 | 95              | 0.85 | 3              |
| General Mills Inc                | Food Processing       | 2               | 1           | A+                 | 100             | 0.70 | 2              |
| Hershey Company                  | Food Processing       | 3               | 2           | B++                | 100             | 0.65 | 3              |
| Hormel Foods Corporation         | Food Processing       | 2               | 1           | A                  | 95              | 0.75 | 2              |
| Kroger Co                        | Retail/Wholesale Food | 2               | 2           | A                  | 90              | 0.80 | 2              |
| Laboratory Corp                  | Medical Services      | 2               | 1           | A                  | 90              | 0.85 | 3              |
| Markel Corp                      | Insurance (Prop/Cas.) | 2               | 1           | A                  | 100             | 0.70 | 2              |
| Mercury General Corp             | Insurance (Prop/Cas.) | 3               | 2           | B++                | 90              | 0.70 | 3              |
| Philip Morris International Inc  | Tobacco               | 3               | 2           | B++                | 95              | 0.80 | 2              |
| Progressive Corporation          | Insurance (Prop/Cas.) | 3               | 2           | B++                | 95              | 0.85 | 3              |
| Republic Services Inc            | Environmental         | 2               | 2           | B++                | 95              | 0.80 | 2              |
| RLI Corp                         | Insurance (Prop/Cas.) | 2               | 2           | B++                | 90              | 0.85 | 3              |
| Stericycle Inc                   | Environmental         | 3               | 2           | B++                | 90              | 0.80 | 5              |
| Sysco Corp                       | Retail/Wholesale Food | 2               | 1           | A+                 | 100             | 0.70 | 2              |
| Target Corp                      | Retail Store          | 2               | 1           | A                  | 95              | 0.75 | 3              |
| Tootsie Roll Industries          | Food Processing       | 2               | 1           | A+                 | 95              | 0.85 | 2              |
| United Parcel Service            | Air Transport         | 2               | 1           | A                  | 100             | 0.85 | 4              |
| Verisk Analytics Inc             | Information Services  | 2               | 2           | B++                | 90              | 0.75 | 3              |
| Weis Markets                     | Retail/Wholesale Food | 3               | 1           | A                  | 85              | 0.75 | 5              |
| West Pharmaceutical Services Inc | Med Supp Non-Invasive | 2               | 2           | B++                | 85              | 0.85 | 3              |
| WR Berkley Corp                  | Insurance (Prop/Cas.) | 2               | 1           | A                  | 95              | 0.80 | 2              |
| Average                          |                       | 2               | 1           | A                  | 94              | 0.78 | 3              |
| Gas Group                        | Average               | 3               | 2           | A                  | 91              | 0.74 | 3              |

Source of Information: Value Line Investment Survey for Windows, March 2016

**Comparable Earnings Approach**

Five -Year Average Historical Earned Returns  
for Years 2010-2014 and  
Projected 3-5 Year Returns

| <u>Company</u>                                 | <u>2010</u> | <u>2011</u> | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>Average</u> | <u>Projected<br/>2018-20</u> |
|--|-------------|-------------|-------------|-------------|-------------|----------------|------------------------------|
| ABM Industries Inc                             | 9.5%        | 9.4%        | 9.0%        | 9.3%        | 9.1%        | 9.3%           | 11.5%                        |
| Alleghany Corp                                 | 4.6%        | 4.9%        | 11.0%       | 7.1%        | 5.8%        | 6.7%           | 6.5%                         |
| AmerisourceBergen Corp                         | 21.6%       | 24.6%       | 28.8%       | 31.9%       | 47.2%       | 30.8%          | 46.0%                        |
| Bio-Techne Corp.                               | 21.9%       | 19.2%       | 16.7%       | 15.3%       | 14.0%       | 17.4%          | 11.0%                        |
| Campbell Soup Co                               | 91.1%       | 77.8%       | 87.2%       | 64.6%       | 49.5%       | 74.0%          | 33.5%                        |
| Church and Dwight Co Inc                       | 15.3%       | 15.9%       | 17.0%       | 17.1%       | 19.7%       | 17.0%          | 17.5%                        |
| Costco Wholesale Corporation                   | 12.1%       | 12.2%       | 14.1%       | 18.2%       | 16.7%       | 14.7%          | 20.0%                        |
| CR Bard Inc                                    | 32.8%       | 31.9%       | 29.4%       | 22.7%       | 36.1%       | 30.6%          | 24.0%                        |
| CVS Caremark Corporation                       | 9.8%        | 9.9%        | 11.7%       | 12.9%       | 13.9%       | 11.6%          | 18.5%                        |
| General Mills Inc                              | 29.1%       | 26.0%       | 2.7%        | 26.8%       | 27.9%       | 22.5%          | 33.0%                        |
| Hershey Company                                | 65.1%       | 76.4%       | 71.4%       | 52.6%       | 61.6%       | 65.4%          | 42.0%                        |
| Hormel Foods Corporation                       | 17.0%       | 17.8%       | 17.7%       | 15.9%       | 16.7%       | 17.0%          | 18.0%                        |
| Kroger Co                                      | 21.1%       | 30.0%       | 33.8%       | 27.8%       | 32.6%       | 29.1%          | 23.5%                        |
| Laboratory Corp                                | 23.7%       | 25.9%       | 24.4%       | 25.6%       | 18.1%       | 23.5%          | 14.5%                        |
| Markel Corp                                    | 7.7%        | 3.7%        | 6.5%        | 3.5%        | 3.6%        | 5.0%           | 6.5%                         |
| Mercury General Corp                           | 6.4%        | 8.2%        | 6.3%        | 6.6%        | 6.7%        | 6.8%           | 12.0%                        |
| Philip Morris International Inc                | NMF         | NMF         | NMF         | NMF         | NMF         | -              | NMF                          |
| Progressive Corporation                        | 16.6%       | 16.5%       | 11.7%       | 14.8%       | 16.5%       | 15.2%          | 18.0%                        |
| Republic Services Inc                          | 8.4%        | 9.7%        | 8.6%        | 9.0%        | 9.0%        | 8.9%           | 10.5%                        |
| RLI Corp                                       | 13.9%       | 14.7%       | 10.9%       | 13.5%       | 13.6%       | 13.3%          | 12.0%                        |
| Stericycle Inc                                 | 20.4%       | 20.2%       | 18.6%       | 18.8%       | 17.2%       | 19.0%          | 14.5%                        |
| Sysco Corp                                     | 30.9%       | 24.5%       | 23.9%       | 19.1%       | 17.7%       | 23.2%          | 25.0%                        |
| Target Corp                                    | 18.3%       | 18.5%       | 17.5%       | 12.7%       | 19.5%       | 17.3%          | 22.5%                        |
| Tootsie Roll Industries                        | 8.0%        | 6.6%        | 8.0%        | 8.9%        | 9.2%        | 8.1%           | 9.5%                         |
| United Parcel Service                          | 44.7%       | 59.6%       | 94.3%       | 67.5%       | 205.0%      | 94.2%          | NMF                          |
| Verisk Analytics Inc                           | -           | -           | NMF         | NMF         | NMF         | -              | 17.5%                        |
| Weis Markets                                   | 9.4%        | 10.1%       | 10.4%       | 9.1%        | 6.4%        | 9.1%           | 7.5%                         |
| West Pharmaceutical Services Inc               | 11.6%       | 12.5%       | 13.3%       | 12.4%       | 13.3%       | 12.6%          | 15.0%                        |
| WR Berkley Corp                                | 11.4%       | 7.7%        | 8.8%        | 9.7%        | 10.6%       | 9.6%           | 10.0%                        |
| Average  |             |             |             |             |             | 22.7%          | 18.5%                        |
| Median   |             |             |             |             |             | 17.0%          | 17.5%                        |
| Average (excluding companies with values >20%) |             |             |             |             |             | 11.7%          | 12.7%                        |

### **Comparable Earnings Approach**

#### Screening Parameters

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##### Timeliness Rank

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The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

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##### Safety Rank

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A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

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##### Financial Strength

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The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

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##### Price Stability Index

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An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

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##### Beta

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A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

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##### Technical Rank

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A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
S. MARK KATKO  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

May 27, 2016

Attorneys for Applicant  
COLUMBIA GAS OF KENTUCKY, INC.

**PREPARED DIRECT TESTIMONY OF S. MARK KATKO**

1 **Q: Please state your name and business address.**

2 A: My name is S. Mark Katko and my business address is 290 W. Nationwide  
3 Blvd., Columbus, Ohio 43215.

4  
5 **Q: What is your current position and what are your responsibilities?**

6 A: I am employed by NiSource Corporate Services Company ("NCSC"). My  
7 title is Manager of Regulatory Strategy and Support. As Manager, my prin-  
8 cipal responsibilities include providing support in regulatory compliance fil-  
9 ings and base rate cases as requested by the NiSource Inc. ("NiSource") gas  
10 distribution companies, including Columbia Gas of Kentucky, Inc. ("Co-  
11 lumbia").

12  
13 **Q: What is your educational background?**

14 A: I received a Bachelor of Science in Business Administration degree, majoring  
15 in Accounting, in 1978 from The Ohio State University. I am a Certified  
16 Public Accountant (inactive) in the state of Ohio.

17  
18 **Q: What is your employment history?**

1 A: I began my career with the Columbia Gas distribution companies in 1978  
2 as a General Accountant in the Finance Department. I held various posi-  
3 tions of increasing responsibility in the Accounting and Financial Plan-  
4 ning sections of the Finance Department from 1978 to 2012, most recently  
5 as Manager of Budgets. I assumed my current position in the Regulatory  
6 Strategy and Support Department in April 2012.

7

8 **Q: Have you previously testified before any regulatory commission?**

9 A: Yes. I have previously testified before the Kentucky Public Service Com-  
10 mission ("Commission") in Case No. 2013-00167 and the Virginia State  
11 Corporation Commission.

12

13 **Q: What is the purpose of your testimony in this proceeding?**

14 A: I am responsible for the development of rate base as presented in Sched-  
15 ule B. Specifically, I support Schedules B-1, B-2, B-2.1, B-2.2, B-2.3, B-2.4, B-  
16 2.5, B-2.6, B-2.7, B-3, B-3.1, B-4, B-5, B-5.1, B-5.2, and B-7 for the base period  
17 ending August 31, 2016, and forecasted test period ending December 31,  
18 2017. These schedules were prepared either by me or under my direction  
19 and supervision. I also sponsor and support Filing Requirements 16-(6)(a),  
20 16-(6)(b), 16-(6)(c), 16-(6)(f), 16-(7)(h)12, and 16-(8)(b).

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**Q: Please describe the rate base information presented in Schedule B.**

A: The information shown on Schedule B-1 is the jurisdictional rate base summary proposed in this proceeding. The forecasted test period rate base of \$253,360,781 was developed using thirteen month average balances of forecasted plant-in-service, reserve for accumulated depreciation and amortization, accumulated deferred income taxes and deferred credits, and working capital items from December 31, 2016 through December 31, 2017, unless noted otherwise. This is consistent with the methodology used by Columbia to develop rate base in Case No. 2013-00167.

The plant-in-service and reserve for accumulated depreciation and amortization for the base period and forecasted test period are summarized on Schedules B-2, B-3, and B-4. Forecasted monthly capital additions are based on Columbia’s capital budget as supported in the testimony of Columbia witness Belle plus other planned capital initiatives that are not yet included in Columbia’s current capital budget. The forecasted monthly reserve for accumulated depreciation balances are based on current depreciation rates through December 31, 2016 and depreciation rates as supported in the testimony of Columbia witness Spanos for the forecasted test period. The forecasted monthly reserve for accumulated amortization bal-

1           ances are based on actual and projected amortizable plant-in-service such  
2           as intangible plant.

3                     The allowance for working capital is summarized on Schedule B-5.

4                     Accumulated deferred income taxes and deferred credits are sum-  
5           marized on Schedule B-6 as supported in the testimony of Columbia wit-  
6           ness Fischer.

7                     The jurisdictional percentages are summarized on Schedule B-7.

8

9   **Q:   What are Columbia's planned capital initiatives that are not yet includ-**  
10 **ed in its current capital budget but which are included in the calculation**  
11 **of rate base?**

12 **A:**   The following items are planned capital initiatives not yet included in the  
13       current capital budget but which are included in the calculation of rate  
14       base through the rate year:

- 15       •   Subsequent to the finalization of the current capital budget, Columbia  
16       finalized plans for additional capital expenditures of \$900,000 and  
17       \$2,000,000 in 2016 and 2017, respectively, in the age and condition cat-  
18       egory.
- 19       •   Columbia is in the planning stages of adding a training facility to its  
20       headquarters site that is not yet included in the current capital budget.

1 The projected cost of the facility as included in rate base is \$1,881,950  
2 with a planned in-service date of November 1, 2017. Please refer to the  
3 testimony of Columbia witness Cote for details regarding the training  
4 facility.

- 5 • Columbia is in the process of modernizing its line location operations  
6 through the use of global positioning system (“GPS”) technology,  
7 which will improve its damage prevention efforts. Subsequent to the  
8 finalization of the current capital budget, Columbia determined that an  
9 additional \$1,326,392 of capital expenditures will be required in 2017 to  
10 implement the GPS technology. Please refer to the testimony of Co-  
11 lumbia witness Cote for details regarding GPS technology implemen-  
12 tation.

- 13 • Subsequent to the finalization of the current capital budget, Columbia  
14 finalized plans for the deployment of 150 mobile data terminals  
15 (“MDTs”) at a cost of \$630,000 as part of a program to replace existing  
16 MDTs used by front-line workers. The planned in-service date is April  
17 1, 2017. Please refer to the testimony of Columbia witness Cole for de-  
18 tails regarding the deployment of MDTs.

19  
20 **Q: Why is a thirteen month average balance utilized for rate base?**

1 A: Since Columbia is filing a forecast test period rate case, a thirteen month  
2 average calculation was used to comply with Filing Requirement 6-c.

3

4 **Q: Please describe in detail the individual supporting schedules for**  
5 **Schedule B.**

6 A: Schedule B-2 shows Columbia's plant-in-service investment by major  
7 property grouping for the base period and the forecasted test period.  
8 Schedules B-2.1 through B-2.7 provide detail of the major property group-  
9 ings by gas plant account and show the plant additions and retirements  
10 for each account during the base period and forecasted test period.

11 Schedule B-3 shows the accumulated depreciation and amortiza-  
12 tion balances by gas plant account for the base period and the forecasted  
13 test period.

14 Workpaper WPB-2.1 provides the monthly balances of plant-in-  
15 service by gas plant account for the base period and forecasted test period.

16 Workpaper WPB-3.1 provides the monthly balances of accumulated de-  
17 preciation and amortization by gas plant account for the base period and  
18 forecasted test period.

19 Schedule B-4 shows the amount of construction work-in-progress  
20 ("CWIP") as of February 29, 2016. Columbia has identified \$731,955 of the

1 total CWIP balance that was in-service as of February 29, 2016, but not yet  
2 classified to Account 106 or Account 101 as of that date. Therefore, this  
3 amount is included for recovery in rate base.

4

5 **Q: How was the forecasted test period plant-in-service developed?**

6 A: Calculations showing the development of the forecasted monthly plant-in-  
7 service balances are found in WPB-2.2. Actual per books plant-in-service  
8 as of February 29, 2016 in Accounts 101, 106, and the in-service portion of  
9 Account 107 is the starting point for the forecast. Budgeted plant additions  
10 were then added by month and budgeted retirements were deducted by  
11 month through the forecasted test period. Monthly budgeted capital addi-  
12 tions were based on Columbia's capital budget discussed in the testimony  
13 of Columbia witness Belle and further adjusted for updated assumptions  
14 regarding the capital initiatives discussed previously in my testimony.  
15 Projected plant retirements were based on a three year average level of ac-  
16 tual retirements recorded in 2013 through 2015. Projected plant additions  
17 and retirements were then increased by 5.3 percent to reflect Columbia's  
18 ten year history of exceeding its original capital expenditure forecasts. Co-  
19 lumbia witness Belle describes Columbia's ten year budget experience.

20

1 **Q: How was the forecasted test period reserve for accumulated deprecia-**  
2 **tion and amortization developed?**

3 A: Calculations showing the development of the forecasted monthly reserve  
4 for accumulated depreciation and amortization balances are found in  
5 WPB-2.2. Details supporting the monthly amortization expense are found  
6 in WPB-2.2a for intangible plant that is subject to amortization. Actual per  
7 books accumulated depreciation and amortization as of February 29, 2016  
8 is the starting point of the forecast. For each month of the forecast, the ac-  
9 cumulated reserve is increased by the projected depreciation and amorti-  
10 zation expense and reduced by the projected retirements and cost of re-  
11 moval. The forecasted depreciation expense is based on current deprecia-  
12 tion rates through December 31, 2016 and the depreciation rates support-  
13 ed by Columbia witness Spanos for the forecasted test period.

14  
15 **Q: How was the calculation of cash working capital and other working cap-**  
16 **ital allowances developed as shown on Schedule B-5?**

17 A: The total working capital requirement of \$47,960,959 is summarized on  
18 Schedule B-5. This is made up of cash working capital, fuel stock, materi-  
19 als and supplies, gas stored underground, and prepayments. Working  
20 capital associated with materials and supplies and prepayments were both

1 determined based on the actual thirteen month average of per book bal-  
2 ances ending February 29, 2016. Columbia does not anticipate a significant  
3 change in the amount of materials and supplies and prepayments during  
4 the forecasted test period. Working capital associated with gas stored un-  
5 derground was calculated by taking the thirteen month average balance of  
6 gas stored underground from December 31, 2016 through December 31,  
7 2017.

8

9 **Q: Did Columbia include Commission fees in the prepayments portion of**  
10 **the working capital requirements?**

11 A: No. Columbia excluded from working capital the portion of prepayments  
12 recorded on the books related to Commission fees.

13

14 **Q: How was the cash working capital allowance developed?**

15 A: Cash working capital is calculated by taking total operation and mainte-  
16 nance expenses excluding gas costs for the twelve months ending Decem-  
17 ber 31, 2017, as supported by Columbia witness Croom, and multiplying  
18 this amount by 1/8, or 12.5 percent. Traditionally, this formula method has  
19 been used by Columbia and accepted by the Commission in Columbia's  
20 previous rate filings.

1 **Q: Did Columbia include customer advances for construction as a reduc-**  
2 **tion to rate base?**

3 A: Yes. Since January 2000, a credit is made to gas plant-in-service in recog-  
4 nition of customer advances. Accordingly, a reduction to rate base has  
5 been included for post-1999 customer advances by including net plant-in-  
6 service per books. Prior to January 2000, a credit for customer advances  
7 was included in Account 252. As of February 29, 2016, the balance in Ac-  
8 count 252 is zero. The budgeted capital expenditures supported by Co-  
9 lumbia witness Belle are also net of projected customer advances. There-  
10 fore, the plant-in-service claimed in this proceeding reflects deductions re-  
11 lated to customer advances.

12  
13 **Q: Please explain Schedule B-7.**

14 A: This schedule identifies the allocation factors used to determine the juris-  
15 dictional percentage of gas plant costs applicable to the calculation of the  
16 gas rate increase requested in this proceeding. Columbia does not have  
17 any non-jurisdictional gas customers within its service territory. There-  
18 fore, this schedule shows that 100 percent of Columbia's costs are jurisdic-  
19 tional in nature and are appropriate to include for recovery in this pro-  
20 ceeding.

1 Q: Does this complete your Prepared Direct testimony?

2 A: Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, S. Mark Katko, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

*S. Mark Katko*

S. Mark Katko

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by S. Mark Katko on this the 19<sup>th</sup> day of March, 2016



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

*Cheryla A. MacDonald*

Notary Public

My Commission expires: March 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

---

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**PREPARED DIRECT TESTIMONY OF  
JANA T. CROOM  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF JANA T. CROOM**

1 **Q: Please state your name and business address.**

2 A: My name is Jana T. Croom and my business address is 290 W. Nationwide  
3 Blvd., Columbus, Ohio 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am the Director of Regulatory Affairs for Columbia Gas of Ohio, Inc. As  
7 Director of Regulatory Affairs, my principal responsibilities include the  
8 planning, supervision, preparation and support of regulatory filings be-  
9 fore the Public Utilities Commission of Ohio as well as other jurisdictions  
10 as requested. Other responsibilities include the validation of revenue and  
11 expense included in Columbia companies' budget planning process.

12

13 **Q: What is your educational background?**

14 A: I received my undergraduate degree from the College of Wooster in  
15 Wooster, Ohio and my Masters of Business Administration from The  
16 Fisher College of Business at The Ohio State University.

17

18 **Q: What is your employment history?**

1 A: I began my career as an Equity Analyst for the Ohio Public Employees  
2 Retirement System (“OPERS”) and spent 10 years in the investment field  
3 before joining American Electric Power where I held positions in Investor  
4 Relations, Corporate Finance and Treasury. I joined Columbia Gas of Ohio  
5 in 2012, focusing on financial forecasting before assuming my current role,  
6 in April, 2014.

7

8 **Q: Have you previously testified before any regulatory commissions?**

9 A: Yes. I provided direct testimony before the Public Utilities Commission of  
10 Ohio.

11

12 **Q: What is the purpose of your testimony in this proceeding?**

13 A: I am responsible for the development of the cost of service and proposed  
14 revenue increase. As part of the cost of service analysis, my testimony  
15 supports Columbia Gas of Kentucky’s (“Columbia’s”) Operations and  
16 Maintenance (“O&M”) expenses. I am responsible for Schedules A, C, D,  
17 F, G, H, I and K. These schedules were prepared either by me or under my  
18 direction and supervision. I also sponsor and support Filing Requirements  
19 16-(6)(a), 16-(6)(b), 16-(7)(h)4, 16-(7)(j), 16-(7)(k), 16-(7)(l), 16-(7)(m), 16-

1 (7)(p), 16-(7)(q), 16-(7)(r), 16-(8)(a), 16-(8)(c), 16-(8)(d), 16-(8)(f), 16-(8)(g),  
2 16-(8)(h), 16-(8)(i), and 16-(8)(k).

3

4 **Q: What is the test period in this proceeding?**

5 A: Columbia is requesting an adjustment in rates based on a forecasted test  
6 period. The test period is the twelve months ended December 31, 2017.  
7 The financial data for the forecasted period is presented in the form of pro  
8 forma adjustments to a base period which is the twelve months ended  
9 August 31, 2016. The base period includes actual data for the period Sep-  
10 tember 1, 2015 through February 29, 2016, and forecasted data for the pe-  
11 riod March 1, 2016 through August 31, 2016.

12

13 **Q: Please describe the schedules presented in Schedule C of Columbia's**  
14 **Application.**

15 A: Schedule C presents Columbia's jurisdictional Operating Income for the  
16 base period and forecasted test period and details how Columbia derived  
17 the amount of the requested revenue increase. Schedule C-1 is the Operat-  
18 ing Income Summary, Schedule C-2 represents annual Operating Reve-  
19 nues and Expenses by Accounts – Jurisdictional, and Schedule C-2.2 is the  
20 monthly Operating Revenues and Expenses by Accounts – Jurisdictional.

1

2 **Q: Please explain Schedule C-1.**

3 A: Schedule C-1 reflects Columbia's base period and forecasted test period  
4 Operating Income Summary. This schedule includes the forecasted test  
5 period operating income summarized at both current rates and proposed  
6 rates. The forecasted test period operating income at current rates is pre-  
7 sented as pro forma adjustments to the base period. The revenue at pro-  
8 posed rates was developed by adding the revenue increase shown on  
9 Schedule A to the current forecasted period operating revenues. The relat-  
10 ed increase to expenses and taxes on the proposed revenue increase was  
11 subtracted from the current forecasted test period adjusted operating re-  
12 sults to determine the forecasted operating income and the corresponding  
13 rate of return. The rate base as shown on this schedule is calculated on  
14 Schedule B-1 and is supported by Columbia witness Katko.

15

16 **Q: What is Schedule C-2?**

17 A: Schedule C-2 shows the adjusted operating income statement for the base  
18 period and forecasted test period at current rates.

19

20 **Q: Please explain Schedules C-2.1A and C-2.1B.**

1 A: Schedule C-2.1A shows the detail of Columbia's unadjusted base period  
2 operating results and Schedule C-2.1B shows the unadjusted forecasted  
3 test period operating results. The operating results as shown on this  
4 schedule are listed by account and are summarized on Schedule C-2.

5

6 **Q: Please explain Schedules C-2.2A and C-2.2B.**

7 A: Schedules C-2.2A and C-2.2B show the information presented on Sched-  
8 ules C-2.1A and C-2.1B, respectively, by month.

9

10 **Q: What is the basis for the taxes other than income included in the base**  
11 **period and forecasted test period net operating income on Schedule C?**

12 A: Property taxes are based on the latest estimated effective tax rate and ap-  
13 plying it to the latest actual assessed value further adjusted to reflect esti-  
14 mated additions and retirements to property, plant, and equipment over  
15 the planning period. Property taxes on gas storage are based on the latest  
16 estimated effective tax rate and applying it to the latest actual West Vir-  
17 ginia assessed value. Payroll taxes are based on an historic trend of actual  
18 payroll expense to actual labor expense and applying the resulting per-  
19 centage to projected labor expense.

20

1 **Q: Please describe the schedules presented in Schedule D of Columbia's**  
2 **Application.**

3 A: Schedule D presents the summary of adjustments made to base period  
4 Operating Income to arrive at forecasted test period Operating Income.  
5 Schedule D-1 is the Summary of Utility Jurisdictional Adjustments to Op-  
6 erating Income by Major Accounts. Schedule D-2.1 shows the detailed ad-  
7 justments made to revenue and gas purchase accounts. Schedule D-2.2  
8 shows the detailed adjustments made to O&M accounts. Schedule D-2.3  
9 shows the detailed adjustments made to Depreciation and Amortization  
10 and Taxes Other Than Income Taxes accounts. Schedule D-2.4 shows  
11 ratemaking adjustments that are being made to the forecasted test period  
12 and which are in addition to those adjustments on Schedules D-2.1  
13 through D-2.3.

14  
15 **Q: What is the basis for the forecasted O&M expense included in the base**  
16 **period and forecasted test period net operating income?**

17 A: The basis for the forecasted O&M expense is the overall budget as de-  
18 scribed by Columbia witness Noel. Adjustments were made in Schedule D  
19 and are described below.

20

1 **Q: What is the O&M expense level for the base period and forecasted test**  
2 **period?**

3 A: O&M expense before ratemaking adjustments is \$39,066,470 for the base  
4 period and \$44,170,009 for the forecasted test period, an increase of  
5 \$5,103,539. Please refer to Attachment JTC-1 included in this testimony for  
6 a comparison of the two periods by cost element and explanations of the  
7 major drivers of the change. Also please refer to Schedule D-2.2 which  
8 provides additional detail regarding the adjustments between the two pe-  
9 riods.

10

11 **Q: Are you making any additional adjustments to O&M expense from**  
12 **what is shown on Attachment JTC-1?**

13 A: Yes. O&M expense included on Attachment JTC-1 reflects Columbia's  
14 most recent forecast and represents the best estimate of costs to be in-  
15 curred during a stated period. This is necessary for overall budget accura-  
16 cy and cost management purposes. However, certain O&M expenses are  
17 treated differently for regulatory purposes. As the result of filing based on  
18 a fully forecasted test period, it is necessary to review budgeted O&M ex-  
19 penses further and make additional adjustments as needed. Schedule D-  
20 2.4 contains a listing of the ratemaking adjustments being made to fore-

1           casted test period O&M expenses, as well as to operating revenues and  
2           other operating expenses. Included in budgeted O&M expenses are items  
3           that have historically been treated as non-recoverable for ratemaking pur-  
4           poses. These include certain expenses related to reimbursements to em-  
5           ployees, lobbying, promotional advertising, other business promotions  
6           and dues and memberships. These reductions to expense are detailed on  
7           Schedule D-2.4.

8

9   **Q:    Are there additional expenses represented in Schedule D-2.4?**

10  A:    Yes. Schedule D-2.4 also includes costs associated with state and federally  
11  mandated safety programs and other safety initiatives as described by Co-  
12  lumbia witnesses Miller, Cote and Cole. These costs include expense asso-  
13  ciated with Global Positioning System (“GPS”) to ensure Columbia is able  
14  to locate the exact position of mains, services lines, meters, transmission  
15  lines, customer connections and critical valves as well as expense associat-  
16  ed with the cost to comply with state law prohibiting mechanized digging  
17  within 18 inches of a gas system. Additional costs represent other federal-  
18  ly mandated and Columbia recommended safety initiatives such as a new  
19  Safety Training Facility, damage prevention and emergency response.

20

1 **Q: How are the income tax effects of these adjustments reflected?**

2 A: State and federal income taxes have been adjusted on Schedule E-1, which  
3 is supported by Columbia witness Fischer, to reflect changes resulting  
4 from the adjustments described in my testimony.

5

6 **Q: What is the basis for the depreciation and amortization expense includ-**  
7 **ed in the base period and forecasted test period net operating income?**

8 A: Depreciation expense included in the base period is based on actual ex-  
9 pense for September 2015 through February 2016 and estimated deprecia-  
10 tion expense for March through August 2016 based on current deprecia-  
11 tion rates and forecasted plant in service by month. For the forecasted test  
12 period, depreciation expense is based on proposed depreciation rates filed  
13 in this case by Columbia witness Spanos, and forecasted plant in service  
14 by month. The forecasted plant in service in both the base period and  
15 forecasted test period is supported by Columbia witness Katko. Amortiza-  
16 tion expense included in the base period and forecasted test period relates  
17 to specific intangible assets with identifiable in-service dates and lives.  
18 Amortization of these assets is normally recorded on a straight-line basis  
19 over the individual asset's life.

20

1 **Q: Is an additional adjustment to depreciation and amortization expense**  
2 **being made on Schedule D-2.4?**

3 A: No. These adjustments will be made on Schedule D-2.3.

4

5 **Q: Please describe the remaining schedules for which you are responsible.**

6 A: Schedule F is a listing of organization membership dues; initiation fees;  
7 expenditures at country clubs; charitable contributions; marketing, sales,  
8 and advertising expenditures; professional service expenses; civic and po-  
9 litical activity expenses; expenditures for employee parties and outings;  
10 employee gift expenses some of which are excluded from Cost of Service;  
11 and rate case expenses for the base period and forecasted test period.  
12 Schedule G is an analysis of payroll costs including wages and salaries,  
13 employee benefits, payroll taxes, straight time and overtime hours, and  
14 executive compensation by title. Schedule H shows the calculation of the  
15 gross revenue conversion factor for the forecasted test period. Schedule I,  
16 which is co-sponsored by Columbia witness Noel, provides comparative  
17 income statements, revenue statistics, and sales statistics for the five most  
18 recent calendar years from the application filing date, the base period, the  
19 forecasted test period, and two calendar years beyond the forecast period.  
20 Schedule K provides comparative financial data and earnings measures

1           for the ten most recent calendar years, the base period, and the forecasted  
2           test period.

3

4   **Q:   Does this complete your Prepared Direct testimony?**

5   **A:   Yes, however, I reserve the right to file rebuttal testimony if necessary.**

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Jana T. Croom, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

Jana T. Croom  
Jana T. Croom

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Jana T. Croom on this the 19<sup>th</sup> day of May, 2016.



ELIZABETH BERTKE  
Notary Public, State of Ohio  
My Commission Expires  
December 3, 2020

Elizabeth Bertke  
Notary Public

My Commission expires: December 3, 2020

| <b>Columbia Gas of Kentucky, Inc.</b>  |                    |                                   |  |   |   |
|--|--------------------|-----------------------------------|--|---|---|
| <b>Operation and Maintenance Expenses Comparison</b>   |                    |                                   |  |   |   |
| <b>For the Base Period 12 Months Ending August 31, 2016 and the Forecasted Period 12 Months Ending December 31, 2017</b> |                    |                                   |  |   |   |
|  | <b>Base Period</b> | <b>Schedule D-2.2 Adjustments</b> | <b>Forecasted Period Before Ratemaking Adjustments</b> | <b>% Change Forecasted v. Base Period</b> | <b>Major Drivers of Change:</b>   |
| Labor  | 8,641,280          | 717,446                           | 9,358,726  | 8.30%                                     | Wage and headcount increases partially offset by decreased incentive plans.   |
| Employee Benefits  | 1,539,704          | 242,072                           | 1,781,776  | 15.72%                                    | Increased medical costs, change in benefits methodology related to FAS 112, headcount increases   |
| Materials and Supplies   | 1,895,205          | 34,773                            | 1,929,978  | 1.83%                                     | Modest increase related to assumptions around materials and supplies cost increases   |
| Outside Services   | 5,500,817          | 1,335,439                         | 6,836,256  | 24.28%                                    | Represents cost increases associated with line locating, cross bore remediation, emergency response, and damage prevention risk management (DPRM) related to the DIMP program |
| Rents and Leases   | 120,558            | (11,833)                          | 108,725  | -9.82%                                    | Primarily communications equipment savings  |
| Corporate Insurance  | 963,844            | 113,131                           | 1,076,975  | 11.74%                                    | Due to rising property values, higher global insurance market rates as well as updated actuarial information  |
| Employee Expenses  | 402,754            | 111,488                           | 514,242  | 27.68%                                    | Projected increase in headcount and costs associated with increased training initiatives  |
| Company Memberships  | 74,122             | 9,294                             | 83,416   | 12.54%                                    |   |
| Utilities Used in Company Operations   | 470,251            | (30,991)                          | 439,260  | -6.59%                                    |   |
| NCS Management Fee   | 15,900,947         | 1,540,639                         | 17,441,586   | 9.69%                                     | Primarily increased expense associated with IT, Capital Execution, Commercial & Customer services, and Gas Operations   |
| Uncollectible Accounts - Non-Gas Costs   | 391,315            | 440,685                           | 832,000  | 112.62%                                   | This amount is adjusted in Schedule D-2.4   |
| Uncollectible Accounts - Gas Costs   | 59,131             | 352,865                           | 411,996  | 596.75%                                   |   |
| Miscellaneous Revenue Adjustments  | (158,297)          | 59,642                            | (98,655)   | -37.68%                                   | Increase driven by assumptions regarding facilities damages and damage expense  |
| Miscellaneous and Other Expenses   | 461,490            | 6,333                             | 467,823  | 1.37%                                     |   |
| Advertising  | 79,230             | 110,766                           | 189,996  | 139.80%                                   | Increased public awareness (DIMP) and one-call (811)  |
| Clearing Accounts (Fleet)  | 1,303,126          | (41,684)                          | 1,261,442  | -3.20%                                    |   |
| Total Non-Tracked  | 37,645,477         | 4,990,065                         | 42,635,542   | 13.26%                                    |   |
| Uncollectible - EAP Tracker  | 361,529            | 49,938                            | 411,467  | 13.81%                                    | Offset in revenue.  |
| Other Revenue - EECF Tracker   | 1,059,464          | 63,536                            | 1,123,000  | 6.00%                                     |   |
| Total O&M Expense  | 39,066,470         | 5,103,539                         | 44,170,009   | 13.06%                                    |   |

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
BRIAN J. NOEL  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF BRIAN J. NOEL**

1 **Q: Please state your name and business address.**

2 A: My name is Brian J. Noel and my business address is 290 W. Nationwide  
3 Blvd., Columbus, Ohio 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am the Director of Operations Budgets for NiSource Corporate Services  
7 Company ("NCSC"). As Director of Operations Budgets, my principal re-  
8 sponsibilities include the oversight of Operating & Maintenance Expense  
9 budget development at the company and departmental level, by cost cate-  
10 gory and activity and reporting out comparisons to actuals and prior  
11 budgets.

12

13 **Q: What is your educational background?**

14 A: I received a Bachelor of Science in Business Administration degree, majoring  
15 in Finance, in 1990 from The Ohio State University and a Master of Business  
16 Administration degree in 1996 from the University of Dayton.

17

18 **Q: What is your employment history?**

1 A: I began my career with the Public Utilities Commission of Ohio from 1990  
2 to 1997 in the capacity of a Rate/Senior Rate Analyst. From there, my em-  
3 ployment took me to a career with the Columbia Gas distribution compa-  
4 nies in 1997 as a Regulatory Analyst in the Regulatory Department from  
5 1997 to 2000. I then took a position within the Finance Department as a Fi-  
6 nancial Analyst. I held various positions of increasing responsibility in the  
7 Finance Department from 2000 to 2015, most recently as Corporate Finan-  
8 cial Planning & Analysis Manager. I assumed my current position in the  
9 Finance Department in August 2015.

10

11 **Q. Have you previously testified before any regulatory commissions?**

12 A: I have not.

13

14 **Q: What is the purpose of your testimony in this proceeding?**

15 A: My testimony supports Columbia Gas of Kentucky's ("Columbia's") Op-  
16 erations and Maintenance ("O&M") expenses. I am also co-sponsoring  
17 Schedule I with Columbia witness Croom. This schedule was prepared  
18 under my direction and supervision. I also sponsor and support Filing  
19 Requirements 16-(7)(d), 16-(7)(h)1, 16-(7)(h)2, 16-(7)(h)3, 16-(7)(h)8, 16-  
20 (7)(h)9, 16-(7)(h)10, 16-(7)(n), 16-(7)(o), and 16-(8)(i).

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**Q: What is the test period in this proceeding?**

A: Columbia is requesting an adjustment in rates based on a forecasted test period. The test period is the twelve months ended December 31, 2017. The financial data for the forecasted period is presented in the form of pro forma adjustments to a base period which is the twelve months ended August 31, 2016. The base period includes actual data for the period September 1, 2015 through February 29, 2016 and forecasted data for the period March 1, 2016 through August 31, 2016.

**Q: What is the basis for the forecasted O&M expense included in the base period and forecasted test period net operating income?**

A: The forecasted O&M expense included in the base and test periods is derived from Columbia's overall budget and subsequent rate making adjustments, as described by Columbia witness Croom.

**Q: How is O&M expense developed for Columbia's budget?**

A: The O&M expense budgeting methodology used by Columbia is a combination of a "top down" and "grass roots" approach. The O&M budget serves as a key component of Columbia's overall budget at a high level

1 and as a cost management tool for NiSource and Columbia management  
2 at a more detailed level.

3 NiSource establishes financial goals and objectives for the entire  
4 corporation based on its overall planning objectives including operating  
5 company input. These goals and objectives are communicated to each of  
6 its operating companies and the NCSC Financial Planning and Analysis  
7 groups responsible for each operating company's overall budget. It is the  
8 responsibility of these groups, working together, to ensure that: (1)each  
9 operating company's overall budget, including O&M expenses, are de-  
10 veloped in accordance with corporate financial goals and objectives as  
11 well as certain specific corporate guidelines and assumptions; and (2) each  
12 individual company's operational and administrative requirements are  
13 addressed.

14 The O&M budget for Columbia is based on a grass roots concept in  
15 which individuals responsible for approving expenditures are also re-  
16 sponsible for budgeting the expenditures. The process generally follows  
17 organizational responsibility. Department heads are responsible for over-  
18 seeing the development of O&M budgets for all cost centers under their  
19 control. Budgets originate in Kentucky operating center locations in the  
20 field and other departments representing the major business functions of

1 the Columbia; these budgets are combined with a corporate level budget  
2 to arrive at a total company budget.

3

4 **Q: What is meant by the term corporate level budget?**

5 A: The corporate level budget represents categories that are budgeted at a  
6 company, and not individual department level. This allows for each de-  
7 partment to focus exclusively on the expenditures for which they are di-  
8 rectly responsible. Examples of O&M expenses included at this level are  
9 employee benefits, benefits administration fees, audit fees, uncollectible  
10 accounts, corporate services fee, corporate insurance, corporate incentive  
11 plan, regulatory amortizations, and revenue trackers.

12

13 **Q: What are the principal assumptions used in the development of the cost  
14 element budgets included in the forecasted test period O&M expenses?**

15 A: Labor expense is based on projected headcount and wage increase as-  
16 sumptions. Specifically, Columbia is projecting 158 active full-time em-  
17 ployees and an overall wage increase guideline of 3% for 2016 and 2017.  
18 Non-labor expenses start with the assumption that amounts are to be held  
19 relatively flat year to year reflecting a normal, ongoing level of expenses

1 and further adjusted for activities or events that are reasonably expected  
2 to occur.

3

4 **Q: Can you provide examples of such activities or events that have been**  
5 **taken into account in the development of Columbia's O&M expense**  
6 **budget?**

7 A: Yes. Some examples include planned safety and compliance initiatives re-  
8 lated to a cross-bore program, enhanced operator qualification ("OQ")  
9 program, meter protection remediation program, and increased emergen-  
10 cy response resources and public awareness programs that will be imple-  
11 mented over the course of 2017 as described in testimony of Columbia  
12 witnesses Cote and Cole. Columbia has also built in additional expenses  
13 starting in mid-2016 related to line locate services due to a new contract  
14 with the outside vendor that conducts this service. The estimated impact  
15 of this contract has been taken into account in the development of outside  
16 services.

17

18 **Q: What other types of activities or events are specifically addressed in the**  
19 **O&M budget?**

1           Uncollectible accounts expense is based on the latest estimate of net  
2           charge-offs as a percentage of residential revenue. Regulatory amortiza-  
3           tions are budgeted at a level based on current approved amortizations of  
4           expenses previously deferred. Revenue trackers are budgeted at the same  
5           level as the corresponding revenue. Additionally, corporate assumptions  
6           are provided to Columbia to be included in its budget.

7

8   **Q:    What are the corporate assumptions provided to Columbia?**

9   A:    Corporate assumptions provided to Columbia include several major cate-  
10       gories. Employee benefits expenses are based on information provided by  
11       NiSource’s independent actuary, AON Hewitt. Corporate insurance ex-  
12       penses are based on estimated property and casualty premium costs de-  
13       veloped by NiSource’s Corporate Insurance Department. Audit fees are  
14       based on estimates developed by NiSource Accounting. Telecommunica-  
15       tions expenses are based on estimates developed by NiSource Information  
16       Technology. Corporate Services fee expenses are based on estimates of  
17       services to be performed by NCSC for Columbia. Benefits administration  
18       fees, and incentive plan expenses are based on estimates developed by  
19       NiSource Human Resources; the corporate incentive plan is currently  
20       based on a target payout assumption.

1

2 **Q: What services are performed by NCSC for Columbia as included in the**  
3 **Corporate Services fee?**

4 A: Please refer to the testimony of Columbia witness Schauer for a discussion  
5 on NCSC.

6

7 **Q: How is the Corporate Services fee budget developed?**

8 A: The Corporate Services fee budget is based on the budgets developed by  
9 each NCSC department. Similar to Columbia's budgeting methodology,  
10 NCSC budgets its expenses by cost categories such as labor, materials,  
11 outside services and other expenses. In addition, each department is allo-  
12 cated a portion of NCSC's indirect costs, such as benefits, taxes, deprecia-  
13 tion and other expenses to arrive at a total cost. This cost is allocated to  
14 Columbia using an allocation basis.

15

16 **Q: What allocation bases are available to each department for allocating**  
17 **their budgets to NiSource companies?**

18 A: Each allocation basis that is currently in effect is available to each depart-  
19 ment in allocating their budgets to NiSource companies. Please refer to the

1 testimony of Columbia witness Schauer for an explanation of the Bases of  
2 Allocation.

3

4 **Q: Does the O&M expense budgeting methodology (before any ratemak-**  
5 **ing adjustments) described in your testimony result in an accurate esti-**  
6 **mate of expenses to be incurred during the forecasted test period?**

7 A: Yes. Please refer to the table below for a comparison of actual versus the  
8 annual original O&M budget excluding trackers for the years 2011  
9 through 2015. As with any budget, conditions may change over the course  
10 of a year, thus requiring adjustments to budgets subsequent to the original  
11 budget. Overall, this table indicates a level of O&M budgeting accuracy by  
12 Columbia and, accordingly, provides confidence as to the accuracy of the  
13 O&M expenses included in the forecasted test period.

Columbia Gas of Kentucky, Inc.  
Operation and Maintenance Expenses  
Actual v. Original Budget Excluding Trackers  
2011 - 2015  
(\$000)

| Year | Original<br>Budget | Actual | Increase<br>(Decrease) | %<br>Variance | <u>Major Variance by Category:</u>                                    |
|------|--------------------|--------|------------------------|---------------|---|
| 2011 | 31,578             | 29,820 | (1,758)                | -5.6%         | uncollectibles - \$(1,345); employee benefits \$(882)                 |
| 2012 | 30,890             | 31,254 | 364                    | 1.2%          | labor \$694; employee benefits \$457; uncollectible accounts \$(650). |
| 2013 | 31,193             | 32,471 | 1,278                  | 4.1%          | labor \$547; outside services \$859; uncollectible accounts \$(180)   |
| 2014 | 33,856             | 33,859 | 3                      | 0.0%          |   |
| 2015 | 32,968             | 34,455 | 1,487                  | 4.5%          | labor \$761; outside services \$915; uncollectible accounts \$(361)   |

14

15

1 **Q: Why have you excluded trackers from this comparison?**

2 A: O&M expenses categorized as trackers are designed to match, or track,  
3 revenues related to specific programs that have been previously approved  
4 in order to ensure that there is no impact on net operating income for such  
5 programs. The accounting treatment generally allows expenses to be de-  
6 ferred as incurred and reclassified to expense when the recovery of pro-  
7 gram costs is recorded in revenue. While O&M tracker expense variances  
8 may be material, there is a corresponding offsetting revenue variance. For  
9 that reason, I have excluded trackers from the comparison so as not to dis-  
10 tort the accuracy of the budget.

11

12 **Q: Does this complete your Prepared Direct testimony?**

13 A: Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Brian J. Noel, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
\_\_\_\_\_  
Brian J. Noel

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Brian J. Noel on this the 19<sup>th</sup> day of May



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
\_\_\_\_\_  
Notary Public

My Commission expires: MARCH 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
MARK P. BALMERT  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF MARK P. BALMERT**

**I. INTRODUCTION**

1  
2 **Q: Please state your name, position of employment and business address.**

3 A: My name is Mark P. Balmert, and I am Director of Rate and Regulatory  
4 Services for NiSource Corporate Services Company ("NCSC"). NCSC  
5 provides, among other services, accounting and regulatory-related  
6 services for the subsidiaries of NiSource Inc. ("NiSource"). I am testifying  
7 on behalf of Columbia Gas of Kentucky, Inc. ("Columbia"), which is one  
8 of the NiSource local distribution companies. My business address is 290  
9 W. Nationwide Blvd., Columbus, Ohio 43215.

10 **Q: Please briefly describe your professional experience.**

11 A: I have been employed by various entities within the Columbia Energy  
12 Group and its successor, NiSource, in capacities related to rates,  
13 regulatory accounting and compliance, and information technology  
14 applications since October 1979. In February of 2012, I was named  
15 Director of Rates and Regulatory Services for NCSC, which is the  
16 position I currently hold.

17 **Q: What are your specific responsibilities as Director of Rates and**  
18 **Regulatory Services?**

1 A: My section within NCSC is responsible for the preparation and support of  
2 special regulatory studies, such as allocated cost of service (“ACOS”)  
3 studies, and revenue development in support of rate proceedings for six  
4 of the NiSource gas distribution companies, which consist of Columbia  
5 Gas of Maryland, Columbia Gas of Kentucky, Bay State Gas Company  
6 (doing business as Columbia Gas of Massachusetts), Columbia Gas of  
7 Ohio, Columbia Gas of Pennsylvania, and Columbia Gas of Virginia. I am  
8 also responsible for the development of regulatory accounting  
9 requirements for Columbia Gas of Ohio with duties including revenue  
10 requirement development, cost of gas filing, infrastructure replacement  
11 and other recovery mechanisms filings. In addition, I am responsible for  
12 the information technology requirements for the NCSC regulatory  
13 department.

14 **Q: What is your educational background?**

15 A: I graduated from The Ohio State University in June of 1979, earning a  
16 Bachelor of Science Degree in Business Administration with a major in  
17 accounting.

18 **Q: Have you previously testified before the Kentucky Public Service**  
19 **Commission (“Commission”) or any other regulatory agency?**

1 A: Yes. I have testified before this Commission as well as the Public Utilities  
2 Commission of Ohio, the Pennsylvania Public Utility Commission, the  
3 New Hampshire Public Utilities Commission, the State Corporation  
4 Commission of Virginia, the Public Service Commission of Maryland and  
5 the Massachusetts Department of Public Utilities.

6 **Q: What is the purpose of your testimony in this proceeding?**

7 A: I will address the appropriate revenue allocation among the various rate  
8 classes and discuss Columbia's proposed rate design changes as shown  
9 in Attachment MPB-1.

10 **Q: Please list the attachments to your testimony that you are sponsoring.**

11 A: Below is a listing of attachments in support of my testimony, which have  
12 been prepared by me or under my supervision and direction, and are  
13 accurate and complete to the best of my knowledge and belief.

|   |       |
|---|-------|
| Rate Design   | MPB-1 |
| Schedule of Additional Revenues - Late Payment Charge | MPB-2 |
| Comparison of Present and Proposed Non-Gas Base Rates | MPB-3 |
| Bill Comparison @ Rate Class Average Usage            | MPB-4 |

14

15 **Q: How is your testimony organized?**

16 A: Section I, Introduction; Section II, Allocation of Revenue Requirement;  
17 Section III, Rate Design Principles, and Section IV, Rate Design.

## II. ALLOCATION OF REVENUE REQUIREMENT

1  
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**Q: What is the basis for evaluating revenue allocation?**

A: The average ACOS study (Attachment CEN-3) is the starting point in evaluating class-level responsibility for costs and revenue. The primary goal of a cost of service is to allocate and assign costs and revenues to each rate class as reasonably consistent as possible with the incurrence of those costs. Columbia recognizes that no single method of allocating costs is the “right” study and that is why Columbia filed three ACOS studies: (1) the Demand/Commodity; (2) Customer/Demand studies to establish a “zone of reasonableness;” and, (3) the Average study which is a midpoint marker that gives equal weighting of the Demand/Commodity and Customer/Demand studies for the establishment or rate design. The three studies are supported by Columbia witness Notestone.

**Q: What are the results of the ACOS studies?**

A: Table 1 below shows the class-level returns and return indices for each of the ACOS studies. Return indices compare individual class returns to the overall jurisdictional return. A return index is calculated by dividing the class return by the jurisdictional return, then multiplying the result by 100 to produce the index. The jurisdictional return index will always be 100.

1           The closer an individual class return is to the jurisdictional return, the  
2           closer its index will be to 100 and to parity. The term “parity” in this context  
3           means that the class return and the jurisdictional return are equal.

4                     It should be noted that factors such as class size, customer diversity,  
5           and economic conditions will result in returns and indices that are more  
6           volatile for some classes than for others. For example, because of the large  
7           numbers of customers in the residential and GSO classes, the returns for  
8           these classes under various ACOS studies are more stable than returns for  
9           the Interruptible Sales (“IS”), Delivery Service (“DS”), and Mainline  
10          Delivery Service (“DS-ML”) classes.

1

**Table 1**

|   | Demand/Commodity |              | Customer/Demand |              | Average Study |              |
|---|------------------|--------------|-----------------|--------------|---------------|--------------|
|   | <u>Return</u>    | <u>Index</u> | <u>Return</u>   | <u>Index</u> | <u>Return</u> | <u>Index</u> |
| GS-Residential Service<br>(GSR/GTR)                   | 2.22%            | 94.5         | -1.04%          | (44.3)       | 0.34%         | 14.5         |
| GS-Other Service<br>(GSO/GTO/GDS)                     | 6.71%            | 285.5        | 11.25%          | 478.7        | 8.70%         | 370.2        |
| Intrastate Utility Service (IUS)                      | 4.13%            | 175.7        | 13.32%          | 566.8        | 7.50%         | 319.1        |
| Interruptible Service & Deliv-<br>ery Service (IS/DS) | -3.33%           | (141.7)      | 12.73%          | 541.7        | 0.44%         | 18.7         |
| Mainline Service (DS-ML)                              | 52.48%           | 2,233.2      | 52.38%          | 2,228.9      | 52.45%        | 2,231.9      |
| Total Company   | 2.35%            | 100.0        | 2.35%           | 100.0        | 2.35%         | 100.0        |

2

3 **Q: What is the primary goal of Columbia's class revenue allocation?**

4 A: The primary goal in Columbia's approach to revenue allocation is to  
5 maintain a movement toward parity among the various rate classes,  
6 consistent with Commission decisions in previous Columbia rate cases.  
7 Movement toward parity, through a goal of equal rates of return by class, is  
8 a way of assuring that the revenue allocation process takes into account the  
9 overall Columbia return and the relative returns by rate class. Each class's  
10 revenue increase is determined within the context of other rate class returns  
11 so that, over time, interclass returns remain close to one another rather than

1           diverging. Maintaining a movement toward parity is a way to minimize  
2           potential cross-subsidization between classes.

3   **Q:   Please describe Columbia's proposed revenue allocation.**

4   A:   Columbia's allocation of the proposed base rate revenue increase, which is  
5       shown in Attachment MPB-1, Page 4, Line 17, reflects the following  
6       allocations: 64.830 percent of the overall increase is applied to the GSR/GTR  
7       class; 26.835 percent of the overall increase is applied to the GSO/GTO/GDS  
8       class; 8.303 percent of the overall increase is applied to the IS/DS class; 0.032  
9       percent of the overall increase is applied to the IUS class; and no increase is  
10      applied to DS-ML customers.

11           As a result, Table 2 below matches the unitized returns at current  
12      rates shown on Attachment MPB-1, Page 4, Line 3, with the proposed  
13      percentage increase in delivery charge revenue by rate class shown on  
14      Attachment MPB-1, Page 2, Column 7, Lines 2 through 21.

15

1 **Table 2 – Percentage Increase in Delivery Charge Revenue & Unitized Return**  
 2 **at Current Rates**

|             | Unitized Return | % Increase in Delivery Charge Revenue |
|-------------|-----------------|---------------------------------------|
| GSR/GTR     | 0.144680        | 37.87%                                |
| GSO/GTO/GDS | 3.702130        | 36.24%                                |
| IS/DS       | 0.187230        | 36.31%                                |
| IUS         | 3.191490        | 35.99%                                |
| DS-ML       | 22.319150       | 0.00%                                 |

3

4 The unitized return for the residential class is the lowest of all classes  
 5 and therefore Columbia assigned the greatest percentage increase in  
 6 delivery service rate revenue requirement to the residential class. The IS/DS  
 7 rate class has the next lowest and is assigned the next highest percentage  
 8 increase in delivery service revenue requirement and so on. It is important  
 9 to note, in the interest of gradualism the percentage of increase in delivery  
 10 service revenue requirement for any of the rate classes was limited to no  
 11 more than 1% above total company increase of 37.02%.

12 **Q: Do the unitized returns of each rate class move toward parity as a result**  
 13 **of Columbia’s revenue distribution?**

14 **A:** Yes. Table 3 below shows the progress toward parity as a result of  
 15 Columbia’s allocation of the proposed base rate revenue increase.

1

**Table 3 – Progress toward Parity**

|             | Unitized Return at<br>Current Rates | Unitized Return at<br>Proposed Rates | Change      |
|-------------|-------------------------------------|--------------------------------------|-------------|
| GSR/GTR     | 0.144680                            | 0.769391                             | 0.624711    |
| GSO/GTO/GDS | 3.702130                            | 1.886000                             | (1.816130)  |
| IS/DS       | 0.187230                            | 0.512245                             | 0.325015    |
| IUS         | 3.191490                            | 1.491500                             | (1.699990)  |
| DS-ML       | 22.319150                           | 6.236150                             | (16.083000) |

2

3

Unitized returns extracted from Attachment MPB-1, Page 4, Lines 3

4

through 5 and displayed in Table 3 above shows the movement toward

5

parity produced by Columbia’s proposed revenue allocation using the

6

Average Study. The movement toward parity (unitized return of 1.00000)

7

measures each class’s return versus the total company return under current

8

and proposed rates.

9

**III. RATE DESIGN PRINCIPLES**

10

**Q: Other than the ACOS studies, what guidelines or criteria have you con-**

11

**sidered in the design of Columbia’s rates?**

12

**A:** There are a number of criteria that I considered in the design of rates,

13

including the following:

1           First, the design of Columbia’s rates recognizes that rates must be just  
2           and reasonable and must not be unduly discriminatory. Columbia’s  
3           proposed rate design also attempts to minimize cross-class subsidies.

4           Second, where rates require adjustment to achieve proper cost  
5           recovery, customer impact considerations have been factored into the rate  
6           design process. For instance, Columbia’s proposed rate design moves each of  
7           the rate classes toward parity (unitized return of 1.00000 and a total company  
8           required rate of return of 8.41 percent), but recognizes that in this case a  
9           move to full parity of 1.00000 would not be consistent with the principle of  
10          gradualism.

11          Finally, Columbia’s proposed rate design provides for recovery of an  
12          increasing proportion of fixed costs through the Customer Charge. This  
13          principle recognizes that the historical recovery of fixed costs through the  
14          volumetric rate portion of the rate schedule inevitably results in the over or  
15          under recovery of those costs because the revenues generated from  
16          customers’ volumetric use of gas can be greatly sensitive to customer usage  
17          fluctuations that vary due to changing consumption characteristics and other  
18          outside influences such as rising BTU content. In essence, customer-related  
19          costs that bear no relationship to customer gas consumption patterns should  
20          be recovered through the fixed portion of the rate design, i.e. the Customer

1 Charge. Columbia’s proposed rate design thus recovers a gradual increase in  
2 revenue through the Customer Charges for each of the rate classes.

3 **IV. RATE DESIGN PROPOSAL**

4 **Q: Please summarize Columbia’s rate design proposals.**

5 A: Table 4 below compares Columbia’s proposed customer charges to  
6 current Customer Charges, the Customer-Based Customer Charge that is  
7 calculated by Columbia witness Notestone in his Attachment CEN-3, Page  
8 53, and “across the board” calculated Customer Charges.

9 **Table 4 – Proposed and Other Customer Charge Options**

|             | Current Charge | Proposed Charge | Across the Board Based Charge | Attachment CEN-3 Charge |
|-------------|----------------|-----------------|-------------------------------|-------------------------|
| GRS/GTR     | \$15.00        | 19.75           | 20.68                         | 32.84                   |
| GSO/GTO/GDS | 37.50          | 51.00           | 51.10                         | 62.62                   |
| IS/DS       | 1,007.05       | 1,462.00        | 1,462.64                      | 3,768.90                |
| IUS         | 477.00         | 649.00          | 649.89                        | 312.40                  |
| DS-ML       | 200.00         | 255.90          | 255.90                        | 1,780.64                |

10

11 The “across the board” based Customer Charges are simply the  
12 result of dividing the proposed Increase to base Rates by the current  
13 delivery service revenue and multiplying by the current customer charge.

1                   For example, the residential “across the board” based Customer  
 2 Charge is calculated as follows:

|  | <u>Reference</u>            | <u>Amount</u>       |
|--|-----------------------------|---------------------|
| Proposed Increase to Base Rates              | Att. MPB-1, Pg. 5, Ln. 14   | \$16,386,080        |
| Customer Charge Revenue                      | Att. MPB-1, Pg. 5, Ln. 16   | \$21,939,180        |
| Accelerated Mains Replacement Program        | Att. MPB-1, Pg. 5, Ln. 17   | \$3,290,877         |
| All Gas Consumed                             | Att. MPB-1, Pg. 5, Ln. 19   | <u>\$18,030,985</u> |
| Subtotal                                     |                             | \$43,261,042        |
| Percent Increase in Delivery Service Revenue | (\$16,386,080/\$43,261,042) | 37.9%               |
| Current Customer Charge                      | Att. MPB-1, Pg. 5, Ln. 16   | \$15.00             |
| Across the Board Cust. Chg.                  | (\$15.00 x 37.9%) + \$15.00 | \$20.68             |

3  
 4                   The theory is simple; the Customer Charge should change at the  
 5 same percentage increase as delivery service revenue as a whole. This  
 6 method has been used in some of NiSource’s other jurisdictions and is  
 7 presented here as a point of reference.

8                   Columbia witness Notestone’s Attachment CEN-3, Page 53, shows  
 9 calculated Customer Charges based on customer based costs in the  
 10 Allocated Cost of Service (“ACOS”) Average study. Ultimately to recover

1 the corresponding rate classes' customer-based costs, Customer Charges  
2 should be as shown in Attachment CEN-3, Page 53. However, due to the  
3 principle of gradualism, Columbia is proposing Customer Charge  
4 increases slightly less than those calculated "across the board." A single  
5 volumetric rate recovers the remaining increased base rate revenue  
6 apportioned for each of the rate classes.

7 **Q: How do Columbia's proposed rates affect annual bills for each rate**  
8 **class?**

9 A: Examples of typical bills for each of the rate classes under current and  
10 proposed rates are shown in Schedule N. Attachment MPB-4 shows detail  
11 calculations of proposed increase to a customer's bill using the average  
12 monthly usage for each of the rate classes. The typical bills for both  
13 Schedule N and Attachment MPB-4 were developed using current rates as  
14 of March 1, 2016. Table 5 below shows a summary of the percentage  
15 increase for typical bills at class average usage by rate class. Importantly,  
16 the percentage increase in an average customer's Total Monthly Costs is  
17 significantly lower than the percentage increase shown for the Delivery  
18 Charge Only for all rate classes. This is because gas costs are included in  
19 Total Monthly Costs, which shows the customer the overall approximate  
20 percentage increase the customer will experience on their monthly bill.

1 **Table 5 – Total Monthly Bill Increase and Total Monthly Delivery Charge**

2

|                 | <b>Increase</b>     |                      |
|-----------------|---------------------|----------------------|
|                 | Total Monthly Costs | Delivery Charge Only |
| GSR/GTR         | 26.36%              | 38.02%               |
| GSO/GTO         | 23.41%              | 37.42%               |
| GDS             | 21.42%              | 52.18%               |
| DS <sup>1</sup> | 9.79%               | 47.32%               |
| DS-ML           | 0.00%               | 0.00%                |

3

4 **Q: Please explain the rationale for increasing the Customer Charge to**  
 5 **reflect the recovery of a proportion of fixed non-gas costs through the**  
 6 **fixed monthly Customer Charge.**

7 **A:** It is reasonable and appropriate to collect a proportion of fixed non-gas  
 8 costs through the fixed monthly Customer Charge. For Columbia, 58% of  
 9 its delivery charge revenue is currently recovered through fixed delivery  
 10 charges (customer charge and Accelerated Mains Replacement Program  
 11 charge) in its GRS/GTR rate schedules. With this proposed increase in the  
 12 Customer Charge, this percentage actually decreases to 48% of delivery  
 13 charge revenue. Fixed cost recovery through the fixed monthly Customer

---

<sup>1</sup> Columbia is not provided the actual costs paid by its transportation customers. The Total Monthly Costs for the GDS, DS and DS-ML rate classes includes an approximate commodity cost based on interruptible gas costs currently in effect (through May 2016).

1 Charge decreases the likelihood and magnitude of customers' over- or  
2 under-payments for delivery service each month due to usage  
3 fluctuations, recognizing that a natural gas utility's customer-related costs  
4 do not vary with gas usage. Even after the proposed changes to existing  
5 Customer Charges for each of the rate classes, percentage of fixed  
6 recovery is at or below that being collected through current rates.

7 **Q: Please explain why Columbia no longer is proposing an Administrative**  
8 **Charge to the GDS, DS, and DS-ML customers.**

9 A: The current Administrative Charge was put in place in Case No. 94-179 to  
10 recover costs that were incurred only by the Delivery Service customers;  
11 primarily for recovery of the Gas Accounting System, a billing system that  
12 only Delivery Service customers benefited from and the personnel that  
13 billed the Delivery Service customers. The billing system is now fully  
14 amortized and now benefits both Delivery Service and CHOICE  
15 Transportation Service customers. The personnel now also benefit both  
16 the Delivery Service and CHOICE Transportation customers. Because  
17 these costs are no longer unique to the delivery service customers and  
18 because the billing system is fully amortized, there is no longer a need to  
19 identify these costs and bill them under a separate rate. Therefore on-

1 going costs should be recovered through the base rates like any other  
2 legitimate business expense.

3 **Q: Does this conclude your prepared direct testimony?**

4 **A:** Yes, it does.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Mark P. Balmert, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

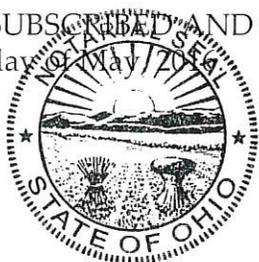
*Mark P. Balmert*

Mark P. Balmert

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Mark P. Balmert on this the 19<sup>th</sup> day of May, 2016



CHERYLA A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

*Cheryla A. MacDonald*

Notary Public

My Commission expires: MARCH 26, 2017

**Columbia Gas of Kentucky, Inc.**  
**Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement**  
**For the 12 Months Ended December 31, 2017**

Attachment MPB-1  
Page 1 of 8  
Witness: M. P. Balmert

| Line No. | Description                             | Adjusted Bills<br>(1) | Adjusted Volumes<br>(2)<br>Mcf | Revenue @ Current Rates<br>(3)<br>\$ | Proposed Revenue Increase<br>(4)<br>\$ | Total Proposed Revenue<br>(5=3+4)<br>\$ | Proposed Increase By Rate Sched<br>(6)<br>% | Proposed Increase by Rate Class<br>(7) |
|----------|---|-----------------------|--------------------------------|--------------------------------------|--|---|---|--|
|          |   | WPM B.2               | WPM C.2                        | Sch. M2.2 & D2.4                     |  | Sch. M 2.3                              |   |  |
| 1        | <b>Total Revenues</b>                   |                       |                                |                                      |  |   |   |  |
| 2        | GSR/GTR Residential                     | 1,462,612             | 7,955,080.5                    | \$58,710,248                         | \$16,386,250                           | \$75,096,498                            | 27.91%                                      | 27.90%                                 |
| 3        | GSO/GTO/GDS                             | 167,676               | 5,748,554.7                    | 26,463,106                           | \$6,791,443                            | 33,254,549                              | 25.66%                                      | 25.65%                                 |
| 4        | DS/SAS                                  | 896                   | 6,897,867.4                    | 4,621,276                            | \$2,090,526                            | 6,711,802                               | 45.24%                                      | 36.31%                                 |
| 5        | IS                                      | 0                     | 0.0                            | 0                                    | \$0                                    | 0                                       | 0.00%                                       | 36.31%                                 |
| 6        | IUS                                     | 24                    | 11,320.7                       | 47,824                               | \$8,105                                | 55,930                                  | 16.95%                                      | 16.95%                                 |
| 7        | IN3 Residential                         | 108                   | 990.2                          | 396                                  | \$0                                    | 396                                     | 0.00%                                       | 27.90%                                 |
| 8        | IN4                                     | 0                     | 0.0                            | 0                                    | \$0                                    | 0                                       | 0.00%                                       | 27.90%                                 |
| 9        | IN5                                     | 36                    | 333.6                          | 200                                  | \$0                                    | 200                                     | 0.00%                                       | 27.90%                                 |
| 10       | G1C                                     | 41                    | 1,697.8                        | 9,744                                | \$0                                    | 9,744                                   | 0.00%                                       | 25.65%                                 |
| 11       | G1R                                     | 192                   | 2,018.9                        | 13,752                               | \$0                                    | 13,752                                  | 0.00%                                       | 27.90%                                 |
| 12       | LG2 Residential                         | 12                    | 605.2                          | 212                                  | \$0                                    | 212                                     | 0.00%                                       | 27.90%                                 |
| 13       | LG2 Commercial                          | 12                    | 710.9                          | 249                                  | \$0                                    | 249                                     | 0.00%                                       | 25.65%                                 |
| 14       | LG3 Residential                         | 12                    | 714.1                          | 256                                  | \$0                                    | 256                                     | 0.00%                                       | 27.90%                                 |
| 15       | LG4 Residential                         | 12                    | 257.6                          | 103                                  | \$0                                    | 103                                     | 0.00%                                       | 27.90%                                 |
| 16       | DS3                                     | 36                    | 680,981.0                      | 67,641                               | \$0                                    | 67,641                                  | 0.00%                                       | 0.00%                                  |
| 17       | FX1                                     | 12                    | 541,812.0                      | 224,062                              | \$0                                    | 224,062                                 | 0.00%                                       | 36.31%                                 |
| 18       | FX2                                     | 12                    | 533,988.0                      | 221,011                              | \$0                                    | 221,011                                 | 0.00%                                       | 36.31%                                 |
| 19       | FX5                                     | 36                    | 4,689,510.0                    | 411,572                              | \$0                                    | 411,572                                 | 0.00%                                       | 0.00%                                  |
| 20       | FX7                                     | 12                    | 410,759.0                      | 189,660                              | \$0                                    | 189,660                                 | 0.00%                                       | 0.00%                                  |
| 21       | SC3                                     | 12                    | 1,710,000.0                    | 500,855                              | \$0                                    | 500,855                                 | 0.00%                                       | 36.31%                                 |
| 22       | <b>Other Gas Department Revenue</b>     |                       |                                |                                      |  |   |   |  |
| 23       | Acct. 487 Forefited Discounts           |                       |                                | 476,000                              | \$132,048                              | 608,048                                 | 27.74%                                      |  |
| 24       | Acct. 488 Miscellaneous Service Revenue |                       |                                | 137,000                              | \$0                                    | 137,000                                 | 0.00%                                       |  |
| 25       | Acct. 495 Non-Traditional Sales         |                       |                                | 72,000                               | \$0                                    | 72,000                                  | 0.00%                                       |  |
| 26       | Acct. 495 Prior Yr. Rate Refund - Net.  |                       |                                | 0                                    | \$0                                    | 0                                       | 0.00%                                       |  |
| 27       | Acct. 495 Other Gas Revenues - Other    |                       |                                | 515,000                              | \$0                                    | 515,000                                 | 0.00%                                       |  |
| 28       | Total Revenues                          | 1,631,753             | 29,187,201.6                   | 92,682,167                           | 25,408,373                             | 118,090,539                             | 27.41%                                      |  |

**Columbia Gas of Kentucky, Inc.**  
**Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement**  
**For the 12 Months Ended December 31, 2017**

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| Line No. | Description   | Adjusted Bills<br>(1)<br>WPM B.2 | Adjusted Volumes<br>(2)<br>Mcf<br>WPM C.2 | Revenue @ Current Rates<br>(3)<br>\$<br>Sch. M 2.2 | Proposed Revenue Increase<br>(4)<br>\$ | Total Proposed Revenue<br>(5=3+4)<br>\$<br>Sch. M 2.3 | Proposed Increase By Rate Sched<br>(6)<br>% | Proposed Increase by Rate Class<br>(7) |
|----------|---|----------------------------------|---|--|--|---|---|--|
| 1        | <b>Delivery Charge Revenue Only (Base Rates, Admin. Charge &amp; AMRP Charge)</b> |                                  |   |  |  |   |   |  |
| 2        | GSR/GTR Residential   | 1,462,612                        | 7,955,080.5                               | \$43,261,042                                       | \$16,386,250                           | \$59,647,292  | 37.88%                                      | 37.87%                                 |
| 3        | GSO/GTO/GDS   | 167,676                          | 5,748,554.7                               | 18,733,089   | 6,791,443                              | 25,524,533  | 36.25%                                      | 36.24%                                 |
| 4        | DS/SAS  | 896                              | 6,897,867.4                               | 4,621,276  | 2,090,526                              | 6,711,802   | 45.24%                                      | 36.31%                                 |
| 5        | IS  | 0                                | 0.0                                       | 0  | 0                                      | 0   | 0.00%                                       | 36.31%                                 |
| 6        | IUS   | 24                               | 11,320.7                                  | 22,521   | 8,105                                  | 30,627  | 35.99%                                      | 35.99%                                 |
| 7        | IN3 Residential   | 108                              | 990.2                                     | 396  | 0                                      | 396   | 0.00%                                       | 37.87%                                 |
| 8        | IN4   | 0                                | 0.0                                       | 0  | 0                                      | 0   | 0.00%                                       | 37.87%                                 |
| 9        | IN5   | 36                               | 333.6                                     | 200  | 0                                      | 200   | 0.00%                                       | 37.87%                                 |
| 10       | G1C   | 41                               | 1,697.8                                   | 5,994  | 0                                      | 5,994   | 0.00%                                       | 36.24%                                 |
| 11       | G1R   | 192                              | 2,018.9                                   | 9,292  | 0                                      | 9,292   | 0.00%                                       | 37.87%                                 |
| 12       | LG2 Residential   | 12                               | 605.2                                     | 212  | 0                                      | 212   | 0.00%                                       | 37.87%                                 |
| 13       | LG2 Commercial  | 12                               | 710.9                                     | 249  | 0                                      | 249   | 0.00%                                       | 36.24%                                 |
| 14       | LG3 Residential   | 12                               | 714.1                                     | 256  | 0                                      | 256   | 0.00%                                       | 37.87%                                 |
| 15       | LG4 Residential   | 12                               | 257.6                                     | 103  | 0                                      | 103   | 0.00%                                       | 37.87%                                 |
| 16       | DS3   | 36                               | 680,981.0                                 | 67,641   | 0                                      | 67,641  | 0.00%                                       | 0.00%                                  |
| 17       | FX1   | 12                               | 541,812.0                                 | 224,062  | 0                                      | 224,062   | 0.00%                                       | 36.31%                                 |
| 18       | FX2   | 12                               | 533,988.0                                 | 221,011  | 0                                      | 221,011   | 0.00%                                       | 36.31%                                 |
| 19       | FX5   | 36                               | 4,689,510.0                               | 411,572  | 0                                      | 411,572   | 0.00%                                       | 0.00%                                  |
| 20       | FX7   | 12                               | 410,759.0                                 | 189,660  | 0                                      | 189,660   | 0.00%                                       | 0.00%                                  |
| 21       | SC3   | 12                               | 1,710,000.0                               | 500,855  | 0                                      | 500,855   | 0.00%                                       | 36.31%                                 |
| 22       | <b>Total Base Revenues</b>  | <b>1,631,753</b>                 | <b>29,187,201.6</b>                       | <b>\$68,269,432</b>                                | <b>\$25,276,325</b>                    | <b>\$93,545,756</b>                                   | <b>37.02%</b>                               |  |

Columbia Gas of Kentucky, Inc.  
Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement  
For the 12 Months Ended December 31, 2017

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| Line No. | <u>Description</u>                            | Adjusted Bills<br>(1)<br>WPM B.2 | Adjusted Volumes<br>(2)<br>Mcf<br>WPM C.2 | Revenue @<br>Current Rates<br>(3)<br>\$<br>Sch. M 2.2 | Proposed Revenue Increase<br>(4)<br>\$ | Total Proposed Revenue<br>(5=3+4)<br>\$<br>Sch. M 2.3 | Proposed Increase By Rate Sched<br>(6)<br>% | Proposed Increase by Rate Class<br>(7) |
|----------|---|----------------------------------|---|---|--|---|---|--|
| 1        | <b>Gas Cost Revenue Only</b>                  |                                  |   |   |  |   |   |  |
| 2        | GSR/GTR Residential                           |                                  |   | \$13,802,635  | \$0                                    | \$13,802,635  | 0.00%                                       |  |
| 3        | GSO/GTO/GDS                                   |                                  |   | 7,640,096   | 0                                      | 7,640,096   | 0.00%                                       |  |
| 4        | G1C   |                                  |   | 3,751   | 0                                      | 3,751   | 0.00%                                       |  |
| 5        | G1R   |                                  |   | 4,460   | 0                                      | 4,460   | 0.00%                                       |  |
| 6        | IUS   |                                  |   | 25,009  | 0                                      | 25,009  | 0.00%                                       |  |
| 7        | Total Gas Cost Revenues                       |                                  |   | <u>\$21,475,950</u>                                   | <u>\$0</u>                             | <u>\$21,475,950</u>                                   | 0.00%                                       |  |
| 8        | <b>EAP Revenue</b>                            |                                  |   |   |  |   |   |  |
| 9        | GSR/GTR Residential                           |                                  |   | \$474,918   | \$0                                    | \$474,918   | 0.00%                                       |  |
| 10       | Total EAP Revenues                            |                                  |   | <u>\$474,918</u>                                      | <u>\$0</u>                             | <u>\$474,918</u>                                      | 0.00%                                       |  |
| 11       | <b>Energy Efficiency Conservation Program</b> |                                  |   |   |  |   |   |  |
| 12       | GSR/GTR Residential                           |                                  |   | \$1,009,202   | \$0                                    | \$1,009,202   | 0.00%                                       |  |
| 13       | Total Energy Efficiency Conservation Revenues |                                  |   | <u>\$1,009,202</u>                                    | <u>\$0</u>                             | <u>\$1,009,202</u>                                    | 0.00%                                       |  |
| 14       | <b>Gas Cost Uncollectible Charge</b>          |                                  |   |   |  |   |   |  |
| 15       | GSR/GTR Residential                           |                                  |   | 162,450   | 0                                      | 162,450   | 0.00%                                       |  |
| 16       | GSO/GTO/GDS                                   |                                  |   | 89,920  | 0                                      | 89,920  | 0.00%                                       |  |
| 17       | IUS   |                                  |   | 294   | (0)                                    | 294   | -0.01%                                      |  |
| 18       | Total Gas Cost Uncollectible Charge           |                                  |   | <u>\$252,665</u>                                      | <u>\$0</u>                             | <u>\$252,665</u>                                      | 0.00%                                       |  |

Columbia Gas of Kentucky, Inc.  
Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement  
For the 12 Months Ended December 31, 2017

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| Line No. | Description   | Total<br>(1)        | GSR/GTR<br>(2)      | GSO/GTO/GDS<br>(3) | IS/DS<br>(4)       | IUS<br>(5)        | DS-ML<br>(6)       |
|----------|---|---------------------|---------------------|--------------------|--------------------|-------------------|--------------------|
| 1        | <b>Determination of Revenue Distribution</b>                          |                     |                     |                    |                    |                   |                    |
| 2        | Rate Base (Attachment CEN-3 Page 4, Line 12)                          | \$253,360,797       | \$162,668,511       | \$57,415,257       | \$32,693,845       | \$97,824          | \$485,360          |
| 3        | Unitized Return @ Current Rates                                       | 1.000000            | 0.144680            | 3.702130           | 0.187230           | 3.191490          | 22.319150          |
| 4        | <b>Proposed Unitized Return</b>                                       | <b>1.000000</b>     | <b>0.769391</b>     | <b>1.886000</b>    | <b>0.512245</b>    | <b>1.491500</b>   | <b>6.236150</b>    |
| 5        | <b>Change in Unitized Return</b>                                      | <b>0.000000</b>     | <b>0.624711</b>     | <b>(1.816130)</b>  | <b>0.325015</b>    | <b>(1.699990)</b> | <b>(16.083000)</b> |
| 6        | Rate of Return Requested  | 8.410%              | 6.471%              | 15.861%            | 4.308%             | 12.544%           | 52.446%            |
| 7        | Net Operating Income @ Requested Return (Line 2 x Line 6)             | \$21,307,643        | \$10,525,593        | \$9,106,783        | \$1,408,444        | \$12,271          | \$254,552          |
| 8        | Net Operating Income @ Current Rates                                  | <u>\$5,955,982</u>  | <u>\$553,639</u>    | <u>\$4,995,219</u> | <u>\$145,234</u>   | <u>\$7,338</u>    | <u>\$254,552</u>   |
| 9        | Income Deficiency (Line 7 - Line 8)                                   | \$15,351,661        | \$9,971,954         | \$4,111,564        | \$1,263,210        | \$4,933           | \$0                |
| 10       | Gross Conversion Factor   | <u>1.655089</u>     | <u>1.655089</u>     | <u>1.655089</u>    | <u>1.655089</u>    | <u>1.655089</u>   | <u>1.655089</u>    |
| 11       | <b>Revenue Required Increase</b>                                      | <b>25,408,365</b>   | <b>16,504,471</b>   | <b>6,805,004</b>   | <b>2,090,725</b>   | <b>8,165</b>      | <b>0</b>           |
| 12       | <b>Percent Distribution to Rate Classes</b>                           | <b>100.000%</b>     | <b>64.957%</b>      | <b>26.783%</b>     | <b>8.228%</b>      | <b>0.032%</b>     | <b>0.000%</b>      |
| 13       | Plus: Gas Cost Uncollectible Charge @ Current Rates                   | 252,665             | 162,450             | 89,920             | 0                  | 294               | 0                  |
| 14       | Less: Gas Cost Uncollectible Charge @ Proposed Rates                  | 252,665             | 162,450             | 89,920             | 0                  | 294               | 0                  |
| 15       | Less: Proposed Change Other Gas Department Revenue (Attachment MPB-2) | <u>132,048</u>      | <u>118,391</u>      | <u>13,573</u>      | <u>76</u>          | <u>2</u>          | <u>6</u>           |
| 16       | <b>Proposed Increase to Base Revenue</b>                              | <b>\$25,276,317</b> | <b>\$16,386,080</b> | <b>\$6,791,431</b> | <b>\$2,090,649</b> | <b>\$8,163</b>    | <b>(\$6)</b>       |
| 17       | <b>Percent Distribution to Rate Classes</b>                           | <b>100.000%</b>     | <b>64.828%</b>      | <b>26.869%</b>     | <b>8.271%</b>      | <b>0.032%</b>     | <b>0.000%</b>      |
| 18       | <b>Current Base Revenue</b>   | <b>68,269,432</b>   | <b>43,271,501</b>   | <b>18,739,332</b>  | <b>5,756,864</b>   | <b>22,521</b>     | <b>479,213</b>     |
| 19       | <b>Current Percent Distribution of Rate Classes</b>                   | <b>100.000%</b>     | <b>63.383%</b>      | <b>27.449%</b>     | <b>8.433%</b>      | <b>0.033%</b>     | <b>0.702%</b>      |
| 20       | <b>Proposed Base Revenue</b>  | <b>93,545,749</b>   | <b>59,657,581</b>   | <b>25,530,763</b>  | <b>7,847,513</b>   | <b>30,684</b>     | <b>479,207</b>     |
| 21       | <b>Proposed Percent Distribution of Rate Classes</b>                  | <b>100.000%</b>     | <b>63.774%</b>      | <b>27.292%</b>     | <b>8.389%</b>      | <b>0.033%</b>     | <b>0.512%</b>      |

Columbia Gas of Kentucky, Inc.  
Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement  
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|    | <u>Bills</u>                     | <u>Dth</u>  | <u>Proposed<br/>Rate</u><br>(\$) | <u>Proposed<br/>Revenue</u><br>(\$) | <u>Current Rev<br/>Revenue</u><br>(\$) | <u>Current<br/>Rate</u><br>(\$) | <u>Proposed<br/>Inc. (Dec.)</u><br>(\$) |
|----|----------------------------------|-------------|----------------------------------|-------------------------------------|--|---------------------------------|---|
| 1  | <b>GSR/GTR Rate Design</b>       |             |                                  |                                     |  |                                 |   |
| 2  |                                  |             |                                  | 58,725,166                          |  |                                 |   |
| 3  | Less:                            |             |                                  | 13,807,095                          |  |                                 |   |
| 4  | Less:                            |             |                                  | 162,450                             |  |                                 |   |
| 5  | Less:                            |             |                                  | 474,918                             |  |                                 |   |
| 6  | Less:                            |             |                                  | 1,009,202                           |  |                                 |   |
| 7  | Less:                            |             |                                  | 9,292                               |  |                                 |   |
| 8  | Less:                            |             |                                  | 396                                 |  |                                 |   |
| 9  | Less:                            |             |                                  | 0                                   |  |                                 |   |
| 10 | Less:                            |             |                                  | 200                                 |  |                                 |   |
| 11 | Less:                            |             |                                  | 212                                 |  |                                 |   |
| 12 | Less:                            |             |                                  | 256                                 |  |                                 |   |
| 13 | Less:                            |             |                                  | 103                                 |  |                                 |   |
| 14 | Plus:                            |             |                                  | <u>16,386,080</u>                   |  |                                 |   |
| 15 |                                  |             |                                  | 59,647,122                          |  |                                 |   |
| 16 | Less:                            | 1,462,612   | <b>19.75</b>                     | 28,886,587                          | 21,939,180                             | 15.00                           | 6,947,407                               |
| 17 | Less:                            | 1,462,612   | <b>0.00</b>                      | 0                                   | 3,290,877                              | 2.25                            | (3,290,877)                             |
| 18 |                                  |             |                                  | 30,760,535                          |  |                                 |   |
| 19 | All Gas Consumed                 | 7,955,080.5 | <b>3.8668</b>                    | 30,760,705                          | 18,030,985                             | 2.2666                          | <u>12,729,720</u>                       |
| 20 | <b>Total Base Revenue Change</b> |             |                                  |                                     |  |                                 | <b>16,386,250</b>                       |

Columbia Gas of Kentucky, Inc.  
Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement  
For the 12 Months Ended December 31, 2017

|    | <u>Bills</u>                     | <u>Dth</u>       | <u>Proposed Rate</u><br>(\$) | <u>Proposed Revenue</u><br>(\$) | <u>Current Revenue</u><br>(\$) | <u>Pct. Of Current Rev</u> | <u>Current Rate</u><br>(\$) | <u>Proposed Inc. (Dec.)</u><br>(\$) |
|----|----------------------------------|------------------|------------------------------|---------------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------------|
| 1  | <b>GSO/GTO/GDS Rate Design</b>   |                  |                              |                                 |                                |                            |                             |                                     |
| 2  |                                  |                  |                              | 26,473,099                      |                                |                            |                             |                                     |
| 3  | Less:                            |                  |                              | 7,643,847                       |                                |                            |                             |                                     |
| 4  | Less:                            |                  |                              | 89,920                          |                                |                            |                             |                                     |
| 5  | Less:                            |                  |                              | 5,994                           |                                |                            |                             |                                     |
| 6  | Less:                            |                  |                              | 249                             |                                |                            |                             |                                     |
| 7  | Plus:                            |                  |                              | <u>6,791,431</u>                |                                |                            |                             |                                     |
| 8  |                                  |                  |                              | 25,524,520                      |                                |                            |                             |                                     |
| 9  | Less:                            | 167,676          | <b>51.00</b>                 | 8,551,476                       | 6,287,850                      |                            | 37.50                       | 2,263,626                           |
| 10 | Less:                            | 325              | <b>0.00</b>                  | 0                               | 18,168                         |                            | 55.90                       | (18,168)                            |
| 11 | Less:                            | 167,676          | <b>0.00</b>                  | <u>0</u>                        | 1,344,762                      |                            | 8.02                        | (1,344,762)                         |
| 12 |                                  |                  |                              | 16,973,044                      |                                |                            |                             |                                     |
| 13 | First 50 Mcf                     | 2,323,884.9      | <b>3.4714</b>                | 8,067,128                       | 5,267,318                      | 0.475290566                | 2.2666                      | 2,799,810                           |
| 14 | Next 350 Mcf                     | 2,223,522.3      | <b>2.6833</b>                | 5,966,299                       | 3,895,611                      | 0.351516154                | 1.752                       | 2,070,688                           |
| 15 | Next 600 Mcf                     | 655,261.1        | <b>2.5514</b>                | 1,671,832                       | 1,091,599                      | 0.098499272                | 1.6659                      | 580,233                             |
| 16 | Over 1,000 Mcf                   | <u>545,886.4</u> | <b>2.3223</b>                | <u>1,267,785</u>                | <u>827,782</u>                 | <u>0.074694008</u>         | 1.5164                      | <u>440,003</u>                      |
| 17 | Total Commodity                  | 5,748,554.7      |                              | 16,973,044                      | 11,082,310                     | 1.000000000                |                             | 5,890,734                           |
| 18 | <b>Total Base Revenue Change</b> |                  |                              |                                 |                                |                            |                             |                                     |
|    |                                  |                  |                              |                                 |                                |                            |                             | <b>6,791,431</b>                    |

Columbia Gas of Kentucky, Inc.  
Allocation of Proposed Annual Revenues by Rate Schedule Based on Revenue Requirement  
For the 12 Months Ended December 31, 2017

|    | <u>Bills</u>                                | <u>Dth</u>         | <u>Proposed Rate</u><br>(\$) | <u>Proposed Revenue</u><br>(\$) | <u>Current Revenue</u><br>(\$) | <u>Pct. Of Current Rev</u> | <u>Current Rate</u><br>(\$) | <u>Proposed Inc. (Dec.)</u><br>(\$) |
|----|---|--------------------|------------------------------|---------------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------------|
| 1  | <b>IS/DS Rate Design</b>                    |                    |                              |                                 |                                |                            |                             |                                     |
| 2  | Total Revenue @ Current Rates               |                    |                              | 5,756,864                       |                                |                            |                             |                                     |
| 3  | Less: FX1 Base Revenue                      |                    |                              | 224,062                         |                                |                            |                             |                                     |
| 4  | Less: FX2 Base Revenue                      |                    |                              | 221,011                         |                                |                            |                             |                                     |
| 5  | Less: FX7 Base Revenue                      |                    |                              | 189,660                         |                                |                            |                             |                                     |
| 6  | Less: SC3 Base Revenue                      |                    |                              | 500,855                         |                                |                            |                             |                                     |
| 7  | Plus: Proposed Increase to Base Rates       |                    |                              | <u>2,090,649</u>                |                                |                            |                             |                                     |
| 8  | Net Base Revenue                            |                    |                              | 6,711,925                       |                                |                            |                             |                                     |
| 9  | Less: Customer Charge Revenue               | 896                | <b>1,462.00</b>              | 1,309,952                       | 902,317                        |                            | 1,007.05                    | 407,635                             |
| 10 | Less: Administrative Charge Revenue         | 896                | <b>0.00</b>                  | 0                               | 50,086                         |                            | 55.90                       | (50,086)                            |
| 11 | Less: Accelerated Mains Replacement Program | 896                | <b>0.00</b>                  | <u>0</u>                        | 402,833                        |                            | 449.59                      | (402,833)                           |
| 12 | Net Volumetric Base Revenue                 |                    |                              | 5,401,973                       |                                |                            |                             |                                     |
| 13 | First 30,000 Mcf                            | 4,984,551.4        | <b>0.9002</b>                | 4,487,406                       | 2,713,091                      | 0.830697607                | 0.5443                      | 1,774,315                           |
| 14 | Over 30,000 Mcf                             | <u>1,913,316.0</u> | <b>0.4781</b>                | <u>914,567</u>                  | <u>552,948</u>                 | <u>0.169302393</u>         | 0.2890                      | <u>361,619</u>                      |
| 15 | Total Commodity                             |                    |                              | 6,897,867.4                     | 5,401,973                      | 3,266,040                  | 1.000000000                 | 2,135,933                           |
| 16 | <b>Total Base Revenue Change</b>            |                    |                              |                                 |                                |                            |                             | <b>2,090,650</b>                    |



**Columbia Gas of Kentucky, Inc.**  
**Schedule of Additional Revenues by Rate Schedule Based on Revenue Requirement - Late Payment Charge**  
**For the 12 Months Ended December 31, 2017**

| <u>Line No.</u> | <u>Reference</u>                                     | <u>Detail</u><br>(\$)    | <u>Amount</u><br>(\$) |
|-----------------|--|--------------------------|-----------------------|
| 1               | <b>Change in Forfeited Discounts Revenue</b>         |                          |                       |
| 2               | Test Year Forfeited Discounts (Account 487)          |                          | 476,000               |
| 3               | Test Year Revenue Subject to Late Payment Penalties: |                          |                       |
| 4               | GSR General Service - Residential                    | Schedule M-2.1           | 49,618,662            |
| 5               | G1C LG&E Commercial                                  | Schedule M-2.1           | 9,744                 |
| 6               | G1R LG&E Residential                                 | Schedule M-2.1           | 13,752                |
| 7               | GSO General Service - Commercial                     | Schedule M-2.1           | 18,479,342            |
| 8               | GSO General Service - Industrial                     | Schedule M-2.1           | 1,407,299             |
| 9               | IS Interruptible Service - Industrial                | Schedule M-2.1           | 0                     |
| 10              | IUS Intrastate Utility Service - Wholesale           | Schedule M-2.1           | 47,711                |
| 11              | GTR GTS Choice - Residential                         | Schedule M-2.1           | 9,029,105             |
| 12              | GTO GTS Choice - Commercial                          | Schedule M-2.1           | 5,787,037             |
| 13              | GTO GTS Choice - Industrial                          | Schedule M-2.1           | 127,654               |
| 14              | DS GTS Delivery Service - Commercial                 | Schedule M-2.1           | 1,398,811             |
| 15              | DS GTS Delivery Service - Industrial                 | Schedule M-2.1           | 3,222,464             |
| 16              | GDS GTS Grandfathered Delivery Service - Commercial  | Schedule M-2.1           | 351,127               |
| 17              | GDS GTS Grandfathered Delivery Service - Industrial  | Schedule M-2.1           | 276,061               |
| 18              | DS3 GTS Main Line Service - Industrial               | Schedule M-2.1           | 67,641                |
| 19              | FX1 GTS Flex Rate - Commercial                       | Schedule M-2.1           | 224,062               |
| 20              | FX2 GTS Flex Rate - Commercial                       | Schedule M-2.1           | 221,011               |
| 21              | FX5 GTS Flex Rate - Industrial                       | Schedule M-2.1           | 411,572               |
| 22              | FX7 GTS Flex Rate - Industrial                       | Schedule M-2.1           | 189,660               |
| 23              | SAS GTS Special Agency Service                       | Schedule M-2.1           | 0                     |
| 24              | SC3 GTS Special Rate - Industrial                    | Schedule M-2.1           | 500,855               |
| 25              | Total  |                          | 91,383,572            |
| 26              | Ratio of Late Payment Penalties to Total Revenue     | Line 2 / Line 25         | 0.005208814           |
| 27              | Proposed Revenue Subject to Late Payment Penalties:  |                          |                       |
| 28              | GSR/GTR Residential                                  | Attachment MPB-1, Page 1 | 75,096,498            |
| 29              | GSO/GTO/GDS  | Attachment MPB-1, Page 1 | 33,254,549            |
| 30              | DS/SAS   | Attachment MPB-1, Page 1 | 6,711,802             |
| 31              | IS   | Attachment MPB-1, Page 1 | 0                     |
| 32              | IUS  | Attachment MPB-1, Page 1 | 55,930                |
| 33              | DS3  | Attachment MPB-1, Page 1 | 67,641                |
| 34              | FX1  | Attachment MPB-1, Page 1 | 224,062               |
| 35              | FX2  | Attachment MPB-1, Page 1 | 221,011               |
| 36              | FX5  | Attachment MPB-1, Page 1 | 411,572               |
| 37              | FX7  | Attachment MPB-1, Page 1 | 189,660               |
| 38              | SC3  | Attachment MPB-1, Page 1 | 500,855               |
| 39              | Total  |                          | 116,733,579           |
| 40              | Proposed Forfeited Discounts (Account 487)           | Line 26 x Line 39        | 608,044               |
| 41              | <b>Proposed Adjustment to Account 487 Revenue</b>    | <b>Line 40 - Line 2</b>  | <b>132,044</b>        |

Columbia Gas of Kentucky, Inc.  
[Case No. 2016-00162](#)  
Non-Gas Base Rates

|  | <u>Current Rates</u> | <u>Proposed Rates</u> |
|--|----------------------|-----------------------|
| <b>General Service - Residential (GSR &amp; GRT)</b> |                      |                       |
| Customer Charge                                      | \$15.00              | \$19.75               |
| All Gas Consumed                                     | \$2.2666             | \$3.8668              |
| <b>General Service - Other (GSO/GTR/GDS)</b>         |                      |                       |
| Customer Charge                                      | \$37.50              | \$51.00               |
| First 50 Mcf   | \$2.2666             | \$3.4714              |
| Next 350 Mcf   | \$1.7520             | \$2.6833              |
| Next 600 Mcf   | \$1.6659             | \$2.5514              |
| Over 1,000 Mcf                                       | \$1.5164             | \$2.3223              |
| <b>Interruptible / Delivery Service (IS/DS)</b>      |                      |                       |
| Customer Charge                                      | \$1,007.05           | \$1,462.00            |
| First 30,000 Mcf                                     | \$0.5443             | \$0.9002              |
| Over 30,000 Mcf                                      | \$0.2890             | \$0.4781              |
| <b>Intrastate Utility Sales Service (IUS)</b>        |                      |                       |
| Customer Charge                                      | \$477.00             | \$649.00              |
| All Gas Consumed                                     | \$0.8150             | \$1.3295              |
| <b>Delivery Service - Mainline (DS-ML)</b>           |                      |                       |
| Customer Charge                                      | \$200.00             | \$255.90              |
| All Gas Consumed                                     | \$0.0858             | \$0.0858              |

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Average GSR/GTR Bill**  
**March 2016**

| <b>Line No.</b> | <b>Component</b>                                | <b>Sales<br/>Mcf</b> | <b>Rate<br/>Per Mcf<br/>\$</b> | <b>Amount<br/>\$</b> |
|-----------------|---|----------------------|--------------------------------|----------------------|
| 1               | <b>Prior Approved Rates</b>                     |                      |                                |                      |
| 2               | Monthly Customer Charge                         |                      |                                | 15.00                |
| 3               | Accelerated Mains Replacement Program (AMRP)    |                      |                                | 2.25                 |
| 4               | Energy Efficiency Conservation Program (EECP)   |                      |                                | 0.69                 |
| 4               | All Gas Consumed                                | 5.5                  | 2.2666                         | 12.47                |
| 5               | Research & Development                          | 5.5                  | 0.0139                         | 0.08                 |
| 6               | Energy Assistance Plan (EAP)                    | 5.5                  | 0.0597                         | 0.33                 |
| 7               | Gas Cost Adjustment (GCA)                       | 5.5                  | 2.2091                         | 12.15                |
| 8               | Gas Cost Uncollectible Charge                   | 5.5                  | 0.0160                         | <u>0.09</u>          |
| 9               | Total Bill                                      | 5.5                  |                                | <u><u>43.06</u></u>  |
| 10              | <b>Proposed Rates</b>                           |                      |                                |                      |
| 11              | Monthly Customer Charge                         |                      |                                | 19.75                |
| 12              | Accelerated Mains Replacement Program (AMRP)    |                      |                                | 0.00                 |
| 13              | Energy Efficiency Conservation Program (EECP)   |                      |                                | 0.69                 |
| 14              | All Gas Consumed                                | 5.5                  | 3.8668                         | 21.27                |
| 15              | Research & Development                          | 5.5                  | 0.0139                         | 0.08                 |
| 16              | Energy Assistance Plan (EAP)                    | 5.5                  | 0.0597                         | 0.33                 |
| 17              | Gas Cost Adjustment (GCA)                       | 5.5                  | 2.2091                         | 12.15                |
| 18              | Gas Cost Uncollectible Charge                   | 5.5                  | 0.0260                         | 0.14                 |
| 19              | Total Bill                                      | 5.5                  |                                | <u><u>54.41</u></u>  |
| 20              | <b>Percent Increase - Total</b>                 |                      |                                | <b>26.36%</b>        |
| 21              | <b>Percent Increase - Delivery Charges only</b> |                      |                                | <b>38.02%</b>        |

1/ Prior Approved Rates as of 3-1-2016. Commodity cost imputed for GRT for illustrative purposes.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Average GSO/GTO Bill**  
**March 2016**

| <b>Line No.</b> | <b>Component</b>                                | <b>Sales<br/>Mcf</b> | <b>Rate<br/>Per Mcf<br/>\$</b> | <b>GSO/GTO<br/>Amount<br/>\$</b> |
|-----------------|---|----------------------|--------------------------------|----------------------------------|
| 1               | <b>Prior Approved Rates</b>                     |                      |                                |                                  |
| 2               | Monthly Customer Charge                         |                      |                                | 37.50                            |
| 3               | Accelerated Mains Replacement Program (AMRP)    |                      |                                | 8.02                             |
| 4               | First 50 Mcf                                    | 32.4                 | 2.2666                         | 73.44                            |
| 5               | Next 350 Mcf                                    | 0.0                  | 1.7520                         | 0.00                             |
| 6               | Next 600 Mcf                                    | 0.0                  | 1.6659                         | 0.00                             |
| 7               | Over 1,000 Mcf                                  | 0.0                  | 1.5164                         | 0.00                             |
| 8               | Research & Development                          | 32.4                 | 0.0139                         | 0.45                             |
| 9               | Energy Assistance Plan (EAP)                    | 32.4                 | 0.0000                         | 0.00                             |
| 10              | Gas Cost Adjustment (GCA)                       | 32.4                 | 2.2091                         | 71.57                            |
| 11              | Gas Cost Uncollectible Charge                   | 32.4                 | 0.0160                         | <u>0.52</u>                      |
| 12              | Total Bill                                      | 32.4                 |                                | <u><u>191.50</u></u>             |
| 13              | <b>Proposed Rates</b>                           |                      |                                |                                  |
| 14              | Monthly Customer Charge                         |                      |                                | 51.00                            |
| 15              | Accelerated Mains Replacement Program (AMRP)    |                      |                                | 0.00                             |
| 16              | First 50 Mcf                                    | 32.4                 | 3.4714                         | 112.47                           |
| 17              | Next 350 Mcf                                    | 0.0                  | 2.6833                         | 0.00                             |
| 18              | Next 600 Mcf                                    | 0.0                  | 2.5514                         | 0.00                             |
| 19              | Over 1,000 Mcf                                  | 0.0                  | 2.3223                         | 0.00                             |
| 20              | Research & Development                          | 32.4                 | 0.0139                         | 0.45                             |
| 21              | Energy Assistance Plan (EAP)                    | 32.4                 | 0.0000                         | 0.00                             |
| 22              | Gas Cost Adjustment (GCA)                       | 32.4                 | 2.2091                         | 71.57                            |
| 23              | Gas Cost Uncollectible Charge                   | 32.4                 | 0.0260                         | 0.84                             |
| 24              | Total Bill                                      | 32.4                 |                                | <u><u>236.33</u></u>             |
| 25              | <b>Percent Increase - Total</b>                 |                      |                                | <b>23.41%</b>                    |
| 26              | <b>Percent Increase - Delivery Charges only</b> |                      |                                | <b>37.42%</b>                    |

1/ Prior Approved Rates as of 3-1-2016. Commodity cost imputed for GTO for illustrative purposes.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Average GDS Bill**  
**March 2016**

| <u>Line No.</u> | <u>Component</u>                                | <u>Sales</u><br>Mcf | <u>Rate</u><br>Per Mcf<br>\$ | <u>GDS</u><br><u>Amount</u><br>\$ |
|-----------------|---|---------------------|------------------------------|-----------------------------------|
| 1               | <b>Prior Approved Rates</b>                     |                     |                              |                                   |
| 2               | Monthly Customer Charge                         |                     |                              | 37.50                             |
| 3               | Accelerated Mains Replacement Program (AMRP)    |                     |                              | 8.02                              |
| 4               | Administrative Charge                           |                     |                              | 55.90                             |
| 5               | First 50 Mcf                                    | 50.0                | 2.2666                       | 113.33                            |
| 6               | Next 350 Mcf                                    | 350.0               | 1.7520                       | 613.20                            |
| 7               | Next 600 Mcf                                    | 600.0               | 1.6659                       | 999.54                            |
| 8               | Over 1,000 Mcf                                  | 101.8               | 1.5164                       | 154.37                            |
| 6               | Research & Development                          | 1,101.8             | 0.0139                       | 15.32                             |
| 7               | Energy Assistance Plan (EAP)                    | 1,101.8             | 0.0000                       | 0.00                              |
| 8               | Gas Cost Adjustment (GCA)                       | 1,101.8             | 2.2091                       | 2,433.99                          |
| 9               | Gas Cost Uncollectible Charge                   | 1,101.8             | 0.0000                       | <u>0.00</u>                       |
| 10              | Total Bill                                      | 1,101.8             |                              | <u><u>4,431.17</u></u>            |
| 11              | <b>Proposed Rates</b>                           |                     |                              |                                   |
| 12              | Monthly Customer Charge                         |                     |                              | 51.00                             |
| 13              | Accelerated Mains Replacement Program (AMRP)    |                     |                              | 0.00                              |
| 14              | Administrative Charge                           |                     |                              | 0.00                              |
| 15              | First 50 Mcf                                    | 50.0                | 3.4714                       | 173.57                            |
| 16              | Next 350 Mcf                                    | 350.0               | 2.6833                       | 939.16                            |
| 17              | Next 600 Mcf                                    | 600.0               | 2.5514                       | 1,530.84                          |
| 18              | Over 1,000 Mcf                                  | 101.8               | 2.3223                       | 236.41                            |
| 19              | Research & Development                          | 1,101.8             | 0.0139                       | 15.32                             |
| 20              | Energy Assistance Plan (EAP)                    | 1,101.8             | 0.0000                       | 0.00                              |
| 21              | Gas Cost Adjustment (GCA)                       | 1,101.8             | 2.2091                       | 2,433.99                          |
| 22              | Gas Cost Uncollectible Charge                   | 1,101.8             | 0.0000                       | 0.00                              |
| 23              | Total Bill                                      | 1,101.8             |                              | <u><u>5,380.29</u></u>            |
| 24              | <b>Percent Increase - Total</b>                 |                     |                              | <b>21.42%</b>                     |
| 25              | <b>Percent Increase - Delivery Charges only</b> |                     |                              | <b>52.18%</b>                     |

1/ Prior Approved Rates as of 3-1-2016. Commodity cost imputed for GTO for illustrative purposes.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Average DS Bill**  
**March 2016**

| <u>Line No.</u> | <u>Component</u>   | <u>Sales Mcf</u> | <u>Rate Per Mcf \$</u> | <u>DS Amount \$</u> |
|-----------------|--|------------------|------------------------|---------------------|
| 1               | <b>Prior Approved Rates</b>  |                  |                        |                     |
| 2               | Monthly Customer Charge  |                  |                        | 1,007.05            |
| 3               | Accelerated Mains Replacement Program (AMRP) Administrative Charge |                  |                        | 449.59<br>55.90     |
| 4               | First 30,000 Mcf   | 7,794.2          | 0.5443                 | 4,242.38            |
| 5               | Over 30,000 Mcf  | 0.0              | 0.2890                 | 0.00                |
| 6               | Research & Development   | 7,794.2          | 0.0139                 | 108.34              |
| 7               | Energy Assistance Plan (EAP)                                       | 7,794.2          | 0.0000                 | 0.00                |
| 8               | Gas Cost Adjustment (GCA)  | 7,794.2          | 2.8155                 | 21,944.57           |
| 9               | Gas Cost Uncollectible Charge                                      | 7,794.2          | 0.0000                 | 0.00                |
| 10              | Total Bill   | 7,794.2          |                        | <u>27,807.83</u>    |
| 11              | <b>Proposed Rates</b>  |                  |                        |                     |
| 12              | Monthly Customer Charge  |                  |                        | 1,462.00            |
| 13              | Accelerated Mains Replacement Program (AMRP)                       |                  |                        | 0.00                |
| 14              | Administrative Charge  |                  |                        | 0.00                |
| 15              |  |                  |                        |                     |
| 16              | First 30,000 Mcf   | 7,794.2          | 0.9002                 | 7,016.34            |
| 17              | Over 30,000 Mcf  | 0.0              | 0.4781                 | 0.00                |
| 18              | Research & Development   | 7,794.2          | 0.0139                 | 108.34              |
| 19              | Energy Assistance Plan (EAP)                                       | 7,794.2          | 0.0000                 | 0.00                |
| 20              | Gas Cost Adjustment (GCA)  | 7,794.2          | 2.8155                 | 21,944.57           |
| 21              | Gas Cost Uncollectible Charge                                      | 7,794.2          | 0.0000                 | 0.00                |
| 22              | Total Bill   | 7,794.2          |                        | <u>30,531.25</u>    |
| 23              | <b>Percent Increase - Total</b>                                    |                  |                        | <b>9.79%</b>        |
| 24              | <b>Percent Increase - Delivery Charges only</b>                    |                  |                        | <b>47.32%</b>       |

1/ Prior Approved Rates as of 3-1-2016. Commodity cost imputed for DS for illustrative purposes.

**Columbia Gas of Kentucky, Inc.**  
**Calculation of Average DS-ML Bill**  
**March 2016**

| <b>Line No.</b> | <b>Component</b>                                | <b>Sales Mcf</b> | <b>Rate Per Mcf \$</b> | <b>DS-ML Amount \$</b>  |
|-----------------|---|------------------|------------------------|-------------------------|
| <b>1</b>        | <b>Prior Approved Rates</b>                     |                  |                        |                         |
| 2               | Monthly Customer Charge                         |                  |                        | 200.00                  |
| 3               | Accelerated Mains Replacement Program (AMRP)    |                  |                        | 0.00                    |
| 4               | Administrative Charge                           |                  |                        | 55.90                   |
| 5               | All Gas Consumed                                | 18,916.1         | 0.0858                 | 1,623.00                |
| 6               | Research & Development                          | 18,916.1         | 0.0139                 | 262.93                  |
| 7               | Energy Assistance Plan (EAP)                    | 18,916.1         | 0.0000                 | 0.00                    |
| 8               | Gas Cost Adjustment (GCA)                       | 18,916.1         | 2.8155                 | 53,258.28               |
| 9               | Gas Cost Uncollectible Charge                   | 18,916.1         | 0.0000                 | <u>0.00</u>             |
| 10              | Total Bill                                      | 18,916.1         |                        | <u><u>55,400.11</u></u> |
| <b>11</b>       | <b>Proposed Rates</b>                           |                  |                        |                         |
| 12              | Monthly Customer Charge                         |                  |                        | 255.90                  |
| 13              | Accelerated Mains Replacement Program (AMRP)    |                  |                        | 0.00                    |
| 14              | Administrative Charge                           |                  |                        | 0.00                    |
| 15              | All Gas Consumed                                | 18,916.1         | 0.0858                 | 1,623.00                |
| 16              | Research & Development                          | 18,916.1         | 0.0139                 | 262.93                  |
| 17              | Energy Assistance Plan (EAP)                    | 18,916.1         | 0.0000                 | 0.00                    |
| 18              | Gas Cost Adjustment (GCA)                       | 18,916.1         | 2.8155                 | 53,258.28               |
| 19              | Gas Cost Uncollectible Charge                   | 18,916.1         | 0.0000                 | 0.00                    |
| 20              | Total Bill                                      | 18,916.1         |                        | <u><u>55,400.11</u></u> |
| 21              | <b>Percent Increase - Total</b>                 |                  |                        | <b>0.00%</b>            |
| 22              | <b>Percent Increase - Delivery Charges only</b> |                  |                        | <b>0.00%</b>            |

1/ Prior Approved Rates as of 3-1-2016. Commodity cost imputed for DS-ML for illustrative purposes.

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
 )  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
CHAD E. NOTESTONE  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF CHAD E. NOTESTONE**

1 **Q: Please state your name and business address.**

2 A: My name is Chad E. Notestone and my business address is 290 West Na-  
3 tionwide Blvd., Columbus, Ohio, 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am Manager of Regulatory Accounting for NiSource Corporate Services  
7 Company ("NCSC"). NCSC provides, among other services, accounting and  
8 regulatory-related services for the subsidiaries of NiSource Inc.  
9 ("NiSource"). I am responsible for providing regulatory accounting services  
10 and support for NiSource's subsidiary companies. Specifically, I provide  
11 support for various rate filings and compliance filings made with the state  
12 regulatory commissions. In this case, I am testifying on behalf of Columbia  
13 Gas of Kentucky, Inc. ("Columbia"), which is one of the NiSource local  
14 distribution companies.

15

16 **Q: What is your educational background?**

17 A: I attended Ohio University and received a Bachelor of Business  
18 Administration degree in Finance in 2006, and a Master of Business  
19 Administration degree in 2013.

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**Q: What is your employment history?**

A: I began my career with NCSC in 2007 as a Regulatory Analyst. I was promoted to Senior Regulatory Analyst in 2009 and then to Lead Regulatory Analyst in 2013. I assumed my current position in 2015. In addition to my work experience, I have attended a variety of public utility accounting and ratemaking seminars.

**Q: Have you previously testified before any regulatory commissions?**

A: Yes. I have submitted testimony in matters before the Kentucky Public Service Commission, the Public Service Commission of Maryland and the Virginia State Corporation Commission.

**Q: What is the purpose of your testimony in this proceeding?**

A: The purpose of my testimony is to present Columbia's allocated cost of service ("ACOS") studies prepared for this case in accordance with the filing requirements under 807 KAR 5:001 Section 16-(7)(v). The studies are based upon pro forma revenues and costs for the forecasted test period ending December 31, 2017.

1 **Q: Please summarize your testimony.**

2 A: Columbia prepared three ACOS studies in this case which are identified  
3 as the Customer/Demand study, Demand/Commodity study and the Av-  
4 erage study. All three studies are based on reasonable and generally ac-  
5 cepted ACOS methodologies, but produce varying results. Columbia pro-  
6 vides three studies based on the belief that there is no one scientifically  
7 correct method of allocating costs due to the fact that a certain amount of  
8 judgment must be used in performing any ACOS study. As such, Colum-  
9 bia believes that multiple studies are useful in facilitating the establish-  
10 ment of a range of reasonableness for purposes of cost allocation. Addi-  
11 tionally, the Commission reaffirmed the usefulness of the multiple study  
12 approach in Atmos Energy's 2013 rate case<sup>1</sup>.

13

14 **Q: What attachments are you sponsoring with your testimony?**

15 A: The table below lists the attachments to my testimony along with a brief  
16 description of each.

| <b>Attachment</b> | <b>Description</b>                                 |
|-------------------|--|
| CEN-1             | Customer / Demand ACOS                             |
| CEN-2             | Demand / Commodity ACOS                            |
| CEN-3             | Average of Customer/Demand and Demand/Commodity    |
| CEN-4             | Development of Allocation Factors Demand/Commodity |

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<sup>1</sup> *Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications, Case No. 2013-00148, Order (April 22, 2014) at 34.*

|       |  |
|-------|--|
| CEN-5 | Development of Allocation Factors Customer/Demand      |
| CEN-6 | Development of Allocation Factors Average of D/C & C/D |
| CEN-7 | Factor Selection and Rational Demand/Commodity         |
| CEN-8 | Factor Selection and Rational Customer/Demand          |
| CEN-9 | Factor Selection and Rational Average D/C & C/D        |

1

2 **Q: How were the different rate schedules grouped in allocating the cost of**  
3 **service in each of the studies?**

4 A: In general, the rate schedules were grouped on a throughput or compli-  
5 mentary rate schedule basis. Sales and transportation schedules having  
6 similar service characteristics and requirements were combined under the  
7 same class category. For example, residential sales service and residential  
8 transportation service were combined under GS Residential. This combi-  
9 nation is appropriate since the cost of providing utility service is essential-  
10 ly the same for either service. All three studies group Columbia’s various  
11 rate schedules into the following five customer classes:

- 12 • GS Residential – includes General Service Residential (“GSR”) and Small  
13 Volume Gas Transportation Service (“SVGTS”) Residential customers.
- 14 • GS Other – includes General Service Other (“GSO”) for Commercial and  
15 Industrial customers and SVGTS for Commercial and Industrial custom-  
16 ers.
- 17 • IUS – includes Intrastate Utility Service customers.

- 1 • DS-ML/SC – includes Delivery Service for Mainline customers (“MLDS”)  
2 and Delivery Service for Special Contract (“SC”) customers.
- 3 • DS/IS – Delivery Service and Interruptible Sales Service customers.

4

5 **Q: What is the purpose of an ACOS study?**

6 A: The purpose of an ACOS study is to assign Columbia’s total cost of service  
7 to each rate class based on cost causation principles. This provides a view  
8 of the relative rates of return contributed by each rate class. Ultimately,  
9 the results of the ACOS studies are used for purposes of determining the  
10 revenue responsibility from each rate class and to assist in the rate design  
11 process.

12

13 **Q: What is the guiding principle that you followed in performing the stud-**  
14 **ies and assigning the cost to each rate class?**

15 A: The guiding principle is that costs should be assigned to customers based  
16 on cost causation. In general, customers (or groups of customers) who  
17 cause Columbia to incur particular costs, should be responsible for recov-  
18 ery of those costs.

19

1 **Q: How are the components of Columbia’s total cost of service assigned to**  
2 **each rate class?**

3 A: In general, performing an allocated cost of service study employs a three  
4 step approach which includes cost functionalization, classification and  
5 then allocation.

6 Cost functionalization is the categorization of costs by operational  
7 characteristics such as Production, Storage and Distribution related costs.  
8 This is done by FERC account in the studies. Costs are further classified as  
9 being either Customer, Demand or Commodity related.

10 Customer related costs are a function of the number of Columbia’s  
11 customers and include the costs of adding customers to the distribution  
12 system and maintaining their accounts. Customer related costs are in-  
13 curred by Columbia even if the customer consumes no gas. For example,  
14 costs associated with the minimum size distribution main, services, meters  
15 and customer service expenses are all driven by number of customers.

16 Demand related costs are capacity costs that are incurred to serve  
17 the peak consumption requirements or design day usage of customers.  
18 For example, the size of the distribution main that is above the minimum  
19 size necessary to provide service is considered demand related because of

1 the cost incurred by Columbia to provide the additional capacity require-  
2 ments of the customer.

3 Commodity related costs are those costs that vary with the amount  
4 of gas sold to customers. For example, gas supply costs are commodity  
5 costs that vary with customer usage. Further applying the principles of  
6 cost causation, the last step uses either direct assignment, external alloca-  
7 tors or internal allocators to assign particular costs to each rate class.

8 Direct assignment refers to the specific identification or isolation of  
9 the cost of service to a specific activity or classification of cost. Columbia  
10 directly assigns costs to rate classes to the extent Columbia's books and  
11 records make it possible to do so. For example, Columbia records reve-  
12 nues by customer rate class and therefore, these revenues can be directly  
13 assigned to each class within the ACOS study. Costs and revenues that  
14 cannot be directly assigned are allocated based on the applicable external-  
15 ly or internally developed allocation factors. The operative principle is to  
16 utilize direct assignment of costs wherever practicable and to allocate  
17 when accounting records do not indicate class categorization.

18 External allocation factors such as number of customers, through-  
19 put, peak usage and others are developed from Columbia's accounting  
20 and customer information records.

1 Internal factors, by contrast, are created within the ACOS study  
2 from previously allocated plant investment or functional O&M costs. For  
3 example, intangible plant is internally allocated within the study among  
4 rate classes based on the summation of the allocation within the study of  
5 total distribution plant, excluding intangible plant.

6

7 **Q: Please describe each of the studies you present in this case.**

8 A: The Customer/Demand study (Attachment CEN-1) is an allocated cost of  
9 service study that allocates distribution mains costs using a composite  
10 weighting between a minimum system investment that is allocated using  
11 number of customers versus the remainder of the mains cost that is allo-  
12 cated based on design day demand requirements. Under this method, the  
13 theory is that the cost of a distribution system main is determined by both  
14 the design day capacity requirements of the customer (i.e., the demand  
15 component) and Columbia's service obligation in its line extension policy  
16 to extend the main the maximum footage without charge to the customer  
17 (i.e. the customer component). The results of the Customer/Demand study  
18 tends to assign more cost to lower load factor customers (i.e., Residential)  
19 and less cost to higher load factor customers (i.e., Industrial).

1           In the Demand/Commodity study (Attachment CEN-2), mains  
2 costs are allocated using a composite factor based on design day demand  
3 and annual usage. The Demand/Commodity study is a Peak and Average  
4 method study. This study emphasizes the utilization of the distribution  
5 system as opposed to how Columbia actually incurs costs to provide dis-  
6 tribution service. As such, there is no consideration of the customer com-  
7 ponent of distribution mains costs using this cost allocation methodology.  
8 Under the Demand/Commodity method, the theory is that distribution  
9 mains costs are driven by customers' commodity consumption both on  
10 peak day demand as well as their consumption throughout the year. In  
11 other words, the argument is that the distribution system was built and  
12 costs were incurred to accommodate customers' throughput during peak  
13 usage periods as well as their average usage for the year. The results of  
14 this study tend to assign more cost to higher load factor customers (i.e.,  
15 Industrial) and less cost to lower load factor customers (i.e., Residential).

16           The third study is the Average study (Attachment CEN-3), which  
17 gives equal weight to the Customer/Demand and Demand/Commodity al-  
18 location factors used to allocate mains costs.

19           Both the Customer/Demand and Demand/Commodity methodolo-  
20 gies are relevant in that they provide the outside limits of the reasonable

1 allocation of mains costs to the various classes of service. As mentioned  
2 previously, the Customer/Demand study produces results that generally  
3 assign more costs to the residential class, whereas the De-  
4 mand/Commodity study produces results that generally assign more costs  
5 to the industrial class. Columbia recognizes that no one cost of service  
6 study is the “right” study and that the results of two such studies are use-  
7 ful in providing a reasonable range of returns for use as a guide in estab-  
8 lishing appropriate rates.

9

10 **Q: What are the major differences between each of the studies?**

11 A: Differences exist mainly to the method of allocation of mains costs in each  
12 study. A significant portion of Columbia’s investment and expense is re-  
13 lated to mains. For example, mains account for 51% of Columbia’s gross  
14 plant investment and 39% of distribution O&M expense. The allocation of  
15 these costs significantly influences the outcome of the studies. In addition,  
16 many other elements of O&M expenses are allocated on plant related fac-  
17 tors.

18

19 **Q: Please explain in more detail how the demand component of mains was**  
20 **allocated in each study.**

1 **A:** In the Customer/Demand study (Attachment CEN-1), the demand com-  
2 ponent is the portion remaining after the customer component is deter-  
3 mined using the “minimum system” methodology, which is described lat-  
4 ter in my testimony. In this case, the resulting demand component is 35%  
5 which is then allocated to the various classes based on design day  
6 throughput. The demand component by class was provided by Colum-  
7 bia’s Energy Supply Service department and represents expected re-  
8 quirements under design day conditions. In the Demand/Commodity  
9 study (Attachment CEN-2), each component is considered to have equal  
10 weight regarding mains. Therefore, the demand component for each class  
11 was used to allocate 50% of the cost of mains with total throughput used  
12 to allocate the remaining 50%. In the Average study (Attachment CEN-3),  
13 mains are allocated based on a simple average of the mains allocation fac-  
14 tors produced from the Customer/Demand and Demand/Commodity  
15 studies.

16

17 **Q: Describe the methodology used in determining the customer compo-**  
18 **nent of mains in your Customer/Demand study.**

19 **A:** As mentioned above, mains were allocated utilizing the minimum system  
20 concept, which is described in Attachment CEN-5 in the description of al-

1 location factor 3. Columbia's minimum system concept is based on a two-  
2 inch system, which assumes that a two-inch diameter pipe is the base or  
3 minimum system required to connect customers, and that any size of  
4 main above the two-inch amount is driven by customer demands. As  
5 shown in Attachment CEN-5, the minimum system concept identified a  
6 significant portion (approximately 65%) of mains costs as being customer  
7 related.

8

9 **Q: Can you provide a description of the other allocation factors you devel-**  
10 **oped for the studies?**

11 **A:** Yes. Attachments CEN-4, CEN-5 and CEN-6 contain general descriptions  
12 of the allocation factors used in the studies. In addition, Attachments  
13 CEN-7, CEN-8 and CEN-9 provide the rationale for factor selection, by ac-  
14 count, as it pertains to the various categories of rate base and expense.

15

16 **Q: Please describe the format of the studies.**

17 **A:** All three studies consist of a table of contents plus 129 pages that show the  
18 detailed calculations supporting the allocation of income and rate base  
19 used to compute the class rates of return. As shown in the table of con-  
20 tents, the first 25 pages summarize the results of the cost classifications

1 and allocations by rate class on a total company basis. Pages 26 through 51  
2 show the classification of total company costs into the respective custom-  
3 er, commodity and demand components. Pages 52 through 77 show the  
4 allocation of the customer related costs to the various rate classes. Like-  
5 wise, pages 78 through 103 show the allocation of the commodity related  
6 costs to the various rate classes. Lastly, pages 104 through 129 detail the  
7 allocation of the demand related cost components to the various rate clas-  
8 ses.

9

10 **Q: Did you calculate Columbia's cost based customer charges in the stud-**  
11 **ies?**

12 **A:** Yes. Columbia's monthly customer charges by rate class at are calculated  
13 based on the results of the customer cost classification and are shown on  
14 page 53 of the studies.

15

16 **Q: Does this complete your Prepared Direct testimony?**

17 **A:** Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Chad E. Notestone, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
\_\_\_\_\_  
Chad E. Notestone

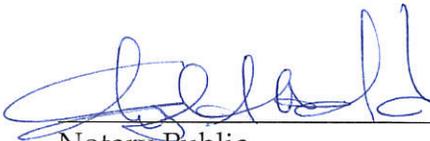
STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Chad E. Notestone on this the 19<sup>th</sup>  
day of May, 2016.



CHERYLA. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
\_\_\_\_\_  
Notary Public

My Commission expires: MARCH 26, 2017

## COLUMBIA GAS OF KENTUCKY, INC.

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CASE NO.: 2016 - 00162  
WITNESS: C. NOTESTONE  
STUDY TYPE: FORECASTED TEST YEAR - ORIGINAL FILING  
ALLOCATION BASIS: CUSTOMER-DEMAND  
TEST YEAR: 12/31/2017  
RATE BASE: 12/31/17

| <b>TOTAL COMPANY</b>  |                              | <b>CUSTOMER</b>          | <b>COMMODITY</b>         | <b>DEMAND</b>            |   |
|-----------------------|------------------------------|--------------------------|--------------------------|--------------------------|---|
| <b><u>SUMMARY</u></b> | <b><u>CLASSIFICATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>DESCRIPTION</u></b>                                     |
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TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED REVENUE  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 1 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT                                   | ALLOC  | TOTAL             |                   |                  |               |               |                  |              |              |    |
|------|--|--------|-------------------|-------------------|------------------|---------------|---------------|------------------|--------------|--------------|----|
| NO.  | NO.                                    | FACTOR | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML         | DS/IS            | NOT USED     | NOT USED     |    |
|      | (A)                                    | (C)    | (D)               | (E)               | (F)              | (G)           | (H)           | (I)              | (J)          | (K)          |    |
|      | (B)                                    |        | \$                | \$                | \$               | \$            | \$            | \$               | \$           | \$           | \$ |
| 1    | TOTAL REVENUES                         |        | 92,682,167        | 59,679,824        | 26,685,285       | 48,080        | 481,735       | 5,787,242        | 0            | 0            |    |
| 2    | PROPOSED INCREASE                      |        | <u>25,408,373</u> | <u>16,471,876</u> | <u>6,826,911</u> | <u>8,147</u>  | <u>2</u>      | <u>2,101,436</u> | <u>0</u>     | <u>0</u>     |    |
| 3    | TOTAL PROPOSED REVENUES                |        | 118,090,539       | 76,151,700        | 33,512,196       | 56,228        | 481,737       | 7,888,678        | 0            | 0            |    |
| 4    | COST OF GAS                            |        | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0             | 0                | 0            | 0            |    |
| 5    | OPERATING & MAINTENANCE EXPENSE        |        | 45,377,927        | 35,826,919        | 7,519,240        | 6,082         | 60,163        | 1,965,523        | 0            | 0            |    |
| 6    | DEPRECIATION & AMORTIZATION            |        | 15,939,780        | 12,623,709        | 2,495,022        | 1,985         | 17,840        | 801,224          | 0            | 0            |    |
| 7    | FEDERAL INCOME TAX                     |        | 7,781,830         | 1,869,413         | 4,409,559        | 6,416         | 118,616       | 1,377,826        | 0            | 0            |    |
| 8    | KENTUCKY STATE INCOME TAX              |        | 1,416,522         | 322,167           | 815,902          | 1,190         | 22,268        | 254,995          | 0            | 0            |    |
| 9    | TAXES OTHER THAN INCOME                |        | <u>4,790,879</u>  | <u>3,701,114</u>  | <u>799,227</u>   | <u>754</u>    | <u>8,568</u>  | <u>281,216</u>   | <u>0</u>     | <u>0</u>     |    |
| 10   | TOTAL EXPENSES & TAXES                 |        | 96,782,888        | 68,150,417        | 23,682,797       | 41,435        | 227,455       | 4,680,784        | 0            | 0            |    |
| 11   | OPERATING INCOME                       |        | 21,307,652        | 8,001,283         | 9,829,399        | 14,793        | 254,283       | 3,207,894        | 0            | 0            |    |
| 12   | INTEREST EXPENSE                       |        | <u>6,688,725</u>  | <u>4,933,634</u>  | <u>1,338,314</u> | <u>1,956</u>  | <u>12,816</u> | <u>402,005</u>   | <u>0</u>     | <u>0</u>     |    |
| 13   | INCOME AVAILABLE FOR COMMON EQUITY     |        | 14,618,927        | 3,067,649         | 8,491,085        | 12,837        | 241,467       | 2,805,889        | 0            | 0            |    |
| 14   | RATE BASE                              |        | 253,360,781       | 186,880,075       | 50,693,701       | 74,098        | 485,470       | 15,227,467       | 0            | 0            |    |
| 15   | RATE OF RETURN AUTHORIZED ON RATE BASE |        | <b>8.41%</b>      | <b>4.28%</b>      | <b>19.39%</b>    | <b>19.96%</b> | <b>52.38%</b> | <b>21.07%</b>    | <b>0.00%</b> | <b>0.00%</b> |    |
| 16   | UNITIZED RETURN                        |        | 1.00              | 0.51              | 2.31             | 2.37          | 6.23          | 2.51             | 0.00         | 0.00         |    |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
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WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 118,090,544      | 88,921,262       | 24,299,869       | 42,059       | 128,450       | 4,698,885      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 45,377,926       | 35,969,099       | 7,416,667        | 5,924        | 56,229        | 1,930,007      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 15,939,787       | 12,623,709       | 2,495,022        | 1,985        | 17,840        | 801,224        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 7,781,824        | 6,023,821        | 1,412,449        | 1,806        | 3,679         | 340,069        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 1,416,523        | 1,079,810        | 269,317          | 350          | 1,307         | 65,739         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>4,790,879</u> | <u>3,701,114</u> | <u>799,227</u>   | <u>754</u>   | <u>8,568</u>  | <u>281,216</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 96,782,888       | 73,204,648       | 20,036,529       | 35,827       | 87,623        | 3,418,255      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 21,307,656       | 15,716,614       | 4,263,340        | 6,232        | 40,828        | 1,280,630      | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>6,688,725</u> | <u>4,933,634</u> | <u>1,338,314</u> | <u>1,956</u> | <u>12,816</u> | <u>402,005</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 14,618,931       | 10,782,980       | 2,925,026        | 4,276        | 28,012        | 878,625        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 253,360,781      | 186,880,075      | 50,693,701       | 74,098       | 485,470       | 15,227,467     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b> | <b>8.41%</b>  | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00             | 1.00         | 1.00          | 1.00           | 0.00         | 0.00         |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF PROFORMA ADJUSTMENTS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 3 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>Company<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E)  | IUS<br>(F)     | DS-ML<br>(G)     | DS/IS<br>(H)     | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|-------------------------|-----------------------|------------------|----------------|------------------|------------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 25,408,378              | 29,241,438            | (2,385,416)      | (6,022)        | (353,284)        | (1,088,357)      | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                       | 0                     | 0                | 0              | 0                | 0                | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 234,603                 | 269,995               | (22,025)         | (56)           | (3,262)          | (10,049)         | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>48,301</u>           | <u>55,588</u>         | <u>(4,535)</u>   | <u>(11)</u>    | <u>(672)</u>     | <u>(2,069)</u>   | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 25,125,474              | 28,915,855            | (2,358,856)      | (5,955)        | (349,350)        | (1,076,239)      | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>1,507,528</u>        | <u>1,734,951</u>      | <u>(141,531)</u> | <u>(357)</u>   | <u>(20,961)</u>  | <u>(64,574)</u>  | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 23,617,946              | 27,180,904            | (2,217,325)      | (5,598)        | (328,389)        | (1,011,665)      | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>8,266,274</u>        | <u>9,513,316</u>      | <u>(776,064)</u> | <u>(1,959)</u> | <u>(114,936)</u> | <u>(354,083)</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 15,351,672              | 17,667,588            | (1,441,261)      | (3,639)        | (213,453)        | (657,582)        | 0               | 0               |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY CLASS - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 4 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|-------------------------------------|--------------|------------------|------------------|------------------|---------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)              | (G)           | (H)           | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$               | \$            | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 92,682,167       | 59,679,824       | 26,685,285       | 48,080        | 481,735       | 5,787,242      | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009        | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 45,095,029       | 35,643,516       | 7,443,227        | 5,991         | 60,163        | 1,942,125      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 15,939,787       | 12,623,709       | 2,495,022        | 1,985         | 17,840        | 801,224        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (484,451)        | (3,489,495)      | 2,188,513        | 3,765         | 118,615       | 694,152        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (91,006)         | (655,141)        | 410,848          | 707           | 22,268        | 130,313        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>4,790,881</u> | <u>3,701,114</u> | <u>799,227</u>   | <u>754</u>    | <u>8,568</u>  | <u>281,216</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 86,726,189       | 61,630,798       | 20,980,684       | 38,210        | 227,454       | 3,849,030      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 5,955,978        | (1,950,974)      | 5,704,601        | 9,870         | 254,281       | 1,938,212      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>6,688,725</u> | <u>4,933,634</u> | <u>1,338,314</u> | <u>1,956</u>  | <u>12,816</u> | <u>402,005</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | (732,747)        | (6,884,608)      | 4,366,287        | 7,914         | 241,465       | 1,536,207      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 253,360,781      | 186,880,075      | 50,693,701       | 74,098        | 485,470       | 15,227,467     | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>2.35%</b>     | <b>-1.04%</b>    | <b>11.25%</b>    | <b>13.32%</b> | <b>52.38%</b> | <b>12.73%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | (0.44)           | 4.79             | 5.67          | 22.29         | 5.42           | 0.00         | 0.00         |

REFERENCES: [1] PAGE 11, [2] PAGE 19, [3] PAGE 10, [4] PAGE 24, [5] PAGE 22, [6] PAGE 20, [7] PAGE 23, [8] PAGE 25.

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 5 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                  |              |               |                |          |          |
| 2        | 301.00   | ORGANIZATION                              |              | 521              | 404              | 84               | 0            | 1             | 32             | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    |              | 74,348           | 57,613           | 12,032           | 12           | 134           | 4,558          | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            |              | <u>8,341,319</u> | <u>6,463,732</u> | <u>1,349,907</u> | <u>1,338</u> | <u>15,006</u> | <u>511,335</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 8,416,188        | 6,521,749        | 1,362,023        | 1,350        | 15,141        | 515,925        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                  |              |               |                |          |          |
| 9        | 304.10   | LAND                                      |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             |              | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                  |              |               |                |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            |              | 206              | 152              | 34               | 0            | 0             | 20             | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 |              | 877,756          | 647,723          | 146,945          | 211          | 0             | 82,877         | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          |              | 661,306          | 487,998          | 110,709          | 159          | 0             | 62,440         | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             |              | 2,729,828        | 2,014,422        | 457,001          | 655          | 0             | 257,751        | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         |              | 2,125            | 1,568            | 356              | 0            | 0             | 201            | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 |              | 2,176,686        | 1,606,243        | 364,399          | 523          | 0             | 205,523        | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 46,211           | 0                | 0                | 0            | 46,211        | 0              | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         |              | 8,761,416        | 6,789,268        | 1,417,892        | 1,406        | 15,762        | 537,087        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV |              | 259,809          | 201,328          | 42,046           | 42           | 468           | 15,927         | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 26       | 376.00   | MAINS                                     |              | 221,300,854      | 163,304,540      | 37,047,976       | 53,112       | 0             | 20,895,227     | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 11,682           | 0                | 0                | 0            | 11,682        | 0              | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             |              | 518,504          | 382,620          | 86,803           | 125          | 0             | 48,957         | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                |              | 9,175,090        | 6,770,575        | 1,536,002        | 2,202        | 0             | 866,312        | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         |              | 45,443           | 33,534           | 7,608            | 11           | 0             | 4,290          | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          |              | 254,901          | 188,100          | 42,673           | 62           | 0             | 24,068         | 0        | 0        |
| 32       | 380.00   | SERVICES                                  |              | 127,467,343      | 112,461,887      | 14,554,221       | 1,275        | 0             | 449,960        | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 6 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)           | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$            | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                |              | 22,789,579       | 16,395,279       | 6,292,659      | 2,963      | 0             | 98,679         | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   |              | 9,462,175        | 6,807,278        | 2,612,696      | 1,230      | 0             | 40,971         | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      |              | 5,770,311        | 4,151,277        | 1,593,298      | 750        | 0             | 24,985         | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               |              | 2,257,522        | 1,624,106        | 623,347        | 293        | 0             | 9,775          | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     |              | 2,697,547        | 0                | 700,742        | 782        | 0             | 1,996,050      | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 677,829          | 0                | 0              | 0          | 677,829       | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             |              | 735,771          | 570,153          | 119,073        | 118        | 1,324         | 45,104         | 0        | 0        |
| 10       | 387.42   | RADIO                                 |              | 795,187          | 616,195          | 128,688        | 128        | 1,431         | 48,746         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   |              | 133,590          | 103,520          | 21,620         | 22         | 241           | 8,190          | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          |              | 3,779,585        | 2,928,821        | 611,664        | 607        | 6,800         | 231,694        | 0        | 0        |
| 13       | 387.46   | CIS                                   |              | <u>113,644</u>   | <u>88,064</u>    | <u>18,392</u>  | <u>19</u>  | <u>205</u>    | <u>6,966</u>   | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 423,501,900      | 328,174,651      | 68,536,844     | 66,695     | 761,953       | 25,961,800     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                  |                |            |               |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 735,278          | 569,771          | 118,993        | 118        | 1,323         | 45,074         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 18,816           | 14,581           | 3,045          | 3          | 34            | 1,153          | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 1,257,641        | 974,553          | 203,529        | 202        | 2,263         | 77,095         | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 95,778           | 74,219           | 15,500         | 16         | 173           | 5,871          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 24,462           | 18,956           | 3,959          | 4          | 44            | 1,499          | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 24,241           | 18,785           | 3,923          | 4          | 43            | 1,486          | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 3,259,030        | 2,525,440        | 527,421        | 523        | 5,863         | 199,783        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  |              | 9,258            | 7,174            | 1,498          | 1          | 16            | 568            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 253,135          | 196,156          | 40,966         | 40         | 455           | 15,518         | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>294,060</u>   | <u>227,868</u>   | <u>47,588</u>  | <u>47</u>  | <u>529</u>    | <u>18,026</u>  | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>5,971,699</u> | <u>4,627,503</u> | <u>966,422</u> | <u>958</u> | <u>10,743</u> | <u>366,073</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 437,889,787      | 339,323,903      | 70,865,289     | 69,003     | 787,837       | 26,843,798     | 0        | 0        |



TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 8 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 6,025,045        | 4,334,538        | 1,663,635      | 783        | 0            | 26,088         | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 4,714,156        | 3,391,458        | 1,301,673      | 613        | 0            | 20,412         | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 1,568,587        | 1,128,473        | 433,118        | 204        | 0            | 6,792          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 1,780,729        | 1,281,092        | 491,695        | 231        | 0            | 7,711          | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 823,118          | 0                | 213,821        | 239        | 0            | 609,066        | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766          | 0                | 0              | 0          | 133,766      | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZION                             |              | (59,912)         | (46,426)         | (9,696)        | (10)       | (108)        | (3,673)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 399,816          | 309,819          | 64,704         | 65         | 720          | 24,509         | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 567,414          | 439,692          | 91,827         | 91         | 1,021        | 34,784         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 50,650           | 39,249           | 8,197          | 8          | 91           | 3,105          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 529,513          | 410,323          | 85,693         | 85         | 953          | 32,460         | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>114,357</u>   | <u>88,615</u>    | <u>18,507</u>  | <u>19</u>  | <u>206</u>   | <u>7,010</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 145,887,056      | 115,687,706      | 22,725,789     | 19,010     | 154,801      | 7,299,762      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                  |                  |                |            |              |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | (33,247)         | (25,763)         | (5,380)        | (6)        | (60)         | (2,038)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | (11,355)         | (8,799)          | (1,838)        | (2)        | (21)         | (696)          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 750,133          | 581,282          | 121,397        | 121        | 1,350        | 45,984         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 27,035           | 20,950           | 4,376          | 4          | 48           | 1,657          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 6,309            | 4,888            | 1,021          | 1          | 11           | 387            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 15,095           | 11,697           | 2,443          | 3          | 27           | 926            | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 37,937           | 29,398           | 6,140          | 6          | 68           | 2,326          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 185              | 143              | 30             | 0          | 0            | 12             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 1,333,005        | 1,032,952        | 215,725        | 213        | 2,398        | 81,715         | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 7,764            | 6,017            | 1,257          | 1          | 14           | 476            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 202,598          | 156,994          | 32,787         | 33         | 365          | 12,419         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | 12,094           | <u>9,372</u>     | <u>1,957</u>   | <u>2</u>   | <u>22</u>    | <u>742</u>     | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>2,347,553</u> | <u>1,819,131</u> | <u>379,915</u> | <u>376</u> | <u>4,222</u> | <u>143,910</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 151,708,251      | 120,198,581      | 23,667,857     | 19,942     | 165,272      | 7,656,611      | 0        | 0        |



TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 10 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML     | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|---------------|----------------|--------------|----------|-----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)           | (E)            | (F)          | (G)      | (H)       | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$            | \$             | \$           | \$       | \$        | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 1,172,264     | 843,350        | 323,686      | 152      | 0         | 5,076        | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 230,831       | 166,064        | 63,737       | 30       | 0         | 999          | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 157,520       | 113,323        | 43,494       | 20       | 0         | 682          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 22,800        | 16,403         | 6,296        | 3        | 0         | 99           | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 158,316       | 0              | 41,126       | 46       | 0         | 117,146      | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065        | 0              | 0            | 0        | 13,065    | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 27,516        | 21,322         | 4,453        | 4        | 49        | 1,686        | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 29,736        | 23,043         | 4,812        | 4        | 53        | 1,823        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 4,992         | 3,868          | 808          | 1        | 9         | 306          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 140,832       | 109,131        | 22,792       | 23       | 253       | 8,633        | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>4,248</u>  | <u>3,292</u>   | <u>687</u>   | <u>0</u> | <u>7</u>  | <u>260</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 14,206,216    | 11,280,355     | 2,214,473    | 1,710    | 14,725    | 694,954      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |               |                |              |          |           |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 36,561        | 28,332         | 5,917        | 6        | 66        | 2,241        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 1,260         | 976            | 204          | 0        | 2         | 77           | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 253,397       | 196,359        | 41,008       | 40       | 455       | 15,534       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 8,760         | 6,788          | 1,418        | 1        | 15        | 537          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 2,244         | 1,739          | 363          | 0        | 4         | 137          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 972           | 753            | 157          | 0        | 2         | 60           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 129,657       | 100,472        | 20,983       | 20       | 233       | 7,948        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 468           | 363            | 76           | 0        | 1         | 29           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 6,552         | 5,078          | 1,060        | 1        | 11        | 401          | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>19,604</u> | <u>15,191</u>  | <u>3,172</u> | <u>3</u> | <u>35</u> | <u>1,202</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 459,475       | 356,051        | 74,358       | 71       | 824       | 28,166       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 15,939,787    | 12,623,709     | 2,495,022    | 1,985    | 17,840    | 801,224      | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 11 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|------------------|------------------|---------------|----------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)              | (F)              | (G)           | (H)            | (I)              | (J)      | (K)      |
|          |          |                              |              | \$                | \$               | \$               | \$            | \$             | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |                   |                  |                  |               |                |                  |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 49,696,061        | 49,696,061       | 0                | 0             | 0              | 0                | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 18,520,317        | 0                | 18,520,317       | 0             | 0              | 0                | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | <u>1,458,726</u>  | <u>0</u>         | <u>1,410,902</u> | <u>47,824</u> | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL SALES REVENUE          |              | 69,675,105        | 49,696,061       | 19,931,219       | 47,824        | 0              | 0                | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 476,000           | 305,532          | 137,766          | 249           | 2,494          | 29,959           | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        |              | 137,000           | 122,833          | 14,082           | 1             | 5              | 79               | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 21,807,062        | 9,029,105        | 6,541,880        | 0             | 479,213        | 5,756,864        | 0        | 0        |
| 9        | 495.00   | OTHER                        |              | <u>587,000</u>    | <u>526,293</u>   | <u>60,338</u>    | <u>6</u>      | <u>23</u>      | <u>340</u>       | <u>0</u> | <u>0</u> |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | <u>23,007,062</u> | <u>9,983,763</u> | <u>6,754,066</u> | <u>256</u>    | <u>481,735</u> | <u>5,787,242</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATING REVENUE      |              | 92,682,167        | 59,679,824       | 26,685,285       | 48,080        | 481,735        | 5,787,242        | 0        | 0        |

| LINE | ACCT                              | ALLOC  | TOTAL             |                   |                  |               |          |          |          |          |          |
|------|-----------------------------------|--------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|----------|
| NO.  | NO.                               | FACTOR | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML    | DS/IS    | NOT USED | NOT USED |          |
|      | (A)                               | (C)    | (D)               | (E)               | (F)              | (G)           | (H)      | (I)      | (J)      | (K)      |          |
|      |                                   |        | \$                | \$                | \$               | \$            | \$       | \$       | \$       | \$       | \$       |
| 1    | OPERATING EXPENSES                |        |                   |                   |                  |               |          |          |          |          |          |
| 2    | PRODUCTION EXPENSES - OPERATION   |        |                   |                   |                  |               |          |          |          |          |          |
| 3    | 717                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 4    | 717                               |        | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        | 0        |
| 5    | 723                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 6    | 728                               |        | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7    |                                   |        | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        | 0        |
| 8    | PRODUCTION EXPENSES - MAINTENANCE |        |                   |                   |                  |               |          |          |          |          |          |
| 9    | 741                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 10   | 741                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 11   | 742                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 12   | 742                               |        | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13   |                                   |        | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14   |                                   |        | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        | 0        |
| 15   | OTHER GAS SUPPLIES EXPENSE        |        |                   |                   |                  |               |          |          |          |          |          |
| 16   | 803 - 806                         |        |                   |                   |                  |               |          |          |          |          |          |
| 17   | & 808                             |        | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0        | 0        | 0        | 0        | 0        |
| 18   | 807                               |        | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        | 0        |
| 19   | 807                               |        | 341,557           | 219,590           | 121,570          | 396           | 0        | 0        | 0        | 0        | 0        |
| 20   | 812                               |        | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |                                   |        | <u>21,817,507</u> | <u>14,026,685</u> | <u>7,765,417</u> | <u>25,405</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22   |                                   |        | 21,819,646        | 14,027,989        | 7,766,214        | 25,407        | 0        | 37       | 0        | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - LABOR  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 13 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC  | TOTAL          |                |               |           |            |              |          |          |    |
|------|------|--------|----------------|----------------|---------------|-----------|------------|--------------|----------|----------|----|
| NO.  | NO.  | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS        | NOT USED | NOT USED |    |
|      | (A)  | (C)    | (D)            | (E)            | (F)           | (G)       |            | (I)          | (J)      | (K)      |    |
|      |      |        | \$             | \$             | \$            | \$        | \$         | \$           | \$       | \$       | \$ |
| 1    |      |        |                |                |               |           |            |              |          |          |    |
|      |      |        |                |                |               |           |            |              |          |          |    |
| 2    | 870  |        | 97,461         | 72,115         | 20,512        | 16        | 189        | 4,630        | 0        | 0        |    |
| 3    | 871  |        | 66,644         | 22,273         | 16,093        | 32        | 0          | 28,246       | 0        | 0        |    |
| 4    | 874  |        | 1,726,536      | 1,365,100      | 255,439       | 266       | 59         | 105,671      | 0        | 0        |    |
| 5    | 875  |        | 82,347         | 60,763         | 13,785        | 20        | 4          | 7,775        | 0        | 0        |    |
| 6    | 876  |        | 38,736         | 0              | 8,042         | 9         | 7,779      | 22,907       | 0        | 0        |    |
| 7    | 878  |        | 1,279,637      | 920,596        | 353,333       | 166       | 0          | 5,541        | 0        | 0        |    |
| 8    | 879  |        | 1,500,691      | 1,079,627      | 414,371       | 195       | 0          | 6,498        | 0        | 0        |    |
| 9    | 880  |        | 547,972        | 405,468        | 115,329       | 86        | 1,059      | 26,031       | 0        | 0        |    |
| 10   | 881  |        | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u>   | <u>0</u>     | <u>0</u> | <u>0</u> |    |
| 11   |      |        | 5,340,024      | 3,925,942      | 1,196,904     | 790       | 9,090      | 207,299      | 0        | 0        |    |
| 12   |      |        |                |                |               |           |            |              |          |          |    |
|      |      |        |                |                |               |           |            |              |          |          |    |
| 13   | 885  |        | 8,649          | 6,400          | 1,820         | 1         | 17         | 411          | 0        | 0        |    |
| 14   | 886  |        | 2,509          | 1,852          | 420           | 0         | 0          | 237          | 0        | 0        |    |
| 15   | 887  |        | 926,354        | 683,548        | 155,071       | 222       | 46         | 87,466       | 0        | 0        |    |
| 16   | 889  |        | 138,594        | 102,267        | 23,201        | 34        | 6          | 13,086       | 0        | 0        |    |
| 17   | 890  |        | 19,419         | 0              | 4,032         | 4         | 3,900      | 11,483       | 0        | 0        |    |
| 18   | 892  |        | 298,657        | 263,499        | 34,101        | 3         | 0          | 1,054        | 0        | 0        |    |
| 19   | 893  |        | 26,851         | 19,317         | 7,414         | 3         | 0          | 116          | 0        | 0        |    |
| 20   | 894  |        | <u>124,180</u> | <u>91,887</u>  | <u>26,135</u> | <u>20</u> | <u>240</u> | <u>5,898</u> | <u>0</u> | <u>0</u> |    |
| 21   |      |        | 1,545,213      | 1,168,770      | 252,194       | 287       | 4,209      | 119,751      | 0        | 0        |    |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 14 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC                            | TOTAL   |                |          |          |          |          |          |          |          |
|------|------|----------------------------------|---------|----------------|----------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | FACTOR                           | COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |          |
|      | (A)  | (B)                              | (C)     | (D)            | (E)      | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |         | \$             | \$       | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |         |                |          |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    |         | 165,331        | 148,232  | 16,994   | 2        | 7        | 96       | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   |         | 692,556        | 620,932  | 71,188   | 7        | 28       | 402      | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 6    | 905  | MISC.                            |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 7    | 920  | SALARIES                         |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        |         | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |         | 857,887        | 769,164  | 88,182   | 9        | 35       | 498      | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |         |                |          |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              |         | 12,982         | 11,639   | 1,334    | 0        | 1        | 8        | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 17   | 920  | SALARIES                         |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 19   | 931  | RENTS                            |         | 0              | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        |         | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |         | 12,982         | 11,639   | 1,334    | 0        | 1        | 8        | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 15 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML  | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|---------------|----------------|-----------|-------|--------|---------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)           | (E)            | (F)       | (G)   | (H)    | (I)     | (J)      | (K)      |
|          |          |                                 |              | \$            | \$             | \$        | \$    | \$     | \$      | \$       | \$       |
| 1        |          | SALES                           |              |               |                |           |       |        |         |          |          |
| 2        | 911      | SUPERVISION                     |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                     |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 5        | 916      | MISC.                           |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                     |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 7,756,106     | 5,875,515      | 1,538,614 | 1,086 | 13,335 | 327,556 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |               |                |           |       |        |         |          |          |
| 9        | 920      | SALARIES                        |              | 1,597,984     | 1,210,522      | 317,000   | 220   | 2,751  | 67,491  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                |              | 4,636         | 3,512          | 920       | 0     | 8      | 196     | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 19       | 931      | RENTS                           |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |               |                |           |       |        |         |          |          |
|          |          | FURNITURE & EQUIPMENT           |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 22       | 932      | MAINT.-MISCELLANEOUS            |              | 0             | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 23       |          | TOTAL ADMIN & GENERAL - LABOR   |              | 1,602,620     | 1,214,034      | 317,920   | 220   | 2,759  | 67,687  | 0        | 0        |
| 24       |          | TOTAL O & M EXPENSE - LABOR     |              | 9,358,726     | 7,089,549      | 1,856,534 | 1,306 | 16,094 | 395,243 | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 16 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC  | TOTAL          |                |               |           |            |               |          |          |
|------|------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (C)    | (D)            | (E)            | (F)           | (G)       | (H)        | (I)           | (J)      | (K)      |
|      |      |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      |        |                |                |               |           |            |               |          |          |
|      |      |        |                |                |               |           |            |               |          |          |
| 2    | 870  |        | 783,470        | 597,050        | 133,276       | 134       | 1,403      | 51,608        | 0        | 0        |
| 3    | 871  |        | 17,885         | 5,977          | 4,319         | 9         | 0          | 7,580         | 0        | 0        |
| 4    | 874  |        | 4,797,660      | 3,793,309      | 709,808       | 741       | 166        | 293,635       | 0        | 0        |
| 5    | 875  |        | 118,379        | 87,351         | 19,817        | 28        | 6          | 11,178        | 0        | 0        |
| 6    | 876  |        | 29,602         | 0              | 6,146         | 7         | 5,944      | 17,505        | 0        | 0        |
| 7    | 878  |        | 485,057        | 348,960        | 133,934       | 63        | 0          | 2,100         | 0        | 0        |
| 8    | 879  |        | 655,941        | 471,897        | 181,118       | 85        | 0          | 2,840         | 0        | 0        |
| 9    | 880  |        | 1,211,487      | 923,224        | 206,085       | 206       | 2,168      | 79,802        | 0        | 0        |
| 10   | 881  |        | <u>82,157</u>  | <u>62,609</u>  | <u>13,975</u> | <u>14</u> | <u>147</u> | <u>5,412</u>  | <u>0</u> | <u>0</u> |
| 11   |      |        | 8,181,638      | 6,290,377      | 1,408,478     | 1,287     | 9,834      | 471,660       | 0        | 0        |
| 12   |      |        |                |                |               |           |            |               |          |          |
|      |      |        |                |                |               |           |            |               |          |          |
| 13   | 885  |        | 2,571          | 1,959          | 437           | 0         | 5          | 169           | 0        | 0        |
| 14   | 886  |        | 251,838        | 185,828        | 42,158        | 60        | 12         | 23,778        | 0        | 0        |
| 15   | 887  |        | 2,202,076      | 1,624,890      | 368,628       | 529       | 110        | 207,920       | 0        | 0        |
| 16   | 889  |        | 144,736        | 106,800        | 24,228        | 35        | 8          | 13,666        | 0        | 0        |
| 17   | 890  |        | 51,880         | 0              | 10,771        | 12        | 10,418     | 30,679        | 0        | 0        |
| 18   | 892  |        | 431,251        | 380,484        | 49,240        | 4         | 0          | 1,522         | 0        | 0        |
| 19   | 893  |        | 118,176        | 85,018         | 32,631        | 15        | 0          | 512           | 0        | 0        |
| 20   | 894  |        | <u>199,573</u> | <u>152,086</u> | <u>33,949</u> | <u>33</u> | <u>357</u> | <u>13,146</u> | <u>0</u> | <u>0</u> |
| 21   |      |        | 3,402,101      | 2,537,065      | 562,042       | 688       | 10,910     | 291,392       | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 17 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT |                                  | ALLOC  | TOTAL     |                |          |          |          |          |          |          |
|------|------|----------------------------------|--------|-----------|----------------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | COMPANY   | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|      | (A)  | (B)                              | (C)    | (D)       | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |        | \$        | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |                |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    |        | 399,502   | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   |        | 3,252,912 | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           |        | 1,027,585 | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6    | 905  | MISC.                            |        | 1,073     | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7    | 920  | SALARIES                         |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      |        | 253       | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        |        | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |                |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      |        | (2,789)   | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              |        | 1,198,971 | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            |        | 65,932    | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    |        | 257,797   | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17   | 920  | SALARIES                         |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      |        | 13,868    | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19   | 931  | RENTS                            |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        |        | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 18 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT                     | ALLOC  | TOTAL             |                   |                  |              |               |                |          |          |          |
|------|--------------------------|--|-------------------|-------------------|------------------|--------------|---------------|----------------|----------|----------|----------|
| NO.  | NO.                      | FACTOR   | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |          |
|      | (A)                      | (C)  | (D)               | (E)               | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |          |
|      |                          |  | \$                | \$                | \$               | \$           | \$            | \$             | \$       | \$       | \$       |
| 1    | SALES                    |  |                   |                   |                  |              |               |                |          |          |          |
| 2    | 911                      | SUPERVISION                                    | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 3    | 912                      | DEMONSTRATION & SELLING                        | 37,477            | 33,601            | 3,852            | 0            | 1             | 22             | 0        | 0        | 0        |
| 4    | 913                      | ADVERTISING                                    | 138,706           | 124,361           | 14,258           | 1            | 6             | 80             | 0        | 0        | 0        |
| 5    | 916                      | MISC.  | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 6    |                          | TOTAL SALES                                    | <u>176,183</u>    | <u>157,962</u>    | <u>18,110</u>    | <u>1</u>     | <u>7</u>      | <u>102</u>     | <u>0</u> | <u>0</u> | <u>0</u> |
| 7    |                          | TOTAL DISTRIBUTION EXPENSES                    | 17,975,026        | 14,528,137        | 2,656,889        | 2,050        | 21,021        | 766,923        | 0        | 0        | 0        |
| 8    | ADMINISTRATIVE & GENERAL |  |                   |                   |                  |              |               |                |          |          |          |
| 9    | 920                      | SALARIES                                       | 2,963,302         | 2,381,490         | 442,533          | 369          | 3,604         | 135,306        | 0        | 0        | 0        |
| 10   | 921                      | OFFICE SUPPLIES & EXPENSES                     | 894,098           | 718,551           | 133,523          | 111          | 1,087         | 40,826         | 0        | 0        | 0        |
| 11   | 922                      | ADMIN. EXPENSES TRANSFERED                     | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 12   | 923                      | OUTSIDE SERVICES                               | 7,869,789         | 6,324,643         | 1,175,255        | 979          | 9,570         | 359,341        | 0        | 0        | 0        |
| 13   | 924                      | PROPERTY INSURANCE                             | 81,748            | 65,698            | 12,208           | 10           | 100           | 3,733          | 0        | 0        | 0        |
| 14   | 925                      | INJURIES AND DAMAGES                           | 1,043,923         | 793,148           | 204,903          | 147          | 1,713         | 44,014         | 0        | 0        | 0        |
| 15   | 926                      | EMPLOYEE PENSIONS & BENEFITS                   | 3,351,467         | 2,546,363         | 657,830          | 470          | 5,499         | 141,304        | 0        | 0        | 0        |
| 16   | 926                      | DIRECT EMPLOYEE PENSIONS & BENEFITS            | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 17   | 928                      | REG COMMISSION EXP - GENERAL                   | 197,760           | 158,932           | 29,533           | 24           | 241           | 9,030          | 0        | 0        | 0        |
| 18   | 928                      | REGULATORY COMMISSION EXP - PSC @ 0.001901     | 176,190           | 141,597           | 26,312           | 22           | 214           | 8,045          | 0        | 0        | 0        |
| 19   | 930.10                   | MISC. - INSTITUT & GOODWILL ADV                | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 20   | 930.20                   | MISC. - GENERAL                                | (62,123)          | (49,926)          | (9,278)          | (7)          | (76)          | (2,837)        | 0        | 0        | 0        |
| 21   | 931                      | RENTS  | 642,175           | 516,091           | 95,901           | 80           | 781           | 29,322         | 0        | 0        | 0        |
| 22   | 935.13                   | MAINT. STRUCTURES & IMPROV.                    | 130               | 104               | 20               | 0            | 0             | 6              | 0        | 0        | 0        |
| 23   | 935.23                   | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        | 0        | 0        |
| 24   | 932                      | MAINT.-MISCELLANEOUS                           | <u>259,121</u>    | <u>208,245</u>    | <u>38,697</u>    | <u>32</u>    | <u>315</u>    | <u>11,832</u>  | <u>0</u> | <u>0</u> | <u>0</u> |
| 25   |                          | TOTAL ADMIN & GENERAL - M & E                  | <u>17,417,580</u> | <u>13,804,936</u> | <u>2,807,437</u> | <u>2,237</u> | <u>23,048</u> | <u>779,922</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 26   |                          | TOTAL O & M EXPENSE - M & E                    | 35,736,302        | 28,553,967        | 5,586,693        | 4,685        | 44,069        | 1,546,882      | 0        | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 19 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |                              |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | LABOR                        |              |                   |                   |                  |              |               |                  |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 5,340,024         | 3,925,942         | 1,196,904        | 790          | 9,090         | 207,299          | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 1,545,213         | 1,168,770         | 252,194          | 287          | 4,209         | 119,751          | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 857,887           | 769,164           | 88,182           | 9            | 35            | 498              | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 12,982            | 11,639            | 1,334            | 0            | 1             | 8                | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>1,602,620</u>  | <u>1,214,034</u>  | <u>317,920</u>   | <u>220</u>   | <u>2,759</u>  | <u>67,687</u>    | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 9,358,726         | 7,089,549         | 1,856,534        | 1,306        | 16,094        | 395,243          | 0        | 0        |
| 10       |          | M & E                        |              |                   |                   |                  |              |               |                  |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 343,696           | 220,894           | 122,367          | 398          | 0             | 37               | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 8,181,638         | 6,290,377         | 1,408,478        | 1,287        | 9,834         | 471,660          | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 3,402,101         | 2,537,065         | 562,042          | 688          | 10,910        | 291,392          | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58           | 208           | 2,880            | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16           | 62            | 889              | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 176,183           | 157,962           | 18,110           | 1            | 7             | 102              | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>17,417,580</u> | <u>13,804,936</u> | <u>2,807,437</u> | <u>2,237</u> | <u>23,048</u> | <u>779,922</u>   | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>35,736,302</u> | <u>28,553,967</u> | <u>5,586,693</u> | <u>4,685</u> | <u>44,069</u> | <u>1,546,882</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 45,095,029        | 35,643,516        | 7,443,227        | 5,991        | 60,163        | 1,942,125        | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 20 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    |              | 4,136,779     | 3,205,612      | 669,470  | 664 | 7,442 | 253,590 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     |              | 654,102       | 495,502        | 129,757  | 90  | 1,126 | 27,626  | 0        | 0        |
| 3        | 408      | OTHER TAXES                |              | 0             | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 4,790,881     | 3,701,114      | 799,227  | 754 | 8,568 | 281,216 | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
KENTUCKY STATE INCOME TAX  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 21 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|-------------------|-------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$                | \$                | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 5,380,520         | (6,095,609)       | 8,303,962        | 14,342       | 395,164       | 2,762,677      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                   |                   |                  |              |               |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 6,688,725         | 4,933,634         | 1,338,314        | 1,956        | 12,816        | 402,005        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    |              | 14,595,754        | 11,310,327        | 2,362,085        | 2,342        | 26,259        | 894,741        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>14,665,691</u> | <u>11,636,406</u> | <u>2,288,831</u> | <u>1,781</u> | <u>15,549</u> | <u>723,120</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (69,937)          | (326,079)         | 73,254           | 561          | 10,710        | 171,621        | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 |              | <u>(4,960)</u>    | (3,757)           | (984)            | (1)          | (9)           | (209)          | 0        | 0        |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>6,613,828</u>  | <u>4,603,798</u>  | <u>1,410,584</u> | <u>2,516</u> | <u>23,517</u> | <u>573,417</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (1,233,308)       | (10,699,407)      | 6,893,378        | 11,826       | 371,647       | 2,189,260      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (73,998)          | (641,961)         | 413,600          | 710          | 22,299        | 131,355        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      |              | <u>0</u>          | 0                 | 0                | 0            | 0             | 0              | 0        | 0        |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (73,998)          | (641,961)         | 413,600          | 710          | 22,299        | 131,355        | 0        | 0        |

TOTAL COMPANY  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 22 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML  | DS/IS   | NOT USED | NOT USED |
|----------|----------|---|--------------|---------------|----------------|----------|-----|--------|---------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)           | (E)            | (F)      | (G) | (H)    | (I)     | (J)      | (K)      |
|          |          |   |              | \$            | \$             | \$       | \$  | \$     | \$      | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |               |                |          |     |        |         |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |               |                |          |     |        |         |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       |              | (17,008)      | (13,180)       | (2,752)  | (3) | (31)   | (1,042) | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (17,008)      | (13,180)       | (2,752)  | (3) | (31)   | (1,042) | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (91,006)      | (655,141)      | 410,848  | 707 | 22,268 | 130,313 | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 23 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|-------------------|---------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)               | (G)           | (H)           | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$                | \$            | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 92,682,167        | 59,679,824        | 26,685,285        | 48,080        | 481,735       | 5,787,242        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>87,301,646</u> | <u>65,775,434</u> | <u>18,381,323</u> | <u>33,739</u> | <u>86,571</u> | <u>3,024,565</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 5,380,520         | (6,095,609)       | 8,303,962         | 14,342        | 395,164       | 2,762,677        | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                   |               |               |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 6,688,725         | 4,933,634         | 1,338,314         | 1,956         | 12,816        | 402,005          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          |              | 14,595,754        | 11,310,327        | 2,362,085         | 2,342         | 26,259        | 894,741          | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>14,665,691</u> | <u>11,636,406</u> | <u>2,288,831</u>  | <u>1,781</u>  | <u>15,549</u> | <u>723,120</u>   | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | (69,937)          | (326,079)         | 73,254            | 561           | 10,710        | 171,621          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      |              | (4,960)           | (3,757)           | (984)             | (1)           | (9)           | (209)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(73,998)</u>   | <u>(641,961)</u>  | <u>413,600</u>    | <u>710</u>    | <u>22,299</u> | <u>131,355</u>   | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 6,539,830         | 3,961,837         | 1,824,184         | 3,226         | 45,816        | 704,772          | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (1,159,310)       | (10,057,447)      | 6,479,778         | 11,116        | 349,348       | 2,057,905        | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | (3,419,532)       | 2,203,124         | 3,780         | 118,778       | 699,688          | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | (3,419,532)       | 2,203,124         | 3,780         | 118,778       | 699,688          | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 24 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY   | GS-RESIDENTIAL  | GS-OTHER        | IUS         | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|-----------------|-------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)             | (G)         | (H)          | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$              | \$          | \$           | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                 |             |              |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     |              | 35,760          | 27,711          | 5,787           | 6           | 65           | 2,193          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                 |             |              |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL |              | <u>(54,526)</u> | <u>(42,252)</u> | <u>(8,824)</u>  | <u>(9)</u>  | <u>(98)</u>  | <u>(3,343)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | (54,526)        | (42,252)        | (8,824)         | (9)         | (98)         | (3,343)        | 0        | 0        |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(90,286)</u> | <u>(69,963)</u> | <u>(14,611)</u> | <u>(15)</u> | <u>(163)</u> | <u>(5,536)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (484,451)       | (3,489,495)     | 2,188,513       | 3,765       | 118,615      | 694,152        | 0        | 0        |

TOTAL COMPANY  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE BASE SUMMARY  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 25 OF 129  
WITNESS: C. NOTESTONE

| LINE NO.                            | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMPANY      | GS-RESIDENTIAL     | GS-OTHER          | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|-------------------------------------|-----------|-----------------------------------|--------------|--------------------|--------------------|-------------------|---------------|----------------|------------------|----------|----------|
|                                     | (A)       | (B)                               | (C)          | (D)                | (E)                | (F)               | (G)           | (H)            | (I)              | (J)      | (K)      |
|                                     |           |                                   |              | \$                 | \$                 | \$                | \$            | \$             | \$               | \$       | \$       |
| 1                                   | 101 & 106 | GROSS PLANT [1]                   |              | 437,889,787        | 339,323,903        | 70,865,289        | 69,003        | 787,837        | 26,843,798       | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                    |                   |               |                |                  |          |          |
| 2                                   | 108-111   | DEPRECIATION RESERVE [2]          |              | <u>151,708,251</u> | <u>120,198,581</u> | <u>23,667,857</u> | <u>19,942</u> | <u>165,272</u> | <u>7,656,611</u> | <u>0</u> | <u>0</u> |
| 3                                   |           | NET PLANT                         |              | 286,181,536        | 219,125,322        | 47,197,432        | 49,061        | 622,564        | 19,187,187       | 0        | 0        |
| 4                                   | 190.00    | ACCUMULATED DEF INCOME TAX        |              | \$5,385,973        | 4,173,619          | 871,632           | 864           | 9,689          | 330,168          | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                    |                   |               |                |                  |          |          |
| 5                                   | 252.00    | CUSTOMER ADVANCES                 |              | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 6                                   | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT |              | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 7                                   | 282.00    | ACCUMULATED DEF INCOME TAX        |              | 86,167,687         | 66,771,800         | 13,944,835        | 13,826        | 155,022        | 5,282,204        | 0        | 0        |
| 8                                   | 283.00    | ACCUMULATED DEF INCOME TAX        |              | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9                                   |           | NET RATE BASE                     |              | 205,399,822        | 156,527,141        | 34,124,229        | 36,099        | 477,231        | 14,235,151       | 0        | 0        |
| 10                                  |           | PLUS WORKING CAPITAL:             |              |                    |                    |                   |               |                |                  |          |          |
| 11                                  |           | CASH WORKING CAPITAL @ 1/8 OF     |              |                    |                    |                   |               |                |                  |          |          |
| 12                                  |           | O & M EXCLUDING GAS COST [3]      |              | 5,636,879          | 4,455,440          | 930,403           | 749           | 7,520          | 242,766          | 0        | 0        |
| 13                                  | 151.00    | FUEL STOCK                        |              | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 14                                  | 154.00    | MATERIALS & SUPPLIES              |              | 82,011             | 63,550             | 13,272            | 13            | 148            | 5,028            | 0        | 0        |
| 15                                  | 165.00    | PREPAYMENTS                       |              | 469,518            | 377,334            | 70,117            | 59            | 571            | 21,439           | 0        | 0        |
| 16                                  | 164.00    | GAS STORED UNDERGROUND - FSS      |              | <u>41,772,551</u>  | <u>25,456,610</u>  | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>       | <u>723,083</u>   | <u>0</u> | <u>0</u> |
| 17                                  |           | RATE BASE                         |              | 253,360,781        | 186,880,075        | 50,693,701        | 74,098        | 485,470        | 15,227,467       | 0        | 0        |
| REFERENCES: [1] PAGE 6, [2] PAGE 8, |           |                                   |              |                    |                    |                   |               |                |                  |          |          |
|                                     |           | [3] TOTAL O & M EXPENSE           |              | 66,570,979         | 49,450,611         | 15,087,074        | 31,000        | 60,163         | 1,942,125        | 0        | 0        |
|                                     |           | LESS: COST OF GAS                 |              | <u>21,475,950</u>  | <u>13,807,095</u>  | <u>7,643,847</u>  | <u>25,009</u> | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
|                                     |           | O & M EXCL. GAS COST              |              | 45,095,029         | 35,643,516         | 7,443,227         | 5,991         | 60,163         | 1,942,125        | 0        | 0        |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN - @ PROPOSED RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 26 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | CLASSIFICATION                         | TOTAL  |                   |                   |                |                  |
|------|------|--|--------|-------------------|-------------------|----------------|------------------|
| NO.  | NO.  | ACCOUNT TITLE                          | FACTOR | COMPANY           | CUSTOMER          | COMMODITY      | DEMAND           |
|      | (A)  | (B)                                    | (C)    | (D)               | (E)               | (F)            | (G)              |
|      |      |  |        | \$                | \$                | \$             | \$               |
| 1    |      | TOTAL REVENUES                         |        | 92,682,167        | 55,729,730        | 21,865,491     | 15,086,946       |
| 2    |      | PROPOSED INCREASE                      |        | <u>25,408,373</u> | <u>19,670,228</u> | <u>101,802</u> | <u>5,636,343</u> |
| 3    |      | TOTAL PROPOSED REVENUES                |        | 118,090,539       | 75,399,958        | 21,967,293     | 20,723,288       |
| 4    |      | COST OF GAS                            |        | 21,475,950        | 0                 | 21,475,950     | 0                |
| 5    |      | OPERATING & MAINTENANCE EXPENSE        |        | 45,377,932        | 38,349,948        | 478,048        | 6,549,934        |
| 6    |      | DEPRECIATION & AMORTIZATION            |        | 15,939,787        | 13,553,430        | 0              | 2,386,356        |
| 7    |      | FEDERAL INCOME TAX                     |        | 7,781,828         | 5,312,951         | 2,677          | 2,466,200        |
| 8    |      | KENTUCKY STATE INCOME TAX              |        | 1,416,522         | 963,055           | 325            | 453,143          |
| 9    |      | TAXES OTHER THAN INCOME                |        | <u>4,790,881</u>  | <u>3,863,259</u>  | <u>6,337</u>   | <u>921,285</u>   |
| 10   |      | TOTAL EXPENSES & TAXES                 |        | 96,782,899        | 62,042,643        | 21,963,337     | 12,776,918       |
| 11   |      | OPERATING INCOME                       |        | 21,307,640        | 13,357,315        | 3,956          | 7,946,371        |
| 12   |      | INTEREST EXPENSE                       |        | <u>6,688,725</u>  | <u>4,291,096</u>  | <u>1,590</u>   | <u>2,396,039</u> |
| 13   |      | INCOME AVAILABLE FOR COMMON EQUITY     |        | 14,618,915        | 9,066,219         | 2,366          | 5,550,332        |
| 14   |      | RATE BASE                              |        | 253,360,780       | 162,541,520       | 60,219         | 90,759,040       |
| 15   |      | RATE OF RETURN AUTHORIZED ON RATE BASE |        | <b>8.41%</b>      | <b>8.22%</b>      | <b>6.57%</b>   | <b>8.76%</b>     |
| 16   |      | UNITIZED RETURN                        |        | 1.00              | 0.98              | 0.78           | 1.04             |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | CLASSIFICATION FACTOR | TOTAL            |                  |               |                  |
|----------|----------|--|-----------------------|------------------|------------------|---------------|------------------|
|          | (A)      | (B)                                    | (C)                   | COMPANY (D)      | CUSTOMER (E)     | COMMODITY (F) | DEMAND (G)       |
|          |          |  |                       | \$               | \$               | \$            | \$               |
| 1        |          | TOTAL REVENUES                         |                       | 118,090,543      | 75,917,052       | 21,969,127    | 20,204,358       |
| 2        |          | COST OF GAS                            |                       | 21,475,950       | 0                | 21,475,950    | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |                       | 45,377,932       | 38,355,705       | 478,069       | 6,544,156        |
| 4        |          | DEPRECIATION & AMORTIZATION            |                       | 15,939,787       | 13,553,430       | 0             | 2,386,356        |
| 5        |          | FEDERAL INCOME TAX                     |                       | 7,781,830        | 5,481,181        | 3,274         | 2,297,373        |
| 6        |          | KENTUCKY STATE INCOME TAX              |                       | 1,416,522        | 993,735          | 434           | 422,354          |
| 7        |          | TAXES OTHER THAN INCOME                |                       | <u>4,790,881</u> | <u>3,863,259</u> | <u>6,337</u>  | <u>921,285</u>   |
| 8        |          | TOTAL EXPENSES & TAXES                 |                       | 96,782,901       | 62,247,310       | 21,964,064    | 12,571,524       |
| 9        |          | OPERATING INCOME                       |                       | 21,307,642       | 13,669,743       | 5,064         | 7,632,835        |
| 10       |          | INTEREST EXPENSE                       |                       | <u>6,688,725</u> | <u>4,291,096</u> | <u>1,590</u>  | <u>2,396,039</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |                       | 14,618,917       | 9,378,647        | 3,474         | 5,236,796        |
| 12       |          | RATE BASE                              |                       | 253,360,780      | 162,541,520      | 60,219        | 90,759,040       |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |                       | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>  | <b>8.41%</b>     |
| 14       |          | UNITIZED RETURN                        |                       | 1.00             | 1.00             | 1.00          | 1.00             |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 28 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | CLASSIFICATION FACTOR<br>(B) | Total Company<br>(C) | CUSTOMER<br>(D)  | COMMODITY<br>(E) | DEMAND<br>(F)    |
|----------|--|------------------------------|----------------------|------------------|------------------|------------------|
| 1        | OPERATING REVENUE                        |                              | 25,408,377           | 20,187,322       | 103,636          | 5,117,413        |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                              | 0                    | 0                | 0                | 0                |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                              | 234,603              | 186,395          | 957              | 47,251           |
| 4        | LESS: PSC FEES @ 0.00190100              |                              | <u>48,301</u>        | <u>38,376</u>    | <u>197</u>       | <u>9,728</u>     |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                              | 25,125,473           | 19,962,551       | 102,482          | 5,060,434        |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                              | <u>1,507,528</u>     | <u>1,197,753</u> | <u>6,149</u>     | <u>303,626</u>   |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                              | 23,617,945           | 18,764,798       | 96,333           | 4,756,808        |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                              | <u>8,266,281</u>     | <u>6,567,679</u> | <u>33,717</u>    | <u>1,664,883</u> |
| 9        | OPERATING INCOME                         |                              | 15,351,664           | 12,197,119       | 62,616           | 3,091,925        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND           |
|----------|----------|-------------------------------------|-----------------------|------------------|------------------|----------------|------------------|
|          | (A)      | (B)                                 | (C)                   | (D)              | (E)              | (F)            | (G)              |
|          |          |                                     |                       | \$               | \$               | \$             | \$               |
| 1        |          | TOTAL REVENUES [1]                  |                       | 92,682,167       | 55,729,730       | 21,865,491     | 15,086,946       |
| 2        |          | COST OF GAS                         |                       | 21,475,950       | 0                | 21,475,950     | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |                       | 45,095,028       | 38,130,934       | 476,915        | 6,487,177        |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |                       | 15,939,787       | 13,553,430       | 0              | 2,386,356        |
| 5        |          | FEDERAL INCOME TAX [4]              |                       | (484,451)        | (1,086,498)      | (30,443)       | 632,490          |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |                       | (91,006)         | (204,018)        | (5,715)        | 118,728          |
| 7        |          | TAXES OTHER THAN INCOME [6]         |                       | <u>4,790,881</u> | <u>3,863,259</u> | <u>6,337</u>   | <u>921,285</u>   |
| 8        |          | TOTAL EXPENSES & TAXES              |                       | 86,726,188       | 54,257,107       | 21,923,044     | 10,546,036       |
| 9        |          | OPERATING INCOME                    |                       | 5,955,978        | 1,472,623        | (57,553)       | 4,540,910        |
| 10       |          | INTEREST EXPENSE [7]                |                       | <u>6,688,725</u> | <u>4,291,096</u> | <u>1,590</u>   | <u>2,396,039</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |                       | (732,747)        | (2,818,473)      | (59,143)       | 2,144,871        |
| 12       |          | RATE BASE [8]                       |                       | 253,360,780      | 162,541,520      | 60,219         | 90,759,040       |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |                       | <b>2.35%</b>     | <b>0.91%</b>     | <b>-95.57%</b> | <b>5.00%</b>     |
| 14       |          | UNITIZED RETURN                     |                       | 1.00             | 0.39             | (40.67)        | 2.13             |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 30 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                            | TOTAL  |                  |                  |           |                  |
|------|--------|---|--------|------------------|------------------|-----------|------------------|
| NO.  | NO.    | ACCOUNT TITLE                             | FACTOR | COMPANY          | CUSTOMER         | COMMODITY | DEMAND           |
|      | (A)    | (B)                                       | (C)    | (D)              | (E)              | (F)       | (G)              |
|      |        |   |        | \$               | \$               | \$        | \$               |
| 1    |        | INTANGIBLE PLANT                          |        |                  |                  |           |                  |
| 2    | 301.00 | ORGANIZATION                              | 7CD    | 521              | 414              | 0         | 107              |
| 3    | 303.00 | MISC. INTANGIBLE PLANT                    | 7CD    | 74,348           | 59,140           | 0         | 15,208           |
| 4    | 303.10 | DIS SOFTWARE                              | 7CD    | 0                | 0                | 0         | 0                |
| 5    | 303.20 | FARA SOFTWARE                             | 7CD    | 0                | 0                | 0         | 0                |
| 6    | 303.30 | OTHER SOFTWARE                            | 7CD    | <u>8,341,319</u> | <u>6,635,078</u> | <u>0</u>  | <u>1,706,241</u> |
| 7    |        | TOTAL INTANGIBLE PLANT                    |        | 8,416,188        | 6,694,632        | 0         | 1,721,556        |
| 8    |        | PRODUCTION PLANT                          |        |                  |                  |           |                  |
| 9    | 304.10 | LAND                                      | 2      | 0                | 0                | 0         | 0                |
| 10   | 305.00 | STRUCTURES & IMPROVEMENTS                 | 2      | 0                | 0                | 0         | 0                |
| 11   | 311.00 | LIQUEFIED PETROLEUM GAS EQUIP             | 2      | <u>0</u>         | <u>0</u>         | <u>0</u>  | <u>0</u>         |
| 12   |        | TOTAL PRODUCTION PLANT                    |        | 0                | 0                | 0         | 0                |
| 13   |        | DISTRIBUTION PLANT                        |        |                  |                  |           |                  |
| 14   | 374.10 | LAND - CITY GATE & M/L IND M&R            | 3      | 206              | 134              | 0         | 72               |
| 15   | 374.20 | LAND - OTHER DISTRIBUTION                 | 3      | 877,756          | 569,005          | 0         | 308,751          |
| 16   | 374.40 | LAND RIGHTS - OTHER DISTRIBUTION          | 3      | 661,306          | 428,692          | 0         | 232,614          |
| 17   | 374.50 | RIGHTS OF WAY                             | 3      | 2,729,828        | 1,769,611        | 0         | 960,217          |
| 18   | 375.20 | CITY GATE - MEAS & REG STRUCTURES         | 3      | 2,125            | 1,378            | 0         | 747              |
| 19   | 375.30 | STRUC & IMPROV-GENERAL M&R                | 3      | 0                | 0                | 0         | 0                |
| 20   | 375.40 | STRUC & IMPROV-REGULATING                 | 3      | 2,176,686        | 1,411,037        | 0         | 765,649          |
| 21   | 375.40 | DIRECT STRUC & IMPROV-REGULATING          | 3      | 46,211           | 29,956           | 0         | 16,255           |
| 22   | 375.60 | STRUC & IMPROV-DIST. IND. M & R           | 8      | 0                | 0                | 0         | 0                |
| 23   | 375.70 | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CD    | 8,761,416        | 6,969,243        | 0         | 1,792,173        |
| 24   | 375.71 | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CD    | 259,809          | 206,664          | 0         | 53,145           |
| 25   | 375.80 | STRUC & IMPROV-COMMUNICATION              | 3      | 0                | 0                | 0         | 0                |
| 26   | 376.00 | MAINS                                     | 3      | 221,300,854      | 143,458,279      | 0         | 77,842,575       |
| 27   | 376.00 | DIRECT MAINS                              | 3      | 11,682           | 7,573            | 0         | 4,109            |
| 28   | 378.10 | M & R GENERAL                             | 3      | 518,504          | 336,120          | 0         | 182,384          |
| 29   | 378.20 | M & R GENERAL - REGULATING                | 3      | 9,175,090        | 5,947,752        | 0         | 3,227,338        |
| 30   | 378.30 | M & R EQUIP - LOCAL GAS PURCHASES         | 3      | 45,443           | 29,458           | 0         | 15,985           |
| 31   | 379.10 | STA EQUIP - CITY                          | 3      | 254,901          | 165,240          | 0         | 89,661           |
| 32   | 380.00 | SERVICES                                  | 15     | 127,467,343      | 127,467,343      | 0         | 0                |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 31 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                        | TOTAL  |                  |                  |           |                  |
|------|--------|---------------------------------------|--------|------------------|------------------|-----------|------------------|
| NO.  | NO.    | ACCOUNT TITLE                         | FACTOR | COMPANY          | CUSTOMER         | COMMODITY | DEMAND           |
|      | (A)    | (B)                                   | (C)    | (D)              | (E)              | (F)       | (G)              |
|      |        |                                       |        | \$               | \$               | \$        | \$               |
| 1    | 380.00 | DIRECT SERVICES                       | 15     | 0                | 0                | 0         | 0                |
| 2    | 381.00 | METERS                                | 16     | 22,789,579       | 22,789,579       | 0         | 0                |
| 3    | 382.00 | METER INSTALLATIONS                   | 16     | 9,462,175        | 9,462,175        | 0         | 0                |
| 4    | 383.00 | HOUSE REGULATORS                      | 16     | 5,770,311        | 5,770,311        | 0         | 0                |
| 5    | 384.00 | HOUSE REG INSTALLATIONS               | 16     | 2,257,522        | 2,257,522        | 0         | 0                |
| 6    | 385.00 | IND M&R EQUIPMENT                     | 17     | 2,697,547        | 2,697,547        | 0         | 0                |
| 7    | 385.00 | DIRECT IND M&R EQUIPMENT              | 17     | 677,829          | 677,829          | 0         | 0                |
| 8    | 387.20 | ODORIZATION                           | 7CD    | 0                | 0                | 0         | 0                |
| 9    | 387.41 | TELEPHONE                             | 7CD    | 735,771          | 585,267          | 0         | 150,504          |
| 10   | 387.42 | RADIO                                 | 7CD    | 795,187          | 632,529          | 0         | 162,658          |
| 11   | 387.44 | OTHER COMMUNICATION                   | 7CD    | 133,590          | 106,264          | 0         | 27,326           |
| 12   | 387.45 | TELEMETERING                          | 7CD    | 3,779,585        | 3,006,460        | 0         | 773,125          |
| 13   | 387.46 | CIS                                   | 7CD    | <u>113,644</u>   | <u>90,398</u>    | <u>0</u>  | <u>23,246</u>    |
| 14   |        | TOTAL DISTRIBUTION PLANT              |        | 423,501,900      | 336,873,366      | 0         | 86,628,534       |
| 15   |        | GENERAL PLANT                         |        |                  |                  |           |                  |
| 16   | 391.10 | OFF FURN & EQUIP - UNSPEC             | 7CD    | 735,278          | 584,875          | 0         | 150,403          |
| 17   | 391.11 | OFF FURN & EQUIP - DATA HAND          | 7CD    | 18,816           | 14,967           | 0         | 3,849            |
| 18   | 391.12 | OFF FURN & EQUIP - INFO SYSTEM        | 7CD    | 1,257,641        | 1,000,387        | 0         | 257,254          |
| 19   | 392.20 | TR EQ - TRAILER > \$1,000             | 7CD    | 95,778           | 76,186           | 0         | 19,592           |
| 20   | 392.21 | TR EQ - TRAILER < \$1,000             | 7CD    | 24,462           | 19,458           | 0         | 5,004            |
| 21   | 394.10 | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CD    | 24,241           | 19,282           | 0         | 4,959            |
| 22   | 394.13 | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CD    | 0                | 0                | 0         | 0                |
| 23   | 393.00 | STORES EQUIPMENT                      | 7CD    | 0                | 0                | 0         | 0                |
| 24   | 394.20 | SHOP EQUIPMENT                        | 7CD    | 0                | 0                | 0         | 0                |
| 25   | 394.30 | TOOLS & OTHER EQUIPMENT               | 7CD    | 3,259,030        | 2,592,386        | 0         | 666,644          |
| 26   | 395.00 | LABORATORY EQUIPMENT                  | 7CD    | 9,258            | 7,364            | 0         | 1,894            |
| 27   | 396.00 | POWER OP EQUIP-GEN TOOLS              | 7CD    | 253,135          | 201,356          | 0         | 51,779           |
| 28   | 397.50 | COMMUNICATION EQUIP - TELEMETERING    | 7CD    | 0                | 0                | 0         | 0                |
| 29   | 398.00 | MISCELLANEOUS EQUIPMENT               | 7CD    | <u>294,060</u>   | <u>233,909</u>   | <u>0</u>  | <u>60,151</u>    |
| 30   |        | TOTAL GENERAL PLANT                   |        | <u>5,971,699</u> | <u>4,750,170</u> | <u>0</u>  | <u>1,221,529</u> |
| 31   |        | TOTAL PLANT IN SERVICE (101 - 106)    |        | 437,889,787      | 348,318,168      | 0         | 89,571,619       |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION RESERVE ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 32 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY | DEMAND         |
|----------|----------|---|-----------------------|------------------|------------------|-----------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)              | (F)       | (G)            |
|          |          |   |                       | \$               | \$               | \$        | \$             |
| 1        |          | INTANGIBLE PLANT                          |                       |                  |                  |           |                |
| 2        | 301.00   | ORGANIZATION                              | 7CD                   | 0                | 0                | 0         | 0              |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7CD                   | 49,104           | 39,060           | 0         | 10,044         |
| 4        | 303.10   | DIS SOFTWARE                              | 7CD                   | 0                | 0                | 0         | 0              |
| 5        | 303.20   | FARA SOFTWARE                             | 7CD                   | 0                | 0                | 0         | 0              |
| 6        | 303.30   | OTHER SOFTWARE                            | 7CD                   | <u>3,424,538</u> | <u>2,724,039</u> | <u>0</u>  | <u>700,499</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |                       | 3,473,642        | 2,763,099        | 0         | 710,543        |
| 8        |          | PRODUCTION PLANT                          |                       |                  |                  |           |                |
| 9        | 304.10   | LAND                                      | 2                     | 0                | 0                | 0         | 0              |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0                | 0         | 0              |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>         | <u>0</u>  | <u>0</u>       |
| 12       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0                | 0         | 0              |
| 13       |          | DISTRIBUTION PLANT                        |                       |                  |                  |           |                |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 3                     | 0                | 0                | 0         | 0              |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 3                     | (523)            | (339)            | 0         | (184)          |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 3                     | 184,637          | 119,691          | 0         | 64,946         |
| 17       | 374.50   | RIGHTS OF WAY                             | 3                     | 942,676          | 611,090          | 0         | 331,586        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 3                     | 2,063            | 1,337            | 0         | 726            |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 3                     | (78)             | (51)             | 0         | (27)           |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 3                     | 497,862          | 322,739          | 0         | 175,123        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 3                     | 3,028            | 1,963            | 0         | 1,065          |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0                | 0         | 0              |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CD                   | 3,369,677        | 2,680,400        | 0         | 689,277        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CD                   | 199,220          | 158,469          | 0         | 40,751         |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 3                     | 0                | 0                | 0         | 0              |
| 26       | 376.00   | MAINS                                     | 3                     | 58,817,583       | 38,128,498       | 0         | 20,689,085     |
| 27       | 376.00   | DIRECT MAINS                              | 3                     | 8,703            | 5,642            | 0         | 3,061          |
| 28       | 378.10   | M & R GENERAL                             | 3                     | 372,072          | 241,196          | 0         | 130,876        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 3                     | 3,453,479        | 2,238,718        | 0         | 1,214,761      |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 3                     | 36,634           | 23,748           | 0         | 12,886         |
| 31       | 379.10   | STA EQUIP - CITY                          | 3                     | 267,731          | 173,557          | 0         | 94,174         |
| 32       | 380.00   | SERVICES                                  | 15                    | 61,085,053       | 61,085,053       | 0         | 0              |
| 33       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0                | 0         | 0              |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 33 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY | DEMAND         |
|----------|----------|---------------------------------------|-----------------------|------------------|------------------|-----------|----------------|
|          | (A)      | (B)                                   | (C)                   | (D)              | (E)              | (F)       | (G)            |
|          |          |                                       |                       | \$               | \$               | \$        | \$             |
| 1        | 381.00   | METERS                                | 16                    | 6,025,045        | 6,025,045        | 0         | 0              |
| 2        | 382.00   | METER INSTALLATIONS                   | 16                    | 4,714,156        | 4,714,156        | 0         | 0              |
| 3        | 383.00   | HOUSE REGULATORS                      | 16                    | 1,568,587        | 1,568,587        | 0         | 0              |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 1,780,729        | 1,780,729        | 0         | 0              |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 823,118          | 823,118          | 0         | 0              |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 133,766          | 133,766          | 0         | 0              |
| 7        | 387.20   | ODORIZATION                           | 7CD                   | (59,912)         | (47,657)         | 0         | (12,255)       |
| 8        | 387.41   | TELEPHONE                             | 7CD                   | 399,816          | 318,032          | 0         | 81,784         |
| 9        | 387.42   | RADIO                                 | 7CD                   | 567,414          | 451,348          | 0         | 116,066        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CD                   | 50,650           | 40,289           | 0         | 10,361         |
| 11       | 387.45   | TELEMETERING                          | 7CD                   | 529,513          | 421,200          | 0         | 108,313        |
| 12       | 387.46   | CIS                                   | 7CD                   | <u>114,357</u>   | <u>90,965</u>    | <u>0</u>  | <u>23,392</u>  |
| 13       |          | TOTAL DISTRIBUTION PLANT              |                       | 145,887,056      | 122,111,289      | 0         | 23,775,767     |
| 14       |          | GENERAL PLANT                         |                       |                  |                  |           |                |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CD                   | (33,247)         | (26,446)         | 0         | (6,801)        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CD                   | (11,355)         | (9,032)          | 0         | (2,323)        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CD                   | 750,133          | 596,691          | 0         | 153,442        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CD                   | 27,035           | 21,505           | 0         | 5,530          |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CD                   | 6,309            | 5,018            | 0         | 1,291          |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CD                   | 15,095           | 12,007           | 0         | 3,088          |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CD                   | 37,937           | 30,177           | 0         | 7,760          |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CD                   | 0                | 0                | 0         | 0              |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CD                   | 185              | 147              | 0         | 38             |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CD                   | 1,333,005        | 1,060,335        | 0         | 272,670        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CD                   | 7,764            | 6,176            | 0         | 1,588          |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CD                   | 202,598          | 161,156          | 0         | 41,442         |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7CD                   | 0                | 0                | 0         | 0              |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CD                   | 12,094           | <u>9,620</u>     | <u>0</u>  | <u>2,474</u>   |
| 29       |          | TOTAL GENERAL PLANT                   |                       | <u>2,347,553</u> | <u>1,867,354</u> | <u>0</u>  | <u>480,199</u> |
| 30       |          | TOTAL PLANT RESERVE                   |                       | 151,708,251      | 126,741,742      | 0         | 24,966,509     |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION EXPENSE ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 34 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY | DEMAND         |
|----------|----------|---|-----------------------|------------------|------------------|-----------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)              | (F)       | (G)            |
|          |          |   |                       | \$               | \$               | \$        | \$             |
|          |          | INTANGIBLE PLANT                          |                       |                  |                  |           |                |
| 1        | 301.00   | ORGANIZATION                              | 7CD                   | 0                | 0                | 0         | 0              |
| 2        | 303.00   | MISC. INTANGIBLE PLANT                    | 7CD                   | 2,478            | 1,971            | 0         | 507            |
| 3        | 303.10   | DIS SOFTWARE                              | 7CD                   | 0                | 0                | 0         | 0              |
| 4        | 303.20   | FARA SOFTWARE                             | 7CD                   | 0                | 0                | 0         | 0              |
| 5        | 303.30   | OTHER SOFTWARE                            | 7CD                   | <u>1,271,617</u> | <u>1,011,504</u> | <u>0</u>  | <u>260,113</u> |
| 6        |          | TOTAL INTANGIBLE PLANT                    |                       | 1,274,096        | 1,013,475        | 0         | 260,620        |
| 7        |          | PRODUCTION PLANT                          |                       |                  |                  |           |                |
| 8        | 304.10   | LAND                                      | 2                     | 0                | 0                | 0         | 0              |
| 9        | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0                | 0         | 0              |
| 10       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>         | <u>0</u>  | <u>0</u>       |
| 11       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0                | 0         | 0              |
| 12       |          | DISTRIBUTION PLANT                        |                       |                  |                  |           |                |
| 13       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 3                     | 0                | 0                | 0         | 0              |
| 14       | 374.20   | LAND - OTHER DISTRIBUTION                 | 3                     | 0                | 0                | 0         | 0              |
| 15       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 3                     | 11,508           | 7,460            | 0         | 4,048          |
| 16       | 374.50   | RIGHTS OF WAY                             | 3                     | 35,215           | 22,828           | 0         | 12,387         |
| 17       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 3                     | 72               | 47               | 0         | 25             |
| 18       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 3                     | 0                | 0                | 0         | 0              |
| 19       | 375.40   | STRUC & IMPROV-REGULATING                 | 3                     | 69,888           | 45,305           | 0         | 24,583         |
| 20       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 3                     | 744              | 482              | 0         | 262            |
| 21       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0                | 0         | 0              |
| 22       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CD                   | 185,730          | 147,738          | 0         | 37,992         |
| 23       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CD                   | 33,049           | 26,289           | 0         | 6,760          |
| 24       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 3                     | 0                | 0                | 0         | 0              |
| 25       | 376.00   | MAINS                                     | 3                     | 5,087,613        | 3,298,045        | 0         | 1,789,568      |
| 26       | 376.00   | DIRECT MAINS                              | 3                     | 151              | 98               | 0         | 53             |
| 27       | 378.10   | M & R GENERAL                             | 3                     | 17,220           | 11,163           | 0         | 6,057          |
| 28       | 378.20   | M & R GENERAL - REGULATING                | 3                     | 304,399          | 197,327          | 0         | 107,072        |
| 29       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 3                     | 1,512            | 980              | 0         | 532            |
| 30       | 379.10   | STA EQUIP - CITY                          | 3                     | 0                | 0                | 0         | 0              |
| 31       | 380.00   | SERVICES                                  | 15                    | 6,496,995        | 6,496,995        | 0         | 0              |
| 32       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0                | 0         | 0              |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 35 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                        | TOTAL  |            |            |           |           |
|------|--------|---------------------------------------|--------|------------|------------|-----------|-----------|
| NO.  | NO.    | ACCOUNT TITLE                         | FACTOR | COMPANY    | CUSTOMER   | COMMODITY | DEMAND    |
|      | (A)    | (B)                                   | (C)    | (D)        | (E)        | (F)       | (G)       |
|      |        |                                       |        | \$         | \$         | \$        | \$        |
| 1    | 381.00 | METERS                                | 16     | 1,172,264  | 1,172,264  | 0         | 0         |
| 2    | 382.00 | METER INSTALLATIONS                   | 16     | 230,831    | 230,831    | 0         | 0         |
| 3    | 383.00 | HOUSE REGULATORS                      | 16     | 157,520    | 157,520    | 0         | 0         |
| 4    | 384.00 | HOUSE REG INSTALLATIONS               | 16     | 22,800     | 22,800     | 0         | 0         |
| 5    | 385.00 | IND M&R EQUIPMENT                     | 17     | 158,316    | 158,316    | 0         | 0         |
| 6    | 385.00 | DIRECT IND M&R EQUIPMENT              | 17     | 13,065     | 13,065     | 0         | 0         |
| 7    | 387.20 | ODORIZATION                           | 7CD    | 0          | 0          | 0         | 0         |
| 8    | 387.41 | TELEPHONE                             | 7CD    | 27,516     | 21,888     | 0         | 5,628     |
| 9    | 387.42 | RADIO                                 | 7CD    | 29,736     | 23,653     | 0         | 6,083     |
| 10   | 387.44 | OTHER COMMUNICATION                   | 7CD    | 4,992      | 3,971      | 0         | 1,021     |
| 11   | 387.45 | TELEMETERING                          | 7CD    | 140,832    | 112,024    | 0         | 28,808    |
| 12   | 387.46 | CIS                                   | 7CD    | 4,248      | 3,379      | 0         | 869       |
| 13   |        | TOTAL DISTRIBUTION PLANT              |        | 14,206,216 | 12,174,468 | 0         | 2,031,748 |
| 14   |        | GENERAL PLANT                         |        |            |            |           |           |
| 15   | 391.10 | OFF FURN & EQUIP - UNSPEC             | 7CD    | 36,561     | 29,082     | 0         | 7,479     |
| 16   | 391.11 | OFF FURN & EQUIP - DATA HAND          | 7CD    | 1,260      | 1,002      | 0         | 258       |
| 17   | 391.12 | OFF FURN & EQUIP - INFO SYSTEM        | 7CD    | 253,397    | 201,564    | 0         | 51,833    |
| 18   | 392.20 | TR EQ - TRAILER > \$1,000             | 7CD    | 8,760      | 6,968      | 0         | 1,792     |
| 19   | 392.21 | TR EQ - TRAILER < \$1,000             | 7CD    | 2,244      | 1,785      | 0         | 459       |
| 20   | 394.10 | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CD    | 972        | 773        | 0         | 199       |
| 21   | 394.13 | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CD    | 0          | 0          | 0         | 0         |
| 22   | 393.00 | STORES EQUIPMENT                      | 7CD    | 0          | 0          | 0         | 0         |
| 23   | 394.20 | SHOP EQUIPMENT                        | 7CD    | 0          | 0          | 0         | 0         |
| 24   | 394.30 | TOOLS & OTHER EQUIPMENT               | 7CD    | 129,657    | 103,135    | 0         | 26,522    |
| 25   | 395.00 | LABORATORY EQUIPMENT                  | 7CD    | 468        | 372        | 0         | 96        |
| 26   | 396.00 | POWER OP EQUIP-GEN TOOLS              | 7CD    | 6,552      | 5,212      | 0         | 1,340     |
| 27   | 398.00 | MISCELLANEOUS EQUIPMENT               | 7CD    | 19,604     | 15,594     | 0         | 4,010     |
| 28   |        | TOTAL GENERAL PLANT                   |        | 459,475    | 365,487    | 0         | 93,988    |
| 29   |        | TOTAL DEPRECIATION EXPENSE            |        | 15,939,787 | 13,553,430 | 0         | 2,386,356 |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 36 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL       |              |               |            |
|----------|----------|------------------------------|-----------------------|-------------|--------------|---------------|------------|
|          | (A)      | (B)                          | (C)                   | COMPANY (D) | CUSTOMER (E) | COMMODITY (F) | DEMAND (G) |
|          |          |                              |                       | \$          | \$           | \$            | \$         |
| 1        |          | OPERATING REVENUE            |                       |             |              |               |            |
| 2        | 480.00   | RESIDENTIAL SALES            | 22                    | 49,696,061  | 28,008,467   | 13,990,847    | 7,696,748  |
| 3        | 481.10   | COMMERCIAL SALES             | 22                    | 18,520,317  | 8,910,498    | 7,161,208     | 2,448,611  |
| 4        | 481.20   | INDUSTRIAL SALES             | 22                    | 1,458,726   | 696,619      | 570,676       | 191,431    |
| 5        |          | TOTAL SALES REVENUE          |                       | 69,675,105  | 37,615,584   | 21,722,730    | 10,336,790 |
| 6        | 487.00   | FORFEITED DISCOUNTS          | 22                    | 476,000     | 371,479      | 31,109        | 73,412     |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6                     | 137,000     | 137,000      | 0             | 0          |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  | 22                    | 21,807,062  | 17,018,667   | 111,652       | 4,676,743  |
| 9        | 495.00   | OTHER                        | 6                     | 587,000     | 587,000      | 0             | 0          |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |                       | 23,007,062  | 18,114,146   | 142,761       | 4,750,155  |
| 11       |          | TOTAL OPERATING REVENUE      |                       | 92,682,167  | 55,729,730   | 21,865,491    | 15,086,946 |

| LINE | ACCT      | CLASSIFICATION                    | TOTAL  |                   |          |                   |          |
|------|-----------|-----------------------------------|--------|-------------------|----------|-------------------|----------|
| NO.  | NO.       | ACCOUNT TITLE                     | FACTOR | COMPANY           | CUSTOMER | COMMODITY         | DEMAND   |
|      | (A)       | (B)                               | (C)    | (D)               | (E)      | (F)               | (G)      |
|      |           |                                   |        | \$                | \$       | \$                | \$       |
| 1    |           | OPERATING EXPENSES                |        |                   |          |                   |          |
| 2    |           | PRODUCTION EXPENSES - OPERATION   |        |                   |          |                   |          |
| 3    | 717       | LIQUE PETRO GAS EXP - LABOR       | 2      | 0                 | 0        | 0                 | 0        |
| 4    | 717       | LIQUE PETRO GAS EXP - M&E         | 2      | 2,139             | 0        | 0                 | 2,139    |
| 5    | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2      | 0                 | 0        | 0                 | 0        |
| 6    | 728       | LIQUIFIED PETROLEUM GAS           | 2      | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 7    |           | TOTAL OPERATION                   |        | 2,139             | 0        | 0                 | 2,139    |
| 8    |           | PRODUCTION EXPENSES - MAINTENANCE |        |                   |          |                   |          |
| 9    | 741       | STRUCTURES & IMPROV - LABOR       | 2      | 0                 | 0        | 0                 | 0        |
| 10   | 741       | STRUCTURES & IMPROV - M&E         | 2      | 0                 | 0        | 0                 | 0        |
| 11   | 742       | PRODUCTION EQUIPMENT - LABOR      | 2      | 0                 | 0        | 0                 | 0        |
| 12   | 742       | PRODUCTION EQUIPMENT - M&E        | 2      | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 13   |           | TOTAL MAINTENANCE                 |        | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 14   |           | TOTAL MANUFACTURED GAS            |        | 2,139             | 0        | 0                 | 2,139    |
| 15   |           | OTHER GAS SUPPLIES EXPENSE        |        |                   |          |                   |          |
| 16   | 803 - 806 |                                   |        |                   |          |                   |          |
| 17   | & 808     | COST OF GAS @ CITY GATE           | 9      | 21,475,950        | 0        | 21,475,950        | 0        |
| 18   | 807       | OTHER PURCHASED GAS - LABOR       | 9      | 0                 | 0        | 0                 | 0        |
| 19   | 807       | OTHER PURCHASED GAS - M & E       | 9      | 341,557           | 0        | 341,557           | 0        |
| 20   | 812       | GAS USED IN OPERATIONS            | 9      | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 21   |           | TOTAL OTHER GAS SUPPLIES EXP      |        | <u>21,817,507</u> | <u>0</u> | <u>21,817,507</u> | <u>0</u> |
| 22   |           | TOTAL PRODUCTION EXPENSE          |        | 21,819,646        | 0        | 21,817,507        | 2,139    |

| LINE | ACCT | CLASSIFICATION             | TOTAL  |                |                |              |               |
|------|------|----------------------------|--------|----------------|----------------|--------------|---------------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | COMPANY        | CUSTOMER       | COMMODITY    | DEMAND        |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)          | (G)           |
|      |      |                            |        | \$             | \$             | \$           | \$            |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |              |               |
| 2    | 870  | SUPERVISION & ENGINEERING  | 10CD   | 97,461         | 83,793         | 1,064        | 12,604        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 66,644         | 0              | 66,644       | 0             |
| 4    | 874  | MAINS & SERVICES           | 14CD   | 1,726,536      | 1,341,178      | 0            | 385,358       |
| 5    | 875  | M & R - GENERAL            | 18CD   | 82,347         | 53,381         | 0            | 28,966        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 38,736         | 38,736         | 0            | 0             |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 1,279,637      | 1,279,637      | 0            | 0             |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 1,500,691      | 1,500,691      | 0            | 0             |
| 9    | 880  | OTHER                      | 10CD   | 547,972        | 471,124        | 5,980        | 70,868        |
| 10   | 881  | RENTS                      | 10CD   | <u>0</u>       | <u>0</u>       | <u>0</u>     | <u>0</u>      |
| 11   |      | TOTAL OPERATION            |        | 5,340,024      | 4,768,540      | 73,688       | 497,796       |
| 12   |      | MAINTENANCE                |        |                |                |              |               |
| 13   | 885  | SUPERVISION & ENGINEERING  | 10CD   | 8,649          | 7,436          | 94           | 1,119         |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CD   | 2,509          | 1,626          | 0            | 883           |
| 15   | 887  | MAINS                      | 18CD   | 926,354        | 600,509        | 0            | 325,845       |
| 16   | 889  | M & R - GENERAL            | 18CD   | 138,594        | 89,844         | 0            | 48,750        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 19,419         | 19,419         | 0            | 0             |
| 18   | 892  | SERVICES                   | 15     | 298,657        | 298,657        | 0            | 0             |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 26,851         | 26,851         | 0            | 0             |
| 20   | 894  | OTHER EQUIPMENT            | 10CD   | <u>124,180</u> | <u>106,765</u> | <u>1,355</u> | <u>16,060</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 1,545,213      | 1,151,107      | 1,449        | 392,657       |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 39 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER | COMMODITY | DEMAND   |
|----------|----------|----------------------------------|-----------------------|---------------|----------|-----------|----------|
|          | (A)      | (B)                              | (C)                   | (D)           | (E)      | (F)       | (G)      |
|          |          |                                  |                       | \$            | \$       | \$        | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |                       |               |          |           |          |
| 2        | 901      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 3        | 902      | METER READING                    | 6                     | 165,331       | 165,331  | 0         | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6                     | 692,556       | 692,556  | 0         | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21                    | 0             | 0        | 0         | 0        |
| 6        | 905      | MISC.                            | 6                     | 0             | 0        | 0         | 0        |
| 7        | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 9        | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |                       | 857,887       | 857,887  | 0         | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |                       |               |          |           |          |
| 13       | 907      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6                     | 12,982        | 12,982   | 0         | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6                     | 0             | 0        | 0         | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6                     | 0             | 0        | 0         | 0        |
| 17       | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 19       | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |                       | 12,982        | 12,982   | 0         | 0        |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 40 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                  | TOTAL  |           |           |           |           |
|------|--------|---------------------------------|--------|-----------|-----------|-----------|-----------|
| NO.  | NO.    | ACCOUNT TITLE                   | FACTOR | COMPANY   | CUSTOMER  | COMMODITY | DEMAND    |
|      | (A)    | (B)                             | (C)    | (D)       | (E)       | (F)       | (G)       |
|      |        |                                 |        | \$        | \$        | \$        | \$        |
| 1    |        | SALES                           |        |           |           |           |           |
| 2    | 911    | SUPERVISION                     | 6      | 0         | 0         | 0         | 0         |
| 3    | 912    | DEMONSTRATION & SELLING         | 6      | 0         | 0         | 0         | 0         |
| 4    | 913    | ADVERTISING                     | 6      | 0         | 0         | 0         | 0         |
| 5    | 916    | MISC.                           | 6      | 0         | 0         | 0         | 0         |
| 6    |        | TOTAL SALES                     |        | 0         | 0         | 0         | 0         |
| 7    |        | TOTAL DISTRIBUTION EXPENSES     |        | 7,756,106 | 6,790,516 | 75,137    | 890,453   |
| 8    |        | ADMINISTRATIVE & GENERAL        |        |           |           |           |           |
| 9    | 920    | SALARIES                        | 12CD   | 1,597,984 | 1,399,044 | 15,480    | 183,459   |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES      | 12CD   | 0         | 0         | 0         | 0         |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED      | 12CD   | 0         | 0         | 0         | 0         |
| 12   | 923    | OUTSIDE SERVICES                | 12CD   | 4,636     | 4,059     | 45        | 532       |
| 13   | 924    | PROPERTY INSURANCE              | 12CD   | 0         | 0         | 0         | 0         |
| 14   | 925    | INJURIES AND DAMAGES            | 12CD   | 0         | 0         | 0         | 0         |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS    | 12CD   | 0         | 0         | 0         | 0         |
| 16   | 928    | REG COMMISSION EXP - GENERAL    | 12CD   | 0         | 0         | 0         | 0         |
| 17   | 930.10 | MISC. - INSTITUT & GOODWILL ADV | 12CD   | 0         | 0         | 0         | 0         |
| 18   | 930.20 | MISC. - GENERAL                 | 12CD   | 0         | 0         | 0         | 0         |
| 19   | 931    | RENTS                           | 12CD   | 0         | 0         | 0         | 0         |
| 20   | 935.13 | MAINT. STRUCTURES & IMPROV.     | 12CD   | 0         | 0         | 0         | 0         |
| 21   | 935.23 | MAINT. - GEN'L OFFICE           |        |           |           |           |           |
| 22   |        | FURNITURE & EQUIPMENT           | 12CD   | 0         | 0         | 0         | 0         |
| 23   | 932    | MAINT.-MISCELLANEOUS            | 12CD   | 0         | 0         | 0         | 0         |
| 24   |        | TOTAL ADMIN & GENERAL - LABOR   |        | 1,602,620 | 1,403,103 | 15,525    | 183,991   |
| 25   |        | TOTAL O & M EXPENSE - LABOR     |        | 9,358,726 | 8,193,619 | 90,662    | 1,074,444 |

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | CLASSIFICATION FACTOR | TOTAL          |                |               |               |
|----------|----------|----------------------------|-----------------------|----------------|----------------|---------------|---------------|
|          | (A)      | (B)                        | (C)                   | COMPANY (D)    | CUSTOMER (E)   | COMMODITY (F) | DEMAND (G)    |
|          |          |                            |                       | \$             | \$             | \$            | \$            |
| 1        |          | DISTRIBUTION EXPENSES      |                       |                |                |               |               |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11CD                  | 783,470        | 611,322        | 1,506         | 170,642       |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4                     | 17,885         | 0              | 17,885        | 0             |
| 4        | 874      | MAINS & SERVICES           | 14CD                  | 4,797,660      | 3,726,836      | 0             | 1,070,824     |
| 5        | 875      | M & R - GENERAL            | 18CD                  | 118,379        | 76,739         | 0             | 41,640        |
| 6        | 876      | M & R - INDUSTRIAL         | 8                     | 29,602         | 29,602         | 0             | 0             |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16                    | 485,057        | 485,057        | 0             | 0             |
| 8        | 879      | CUSTOMER INSTALLATION      | 16                    | 655,941        | 655,941        | 0             | 0             |
| 9        | 880      | OTHER                      | 11CD                  | 1,211,487      | 945,293        | 2,329         | 263,865       |
| 10       | 881      | RENTS                      | 11CD                  | <u>82,157</u>  | <u>64,105</u>  | <u>158</u>    | <u>17,894</u> |
| 11       |          | TOTAL OPERATION            |                       | 8,181,638      | 6,594,895      | 21,878        | 1,564,865     |
| 12       |          | MAINTENANCE                |                       |                |                |               |               |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11CD                  | 2,571          | 2,006          | 5             | 560           |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18CD                  | 251,838        | 163,254        | 0             | 88,584        |
| 15       | 887      | MAINS                      | 18CD                  | 2,202,076      | 1,427,496      | 0             | 774,580       |
| 16       | 889      | M & R - GENERAL            | 18CD                  | 144,736        | 93,825         | 0             | 50,911        |
| 17       | 890      | M & R - INDUSTRIAL         | 8                     | 51,880         | 51,880         | 0             | 0             |
| 18       | 892      | SERVICES                   | 15                    | 431,251        | 431,251        | 0             | 0             |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16                    | 118,176        | 118,176        | 0             | 0             |
| 20       | 894      | OTHER EQUIPMENT            | 11CD                  | <u>199,573</u> | <u>155,722</u> | <u>384</u>    | <u>43,467</u> |
| 21       |          | TOTAL MAINTENANCE          |                       | 3,402,101      | 2,443,610      | 389           | 958,102       |

| LINE | ACCT | CLASSIFICATION                   | TOTAL  |           |           |           |          |
|------|------|----------------------------------|--------|-----------|-----------|-----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | COMPANY   | CUSTOMER  | COMMODITY | DEMAND   |
|      | (A)  | (B)                              | (C)    | (D)       | (E)       | (F)       | (G)      |
|      |      |                                  |        | \$        | \$        | \$        | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |           |           |          |
| 2    | 901  | SUPERVISION                      | 6      | 0         | 0         | 0         | 0        |
| 3    | 902  | METER READING                    | 6      | 399,502   | 399,502   | 0         | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   | 6      | 3,252,912 | 3,252,912 | 0         | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           | 21     | 1,027,585 | 1,027,585 | 0         | 0        |
| 6    | 905  | MISC.                            | 6      | 1,073     | 1,073     | 0         | 0        |
| 7    | 920  | SALARIES                         | 6      | 0         | 0         | 0         | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 253       | 253       | 0         | 0        |
| 9    | 931  | RENTS                            | 6      | 0         | 0         | 0         | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>  | <u>0</u>  | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,681,325 | 0         | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |           |           |          |
| 13   | 907  | SUPERVISION                      | 6      | (2,789)   | (2,789)   | 0         | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              | 6      | 1,198,971 | 1,198,971 | 0         | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            | 6      | 65,932    | 65,932    | 0         | 0        |
| 16   | 910  | MISCELLANEOUS                    | 6      | 257,797   | 257,797   | 0         | 0        |
| 17   | 920  | SALARIES                         | 6      | 0         | 0         | 0         | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 13,868    | 13,868    | 0         | 0        |
| 19   | 931  | RENTS                            | 6      | 0         | 0         | 0         | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>  | <u>0</u>  | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,533,779 | 0         | 0        |

| LINE | ACCT   | CLASSIFICATION                                 | TOTAL  |                   |                   |               |                  |
|------|--------|--|--------|-------------------|-------------------|---------------|------------------|
| NO.  | NO.    | ACCOUNT TITLE                                  | FACTOR | COMPANY           | CUSTOMER          | COMMODITY     | DEMAND           |
|      | (A)    | (B)  | (C)    | (D)               | (E)               | (F)           | (G)              |
|      |        |  |        | \$                | \$                | \$            | \$               |
| 1    |        | SALES  |        |                   |                   |               |                  |
| 2    | 911    | SUPERVISION                                    | 6      | 0                 | 0                 | 0             | 0                |
| 3    | 912    | DEMONSTRATION & SELLING                        | 6      | 37,477            | 37,477            | 0             | 0                |
| 4    | 913    | ADVERTISING                                    | 6      | 138,706           | 138,706           | 0             | 0                |
| 5    | 916    | MISC.  | 6      | 0                 | 0                 | 0             | 0                |
| 6    |        | TOTAL SALES                                    |        | <u>176,183</u>    | <u>176,183</u>    | <u>0</u>      | <u>0</u>         |
| 7    |        | TOTAL DISTRIBUTION EXPENSES                    |        | 17,975,026        | 15,429,792        | 22,267        | 2,522,967        |
| 8    |        | ADMINISTRATIVE & GENERAL                       |        |                   |                   |               |                  |
| 9    | 920    | SALARIES                                       | 13CD   | 2,963,302         | 2,468,206         | 3,816         | 491,280          |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES                     | 13CD   | 894,098           | 744,716           | 1,151         | 148,231          |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED                     | 13CD   | 0                 | 0                 | 0             | 0                |
| 12   | 923    | OUTSIDE SERVICES                               | 13CD   | 7,869,789         | 6,554,938         | 10,134        | 1,304,717        |
| 13   | 924    | PROPERTY INSURANCE                             | 13CD   | 81,748            | 68,090            | 105           | 13,553           |
| 14   | 925    | INJURIES AND DAMAGES                           | 13CD   | 1,043,923         | 869,509           | 1,344         | 173,070          |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS                   | 13CD   | 3,351,467         | 2,791,518         | 4,316         | 555,633          |
| 16   | 926    | DIRECT EMPLOYEE PENSIONS & BENEFITS            | 13CD   | 0                 | 0                 | 0             | 0                |
| 17   | 928    | REG COMMISSION EXP - GENERAL                   | 13CD   | 197,760           | 164,719           | 255           | 32,786           |
| 18   | 928    | REGULATORY COMMISSION EXP - PSC @ 0.001901     | 13CD   | 176,189           | 146,752           | 227           | 29,210           |
| 19   | 930.10 | MISC. - INSTITUT & GOODWILL ADV                | 13CD   | 0                 | 0                 | 0             | 0                |
| 20   | 930.20 | MISC. - GENERAL                                | 13CD   | (62,123)          | (51,744)          | (80)          | (10,299)         |
| 21   | 931    | RENTS  | 13CD   | 642,175           | 534,883           | 827           | 106,465          |
| 22   | 935.13 | MAINT. STRUCTURES & IMPROV.                    | 13CD   | 130               | 108               | 0             | 22               |
| 23   | 935.23 | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT | 13CD   | 0                 | 0                 | 0             | 0                |
| 24   | 932    | MAINT.-MISCELLANEOUS                           | 13CD   | <u>259,121</u>    | <u>215,828</u>    | <u>334</u>    | <u>42,959</u>    |
| 25   |        | TOTAL ADMIN & GENERAL - M & E                  |        | <u>17,417,579</u> | <u>14,507,523</u> | <u>22,429</u> | <u>2,887,627</u> |
| 26   |        | TOTAL O & M EXPENSE - M & E                    |        | 35,736,301        | 29,937,315        | 386,253       | 5,412,733        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY      | DEMAND           |
|----------|----------|------------------------------|-----------------------|-------------------|-------------------|----------------|------------------|
|          | (A)      | (B)                          | (C)                   | (D)               | (E)               | (F)            | (G)              |
|          |          |                              |                       | \$                | \$                | \$             | \$               |
| 1        |          | LABOR                        |                       |                   |                   |                |                  |
| 2        |          | PRODUCTION                   | PAGE 13               | 0                 | 0                 | 0              | 0                |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14               | 5,340,024         | 4,768,540         | 73,688         | 497,796          |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14               | 1,545,213         | 1,151,107         | 1,449          | 392,657          |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15               | 857,887           | 857,887           | 0              | 0                |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15               | 12,982            | 12,982            | 0              | 0                |
| 7        |          | SALES                        | PAGE 16               | 0                 | 0                 | 0              | 0                |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16               | <u>1,602,620</u>  | <u>1,403,103</u>  | <u>15,525</u>  | <u>183,991</u>   |
| 9        |          | TOTAL LABOR EXPENSE          |                       | 9,358,726         | 8,193,619         | 90,662         | 1,074,444        |
| 10       |          | M & E                        |                       |                   |                   |                |                  |
| 11       |          | PRODUCTION                   | PAGE 13               | 343,696           | 0                 | 341,557        | 2,139            |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17               | 8,181,638         | 6,594,895         | 21,878         | 1,564,865        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17               | 3,402,101         | 2,443,610         | 389            | 958,102          |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18               | 4,681,325         | 4,681,325         | 0              | 0                |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18               | 1,533,779         | 1,533,779         | 0              | 0                |
| 16       |          | SALES                        | PAGE 19               | 176,183           | 176,183           | 0              | 0                |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19               | <u>17,417,579</u> | <u>14,507,523</u> | <u>22,429</u>  | <u>2,887,627</u> |
| 18       |          | TOTAL M & E EXPENSE          |                       | <u>35,736,301</u> | <u>29,937,315</u> | <u>386,253</u> | <u>5,412,733</u> |
| 19       |          | TOTAL O & M EXPENSES         |                       | 45,095,028        | 38,130,934        | 476,915        | 6,487,177        |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 45 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)       | CLASSIFICATION FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | CUSTOMER<br>(E)<br>\$ | COMMODITY<br>(F)<br>\$ | DEMAND<br>(G)<br>\$ |
|----------|-----------------|----------------------------|------------------------------|----------------------------|-----------------------|------------------------|---------------------|
| 1        | 408             | TAXES BASED ON PROPERTY    | 7CD                          | 4,136,779                  | 3,290,589             | 0                      | 846,190             |
| 2        | 408             | TAXES BASED ON PAYROLL     | 12CD                         | 654,102                    | 572,670               | 6,337                  | 75,095              |
| 3        | 408             | OTHER TAXES                | 12CD                         | 0                          | 0                     | 0                      | 0                   |
| 4        |                 | TOTAL TAXES OTHER THAN FIT |                              | 4,790,881                  | 3,863,259             | 6,337                  | 921,285             |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 46 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY    | DEMAND           |
|----------|----------|---|-----------------------|-------------------|-------------------|--------------|------------------|
|          | (A)      | (B)   | (C)                   | (D)               | (E)               | (F)          | (G)              |
|          |          |   |                       | \$                | \$                | \$           | \$               |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |                       | 5,380,521         | 182,107           | (93,711)     | 5,292,128        |
| 2        |          | LESS: RECONCILING ITEMS:                        |                       |                   |                   |              |                  |
| 3        |          | IMPUTED INTEREST                                |                       | 6,688,725         | 4,291,096         | 1,590        | 2,396,039        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19CD                  | 14,595,754        | 11,610,150        | 0            | 2,985,604        |
| 5        |          | BOOK DEPRECIATION                               |                       | <u>14,665,691</u> | <u>12,539,955</u> | <u>0</u>     | <u>2,125,736</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |                       | (69,937)          | (929,805)         | 0            | 859,868          |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12CD                  | <u>(4,960)</u>    | <u>(4,343)</u>    | <u>(48)</u>  | <u>(569)</u>     |
| 8        |          | TOTAL RECONCILING ITEMS                         |                       | <u>6,613,828</u>  | <u>3,356,948</u>  | <u>1,542</u> | <u>3,255,338</u> |
| 9        |          | TAXABLE INCOME                                  |                       | (1,233,307)       | (3,174,841)       | (95,253)     | 2,036,790        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |                       | (73,998)          | (190,489)         | (5,715)      | 122,207          |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19CD                  | <u>0</u>          | <u>0</u>          | <u>0</u>     | <u>0</u>         |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |                       | (73,998)          | (190,489)         | (5,715)      | 122,207          |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 47 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND  |
|----------|----------|---|-----------------------|---------------|-----------|-----------|---------|
|          | (A)      | (B)                                     | (C)                   | (D)           | (E)       | (F)       | (G)     |
|          |          |   |                       | \$            | \$        | \$        | \$      |
| 1        |          | DEFERRED TAXES                          |                       |               |           |           |         |
| 2        |          | RECONCILIATION ITEMS:                   |                       |               |           |           |         |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19CD                  | (17,008)      | (13,529)  | 0         | (3,479) |
| 4        |          | TOTAL DEFERRED INCOME TAX               |                       | (17,008)      | (13,529)  | 0         | (3,479) |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |                       | (91,006)      | (204,018) | (5,715)   | 118,728 |

CLASSIFICATION  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 48 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY         | DEMAND           |
|----------|----------|--------------------------------------|-----------------------|-------------------|-------------------|-------------------|------------------|
|          | (A)      | (B)                                  | (C)                   | (D)               | (E)               | (F)               | (G)              |
|          |          |                                      |                       | \$                | \$                | \$                | \$               |
| 1        |          | OPERATING REVENUE                    |                       | 92,682,167        | 55,729,730        | 21,865,491        | 15,086,946       |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |                       | <u>87,301,645</u> | <u>55,547,623</u> | <u>21,959,202</u> | <u>9,794,818</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |                       | 5,380,521         | 182,107           | (93,711)          | 5,292,128        |
| 4        |          | LESS: RECONCILING ITEMS:             |                       |                   |                   |                   |                  |
| 5        |          | IMPUTED INTEREST                     |                       | 6,688,725         | 4,291,096         | 1,590             | 2,396,039        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19CD                  | 14,595,754        | 11,610,150        | 0                 | 2,985,604        |
| 7        |          | BOOK DEPRECIATION                    |                       | <u>14,665,691</u> | <u>12,539,955</u> | <u>0</u>          | <u>2,125,736</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |                       | (69,937)          | (929,805)         | 0                 | 859,868          |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12CD                  | (4,960)           | <u>(4,343)</u>    | <u>(48)</u>       | <u>(569)</u>     |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |                       | <u>(73,998)</u>   | <u>(190,489)</u>  | <u>(5,715)</u>    | <u>122,207</u>   |
| 11       |          | TOTAL RECONCILING ITEMS              |                       | 6,539,830         | 3,166,459         | (4,173)           | 3,377,545        |
| 12       |          | TAXABLE INCOME                       |                       | (1,159,309)       | (2,984,352)       | (89,538)          | 1,914,583        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (1,014,680)       | (30,443)          | 650,958          |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19CD                  | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>         |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (1,014,680)       | (30,443)          | 650,958          |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 49 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL COMPANY   | CUSTOMER        | COMMODITY | DEMAND          |
|----------|----------|-------------------------------------|-----------------------|-----------------|-----------------|-----------|-----------------|
|          | (A)      | (B)                                 | (C)                   | (D)             | (E)             | (F)       | (G)             |
|          |          |                                     |                       | \$              | \$              | \$        | \$              |
| 1        |          | DEFERRED INCOME TAXES               |                       |                 |                 |           |                 |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19CD                  | 35,760          | 28,445          | 0         | 7,315           |
| 3        |          | OTHER TAX DEFERRALS                 |                       |                 |                 |           |                 |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19CD                  | <u>(54,526)</u> | <u>(43,373)</u> | <u>0</u>  | <u>(11,153)</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |                       | <u>(54,526)</u> | <u>(43,373)</u> | <u>0</u>  | <u>(11,153)</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |                       | <u>(90,286)</u> | <u>(71,818)</u> | <u>0</u>  | <u>(18,468)</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |                       | (484,451)       | (1,086,498)     | (30,443)  | 632,490         |

CLASSIFICATION  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 50 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | CLASSIFICATION FACTOR | TOTAL COMPANY      | CUSTOMER           | COMMODITY | DEMAND            |
|----------|-----------|-----------------------------------|-----------------------|--------------------|--------------------|-----------|-------------------|
|          | (A)       | (B)                               | (C)                   | (D)                | (E)                | (F)       | (G)               |
|          |           |                                   |                       | \$                 | \$                 | \$        | \$                |
| 1        | 101 & 106 | GROSS PLANT [1]                   |                       | 437,889,787        | 348,318,168        | 0         | 89,571,619        |
|          |           | LESS:                             |                       |                    |                    |           |                   |
| 2        | 108-111   | DEPRECIATION RESERVE [2]          |                       | <u>151,708,251</u> | <u>126,741,742</u> | <u>0</u>  | <u>24,966,509</u> |
| 3        |           | NET PLANT                         |                       | 286,181,536        | 221,576,426        | 0         | 64,605,110        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX        | 19CD                  | \$5,385,973        | 4,284,256          | 0         | 1,101,716         |
|          |           | LESS:                             |                       |                    |                    |           |                   |
| 5        | 252.00    | CUSTOMER ADVANCES                 | 3                     | 0                  | 0                  | 0         | 0                 |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT | 19CD                  | 0                  | 0                  | 0         | 0                 |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX        | 19CD                  | 86,167,687         | 68,541,837         | 0         | 17,625,850        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX        | 19CD                  | <u>0</u>           | <u>0</u>           | <u>0</u>  | <u>0</u>          |
| 9        |           | NET RATE BASE                     |                       | 205,399,822        | 157,318,845        | 0         | 48,080,976        |
| 10       |           | PLUS WORKING CAPITAL:             |                       |                    |                    |           |                   |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF     |                       |                    |                    |           |                   |
| 12       |           | O & M EXCLUDING GAS COST [3]      |                       | 5,636,878          | 4,766,367          | 59,614    | 810,897           |
| 13       | 151.00    | FUEL STOCK                        | 2                     | 0                  | 0                  | 0         | 0                 |
| 14       | 154.00    | MATERIALS & SUPPLIES              | 7CD                   | 82,011             | 65,235             | 0         | 16,776            |
| 15       | 165.00    | PREPAYMENTS                       | 13CD                  | 469,518            | 391,073            | 605       | 77,840            |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS      | 2                     | <u>41,772,551</u>  | <u>0</u>           | <u>0</u>  | <u>41,772,551</u> |
| 17       |           | RATE BASE                         |                       | 253,360,780        | 162,541,520        | 60,219    | 90,759,040        |

REFERENCES: [1] PAGE 31, [2] PAGE 33,  
 [3] TOTAL O & M EXPENSE  
 LESS: COST OF GAS  
 O & M EXCL. GAS COST

|                   |            |                   |           |
|-------------------|------------|-------------------|-----------|
| 66,570,978        | 38,130,934 | 21,952,865        | 6,487,177 |
| <u>21,475,950</u> | <u>0</u>   | <u>21,475,950</u> | <u>0</u>  |
| 45,095,028        | 38,130,934 | 476,915           | 6,487,177 |

| LINE<br>NO. | DESCRIPTION<br>(A)                               | CLASSIFICATION<br>FACTOR<br>(B) | TOTAL          |                 |                  |               |
|-------------|--|---------------------------------|----------------|-----------------|------------------|---------------|
|             |  |                                 | COMPANY<br>(C) | CUSTOMER<br>(D) | COMMODITY<br>(E) | DEMAND<br>(F) |
| 1           | DEMAND DESIGN DAY                                | 1                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 2           | DESIGN DAY EXCL. INTERR DEMAND (MCF)             | 2                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 3           | MINIMUM SYSTEM MAINS                             | 3                               | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 4           | COMMODITY THROUGHPUT                             | 4                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 5           | COMPOSITE OF 1 & 4 - DEMAND/COMMODITY            | 5                               | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 6           | CUSTOMER   | 6                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 7           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - C/D  | 7CD                             | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 8           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - D/C  | 7DC                             | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 9           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - AVG  | 7AVG                            | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 10          | TOTAL PLANT ACCOUNT 385                          | 8                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 11          | GAS PURCHASE EXPENSE EX OFF SYST                 | 9                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 12          | OTHER DIST. EXP - LABOR - C/D                    | 10CD                            | 100.000%       | 85.976%         | 1.091%           | 12.933%       |
| 13          | OTHER DIST. EXP - LABOR - D/C                    | 10DC                            | 100.000%       | 62.142%         | 19.475%          | 18.383%       |
| 14          | OTHER DIST. EXP - LABOR - AVG                    | 10AVG                           | 100.000%       | 74.059%         | 10.283%          | 15.658%       |
| 15          | OTHER DIST. EXP EXCL - M & E - C/D               | 11CD                            | 100.000%       | 78.028%         | 0.192%           | 21.780%       |
| 16          | OTHER DIST. EXP EXCL - M & E - D/C               | 11DC                            | 100.000%       | 37.888%         | 31.152%          | 30.960%       |
| 17          | OTHER DIST. EXP EXCL - M & E - AVG               | 11AVG                           | 100.000%       | 57.958%         | 15.672%          | 26.370%       |
| 18          | O & M EXCL A & G - LABOR - C/D                   | 12CD                            | 100.000%       | 87.551%         | 0.969%           | 11.481%       |
| 19          | O & M EXCL A & G - LABOR - D/C                   | 12DC                            | 100.000%       | 66.393%         | 17.288%          | 16.319%       |
| 20          | O & M EXCL A & G - LABOR - AVG                   | 12AVG                           | 100.000%       | 76.972%         | 9.128%           | 13.900%       |
| 21          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - C/D | 13CD                            | 100.000%       | 83.292%         | 0.129%           | 16.579%       |
| 22          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - D/C | 13DC                            | 100.000%       | 56.402%         | 20.869%          | 22.728%       |
| 23          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - AVG | 13AVG                           | 100.000%       | 69.847%         | 10.499%          | 19.654%       |
| 24          | ACCT 376/380 - MAINS/SERVICES - C/D              | 14CD                            | 100.000%       | 77.680%         | 0.000%           | 22.320%       |
| 25          | ACCT 376/380 - MAINS/SERVICES - D/C              | 14DC                            | 100.000%       | 36.547%         | 31.727%          | 31.727%       |
| 26          | ACCT 376/380 - MAINS/SERVICES - AVG              | 14AVG                           | 100.000%       | 57.113%         | 15.863%          | 27.023%       |
| 27          | DIRECT PLANT ACCT 380                            | 15                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 28          | DIRECT PLANT ACCTS 381                           | 16                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 29          | DIRECT PLANT ACCT 385                            | 17                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 30          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - C/D        | 18CD                            | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 31          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - D/C        | 18DC                            | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 32          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - AVG        | 18AVG                           | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 33          | TOTAL PLANT - C/D                                | 19CD                            | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 34          | TOTAL PLANT - D/C                                | 19DC                            | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 35          | TOTAL PLANT - AVG                                | 19AVG                           | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 36          | AVERAGE C/D & D/C                                | 20                              | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 37          | UNCOLLECTIBLES                                   | 21                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 38          | REVREQ   | 22                              | 100.000%       | 78.042%         | 0.512%           | 21.446%       |

CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-------------------|-------------------|------------------|---------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)               | (E)               | (F)              | (G)           | (H)           | (I)              | (J)          | (K)          |
|          |          |  |              | \$                | \$                | \$               | \$            | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 55,729,727        | 35,942,527        | 14,876,660       | 18,007        | 375,961       | 4,516,572        | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>19,670,231</u> | <u>12,712,450</u> | <u>5,311,517</u> | <u>6,357</u>  | <u>(3)</u>    | <u>1,639,910</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 75,399,958        | 48,654,977        | 20,188,177       | 24,364        | 375,958       | 6,156,482        | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                 | 0                 | 0                | 0             | 0             | 0                | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 38,349,944        | 30,729,039        | 6,259,549        | 4,033         | 59,839        | 1,297,484        | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 13,553,430        | 10,863,054        | 2,095,593        | 1,416         | 17,422        | 575,945          | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 5,312,954         | 605,341           | 3,409,753        | 5,601         | 85,344        | 1,206,915        | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 963,055           | 91,427            | 630,851          | 1,040         | 16,022        | 223,715          | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>3,863,257</u>  | <u>3,019,307</u>  | <u>643,499</u>   | <u>530</u>    | <u>8,361</u>  | <u>191,560</u>   | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 62,042,640        | 45,308,168        | 13,039,245       | 12,620        | 186,988       | 3,495,619        | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 13,357,318        | 3,346,809         | 7,148,932        | 11,744        | 188,970       | 2,660,863        | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>4,291,097</u>  | <u>3,306,614</u>  | <u>710,677</u>   | <u>663</u>    | <u>12,468</u> | <u>260,675</u>   | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 9,066,221         | 40,195            | 6,438,255        | 11,081        | 176,502       | 2,400,188        | 0            | 0            |
| 14       |          | RATE BASE                              |              | 162,541,520       | 125,250,548       | 26,919,574       | 25,105        | 472,267       | 9,874,049        | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.22%</b>      | <b>2.67%</b>      | <b>26.56%</b>    | <b>46.78%</b> | <b>40.01%</b> | <b>26.95%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00              | 0.32              | 3.16             | 5.56          | 4.76          | 3.20             | 0.00         | 0.00         |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS           | DS-ML           | DS/IS           | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|---------------|-----------------|-----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)           | (H)             | (I)             | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$            | \$              | \$              | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 75,917,052       | 60,549,711       | 12,103,071     | 8,421         | 128,932         | 3,126,916       | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0             | 0               | 0               | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 38,355,700       | 30,861,478       | 6,169,527      | 3,855         | 57,088          | 1,263,752       | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 13,553,430       | 10,863,054       | 2,095,593      | 1,416         | 17,422          | 575,945         | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 5,481,184        | 4,475,136        | 779,370        | 414           | 4,978           | 221,286         | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 993,735          | 797,165          | 151,146        | 94            | 1,365           | 43,965          | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>3,863,257</u> | <u>3,019,307</u> | <u>643,499</u> | <u>530</u>    | <u>8,361</u>    | <u>191,560</u>  | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 62,247,306       | 50,016,140       | 9,839,135      | 6,309         | 89,214          | 2,296,508       | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 13,669,746       | 10,533,572       | 2,263,936      | 2,112         | 39,718          | 830,408         | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>4,291,097</u> | <u>3,306,614</u> | <u>710,677</u> | <u>663</u>    | <u>12,468</u>   | <u>260,675</u>  | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 9,378,649        | 7,226,958        | 1,553,259      | 1,449         | 27,250          | 569,733         | 0            | 0            |
| 12       |          | RATE BASE                              |              | 162,541,520      | 125,250,548      | 26,919,574     | 25,105        | 472,267         | 9,874,049       | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b>  | <b>8.41%</b>    | <b>8.41%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00          | 1.00            | 1.00            | 0.00         | 0.00         |
| 15       |          | AVERAGE ANNUAL CUSTOMERS               |              | 135,979          | 121,915          | 13,977         | 2             | 6               | 79              | 0            | 0            |
| 16       |          | <b>MONTHLY CUSTOMER BASED COST [1]</b> |              | <b>46.52</b>     | <b>41.39</b>     | <b>72.16</b>   | <b>350.87</b> | <b>1,790.72</b> | <b>3,298.43</b> | <b>0.00</b>  | <b>0.00</b>  |

[1] LINE 1 / LINE 15 / 12 MONTHS.

CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF PROFORMA ADJUSTMENTS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 54 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION (A)                          | ALLOC FACTOR (B) | Total CUSTOMER (C) | GS-RESIDENTIAL (D) | GS-OTHER (E)     | IUS (F)        | DS-ML (G)       | DS/IS (H)        | NOT USED (I) | NOT USED (J) |
|----------|--|------------------|--------------------|--------------------|------------------|----------------|-----------------|------------------|--------------|--------------|
| 1        | OPERATING REVENUE                        |                  | 20,187,322         | 24,607,184         | (2,773,589)      | (9,586)        | (247,029)       | (1,389,656)      | 0            | 0            |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                  | 0                  | 0                  | 0                | 0              | 0               | 0                | 0            | 0            |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                  | 186,395            | 227,205            | (25,609)         | (89)           | (2,281)         | (12,831)         | 0            | 0            |
| 4        | LESS: PSC FEES @ 0.00190100              |                  | <u>38,375</u>      | <u>46,778</u>      | <u>(5,273)</u>   | <u>(18)</u>    | <u>(470)</u>    | <u>(2,642)</u>   | <u>0</u>     | <u>0</u>     |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                  | 19,962,552         | 24,333,201         | (2,742,707)      | (9,479)        | (244,278)       | (1,374,183)      | 0            | 0            |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                  | <u>1,197,753</u>   | <u>1,459,992</u>   | <u>(164,562)</u> | <u>(569)</u>   | <u>(14,657)</u> | <u>(82,451)</u>  | <u>0</u>     | <u>0</u>     |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                  | 18,764,799         | 22,873,209         | (2,578,145)      | (8,910)        | (229,621)       | (1,291,732)      | 0            | 0            |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                  | <u>6,567,680</u>   | <u>8,005,623</u>   | <u>(902,351)</u> | <u>(3,119)</u> | <u>(80,367)</u> | <u>(452,106)</u> | <u>0</u>     | <u>0</u>     |
| 9        | OPERATING INCOME                         |                  | 12,197,119         | 14,867,586         | (1,675,794)      | (5,791)        | (149,254)       | (839,626)        | 0            | 0            |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS           | DS-ML         | DS/IS          | NOT USED (J) | NOT USED (K) |
|----------|----------|-------------------------------------|--------------|------------------|------------------|----------------|---------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)            | (G)           | (H)           | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$             | \$            | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 55,729,730       | 35,942,527       | 14,876,660     | 18,007        | 375,961       | 4,516,572      | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 0                | 0                | 0              | 0             | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 38,130,934       | 30,587,495       | 6,200,409      | 3,962         | 59,839        | 1,279,225      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 13,553,430       | 10,863,054       | 2,095,593      | 1,416         | 17,422        | 575,945        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (1,086,498)      | (3,530,487)      | 1,681,721      | 3,533         | 85,345        | 673,392        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (204,018)        | (662,827)        | 315,708        | 663           | 16,022        | 126,416        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>3,863,259</u> | <u>3,019,307</u> | <u>643,499</u> | <u>530</u>    | <u>8,361</u>  | <u>191,560</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 54,257,107       | 40,276,542       | 10,936,930     | 10,104        | 186,989       | 2,846,538      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 1,472,623        | (4,334,015)      | 3,939,730      | 7,903         | 188,972       | 1,670,034      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>4,291,096</u> | <u>3,306,614</u> | <u>710,677</u> | <u>663</u>    | <u>12,468</u> | <u>260,675</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | (2,818,473)      | (7,640,629)      | 3,229,053      | 7,240         | 176,504       | 1,409,359      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 162,541,520      | 125,250,548      | 26,919,574     | 25,105        | 472,267       | 9,874,049      | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>0.91%</b>     | <b>-3.46%</b>    | <b>14.64%</b>  | <b>31.48%</b> | <b>40.01%</b> | <b>16.91%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | (3.80)           | 16.09          | 34.59         | 43.97         | 18.58          | 0.00         | 0.00         |

REFERENCES: [1] PAGE 62, [2] PAGE 70, [3] PAGE 61, [4] PAGE 75, [5] PAGE 73, [6] PAGE 71, [7] PAGE 74, [8] PAGE 76.

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 56 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER         | IUS        | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)              | (G)        | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$         | \$            | \$             | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                  |            |               |                |          |          |
| 2        | 301.00   | ORGANIZATION                              | 7CUST        | 414              | 325              | 66               | 0          | 1             | 22             | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7CUST        | 59,140           | 46,393           | 9,487            | 8          | 130           | 3,122          | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              | 7CUST        | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             | 7CUST        | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            | 7CUST        | <u>6,635,078</u> | <u>5,204,953</u> | <u>1,064,333</u> | <u>929</u> | <u>14,597</u> | <u>350,266</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 6,694,632        | 5,251,671        | 1,073,886        | 937        | 14,728        | 353,410        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                  |            |               |                |          |          |
| 9        | 304.10   | LAND                                      | 2            | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2            | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2            | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>   | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                  |            |               |                |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 3            | 134              | 99               | 22               | 0          | 0             | 13             | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 3            | 569,005          | 419,886          | 95,257           | 137        | 0             | 53,725         | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 3            | 428,692          | 316,345          | 71,767           | 103        | 0             | 40,477         | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             | 3            | 1,769,611        | 1,305,849        | 296,251          | 425        | 0             | 167,087        | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 3            | 1,378            | 1,017            | 231              | 0          | 0             | 130            | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 3            | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 3            | 1,411,037        | 1,041,247        | 236,222          | 339        | 0             | 133,230        | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 29,956           | 0                | 0                | 0          | 29,956        | 0              | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8            | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CUST        | 6,969,243        | 5,467,092        | 1,117,936        | 976        | 15,332        | 367,906        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CUST        | 206,664          | 162,120          | 33,151           | 29         | 455           | 10,910         | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 3            | 0                | 0                | 0                | 0          | 0             | 0              | 0        | 0        |
| 26       | 376.00   | MAINS                                     | 3            | 143,458,279      | 105,862,168      | 24,016,350       | 34,430     | 0             | 13,545,331     | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 7,573            | 0                | 0                | 0          | 7,573         | 0              | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             | 3            | 336,120          | 248,033          | 56,270           | 81         | 0             | 31,736         | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 3            | 5,947,752        | 4,389,025        | 995,713          | 1,427      | 0             | 561,587        | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 3            | 29,458           | 21,738           | 4,932            | 7          | 0             | 2,781          | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          | 3            | 165,240          | 121,936          | 27,663           | 40         | 0             | 15,602         | 0        | 0        |
| 32       | 380.00   | SERVICES                                  | 15           | 127,467,343      | 112,461,887      | 14,554,221       | 1,275      | 0             | 449,960        | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT   |                                       | ALLOC  | TOTAL            |                  |                |            |               |                |          |          |          |
|------|--------|---------------------------------------|--------|------------------|------------------|----------------|------------|---------------|----------------|----------|----------|----------|
| NO.  | NO.    | ACCOUNT TITLE                         | FACTOR | CUSTOMER         | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML         | DS/IS          | NOT USED | NOT USED |          |
|      | (A)    | (B)                                   | (C)    | (D)              | (E)              | (F)            | (G)        | (H)           | (I)            | (J)      | (K)      |          |
|      |        |                                       |        | \$               | \$               | \$             | \$         | \$            | \$             | \$       | \$       | \$       |
| 1    | 380.00 | DIRECT SERVICES                       |        | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 2    | 381.00 | METERS                                | 16     | 22,789,579       | 16,395,279       | 6,292,659      | 2,963      | 0             | 98,679         | 0        | 0        | 0        |
| 3    | 382.00 | METER INSTALLATIONS                   | 16     | 9,462,175        | 6,807,278        | 2,612,696      | 1,230      | 0             | 40,971         | 0        | 0        | 0        |
| 4    | 383.00 | HOUSE REGULATORS                      | 16     | 5,770,311        | 4,151,277        | 1,593,298      | 750        | 0             | 24,985         | 0        | 0        | 0        |
| 5    | 384.00 | HOUSE REG INSTALLATIONS               | 16     | 2,257,522        | 1,624,106        | 623,347        | 293        | 0             | 9,775          | 0        | 0        | 0        |
| 6    | 385.00 | IND M&R EQUIPMENT                     | 17     | 2,697,547        | 0                | 700,742        | 782        | 0             | 1,996,050      | 0        | 0        | 0        |
| 7    | 385.00 | DIRECT IND M&R EQUIPMENT              |        | 677,829          | 0                | 0              | 0          | 677,829       | 0              | 0        | 0        | 0        |
| 8    | 387.20 | ODORIZATION                           | 7CUST  | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 9    | 387.41 | TELEPHONE                             | 7CUST  | 585,267          | 459,119          | 93,883         | 82         | 1,288         | 30,896         | 0        | 0        | 0        |
| 10   | 387.42 | RADIO                                 | 7CUST  | 632,529          | 496,194          | 101,464        | 89         | 1,392         | 33,391         | 0        | 0        | 0        |
| 11   | 387.44 | OTHER COMMUNICATION                   | 7CUST  | 106,264          | 83,360           | 17,046         | 15         | 234           | 5,610          | 0        | 0        | 0        |
| 12   | 387.45 | TELEMETERING                          | 7CUST  | 3,006,460        | 2,358,448        | 482,266        | 421        | 6,614         | 158,711        | 0        | 0        | 0        |
| 13   | 387.46 | CIS                                   | 7CUST  | <u>90,398</u>    | <u>70,914</u>    | <u>14,501</u>  | <u>13</u>  | <u>199</u>    | <u>4,772</u>   | <u>0</u> | <u>0</u> | <u>0</u> |
| 14   |        | TOTAL DISTRIBUTION PLANT              |        | 336,873,366      | 264,264,417      | 54,037,888     | 45,907     | 740,872       | 17,784,315     | 0        | 0        | 0        |
| 15   |        | GENERAL PLANT                         |        |                  |                  |                |            |               |                |          |          |          |
| 16   | 391.10 | OFF FURN & EQUIP - UNSPEC             | 7CUST  | 584,875          | 458,811          | 93,820         | 82         | 1,287         | 30,876         | 0        | 0        | 0        |
| 17   | 391.11 | OFF FURN & EQUIP - DATA HAND          | 7CUST  | 14,967           | 11,741           | 2,401          | 2          | 33            | 790            | 0        | 0        | 0        |
| 18   | 391.12 | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST  | 1,000,387        | 784,764          | 160,472        | 140        | 2,201         | 52,810         | 0        | 0        | 0        |
| 19   | 392.20 | TR EQ - TRAILER > \$1,000             | 7CUST  | 76,186           | 59,765           | 12,221         | 11         | 168           | 4,022          | 0        | 0        | 0        |
| 20   | 392.21 | TR EQ - TRAILER < \$1,000             | 7CUST  | 19,458           | 15,264           | 3,121          | 3          | 43            | 1,027          | 0        | 0        | 0        |
| 21   | 394.10 | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST  | 19,282           | 15,126           | 3,093          | 3          | 42            | 1,018          | 0        | 0        | 0        |
| 22   | 394.13 | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST  | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 23   | 393.00 | STORES EQUIPMENT                      | 7CUST  | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 24   | 394.20 | SHOP EQUIPMENT                        | 7CUST  | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 25   | 394.30 | TOOLS & OTHER EQUIPMENT               | 7CUST  | 2,592,386        | 2,033,623        | 415,845        | 363        | 5,703         | 136,852        | 0        | 0        | 0        |
| 26   | 395.00 | LABORATORY EQUIPMENT                  | 7CUST  | 7,364            | 5,777            | 1,181          | 1          | 16            | 389            | 0        | 0        | 0        |
| 27   | 396.00 | POWER OP EQUIP-GEN TOOLS              | 7CUST  | 201,356          | 157,956          | 32,300         | 28         | 443           | 10,630         | 0        | 0        | 0        |
| 28   | 397.50 | COMMUNICATION EQUIP - TELEMETERING    | 7CUST  | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        | 0        |
| 29   | 398.00 | MISCELLANEOUS EQUIPMENT               | 7CUST  | <u>233,909</u>   | <u>183,492</u>   | <u>37,521</u>  | <u>33</u>  | <u>515</u>    | <u>12,348</u>  | <u>0</u> | <u>0</u> | <u>0</u> |
| 30   |        | TOTAL GENERAL PLANT                   |        | <u>4,750,170</u> | <u>3,726,319</u> | <u>761,975</u> | <u>666</u> | <u>10,451</u> | <u>250,762</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 31   |        | TOTAL PLANT IN SERVICE (101 - 106)    |        | 348,318,168      | 273,242,407      | 55,873,749     | 47,510     | 766,051       | 18,388,487     | 0        | 0        | 0        |



CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|--------------|---------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)           | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$           | \$            | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 6,025,045        | 4,334,538        | 1,663,635      | 783        | 0            | 26,088        | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 4,714,156        | 3,391,458        | 1,301,673      | 613        | 0            | 20,412        | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 1,568,587        | 1,128,473        | 433,118        | 204        | 0            | 6,792         | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 1,780,729        | 1,281,092        | 491,695        | 231        | 0            | 7,711         | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 823,118          | 0                | 213,821        | 239        | 0            | 609,066       | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766          | 0                | 0              | 0          | 133,766      | 0             | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | (47,657)         | (37,385)         | (7,645)        | (7)        | (105)        | (2,516)       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 318,032          | 249,483          | 51,016         | 45         | 700          | 16,789        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 451,348          | 354,064          | 72,401         | 63         | 993          | 23,827        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 40,289           | 31,605           | 6,463          | 6          | 89           | 2,127         | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 421,200          | 330,415          | 67,565         | 59         | 927          | 22,235        | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | <u>90,965</u>    | <u>71,358</u>    | <u>14,592</u>  | <u>13</u>  | <u>200</u>   | <u>4,802</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 122,111,289      | 98,146,089       | 18,746,222     | 13,304     | 150,421      | 5,055,265     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                  |                  |                |            |              |               |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | (26,446)         | (20,746)         | (4,242)        | (4)        | (58)         | (1,396)       | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | (9,032)          | (7,085)          | (1,449)        | (1)        | (20)         | (477)         | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 596,691          | 468,080          | 95,715         | 84         | 1,313        | 31,499        | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 21,505           | 16,870           | 3,450          | 3          | 47           | 1,135         | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 5,018            | 3,936            | 805            | 1          | 11           | 265           | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 12,007           | 9,419            | 1,926          | 2          | 26           | 634           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 30,177           | 23,673           | 4,841          | 4          | 66           | 1,593         | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0                | 0                | 0              | 0          | 0            | 0             | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 147              | 115              | 24             | 0          | 0            | 8             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 1,060,335        | 831,790          | 170,088        | 148        | 2,333        | 55,975        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 6,176            | 4,845            | 991            | 1          | 14           | 326           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 161,156          | 126,420          | 25,851         | 23         | 355          | 8,507         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7CUST        | 0                | 0                | 0              | 0          | 0            | 0             | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | <u>9,620</u>     | <u>7,547</u>     | <u>1,543</u>   | <u>1</u>   | <u>21</u>    | <u>508</u>    | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>1,867,354</u> | <u>1,464,864</u> | <u>299,543</u> | <u>262</u> | <u>4,108</u> | <u>98,577</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 126,741,742      | 101,778,494      | 19,488,994     | 13,952     | 160,608      | 5,299,706     | 0        | 0        |



CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 61 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML     | DS/IS      | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|--------------|----------|-----------|------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)          | (G)      | (H)       | (I)        | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$           | \$       | \$        | \$         | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 1,172,264      | 843,350        | 323,686      | 152      | 0         | 5,076      | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 230,831        | 166,064        | 63,737       | 30       | 0         | 999        | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 157,520        | 113,323        | 43,494       | 20       | 0         | 682        | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 22,800         | 16,403         | 6,296        | 3        | 0         | 99         | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 158,316        | 0              | 41,126       | 46       | 0         | 117,146    | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065         | 0              | 0            | 0        | 13,065    | 0          | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 21,888         | 17,170         | 3,511        | 3        | 48        | 1,155      | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 23,653         | 18,555         | 3,794        | 3        | 52        | 1,249      | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 3,971          | 3,115          | 637          | 1        | 9         | 210        | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 112,024        | 87,878         | 17,970       | 16       | 246       | 5,914      | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | <u>3,379</u>   | <u>2,651</u>   | <u>542</u>   | <u>0</u> | <u>7</u>  | <u>178</u> | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 12,174,468     | 9,781,314      | 1,874,394    | 1,224    | 14,390    | 503,150    | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |              |          |           |            |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | 29,082         | 22,814         | 4,665        | 4        | 64        | 1,535      | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | 1,002          | 786            | 161          | 0        | 2         | 53         | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 201,564        | 158,119        | 32,333       | 28       | 443       | 10,641     | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 6,968          | 5,466          | 1,118        | 1        | 15        | 368        | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 1,785          | 1,400          | 286          | 0        | 4         | 94         | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 773            | 606            | 124          | 0        | 2         | 41         | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 103,135        | 80,905         | 16,544       | 14       | 227       | 5,444      | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 372            | 292            | 60           | 0        | 1         | 20         | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 5,212          | 4,089          | 836          | 1        | 11        | 275        | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | <u>15,594</u>  | <u>12,233</u>  | <u>2,501</u> | <u>2</u> | <u>34</u> | <u>823</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 365,487        | 286,710        | 58,628       | 50       | 803       | 19,294     | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 13,553,430     | 10,863,054     | 2,095,593    | 1,416    | 17,422    | 575,945    | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 62 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML          | DS/IS            | NOT USED (J) | NOT USED (K) |
|----------|----------|------------------------------|--------------|-------------------|------------------|------------------|---------------|----------------|------------------|--------------|--------------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)              | (F)              | (G)           | (H)            | (I)              | (J)          | (K)          |
|          |          |                              |              | \$                | \$               | \$               | \$            | \$             | \$               | \$           | \$           |
| 1        |          | OPERATING REVENUE            |              |                   |                  |                  |               |                |                  |              |              |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 28,008,467        | 28,008,467       | 0                | 0             | 0              | 0                | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES             |              | 8,910,498         | 0                | 8,910,498        | 0             | 0              | 0                | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES             |              | <u>696,619</u>    | <u>0</u>         | <u>678,813</u>   | <u>17,806</u> | <u>0</u>       | <u>0</u>         | <u>0</u>     | <u>0</u>     |
| 5        |          | TOTAL SALES REVENUE          |              | 37,615,584        | 28,008,467       | 9,589,311        | 17,806        | 0              | 0                | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 371,479           | 238,443          | 107,515          | 194           | 1,946          | 23,381           | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 137,000           | 122,831          | 14,082           | 1             | 5              | 79               | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 17,018,667        | 7,046,494        | 5,105,414        | 0             | 373,987        | 4,492,772        | 0            | 0            |
| 9        | 495.00   | OTHER                        | 6            | <u>587,000</u>    | <u>526,292</u>   | <u>60,338</u>    | <u>6</u>      | <u>23</u>      | <u>340</u>       | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | <u>18,114,146</u> | <u>7,934,060</u> | <u>5,287,349</u> | <u>201</u>    | <u>375,961</u> | <u>4,516,572</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL OPERATING REVENUE      |              | 55,729,730        | 35,942,527       | 14,876,660       | 18,007        | 375,961        | 4,516,572        | 0            | 0            |



CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 64 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT |                            | ALLOC  | TOTAL          |                |               |           |            |              |          |          |  |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|--------------|----------|----------|--|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | CUSTOMER       | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS        | NOT USED | NOT USED |  |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       |            | (I)          | (J)      | (K)      |  |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$           | \$       | \$       |  |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |              |          |          |  |
| 2    | 870  | SUPERVISION & ENGINEERING  | 10CUST | 83,793         | 62,459         | 18,145        | 12        | 188        | 2,989        | 0        | 0        |  |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 0              | 0              | 0             | 0         | 0          | 0            | 0        | 0        |  |
| 4    | 874  | MAINS & SERVICES           | 14CUST | 1,341,178      | 1,080,748      | 190,930       | 174       | 40         | 69,285       | 0        | 0        |  |
| 5    | 875  | M & R - GENERAL            | 18CUST | 53,381         | 39,389         | 8,936         | 13        | 3          | 5,040        | 0        | 0        |  |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 38,736         | 0              | 8,042         | 9         | 7,779      | 22,907       | 0        | 0        |  |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 1,279,637      | 920,596        | 353,333       | 166       | 0          | 5,541        | 0        | 0        |  |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 1,500,691      | 1,079,627      | 414,371       | 195       | 0          | 6,498        | 0        | 0        |  |
| 9    | 880  | OTHER                      | 10CUST | 471,124        | 351,176        | 102,022       | 66        | 1,055      | 16,805       | 0        | 0        |  |
| 10   | 881  | RENTS                      | 10CUST | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u>   | <u>0</u>     | <u>0</u> | <u>0</u> |  |
| 11   |      | TOTAL OPERATION            |        | 4,768,540      | 3,533,995      | 1,095,779     | 635       | 9,065      | 129,065      | 0        | 0        |  |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |              |          |          |  |
| 13   | 885  | SUPERVISION & ENGINEERING  | 10CUST | 7,436          | 5,543          | 1,610         | 1         | 17         | 265          | 0        | 0        |  |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CUST | 1,626          | 1,200          | 272           | 0         | 0          | 154          | 0        | 0        |  |
| 15   | 887  | MAINS                      | 18CUST | 600,509        | 443,110        | 100,525       | 144       | 30         | 56,700       | 0        | 0        |  |
| 16   | 889  | M & R - GENERAL            | 18CUST | 89,844         | 66,295         | 15,040        | 22        | 4          | 8,483        | 0        | 0        |  |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 19,419         | 0              | 4,032         | 4         | 3,900      | 11,483       | 0        | 0        |  |
| 18   | 892  | SERVICES                   | 15     | 298,657        | 263,499        | 34,101        | 3         | 0          | 1,054        | 0        | 0        |  |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 26,851         | 19,317         | 7,414         | 3         | 0          | 116          | 0        | 0        |  |
| 20   | 894  | OTHER EQUIPMENT            | 10CUST | <u>106,765</u> | <u>79,583</u>  | <u>23,120</u> | <u>15</u> | <u>239</u> | <u>3,808</u> | <u>0</u> | <u>0</u> |  |
| 21   |      | TOTAL MAINTENANCE          |        | 1,151,107      | 878,547        | 186,114       | 192       | 4,190      | 82,063       | 0        | 0        |  |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 65 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT |                                  | ALLOC  | TOTAL    |                |          |          |          |          |          |          |  |
|------|------|----------------------------------|--------|----------|----------------|----------|----------|----------|----------|----------|----------|--|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |  |
|      | (A)  | (B)                              | (C)    | (D)      | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |  |
|      |      |                                  |        | \$       | \$             | \$       | \$       | \$       | \$       | \$       | \$       |  |
| 1    |      | CUSTOMER ACCOUNTS                |        |          |                |          |          |          |          |          |          |  |
| 2    | 901  | SUPERVISION                      | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 3    | 902  | METER READING                    | 6      | 165,331  | 148,232        | 16,994   | 2        | 7        | 96       | 0        | 0        |  |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   | 6      | 692,556  | 620,932        | 71,188   | 7        | 28       | 402      | 0        | 0        |  |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           | 21     | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 6    | 905  | MISC.                            | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 7    | 920  | SALARIES                         | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 9    | 931  | RENTS                            | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 10   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u> | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |  |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 857,887  | 769,164        | 88,182   | 9        | 35       | 498      | 0        | 0        |  |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |          |                |          |          |          |          |          |          |  |
| 13   | 907  | SUPERVISION                      | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 14   | 908  | CUSTOMER ASSISTANCE              | 6      | 12,982   | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |  |
| 15   | 909  | INFO. & INSTRUCTIONAL            | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 16   | 910  | MISCELLANEOUS                    | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 17   | 920  | SALARIES                         | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 19   | 931  | RENTS                            | 6      | 0        | 0              | 0        | 0        | 0        | 0        | 0        | 0        |  |
| 20   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u> | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |  |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 12,982   | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |  |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHETWELVEMONTHSENDED12/31/2017

ATTACHMENT CEN-1  
 PAGE 66 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML  | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|----------------|----------------|-----------|-------|--------|---------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)            | (E)            | (F)       | (G)   | (H)    | (I)     | (J)      | (K)      |
|          |          |                                 |              | \$             | \$             | \$        | \$    | \$     | \$      | \$       | \$       |
| 1        |          | SALES                           |              |                |                |           |       |        |         |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                     |              | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 6,790,516      | 5,193,345      | 1,371,409 | 836   | 13,291 | 211,634 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                |                |           |       |        |         |          |          |
| 9        | 920      | SALARIES                        | 12CUST       | 1,399,044      | 1,069,975      | 282,551   | 168   | 2,742  | 43,608  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12CUST       | 4,059          | 3,104          | 820       | 0     | 8      | 127     | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 19       | 931      | RENTS                           | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                |                |           |       |        |         |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12CUST       | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | 1,403,103      | 1,073,079      | 283,371   | 168   | 2,750  | 43,735  | 0        | 0        |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 8,193,619      | 6,266,424      | 1,654,780 | 1,004 | 16,041 | 255,369 | 0        | 0        |

CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 67 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC                      | TOTAL  |                |                |               |           |            |              |          |          |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|--------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | CUSTOMER       | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS        | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       | (H)        | (I)          | (J)      | (K)      |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$           | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |              |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  | 11CUST | 611,322        | 470,632        | 104,347       | 92        | 1,394      | 34,858       | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 0              | 0              | 0             | 0         | 0          | 0            | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           | 14CUST | 3,726,836      | 3,003,159      | 530,552       | 484       | 112        | 192,528      | 0        | 0        |
| 5    | 875  | M & R - GENERAL            | 18CUST | 76,739         | 56,625         | 12,846        | 18        | 4          | 7,246        | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 29,602         | 0              | 6,146         | 7         | 5,944      | 17,505       | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 485,057        | 348,960        | 133,934       | 63        | 0          | 2,100        | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 655,941        | 471,897        | 181,118       | 85        | 0          | 2,840        | 0        | 0        |
| 9    | 880  | OTHER                      | 11CUST | 945,293        | 727,743        | 161,352       | 142       | 2,155      | 53,901       | 0        | 0        |
| 10   | 881  | RENTS                      | 11CUST | <u>64,105</u>  | <u>49,352</u>  | <u>10,942</u> | <u>10</u> | <u>146</u> | <u>3,655</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 6,594,895      | 5,128,368      | 1,141,237     | 901       | 9,755      | 314,633      | 0        | 0        |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |              |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  | 11CUST | 2,006          | 1,544          | 342           | 0         | 5          | 114          | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CUST | 163,254        | 120,463        | 27,329        | 39        | 8          | 15,414       | 0        | 0        |
| 15   | 887  | MAINS                      | 18CUST | 1,427,496      | 1,053,335      | 238,963       | 343       | 71         | 134,784      | 0        | 0        |
| 16   | 889  | M & R - GENERAL            | 18CUST | 93,825         | 69,233         | 15,706        | 23        | 5          | 8,859        | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 51,880         | 0              | 10,771        | 12        | 10,418     | 30,679       | 0        | 0        |
| 18   | 892  | SERVICES                   | 15     | 431,251        | 380,484        | 49,240        | 4         | 0          | 1,522        | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 118,176        | 85,018         | 32,631        | 15        | 0          | 512          | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            | 11CUST | <u>155,722</u> | <u>119,884</u> | <u>26,580</u> | <u>23</u> | <u>355</u> | <u>8,879</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 2,443,610      | 1,829,961      | 401,562       | 459       | 10,862     | 200,763      | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 68 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT |                                  | ALLOC  | TOTAL     |                |          | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|------|------|----------------------------------|--------|-----------|----------------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | CUSTOMER  | GS-RESIDENTIAL | GS-OTHER |          |          |          |          |          |
|      | (A)  | (B)                              | (C)    | (D)       | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |        | \$        | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |                |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    | 6      | 399,502   | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   | 6      | 3,252,912 | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           | 21     | 1,027,585 | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6    | 905  | MISC.                            | 6      | 1,073     | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7    | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 253       | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |                |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      | 6      | (2,789)   | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              | 6      | 1,198,971 | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            | 6      | 65,932    | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    | 6      | 257,797   | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17   | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 13,868    | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19   | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT                     | ALLOC                                      | TOTAL    |                   |                   |                  |              |               |                |          |  |
|------|--------------------------|--|----------|-------------------|-------------------|------------------|--------------|---------------|----------------|----------|--|
| NO.  | NO.                      | FACTOR                                     | CUSTOMER | GS-RESIDENTIAL    | GS-OTHER          | IUS              | DS-ML        | DS/IS         | NOT USED       | NOT USED |  |
|      | (A)                      | (C)  | (D)      | (E)               | (F)               | (G)              | (H)          | (I)           | (J)            | (K)      |  |
|      |                          |  | \$       | \$                | \$                | \$               | \$           | \$            | \$             | \$       |  |
| 1    | SALES                    |  |          |                   |                   |                  |              |               |                |          |  |
| 2    | 911                      | SUPERVISION                                | 6        | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 3    | 912                      | DEMONSTRATION & SELLING                    | 6        | 37,477            | 33,601            | 3,852            | 0            | 1             | 22             | 0        |  |
| 4    | 913                      | ADVERTISING                                | 6        | 138,706           | 124,361           | 14,258           | 1            | 6             | 80             | 0        |  |
| 5    | 916                      | MISC.                                      | 6        | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 6    |                          | TOTAL SALES                                |          | <u>176,183</u>    | <u>157,962</u>    | <u>18,110</u>    | <u>1</u>     | <u>7</u>      | <u>102</u>     | <u>0</u> |  |
| 7    |                          | TOTAL DISTRIBUTION EXPENSES                |          | 15,429,792        | 12,659,024        | 2,229,168        | 1,435        | 20,894        | 519,267        | 0        |  |
| 8    | ADMINISTRATIVE & GENERAL |  |          |                   |                   |                  |              |               |                |          |  |
| 9    | 920                      | SALARIES                                   | 13CUST   | 2,468,206         | 2,016,648         | 358,877          | 247          | 3,579         | 88,855         | 0        |  |
| 10   | 921                      | OFFICE SUPPLIES & EXPENSES                 | 13CUST   | 744,716           | 608,470           | 108,282          | 74           | 1,080         | 26,810         | 0        |  |
| 11   | 922                      | ADMIN. EXPENSES TRANSFERED                 | 13CUST   | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 12   | 923                      | OUTSIDE SERVICES                           | 13CUST   | 6,554,938         | 5,355,712         | 953,088          | 655          | 9,505         | 235,978        | 0        |  |
| 13   | 924                      | PROPERTY INSURANCE                         | 13CUST   | 68,090            | 55,633            | 9,900            | 7            | 99            | 2,451          | 0        |  |
| 14   | 925                      | INJURIES AND DAMAGES                       | 12CUST   | 869,509           | 664,992           | 175,606          | 104          | 1,704         | 27,103         | 0        |  |
| 15   | 926                      | EMPLOYEE PENSIONS & BENEFITS               | 12CUST   | 2,791,518         | 2,134,925         | 563,775          | 335          | 5,471         | 87,012         | 0        |  |
| 16   | 926                      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |          | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 17   | 928                      | REG COMMISSION EXP - GENERAL               | 13CUST   | 164,719           | 134,584           | 23,950           | 16           | 239           | 5,930          | 0        |  |
| 18   | 928                      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13CUST   | 146,752           | 119,904           | 21,338           | 15           | 213           | 5,283          | 0        |  |
| 19   | 930.10                   | MISC. - INSTITUT & GOODWILL ADV            | 13CUST   | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 20   | 930.20                   | MISC. - GENERAL                            | 13CUST   | (51,744)          | (42,277)          | (7,524)          | (5)          | (75)          | (1,863)        | 0        |  |
| 21   | 931                      | RENTS                                      | 13CUST   | 534,883           | 437,026           | 77,772           | 53           | 776           | 19,256         | 0        |  |
| 22   | 935.13                   | MAINT. STRUCTURES & IMPROV.                | 13CUST   | 108               | 88                | 16               | 0            | 0             | 4              | 0        |  |
| 23   | 935.23                   | MAINT. - GEN'L OFFICE                      |          |                   |                   |                  |              |               |                |          |  |
| 24   |                          | FURNITURE & EQUIPMENT                      | 13CUST   | 0                 | 0                 | 0                | 0            | 0             | 0              | 0        |  |
| 25   | 932                      | MAINT.-MISCELLANEOUS                       | 13CUST   | <u>215,828</u>    | <u>176,342</u>    | <u>31,381</u>    | <u>22</u>    | <u>313</u>    | <u>7,770</u>   | <u>0</u> |  |
| 26   |                          | TOTAL ADMIN & GENERAL - M & E              |          | <u>14,507,523</u> | <u>11,662,047</u> | <u>2,316,461</u> | <u>1,523</u> | <u>22,904</u> | <u>504,589</u> | <u>0</u> |  |
| 27   |                          | TOTAL O & M EXPENSE - M & E                |          | 29,937,315        | 24,321,071        | 4,545,629        | 2,958        | 43,798        | 1,023,856      | 0        |  |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 70 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.                     | ACCOUNT TITLE | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|------------------------------|---------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)                          | (B)           | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |                              |               |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        | LABOR                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 2        | PRODUCTION                   |               | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3        | DISTRIBUTION - O&M OPERATION |               | PAGE 14      | 4,768,540         | 3,533,995         | 1,095,779        | 635          | 9,065         | 129,065          | 0        | 0        |
| 4        | DISTRIBUTION - O&M MAINT.    |               | PAGE 14      | 1,151,107         | 878,547           | 186,114          | 192          | 4,190         | 82,063           | 0        | 0        |
| 5        | CUSTOMER ACCOUNTS            |               | PAGE 15      | 857,887           | 769,164           | 88,182           | 9            | 35            | 498              | 0        | 0        |
| 6        | CUSTOMER SERVICE & INFOR.    |               | PAGE 15      | 12,982            | 11,639            | 1,334            | 0            | 1             | 8                | 0        | 0        |
| 7        | SALES                        |               | PAGE 16      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 8        | ADMINISTRATIVE & GENERAL     |               | PAGE 16      | <u>1,403,103</u>  | <u>1,073,079</u>  | <u>283,371</u>   | <u>168</u>   | <u>2,750</u>  | <u>43,735</u>    | <u>0</u> | <u>0</u> |
| 9        | TOTAL LABOR EXPENSE          |               |              | 8,193,619         | 6,266,424         | 1,654,780        | 1,004        | 16,041        | 255,369          | 0        | 0        |
| 10       | M & E                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 11       | PRODUCTION                   |               | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 12       | DISTRIBUTION - O&M OPERATION |               | PAGE 17      | 6,594,895         | 5,128,368         | 1,141,237        | 901          | 9,755         | 314,633          | 0        | 0        |
| 13       | DISTRIBUTION - O&M MAINT.    |               | PAGE 17      | 2,443,610         | 1,829,961         | 401,562          | 459          | 10,862        | 200,763          | 0        | 0        |
| 14       | CUSTOMER ACCOUNTS            |               | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58           | 208           | 2,880            | 0        | 0        |
| 15       | CUSTOMER SERVICE & INFOR.    |               | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16           | 62            | 889              | 0        | 0        |
| 16       | SALES                        |               | PAGE 19      | 176,183           | 157,962           | 18,110           | 1            | 7             | 102              | 0        | 0        |
| 17       | ADMINISTRATIVE & GENERAL     |               | PAGE 19      | <u>14,507,523</u> | <u>11,662,047</u> | <u>2,316,461</u> | <u>1,523</u> | <u>22,904</u> | <u>504,589</u>   | <u>0</u> | <u>0</u> |
| 18       | TOTAL M & E EXPENSE          |               |              | <u>29,937,315</u> | <u>24,321,071</u> | <u>4,545,629</u> | <u>2,958</u> | <u>43,798</u> | <u>1,023,856</u> | <u>0</u> | <u>0</u> |
| 19       | TOTAL O & M EXPENSES         |               |              | 38,130,934        | 30,587,495        | 6,200,409        | 3,962        | 59,839        | 1,279,225        | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 71 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|----------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)            | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$             | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7CUST        | 3,290,589      | 2,581,335      | 527,843  | 461 | 7,239 | 173,710 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12CUST       | 572,670        | 437,972        | 115,656  | 69  | 1,122 | 17,850  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12CUST       | 0              | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 3,863,259      | 3,019,307      | 643,499  | 530 | 8,361 | 191,560 | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|-------------------|-------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$                | \$                | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 182,107           | (8,527,329)       | 5,937,159        | 12,099       | 290,339       | 2,469,842      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                   |                   |                  |              |               |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 4,291,096         | 3,306,614         | 710,677          | 663          | 12,468        | 260,675        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19CUST       | 11,610,150        | 9,107,698         | 1,862,384        | 1,625        | 25,542        | 612,900        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>12,539,955</u> | <u>10,068,024</u> | <u>1,933,022</u> | <u>1,274</u> | <u>15,193</u> | <u>522,444</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (929,805)         | (960,326)         | (70,638)         | 351          | 10,349        | 90,456         | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12CUST       | <u>(4,343)</u>    | <u>(3,321)</u>    | <u>(877)</u>     | <u>(1)</u>   | <u>(9)</u>    | <u>(135)</u>   | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>3,356,948</u>  | <u>2,342,967</u>  | <u>639,162</u>   | <u>1,013</u> | <u>22,808</u> | <u>350,996</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (3,174,841)       | (10,870,296)      | 5,297,997        | 11,086       | 267,531       | 2,118,846      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (190,489)         | (652,214)         | 317,878          | 665          | 16,052        | 127,130        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19CUST       | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (190,489)         | (652,214)         | 317,878          | 665          | 16,052        | 127,130        | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 73 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML  | DS/IS   | NOT USED | NOT USED |
|----------|----------|---|--------------|----------------|----------------|----------|-----|--------|---------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)            | (E)            | (F)      | (G) | (H)    | (I)     | (J)      | (K)      |
|          |          |   |              | \$             | \$             | \$       | \$  | \$     | \$      | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                |                |          |     |        |         |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                |                |          |     |        |         |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19CUST       | (13,529)       | (10,613)       | (2,170)  | (2) | (30)   | (714)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (13,529)       | (10,613)       | (2,170)  | (2) | (30)   | (714)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (204,018)      | (662,827)      | 315,708  | 663 | 16,022 | 126,416 | 0        | 0        |

CUSTOMER RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 74 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT                                 | ALLOC  | TOTAL             |                   | IUS              | DS-ML        | DS/IS         | NOT USED         | NOT USED |          |
|------|--------------------------------------|--------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
| NO.  | NO.                                  | FACTOR | CUSTOMER          | GS-RESIDENTIAL    | GS-OTHER         |              |               |                  |          |          |
|      | (A)                                  | (C)    | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|      |                                      |        | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1    | OPERATING REVENUE                    |        | 55,729,730        | 35,942,527        | 14,876,660       | 18,007       | 375,961       | 4,516,572        | 0        | 0        |
| 2    | LESS: EXPENSES OTHER THAN FIT        |        | <u>55,547,623</u> | <u>44,469,856</u> | <u>8,939,501</u> | <u>5,908</u> | <u>85,622</u> | <u>2,046,730</u> | <u>0</u> | <u>0</u> |
| 3    | OPERATING INCOME BEFORE TAXES        |        | 182,107           | (8,527,329)       | 5,937,159        | 12,099       | 290,339       | 2,469,842        | 0        | 0        |
| 4    | LESS: RECONCILING ITEMS:             |        |                   |                   |                  |              |               |                  |          |          |
| 5    | IMPUTED INTEREST                     |        | 4,291,096         | 3,306,614         | 710,677          | 663          | 12,468        | 260,675          | 0        | 0        |
| 6    | EXCESS OF BOOK OVER TAX S/L          | 19CUST | 11,610,150        | 9,107,698         | 1,862,384        | 1,625        | 25,542        | 612,900          | 0        | 0        |
| 7    | BOOK DEPRECIATION                    |        | <u>12,539,955</u> | <u>10,068,024</u> | <u>1,933,022</u> | <u>1,274</u> | <u>15,193</u> | <u>522,444</u>   | <u>0</u> | <u>0</u> |
| 8    | EXCESS OF BOOK OVER TAX DEPRECIATION |        | (929,805)         | (960,326)         | (70,638)         | 351          | 10,349        | 90,456           | 0        | 0        |
| 9    | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12CUST | (4,343)           | (3,321)           | (877)            | (1)          | (9)           | (135)            | 0        | 0        |
| 10   | KENTUCKY STATE INCOME TAX DEDUCTION  |        | <u>(190,489)</u>  | <u>(652,214)</u>  | <u>317,878</u>   | <u>665</u>   | <u>16,052</u> | <u>127,130</u>   | <u>0</u> | <u>0</u> |
| 11   | TOTAL RECONCILING ITEMS              |        | 3,166,459         | 1,690,753         | 957,040          | 1,678        | 38,860        | 478,126          | 0        | 0        |
| 12   | TAXABLE INCOME                       |        | (2,984,352)       | (10,218,082)      | 4,980,119        | 10,421       | 251,479       | 1,991,716        | 0        | 0        |
| 13   | CURRENT FEDERAL INCOME TAX @ 35%     |        | (1,014,680)       | (3,474,149)       | 1,693,241        | 3,543        | 85,503        | 677,184          | 0        | 0        |
| 14   | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19CUST | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15   | CURRENT FEDERAL INCOME TAX @ 35%     |        | (1,014,680)       | (3,474,149)       | 1,693,241        | 3,543        | 85,503        | 677,184          | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 75 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL CUSTOMER  | GS-RESIDENTIAL  | GS-OTHER        | IUS         | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|-----------------|-------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)             | (G)         | (H)          | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$              | \$          | \$           | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                 |             |              |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19CUST       | 28,445          | 22,314          | 4,563           | 4           | 63           | 1,502          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                 |             |              |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19CUST       | <u>(43,373)</u> | <u>(34,024)</u> | <u>(6,957)</u>  | <u>(6)</u>  | <u>(95)</u>  | <u>(2,290)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(43,373)</u> | <u>(34,024)</u> | <u>(6,957)</u>  | <u>(6)</u>  | <u>(95)</u>  | <u>(2,290)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(71,818)</u> | <u>(56,338)</u> | <u>(11,520)</u> | <u>(10)</u> | <u>(158)</u> | <u>(3,792)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (1,086,498)     | (3,530,487)     | 1,681,721       | 3,533       | 85,345       | 673,392        | 0        | 0        |

CUSTOMER RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 76 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER     | GS-RESIDENTIAL     | GS-OTHER          | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|----------|-----------|---------------------------------------|--------------|--------------------|--------------------|-------------------|---------------|----------------|------------------|----------|----------|
|          | (A)       | (B)                                   | (C)          | (D)                | (E)                | (F)               | (G)           | (H)            | (I)              | (J)      | (K)      |
|          |           |                                       |              | \$                 | \$                 | \$                | \$            | \$             | \$               | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                       |              | 348,318,168        | 273,242,407        | 55,873,749        | 47,510        | 766,051        | 18,388,487       | 0        | 0        |
|          |           | LESS:                                 |              |                    |                    |                   |               |                |                  |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]              |              | <u>126,741,742</u> | <u>101,778,494</u> | <u>19,488,994</u> | <u>13,952</u> | <u>160,608</u> | <u>5,299,706</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                             |              | 221,576,426        | 171,463,913        | 36,384,755        | 33,558        | 605,443        | 13,088,781       | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | 4,284,256          | 3,360,827          | 687,238           | 600           | 9,425          | 226,166          | 0        | 0        |
|          |           | LESS:                                 |              |                    |                    |                   |               |                |                  |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                     | 3            | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT     | 19CUST       | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | 68,541,837         | 53,768,329         | 10,994,796        | 9,596         | 150,792        | 3,618,324        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                         |              | 157,318,845        | 121,056,411        | 26,077,197        | 24,562        | 464,076        | 9,696,623        | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                 |              |                    |                    |                   |               |                |                  |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF         |              |                    |                    |                   |               |                |                  |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]          |              | 4,766,367          | 3,823,437          | 775,051           | 495           | 7,480          | 159,903          | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                            | 2            | 0                  | 0                  | 0                 | 0             | 0              | 0                | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                  | 7CUST        | 65,235             | 51,174             | 10,464            | 9             | 144            | 3,444            | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                           | 13CUST       | 391,073            | 319,526            | 56,862            | 39            | 567            | 14,079           | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS          | 2            | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                             |              | 162,541,520        | 125,250,548        | 26,919,574        | 25,105        | 472,267        | 9,874,049        | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 57, [2] PAGE 59, |              |                    |                    |                   |               |                |                  |          |          |
|          |           | [3] TOTAL O & M EXPENSE               |              | 38,130,934         | 30,587,495         | 6,200,409         | 3,962         | 59,839         | 1,279,225        | 0        | 0        |
|          |           | LESS: COST OF GAS                     |              | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                  |              | 38,130,934         | 30,587,495         | 6,200,409         | 3,962         | 59,839         | 1,279,225        | 0        | 0        |

COLUMBIA GAS OF KENTUCKY, INC.

ATTACHMENT CEN-1

ALLOCATION FACTORS

PAGE 77 OF 129

CUSTOMER RELATED  
FORECASTED TEST YEAR - ORIGINAL FILING

FOR THE TWELVE MONTHS ENDED 12/31/2017

WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOC FACTOR<br>(B) | TOTAL CUSTOMER<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|---------------------|-----------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                   | 100.000%              | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                   | 100.000%              | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                   | 100.000%              | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                   | 100.000%              | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                   | 100.000%              | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                   | 100.000%              | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7CUST               | 100.000%              | 78.446%               | 16.041%         | 0.014%     | 0.220%       | 5.279%       | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                   | 100.000%              | 0.000%                | 20.761%         | 0.023%     | 20.081%      | 59.135%      | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                   | 100.000%              | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10CUST              | 100.000%              | 74.540%               | 21.655%         | 0.014%     | 0.224%       | 3.567%       | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11CUST              | 100.000%              | 76.986%               | 17.069%         | 0.015%     | 0.228%       | 5.702%       | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12CUST              | 100.000%              | 76.479%               | 20.196%         | 0.012%     | 0.196%       | 3.117%       | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13CUST              | 100.000%              | 81.705%               | 14.540%         | 0.010%     | 0.145%       | 3.600%       | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14CUST              | 100.000%              | 80.582%               | 14.236%         | 0.013%     | 0.003%       | 5.166%       | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                  | 100.000%              | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                  | 100.000%              | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                  | 100.000%              | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18CUST              | 100.000%              | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19CUST              | 100.000%              | 78.446%               | 16.041%         | 0.014%     | 0.220%       | 5.279%       | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                  | 100.000%              | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                  | 100.000%              | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

| LINE | ACCT                                   | ALLOC  | TOTAL          |                |                |                 |              |                 |              |              |    |
|------|--|--------|----------------|----------------|----------------|-----------------|--------------|-----------------|--------------|--------------|----|
| NO.  | NO.                                    | FACTOR | COMMODITY      | GS-RESIDENTIAL | GS-OTHER       | IUS             | DS-ML        | DS/IS           | NOT USED     | NOT USED     |    |
|      | (A)                                    | (C)    | (D)            | (E)            | (F)            | (G)             | (H)          | (I)             | (J)          | (K)          |    |
|      | (B)                                    |        | \$             | \$             | \$             | \$              | \$           | \$              | \$           | \$           | \$ |
| 1    | TOTAL REVENUES                         |        | 21,865,491     | 14,038,640     | 7,769,797      | 25,126          | 2,454        | 29,475          | 0            | 0            |    |
| 2    | PROPOSED INCREASE                      |        | <u>101,802</u> | <u>84,336</u>  | <u>6,496</u>   | <u>42</u>       | <u>13</u>    | <u>10,915</u>   | <u>0</u>     | <u>0</u>     |    |
| 3    | TOTAL PROPOSED REVENUES                |        | 21,967,293     | 14,122,976     | 7,776,293      | 25,168          | 2,467        | 40,390          | 0            | 0            |    |
| 4    | COST OF GAS                            |        | 21,475,950     | 13,807,095     | 7,643,847      | 25,009          | 0            | 0               | 0            | 0            |    |
| 5    | OPERATING & MAINTENANCE EXPENSE        |        | 478,050        | 270,626        | 156,132        | 472             | 0            | 50,820          | 0            | 0            |    |
| 6    | DEPRECIATION & AMORTIZATION            |        | 0              | 0              | 0              | 0               | 0            | 0               | 0            | 0            |    |
| 7    | FEDERAL INCOME TAX                     |        | 2,675          | 14,288         | (8,162)        | (101)           | 788          | (4,138)         | 0            | 0            |    |
| 8    | KENTUCKY STATE INCOME TAX              |        | 325            | 2,535          | (1,544)        | (20)            | 148          | (795)           | 0            | 0            |    |
| 9    | TAXES OTHER THAN INCOME                |        | <u>6,337</u>   | <u>2,118</u>   | <u>1,530</u>   | <u>3</u>        | <u>0</u>     | <u>2,686</u>    | <u>0</u>     | <u>0</u>     |    |
| 10   | TOTAL EXPENSES & TAXES                 |        | 21,963,337     | 14,096,662     | 7,791,803      | 25,363          | 936          | 48,573          | 0            | 0            |    |
| 11   | OPERATING INCOME                       |        | 3,956          | 26,314         | (15,510)       | (195)           | 1,531        | (8,183)         | 0            | 0            |    |
| 12   | INTEREST EXPENSE                       |        | <u>1,591</u>   | <u>900</u>     | <u>521</u>     | <u>2</u>        | <u>0</u>     | <u>168</u>      | <u>0</u>     | <u>0</u>     |    |
| 13   | INCOME AVAILABLE FOR COMMON EQUITY     |        | 2,365          | 25,414         | (16,031)       | (197)           | 1,531        | (8,351)         | 0            | 0            |    |
| 14   | RATE BASE                              |        | 60,219         | 34,089         | 19,719         | 60              | 0            | 6,353           | 0            | 0            |    |
| 15   | RATE OF RETURN AUTHORIZED ON RATE BASE |        | <b>6.57%</b>   | <b>77.19%</b>  | <b>-78.66%</b> | <b>-325.67%</b> | <b>0.00%</b> | <b>-128.80%</b> | <b>0.00%</b> | <b>0.00%</b> |    |
| 16   | UNITIZED RETURN                        |        | 1.00           | 9.18           | (9.35)         | (38.72)         | 0.00         | (15.32)         | 0.00         | 0.00         |    |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS          | DS-ML        | DS/IS        | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)             | (E)            | (F)          | (G)          | (H)          | (I)          | (J)          | (K)          |
|          |          |  |              | \$              | \$             | \$           | \$           | \$           | \$           | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 21,969,128      | 14,084,168     | 7,804,710    | 25,500       | (66)         | 54,815       | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950      | 13,807,095     | 7,643,847    | 25,009       | 0            | 0            | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 478,070         | 270,194        | 156,448      | 476          | (28)         | 50,980       | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 0               | 0              | 0            | 0            | 0            | 0            | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 3,272           | 1,662          | 1,084        | 7            | (36)         | 555          | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 433             | 232            | 142          | 0            | (3)          | 61           | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>6,337</u>    | <u>2,118</u>   | <u>1,530</u> | <u>3</u>     | <u>0</u>     | <u>2,686</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 21,964,062      | 14,081,301     | 7,803,051    | 25,495       | (67)         | 54,282       | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 5,066           | 2,867          | 1,658        | 5            | 0            | 534          | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>1,591</u>    | <u>900</u>     | <u>521</u>   | <u>2</u>     | <u>0</u>     | <u>168</u>   | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 3,475           | 1,967          | 1,137        | 3            | 0            | 366          | 0            | 0            |
| 12       |          | RATE BASE                              |              | 60,219          | 34,089         | 19,719       | 60           | 0            | 6,353        | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>    | <b>8.41%</b>   | <b>8.41%</b> | <b>8.85%</b> | <b>0.00%</b> | <b>8.40%</b> | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00            | 1.00           | 1.00         | 1.05         | 0.00         | 1.00         | 0.00         | 0.00         |

COMMODITY RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF PROFORMA ADJUSTMENTS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 80 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>COMMODITY<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|---------------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 103,636                   | 45,529                | 34,913          | 375        | (2,520)      | 25,340       | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                         | 0                     | 0               | 0          | 0            | 0            | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 956                       | 420                   | 322             | 3          | (23)         | 234          | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>197</u>                | <u>87</u>             | <u>66</u>       | <u>1</u>   | <u>(5)</u>   | <u>48</u>    | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 102,483                   | 45,022                | 34,525          | 371        | (2,492)      | 25,058       | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>6,149</u>              | <u>2,701</u>          | <u>2,071</u>    | <u>22</u>  | <u>(150)</u> | <u>1,504</u> | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 96,334                    | 42,321                | 32,454          | 349        | (2,342)      | 23,554       | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>33,717</u>             | <u>14,812</u>         | <u>11,359</u>   | <u>122</u> | <u>(820)</u> | <u>8,244</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 62,617                    | 27,509                | 21,095          | 227        | (1,522)      | 15,310       | 0               | 0               |

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D) | GS-RESIDENTIAL<br>(E) | GS-OTHER<br>(F) | IUS<br>(G)      | DS-ML<br>(H) | DS/IS<br>(I)    | NOT USED<br>(J) | NOT USED<br>(K) |
|----------|-----------------|-------------------------------------|---------------------|------------------------|-----------------------|-----------------|-----------------|--------------|-----------------|-----------------|-----------------|
|          |                 |                                     |                     | \$                     | \$                    | \$              | \$              | \$           | \$              | \$              | \$              |
| 1        |                 | TOTAL REVENUES [1]                  |                     | 21,865,491             | 14,038,640            | 7,769,797       | 25,126          | 2,454        | 29,475          | 0               | 0               |
| 2        |                 | COST OF GAS                         |                     | 21,475,950             | 13,807,095            | 7,643,847       | 25,009          | 0            | 0               | 0               | 0               |
| 3        |                 | OPERATING & MAINTENANCE EXPENSE [2] |                     | 476,915                | 269,687               | 156,060         | 472             | 0            | 50,698          | 0               | 0               |
| 4        |                 | DEPRECIATION & AMORTIZATION [3]     |                     | 0                      | 0                     | 0               | 0               | 0            | 0               | 0               | 0               |
| 5        |                 | FEDERAL INCOME TAX [4]              |                     | (30,443)               | (13,150)              | (10,275)        | (115)           | 784          | (7,689)         | 0               | 0               |
| 6        |                 | KENTUCKY STATE INCOME TAX [5]       |                     | (5,715)                | (2,469)               | (1,929)         | (22)            | 147          | (1,443)         | 0               | 0               |
| 7        |                 | TAXES OTHER THAN INCOME [6]         |                     | <u>6,337</u>           | <u>2,118</u>          | <u>1,530</u>    | <u>3</u>        | <u>0</u>     | <u>2,686</u>    | <u>0</u>        | <u>0</u>        |
| 8        |                 | TOTAL EXPENSES & TAXES              |                     | 21,923,044             | 14,063,281            | 7,789,233       | 25,347          | 931          | 44,252          | 0               | 0               |
| 9        |                 | OPERATING INCOME                    |                     | (57,553)               | (24,641)              | (19,436)        | (221)           | 1,523        | (14,777)        | 0               | 0               |
| 10       |                 | INTEREST EXPENSE [7]                |                     | <u>1,590</u>           | <u>900</u>            | <u>521</u>      | <u>2</u>        | <u>0</u>     | <u>168</u>      | <u>0</u>        | <u>0</u>        |
| 11       |                 | INCOME AVAILABLE FOR COMMON EQUITY  |                     | (59,143)               | (25,541)              | (19,957)        | (223)           | 1,523        | (14,945)        | 0               | 0               |
| 12       |                 | RATE BASE [8]                       |                     | 60,219                 | 34,089                | 19,719          | 60              | 0            | 6,353           | 0               | 0               |
| 13       |                 | RATE OF RETURN EARNED ON RATE BASE  |                     | <b>-95.57%</b>         | <b>-72.29%</b>        | <b>-98.57%</b>  | <b>-369.00%</b> | <b>0.00%</b> | <b>-232.59%</b> | <b>0.00%</b>    | <b>0.00%</b>    |
| 14       |                 | UNITIZED RETURN                     |                     | 1.00                   | 0.76                  | 1.03            | 3.86            | 0.00         | 2.43            | 0.00            | 0.00            |

REFERENCES: [1] PAGE 88, [2] PAGE 96, [3] PAGE 87, [4] PAGE 101, [5] PAGE 99, [6] PAGE 97, [7] PAGE 100, [8] PAGE 102.













COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 88 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                  | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER  | IUS    | DS-ML | DS/IS  | NOT USED (J) | NOT USED (K) |
|----------|----------|--|--------------|-----------------|----------------|-----------|--------|-------|--------|--------------|--------------|
|          | (A)      | (B)  | (C)          | (D)             | (E)            | (F)       | (G)    | (H)   | (I)    | (J)          | (K)          |
|          |          |  |              | \$              | \$             | \$        | \$     | \$    | \$     | \$           | \$           |
| 1        |          | OPERATING REVENUE                              |              |                 |                |           |        |       |        |              |              |
| 2        | 480.00   | RESIDENTIAL SALES                              |              | 13,990,847      | 13,990,847     | 0         | 0      | 0     | 0      | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES                               |              | 7,161,208       | 0              | 7,161,208 | 0      | 0     | 0      | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES                               |              | 570,676         | 0              | 545,550   | 25,126 | 0     | 0      | 0            | 0            |
| 5        |          | TOTAL SALES REVENUE                            |              | 21,722,730      | 13,990,847     | 7,706,758 | 25,126 | 0     | 0      | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS                            |              | 31,109          | 1,564          | 29,545    | 0      | 0     | 0      | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE                          | 6            | 0               | 0              | 0         | 0      | 0     | 0      | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION - GS - Residential |              | 111,652         | 46,229         | 33,494    | 0      | 2,454 | 29,475 | 0            | 0            |
| 9        | 495.00   | OTHER  | 6            | 0               | 0              | 0         | 0      | 0     | 0      | 0            | 0            |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE                   |              | 142,761         | 47,793         | 63,039    | 0      | 2,454 | 29,475 | 0            | 0            |
| 11       |          | TOTAL OPERATING REVENUE                        |              | 21,865,491      | 14,038,640     | 7,769,797 | 25,126 | 2,454 | 29,475 | 0            | 0            |



COMMODITY RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - LABOR  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 90 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER   | IUS      | DS-ML    | DS/IS      | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|-----------------|----------------|------------|----------|----------|------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)        | (G)      |          | (I)        | (J)      | (K)      |
|          |          |                            |              | \$              | \$             | \$         | \$       | \$       | \$         | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |            |          |          |            |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10COMM       | 1,064           | 356            | 257        | 1        | 0        | 451        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 66,644          | 22,273         | 16,093     | 32       | 0        | 28,246     | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 9        | 880      | OTHER                      | 10COMM       | 5,980           | 1,999          | 1,444      | 3        | 0        | 2,535      | 0        | 0        |
| 10       | 881      | RENTS                      | 10COMM       | <u>0</u>        | <u>0</u>       | <u>0</u>   | <u>0</u> | <u>0</u> | <u>0</u>   | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 73,688          | 24,628         | 17,794     | 36       | 0        | 31,232     | 0        | 0        |
| 12       |          | MAINTENANCE                |              |                 |                |            |          |          |            |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10COMM       | 94              | 31             | 23         | 0        | 0        | 40         | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 15       | 887      | MAINS                      | 18COMM       | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10COMM       | <u>1,355</u>    | <u>453</u>     | <u>327</u> | <u>1</u> | <u>0</u> | <u>574</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 1,449           | 484            | 350        | 1        | 0        | 614        | 0        | 0        |



COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 92 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED (J) | NOT USED (K) |
|----------|----------|---------------------------------|--------------|-----------------|----------------|--------------|----------|----------|--------------|--------------|--------------|
|          | (A)      | (B)                             | (C)          | (D)             | (E)            | (F)          | (G)      | (H)      | (I)          | (J)          | (K)          |
|          |          |                                 |              | \$              | \$             | \$           | \$       | \$       | \$           | \$           | \$           |
| 1        |          | SALES                           |              |                 |                |              |          |          |              |              |              |
| 2        | 911      | SUPERVISION                     | 6            | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 4        | 913      | ADVERTISING                     | 6            | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 5        | 916      | MISC.                           | 6            | <u>0</u>        | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     | <u>0</u>     |
| 6        |          | TOTAL SALES                     |              | <u>0</u>        | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     | <u>0</u>     |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 75,137          | 25,112         | 18,144       | 37       | 0        | 31,846       | 0            | 0            |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                 |                |              |          |          |              |              |              |
| 9        | 920      | SALARIES                        | 12COMM       | 15,480          | 5,174          | 3,738        | 8        | 0        | 6,561        | 0            | 0            |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 12       | 923      | OUTSIDE SERVICES                | 12COMM       | 45              | 15             | 11           | 0        | 0        | 19           | 0            | 0            |
| 13       | 924      | PROPERTY INSURANCE              | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 14       | 925      | INJURIES AND DAMAGES            | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 18       | 930.20   | MISC. - GENERAL                 | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 19       | 931      | RENTS                           | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                 |                |              |          |          |              |              |              |
| 22       |          | FURNITURE & EQUIPMENT           | 12COMM       | 0               | 0              | 0            | 0        | 0        | 0            | 0            | 0            |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12COMM       | <u>0</u>        | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     | <u>0</u>     |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>15,525</u>   | <u>5,189</u>   | <u>3,749</u> | <u>8</u> | <u>0</u> | <u>6,580</u> | <u>0</u>     | <u>0</u>     |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 90,662          | 30,301         | 21,893       | 45       | 0        | 38,426       | 0            | 0            |

COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 93 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER  | IUS      | DS-ML    | DS/IS      | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|-----------------|----------------|-----------|----------|----------|------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)       | (G)      | (H)      | (I)        | (J)      | (K)      |
|          |          |                            |              | \$              | \$             | \$        | \$       | \$       | \$         | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |           |          |          |            |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11COMM       | 1,506           | 503            | 364       | 1        | 0        | 638        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 17,885          | 5,977          | 4,319     | 9        | 0        | 7,580      | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 9        | 880      | OTHER                      | 11COMM       | 2,329           | 778            | 562       | 1        | 0        | 987        | 0        | 0        |
| 10       | 881      | RENTS                      | 11COMM       | <u>158</u>      | <u>53</u>      | <u>38</u> | <u>0</u> | <u>0</u> | <u>67</u>  | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 21,878          | 7,311          | 5,283     | 11       | 0        | 9,272      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |                 |                |           |          |          |            |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11COMM       | 5               | 2              | 1         | 0        | 0        | 2          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 15       | 887      | MAINS                      | 18COMM       | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0         | 0        | 0        | 0          | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 11COMM       | <u>384</u>      | <u>128</u>     | <u>93</u> | <u>0</u> | <u>0</u> | <u>163</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 389             | 130            | 94        | 0        | 0        | 165        | 0        | 0        |



COMMODITY RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT   | ALLOC                                      | TOTAL  |           |                |          |     |       |        |          |          |
|------|--------|--|--------|-----------|----------------|----------|-----|-------|--------|----------|----------|
| NO.  | NO.    | ACCOUNT TITLE                              | FACTOR | COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS  | NOT USED | NOT USED |
|      | (A)    | (B)  | (C)    | (D)       | (E)            | (F)      | (G) | (H)   | (I)    | (J)      | (K)      |
|      |        |  |        | \$        | \$             | \$       | \$  | \$    | \$     | \$       | \$       |
| 1    |        | SALES                                      |        |           |                |          |     |       |        |          |          |
| 2    | 911    | SUPERVISION                                | 6      | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 3    | 912    | DEMONSTRATION & SELLING                    | 6      | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 4    | 913    | ADVERTISING                                | 6      | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 5    | 916    | MISC.                                      | 6      | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 6    |        | TOTAL SALES                                |        | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 7    |        | TOTAL DISTRIBUTION EXPENSES                |        | 22,267    | 7,441          | 5,377    | 11  | 0     | 9,437  | 0        | 0        |
| 8    |        | ADMINISTRATIVE & GENERAL                   |        |           |                |          |     |       |        |          |          |
| 9    | 920    | SALARIES                                   | 13COMM | 3,816     | 2,381          | 1,332    | 4   | 0     | 99     | 0        | 0        |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES                 | 13COMM | 1,151     | 718            | 402      | 1   | 0     | 30     | 0        | 0        |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED                 | 13COMM | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 12   | 923    | OUTSIDE SERVICES                           | 13COMM | 10,134    | 6,324          | 3,536    | 11  | 0     | 263    | 0        | 0        |
| 13   | 924    | PROPERTY INSURANCE                         | 13COMM | 105       | 66             | 37       | 0   | 0     | 3      | 0        | 0        |
| 14   | 925    | INJURIES AND DAMAGES                       | 12COMM | 1,344     | 449            | 325      | 1   | 0     | 570    | 0        | 0        |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS               | 12COMM | 4,316     | 1,442          | 1,042    | 2   | 0     | 1,829  | 0        | 0        |
| 16   | 926    | DIRECT EMPLOYEE PENSIONS & BENEFITS        |        | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 17   | 928    | REG COMMISSION EXP - GENERAL               | 13COMM | 255       | 159            | 89       | 0   | 0     | 7      | 0        | 0        |
| 18   | 928    | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13COMM | 227       | 142            | 79       | 0   | 0     | 6      | 0        | 0        |
| 19   | 930.10 | MISC. - INSTITUT & GOODWILL ADV            | 13COMM | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 20   | 930.20 | MISC. - GENERAL                            | 13COMM | (80)      | (50)           | (28)     | 0   | 0     | (2)    | 0        | 0        |
| 21   | 931    | RENTS                                      | 13COMM | 827       | 516            | 289      | 1   | 0     | 21     | 0        | 0        |
| 22   | 935.13 | MAINT. STRUCTURES & IMPROV.                | 13COMM | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 23   | 935.23 | MAINT. - GEN'L OFFICE                      |        |           |                |          |     |       |        |          |          |
| 24   |        | FURNITURE & EQUIPMENT                      | 13COMM | 0         | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 25   | 932    | MAINT.-MISCELLANEOUS                       | 13COMM | 334       | 208            | 117      | 0   | 0     | 9      | 0        | 0        |
| 26   |        | TOTAL ADMIN & GENERAL - M & E              |        | 22,429    | 12,355         | 7,220    | 20  | 0     | 2,835  | 0        | 0        |
| 27   |        | TOTAL O & M EXPENSE - M & E                |        | 386,253   | 239,386        | 134,167  | 427 | 0     | 12,272 | 0        | 0        |

COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 96 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML    | DS/IS         | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-----------------|----------------|----------------|------------|----------|---------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)             | (E)            | (F)            | (G)        | (H)      | (I)           | (J)      | (K)      |
|          |          |                              |              | \$              | \$             | \$             | \$         | \$       | \$            | \$       | \$       |
| 1        |          | LABOR                        |              |                 |                |                |            |          |               |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 73,688          | 24,628         | 17,794         | 36         | 0        | 31,232        | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 1,449           | 484            | 350            | 1          | 0        | 614           | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>15,525</u>   | <u>5,189</u>   | <u>3,749</u>   | <u>8</u>   | <u>0</u> | <u>6,580</u>  | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 90,662          | 30,301         | 21,893         | 45         | 0        | 38,426        | 0        | 0        |
| 10       |          | M & E                        |              |                 |                |                |            |          |               |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 341,557         | 219,590        | 121,570        | 396        | 0        | 0             | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 21,878          | 7,311          | 5,283          | 11         | 0        | 9,272         | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 389             | 130            | 94             | 0          | 0        | 165           | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 0               | 0              | 0              | 0          | 0        | 0             | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>22,429</u>   | <u>12,355</u>  | <u>7,220</u>   | <u>20</u>  | <u>0</u> | <u>2,835</u>  | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>386,253</u>  | <u>239,386</u> | <u>134,167</u> | <u>427</u> | <u>0</u> | <u>12,272</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 476,915         | 269,687        | 156,060        | 472        | 0        | 50,698        | 0        | 0        |

COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 97 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)       | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|----------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        | 408             | TAXES BASED ON PROPERTY    | 7COMM               | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 2        | 408             | TAXES BASED ON PAYROLL     | 12COMM              | 6,337                        | 2,118                       | 1,530                 | 3                | 0                  | 2,686              | 0                     | 0                     |
| 3        | 408             | OTHER TAXES                | 12COMM              | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 4        |                 | TOTAL TAXES OTHER THAN FIT |                     | 6,337                        | 2,118                       | 1,530                 | 3                | 0                  | 2,686              | 0                     | 0                     |

| LINE | ACCT  | ALLOC  | TOTAL        |                |             |          |          |             |          |          |
|------|---|--------|--------------|----------------|-------------|----------|----------|-------------|----------|----------|
| NO.  | NO.   | FACTOR | COMMODITY    | GS-RESIDENTIAL | GS-OTHER    | IUS      | DS-ML    | DS/IS       | NOT USED | NOT USED |
|      | (A)   | (C)    | (D)          | (E)            | (F)         | (G)      | (H)      | (I)         | (J)      | (K)      |
|      |   |        | \$           | \$             | \$          | \$       | \$       | \$          | \$       | \$       |
| 1    | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |        | (93,711)     | (40,260)       | (31,640)    | (358)    | 2,454    | (23,909)    | 0        | 0        |
| 2    | LESS: RECONCILING ITEMS:                        |        |              |                |             |          |          |             |          |          |
| 3    | IMPUTED INTEREST                                |        | 1,590        | 900            | 521         | 2        | 0        | 168         | 0        | 0        |
| 4    | TAX ACCELERATED DEPRECIATION                    | 19COMM | 0            | 0              | 0           | 0        | 0        | 0           | 0        | 0        |
| 5    | BOOK DEPRECIATION                               |        | <u>0</u>     | <u>0</u>       | <u>0</u>    | <u>0</u> | <u>0</u> | <u>0</u>    | <u>0</u> | <u>0</u> |
| 6    | EXCESS OF BOOK OVER TAX DEPRECIATION            |        | 0            | 0              | 0           | 0        | 0        | 0           | 0        | 0        |
| 7    | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12COMM | <u>(48)</u>  | <u>(16)</u>    | <u>(12)</u> | <u>0</u> | <u>0</u> | <u>(20)</u> | <u>0</u> | <u>0</u> |
| 8    | TOTAL RECONCILING ITEMS                         |        | <u>1,542</u> | <u>884</u>     | <u>509</u>  | <u>2</u> | <u>0</u> | <u>148</u>  | <u>0</u> | <u>0</u> |
| 9    | TAXABLE INCOME                                  |        | (95,253)     | (41,144)       | (32,149)    | (360)    | 2,454    | (24,057)    | 0        | 0        |
| 10   | STATE INCOME TAX @ 6.00%                        |        | (5,715)      | (2,469)        | (1,929)     | (22)     | 147      | (1,443)     | 0        | 0        |
| 11   | PLUS: FOREIGN TAX PAYMENTS                      | 19COMM | <u>0</u>     | <u>0</u>       | <u>0</u>    | <u>0</u> | <u>0</u> | <u>0</u>    | <u>0</u> | <u>0</u> |
| 12   | KENTUCKY STATE INCOME TAX - CURRENT             |        | (5,715)      | (2,469)        | (1,929)     | (22)     | 147      | (1,443)     | 0        | 0        |

COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 99 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS  | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|---|--------------|-----------------|----------------|----------|------|-------|---------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)             | (E)            | (F)      | (G)  | (H)   | (I)     | (J)      | (K)      |
|          |          |   |              | \$              | \$             | \$       | \$   | \$    | \$      | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                 |                |          |      |       |         |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                 |                |          |      |       |         |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19COMM       | 0               | 0              | 0        | 0    | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | 0               | 0              | 0        | 0    | 0     | 0       | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (5,715)         | (2,469)        | (1,929)  | (22) | 147   | (1,443) | 0        | 0        |

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                 | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|--------------------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | OPERATING REVENUE                    |                     | 21,865,491                   | 14,038,640                  | 7,769,797             | 25,126           | 2,454              | 29,475             | 0                     | 0                     |
| 2        |                 | LESS: EXPENSES OTHER THAN FIT        |                     | <u>21,959,202</u>            | <u>14,078,900</u>           | <u>7,801,437</u>      | <u>25,484</u>    | <u>0</u>           | <u>53,384</u>      | <u>0</u>              | <u>0</u>              |
| 3        |                 | OPERATING INCOME BEFORE TAXES        |                     | (93,711)                     | (40,260)                    | (31,640)              | (358)            | 2,454              | (23,909)           | 0                     | 0                     |
| 4        |                 | LESS: RECONCILING ITEMS:             |                     |                              |                             |                       |                  |                    |                    |                       |                       |
| 5        |                 | IMPUTED INTEREST                     |                     | 1,590                        | 900                         | 521                   | 2                | 0                  | 168                | 0                     | 0                     |
| 6        |                 | EXCESS OF BOOK OVER TAX S/L          | 19COMM              | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 7        |                 | BOOK DEPRECIATION                    |                     | <u>0</u>                     | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
| 8        |                 | EXCESS OF BOOK OVER TAX DEPRECIATION |                     | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 9        |                 | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12COMM              | (48)                         | (16)                        | (12)                  | 0                | 0                  | (20)               | 0                     | 0                     |
| 10       |                 | KENTUCKY STATE INCOME TAX DEDUCTION  |                     | <u>(5,715)</u>               | <u>(2,469)</u>              | <u>(1,929)</u>        | <u>(22)</u>      | <u>147</u>         | <u>(1,443)</u>     | <u>0</u>              | <u>0</u>              |
| 11       |                 | TOTAL RECONCILING ITEMS              |                     | (4,173)                      | (1,585)                     | (1,420)               | (20)             | 147                | (1,295)            | 0                     | 0                     |
| 12       |                 | TAXABLE INCOME                       |                     | (89,538)                     | (38,675)                    | (30,220)              | (338)            | 2,307              | (22,614)           | 0                     | 0                     |
| 13       |                 | CURRENT FEDERAL INCOME TAX @ 35%     |                     | (30,443)                     | (13,150)                    | (10,275)              | (115)            | 784                | (7,689)            | 0                     | 0                     |
| 14       |                 | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19COMM              | <u>0</u>                     | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
| 15       |                 | CURRENT FEDERAL INCOME TAX @ 35%     |                     | (30,443)                     | (13,150)                    | (10,275)              | (115)            | 784                | (7,689)            | 0                     | 0                     |

COMMODITY RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 101 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                     |              | \$              | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                |          |          |          |          |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19COMM       | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                |          |          |          |          |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19COMM       | <u>0</u>        | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>0</u>        | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (30,443)        | (13,150)       | (10,275) | (115)    | 784      | (7,689)  | 0        | 0        |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|-----------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)             | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |           |                                   |              | \$              | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                   |              | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
|          |           | LESS:                             |              |                 |                |          |          |          |          |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]          |              | <u>0</u>        | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                         |              | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX        | 19COMM       | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
|          |           | LESS:                             |              |                 |                |          |          |          |          |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                 | 3            | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT | 19COMM       | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX        | 19COMM       | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX        | 19COMM       | <u>0</u>        | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                     |              | 0               | 0              | 0        | 0        | 0        | 0        | 0        | 0        |

10 PLUS WORKING CAPITAL:

|    |        |                               |        |          |          |          |          |          |          |          |          |
|----|--------|-------------------------------|--------|----------|----------|----------|----------|----------|----------|----------|----------|
| 11 |        | CASH WORKING CAPITAL @ 1/8 OF |        |          |          |          |          |          |          |          |          |
| 12 |        | O & M EXCLUDING GAS COST [3]  |        | 59,614   | 33,711   | 19,508   | 59       | 0        | 6,337    | 0        | 0        |
| 13 | 151.00 | FUEL STOCK                    | 2      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 14 | 154.00 | MATERIALS & SUPPLIES          | 7COMM  | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 15 | 165.00 | PREPAYMENTS                   | 13COMM | 605      | 378      | 211      | 1        | 0        | 16       | 0        | 0        |
| 16 | 164.00 | GAS STORED UNDERGROUND - FSS  | 2      | <u>0</u> |
| 17 |        | RATE BASE                     |        | 60,219   | 34,089   | 19,719   | 60       | 0        | 6,353    | 0        | 0        |

REFERENCES: [1] PAGE 83, [2] PAGE 85,

|                         |                   |                   |                  |               |          |          |          |          |
|-------------------------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|
| [3] TOTAL O & M EXPENSE | 21,952,865        | 14,076,782        | 7,799,907        | 25,481        | 0        | 50,698   | 0        | 0        |
| LESS: COST OF GAS       | <u>21,475,950</u> | <u>13,807,095</u> | <u>7,643,847</u> | <u>25,009</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| O & M EXCL. GAS COST    | 476,915           | 269,687           | 156,060          | 472           | 0        | 50,698   | 0        | 0        |

| LINE NO. | DESCRIPTION (A)                            | ALLOC FACTOR (B) | TOTAL COMMODITY (C) | GS-RESIDENTIAL (D) | GS-OTHER (E) | IUS (F) | DS-ML (G) | DS/IS (H) | NOT USED (I) | NOT USED (K) |
|----------|--|------------------|---------------------|--------------------|--------------|---------|-----------|-----------|--------------|--------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                | 100.000%            | 44.549%            | 28.650%      | 0.065%  | 0.000%    | 26.736%   | 0.000%       | 0.000%       |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                | 100.000%            | 60.941%            | 37.239%      | 0.089%  | 0.000%    | 1.731%    | 0.000%       | 0.000%       |
| 3        | MINIMUM SYSTEM MAINS                       | 3                | 100.000%            | 73.793%            | 16.741%      | 0.024%  | 0.000%    | 9.442%    | 0.000%       | 0.000%       |
| 4        | THROUGHPUT EXCL MLS                        | 4                | 100.000%            | 33.421%            | 24.147%      | 0.048%  | 0.000%    | 42.384%   | 0.000%       | 0.000%       |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                | 100.000%            | 38.984%            | 26.399%      | 0.057%  | 0.000%    | 34.560%   | 0.000%       | 0.000%       |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                | 100.000%            | 89.658%            | 10.279%      | 0.001%  | 0.004%    | 0.058%    | 0.000%       | 0.000%       |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7COMM            | 100.000%            | 100.000%           | 0.000%       | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                | 100.000%            | 0.000%             | 100.000%     | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                | 100.000%            | 64.291%            | 35.593%      | 0.116%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 10       | OTHER DIST. EXP - LABOR                    | 10COMM           | 100.000%            | 33.421%            | 24.148%      | 0.048%  | 0.000%    | 42.383%   | 0.000%       | 0.000%       |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11COMM           | 100.000%            | 33.419%            | 24.149%      | 0.050%  | 0.000%    | 42.382%   | 0.000%       | 0.000%       |
| 12       | O & M EXCL A & G - LABOR                   | 12COMM           | 100.000%            | 33.421%            | 24.147%      | 0.049%  | 0.000%    | 42.383%   | 0.000%       | 0.000%       |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13COMM           | 100.000%            | 62.401%            | 34.893%      | 0.112%  | 0.000%    | 2.594%    | 0.000%       | 0.000%       |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14COMM           | 100.000%            | 100.000%           | 0.000%       | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 15       | DIRECT PLANT ACCT 380                      | 15               | 100.000%            | 88.228%            | 11.418%      | 0.001%  | 0.000%    | 0.353%    | 0.000%       | 0.000%       |
| 16       | DIRECT PLANT ACCTS 381                     | 16               | 100.000%            | 71.942%            | 27.612%      | 0.013%  | 0.000%    | 0.433%    | 0.000%       | 0.000%       |
| 17       | DIRECT PLANT ACCT 385                      | 17               | 100.000%            | 0.000%             | 25.977%      | 0.029%  | 0.000%    | 73.995%   | 0.000%       | 0.000%       |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18COMM           | 100.000%            | 100.000%           | 0.000%       | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 19       | TOTAL PLANT                                | 19COMM           | 100.000%            | 100.000%           | 0.000%       | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20               | 100.000%            | 56.388%            | 21.570%      | 0.041%  | 0.000%    | 22.001%   | 0.000%       | 0.000%       |
| 21       | UNCOLLECTIBLES                             | 21               | 100.000%            | 86.777%            | 13.141%      | 0.002%  | 0.006%    | 0.074%    | 0.000%       | 0.000%       |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)            | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 15,086,946       | 9,698,655        | 4,038,828        | 4,948        | 103,320        | 1,241,195      | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>5,636,343</u> | <u>3,675,093</u> | <u>1,508,898</u> | <u>1,748</u> | <u>(8)</u>     | <u>450,611</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 20,723,288       | 13,373,748       | 5,547,726        | 6,696        | 103,312        | 1,691,806      | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                | 0                | 0                | 0            | 0              | 0              | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 6,549,932        | 4,827,254        | 1,103,559        | 1,576        | 324            | 617,219        | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 2,386,350        | 1,760,655        | 399,429          | 569          | 418            | 225,279        | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 2,466,199        | 1,249,783        | 1,007,968        | 915          | 32,484         | 175,049        | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 453,144          | 228,205          | 186,595          | 169          | 6,099          | 32,076         | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>921,285</u>   | <u>679,689</u>   | <u>154,198</u>   | <u>221</u>   | <u>207</u>     | <u>86,970</u>  | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 12,776,910       | 8,745,586        | 2,851,749        | 3,450        | 39,531         | 1,136,593      | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 7,946,378        | 4,628,162        | 2,695,977        | 3,246        | 63,781         | 555,212        | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>2,396,039</u> | <u>1,626,120</u> | <u>627,116</u>   | <u>1,292</u> | <u>349</u>     | <u>141,162</u> | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 5,550,339        | 3,002,042        | 2,068,861        | 1,954        | 63,432         | 414,050        | 0            | 0            |
| 14       |          | RATE BASE                              |              | 90,759,041       | 61,595,438       | 23,754,409       | 48,933       | 13,204         | 5,347,064      | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.76%</b>     | <b>7.51%</b>     | <b>11.35%</b>    | <b>6.63%</b> | <b>483.03%</b> | <b>10.38%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00             | 0.89             | 1.35             | 0.79         | 57.44          | 1.23           | 0.00         | 0.00         |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 105 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML        | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|--------------|--------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)          | (H)          | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$           | \$           | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 20,204,362       | 14,287,380       | 4,392,091      | 8,134        | (415)        | 1,517,153      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0            | 0            | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 6,544,154        | 4,837,426        | 1,090,692      | 1,592        | (831)        | 615,275        | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 2,386,357        | 1,760,655        | 399,429        | 569          | 418          | 225,279        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 2,297,366        | 1,547,021        | 631,997        | 1,383        | (1,263)      | 118,228        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 422,353          | 282,413          | 118,029        | 254          | (56)         | 21,713         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>921,285</u>   | <u>679,689</u>   | <u>154,198</u> | <u>221</u>   | <u>207</u>   | <u>86,970</u>  | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 12,571,515       | 9,107,204        | 2,394,345      | 4,019        | (1,526)      | 1,067,465      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 7,632,848        | 5,180,177        | 1,997,746      | 4,115        | 1,110        | 449,688        | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>2,396,039</u> | <u>1,626,120</u> | <u>627,116</u> | <u>1,292</u> | <u>349</u>   | <u>141,162</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 5,236,809        | 3,554,057        | 1,370,630      | 2,823        | 761          | 308,526        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 90,759,041       | 61,595,438       | 23,754,409     | 48,933       | 13,204       | 5,347,064      | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b> | <b>8.41%</b> | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00         | 1.00         | 1.00           | 0.00         | 0.00         |

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total DEMAND<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F)   | DS-ML<br>(G)    | DS/IS<br>(H)  | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|---------------------|-----------------------|-----------------|--------------|-----------------|---------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 5,117,417           | 4,588,725             | 353,263         | 3,186        | (103,735)       | 275,958       | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                   | 0                     | 0               | 0            | 0               | 0             | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 47,250              | 42,369                | 3,262           | 29           | (958)           | 2,548         | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>9,729</u>        | <u>8,723</u>          | <u>672</u>      | <u>6</u>     | <u>(197)</u>    | <u>525</u>    | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 5,060,438           | 4,537,633             | 349,329         | 3,151        | (102,580)       | 272,885       | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>303,626</u>      | <u>272,258</u>        | <u>20,960</u>   | <u>189</u>   | <u>(6,155)</u>  | <u>16,373</u> | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 4,756,812           | 4,265,375             | 328,369         | 2,962        | (96,425)        | 256,512       | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>1,664,877</u>    | <u>1,492,881</u>      | <u>114,929</u>  | <u>1,037</u> | <u>(33,749)</u> | <u>89,779</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 3,091,935           | 2,772,494             | 213,440         | 1,925        | (62,676)        | 166,733       | 0               | 0               |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY CLASS - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 107 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                | ALLOC FACTOR<br>(C) | TOTAL DEMAND<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|-------------------------------------|---------------------|---------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | TOTAL REVENUES [1]                  |                     | 15,086,946                | 9,698,655                   | 4,038,828             | 4,948            | 103,320            | 1,241,195          | 0                     | 0                     |
| 2        |                 | COST OF GAS                         |                     | 0                         | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 3        |                 | OPERATING & MAINTENANCE EXPENSE [2] |                     | 6,487,179                 | 4,786,334                   | 1,086,758             | 1,557            | 324                | 612,202            | 0                     | 0                     |
| 4        |                 | DEPRECIATION & AMORTIZATION [3]     |                     | 2,386,357                 | 1,760,655                   | 399,429               | 569              | 418                | 225,279            | 0                     | 0                     |
| 5        |                 | FEDERAL INCOME TAX [4]              |                     | 632,490                   | 54,140                      | 517,068               | 346              | 32,486             | 28,449             | 0                     | 0                     |
| 6        |                 | KENTUCKY STATE INCOME TAX [5]       |                     | 118,728                   | 10,155                      | 97,069                | 65               | 6,099              | 5,340              | 0                     | 0                     |
| 7        |                 | TAXES OTHER THAN INCOME [6]         |                     | <u>921,285</u>            | <u>679,689</u>              | <u>154,198</u>        | <u>221</u>       | <u>207</u>         | <u>86,970</u>      | <u>0</u>              | <u>0</u>              |
| 8        |                 | TOTAL EXPENSES & TAXES              |                     | 10,546,038                | 7,290,973                   | 2,254,522             | 2,758            | 39,533             | 958,240            | 0                     | 0                     |
| 9        |                 | OPERATING INCOME                    |                     | 4,540,908                 | 2,407,682                   | 1,784,306             | 2,190            | 63,786             | 282,955            | 0                     | 0                     |
| 10       |                 | INTEREST EXPENSE [7]                |                     | <u>2,396,039</u>          | <u>1,626,120</u>            | <u>627,116</u>        | <u>1,292</u>     | <u>349</u>         | <u>141,162</u>     | <u>0</u>              | <u>0</u>              |
| 11       |                 | INCOME AVAILABLE FOR COMMON EQUITY  |                     | 2,144,869                 | 781,562                     | 1,157,190             | 898              | 63,437             | 141,793            | 0                     | 0                     |
| 12       |                 | RATE BASE [8]                       |                     | 90,759,041                | 61,595,438                  | 23,754,409            | 48,933           | 13,204             | 5,347,064          | 0                     | 0                     |
| 13       |                 | RATE OF RETURN EARNED ON RATE BASE  |                     | <b>5.00%</b>              | <b>3.91%</b>                | <b>7.51%</b>          | <b>4.48%</b>     | <b>483.07%</b>     | <b>5.29%</b>       | <b>0.00%</b>          | <b>0.00%</b>          |
| 14       |                 | UNITIZED RETURN                     |                     | 1.00                      | 0.78                        | 1.50                  | 0.90             | 96.61              | 1.06               | 0.00                  | 0.00                  |

REFERENCES: [1] PAGE 114, [2] PAGE 122, [3] PAGE 113, [4] PAGE 127, [5] PAGE 125, [6] PAGE 123, [7] PAGE 126, [8] PAGE 128.



DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 109 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             | 7DEM         | 150,504          | 111,034        | 25,190         | 36         | 36         | 14,208         | 0        | 0        |
| 10       | 387.42   | RADIO                                 | 7DEM         | 162,658          | 120,001        | 27,224         | 39         | 39         | 15,355         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 27,326           | 20,160         | 4,574          | 7          | 7          | 2,580          | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          | 7DEM         | 773,125          | 570,373        | 129,398        | 186        | 186        | 72,983         | 0        | 0        |
| 13       | 387.46   | CIS                                   | 7DEM         | <u>23,246</u>    | <u>17,150</u>  | <u>3,891</u>   | <u>6</u>   | <u>6</u>   | <u>2,194</u>   | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 86,628,534       | 63,910,234     | 14,498,956     | 20,788     | 21,081     | 8,177,485      | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                |                |            |            |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 150,403          | 110,960        | 25,173         | 36         | 36         | 14,198         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 3,849            | 2,840          | 644            | 1          | 1          | 363            | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 257,254          | 189,789        | 43,057         | 62         | 62         | 24,285         | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 19,592           | 14,454         | 3,279          | 5          | 5          | 1,849          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 5,004            | 3,692          | 838            | 1          | 1          | 472            | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 4,959            | 3,659          | 830            | 1          | 1          | 468            | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 666,644          | 491,817        | 111,576        | 160        | 160        | 62,931         | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 1,894            | 1,397          | 317            | 0          | 0          | 179            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 51,779           | 38,200         | 8,666          | 12         | 12         | 4,888          | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>60,151</u>    | <u>44,376</u>  | <u>10,067</u>  | <u>14</u>  | <u>14</u>  | <u>5,678</u>   | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>1,221,529</u> | <u>901,184</u> | <u>204,447</u> | <u>292</u> | <u>292</u> | <u>115,311</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 89,571,619       | 66,081,496     | 14,991,540     | 21,493     | 21,786     | 8,455,311      | 0        | 0        |



DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 111 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND   | GS-RESIDENTIAL | GS-OTHER      | IUS        | DS-ML      | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|---------------|------------|------------|---------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)           | (G)        | (H)        | (I)           | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$            | \$         | \$         | \$            | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)            | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | (12,255)       | (9,041)        | (2,051)       | (3)        | (3)        | (1,157)       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 81,784         | 60,336         | 13,688        | 20         | 20         | 7,720         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 116,066        | 85,628         | 19,426        | 28         | 28         | 10,957        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 10,361         | 7,644          | 1,734         | 2          | 2          | 978           | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 108,313        | 79,908         | 18,128        | 26         | 26         | 10,225        | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | <u>23,392</u>  | <u>17,257</u>  | <u>3,915</u>  | <u>6</u>   | <u>6</u>   | <u>2,208</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 23,775,767     | 17,541,617     | 3,979,567     | 5,706      | 4,380      | 2,244,497     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |               |            |            |               |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | (6,801)        | (5,017)        | (1,138)       | (2)        | (2)        | (642)         | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | (2,323)        | (1,714)        | (389)         | (1)        | (1)        | (219)         | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 153,442        | 113,202        | 25,682        | 37         | 37         | 14,485        | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 5,530          | 4,080          | 926           | 1          | 1          | 522           | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 1,291          | 952            | 216           | 0          | 0          | 122           | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 3,088          | 2,278          | 517           | 1          | 1          | 292           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 7,760          | 5,725          | 1,299         | 2          | 2          | 733           | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 38             | 28             | 6             | 0          | 0          | 4             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 272,670        | 201,162        | 45,637        | 65         | 65         | 25,740        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 1,588          | 1,172          | 266           | 0          | 0          | 150           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 41,442         | 30,574         | 6,936         | 10         | 10         | 3,912         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7DEM         | 0              | 0              | 0             | 0          | 0          | 0             | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>2,474</u>   | <u>1,825</u>   | <u>414</u>    | <u>1</u>   | <u>1</u>   | <u>234</u>    | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>480,199</u> | <u>354,267</u> | <u>80,372</u> | <u>114</u> | <u>114</u> | <u>45,333</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 24,966,509     | 18,420,087     | 4,178,863     | 5,990      | 4,664      | 2,356,905     | 0        | 0        |



DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|--------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                                       |              | \$           | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)          | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 5,628        | 4,152          | 942      | 1   | 1     | 531     | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 6,083        | 4,488          | 1,018    | 1   | 1     | 574     | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 1,021        | 753            | 171      | 0   | 0     | 96      | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 28,808       | 21,253         | 4,822    | 7   | 7     | 2,719   | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | 869          | 641            | 145      | 0   | 0     | 82      | 0        | 0        |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 2,031,748    | 1,499,041      | 340,079  | 486 | 335   | 191,804 | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |              |                |          |     |       |         |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 7,479        | 5,518          | 1,252    | 2   | 2     | 706     | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 258          | 190            | 43       | 0   | 0     | 24      | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 51,833       | 38,240         | 8,675    | 12  | 12    | 4,893   | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 1,792        | 1,322          | 300      | 0   | 0     | 169     | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 459          | 339            | 77       | 0   | 0     | 43      | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 199          | 147            | 33       | 0   | 0     | 19      | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 26,522       | 19,567         | 4,439    | 6   | 6     | 2,504   | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 96           | 71             | 16       | 0   | 0     | 9       | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 1,340        | 989            | 224      | 0   | 0     | 126     | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | 4,010        | 2,958          | 671      | 1   | 1     | 379     | 0        | 0        |
| 28       |          | TOTAL GENERAL PLANT                   |              | 93,988       | 69,341         | 15,730   | 21  | 21    | 8,872   | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 2,386,357    | 1,760,655      | 399,429  | 569 | 418   | 225,279 | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 114 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML   | DS/IS     | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|--------------|----------------|-----------|-------|---------|-----------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)          | (E)            | (F)       | (G)   | (H)     | (I)       | (J)      | (K)      |
|          |          |                              |              | \$           | \$             | \$        | \$    | \$      | \$        | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |              |                |           |       |         |           |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 7,696,748    | 7,696,748      | 0         | 0     | 0       | 0         | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 2,448,611    | 0              | 2,448,611 | 0     | 0       | 0         | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | 191,431      | 0              | 186,539   | 4,893 | 0       | 0         | 0        | 0        |
| 5        |          | TOTAL SALES REVENUE          |              | 10,336,790   | 7,696,748      | 2,635,150 | 4,893 | 0       | 0         | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 73,412       | 65,525         | 706       | 55    | 548     | 6,578     | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 4,676,743    | 1,936,382      | 1,402,972 | 0     | 102,772 | 1,234,617 | 0        | 0        |
| 9        | 495.00   | OTHER                        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | 4,750,155    | 2,001,907      | 1,403,678 | 55    | 103,320 | 1,241,195 | 0        | 0        |
| 11       |          | TOTAL OPERATING REVENUE      |              | 15,086,946   | 9,698,655      | 4,038,828 | 4,948 | 103,320 | 1,241,195 | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 PRODUCTION EXPENSE ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 115 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|--------------|----------------|----------|-----|-------|-------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)   | (J)      | (K)      |
|          |           |                                   |              | \$           | \$             | \$       | \$  | \$    | \$    | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |              |                |          |     |       |       |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |              |                |          |     |       |       |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2            | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 7        |           | TOTAL OPERATION                   |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |              |                |          |     |       |       |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 13       |           | TOTAL MAINTENANCE                 |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |              |                |          |     |       |       |          |          |
| 16       | 803 - 806 |                                   |              |              |                |          |     |       |       |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - LABOR  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)          | (G)      |          | (I)          | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |              |          |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10DEM        | 12,604        | 9,300          | 2,110        | 3        | 1        | 1,190        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 385,358       | 284,352        | 64,509       | 92       | 19       | 36,386       | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 28,966        | 21,374         | 4,849        | 7        | 1        | 2,735        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 10DEM        | 70,868        | 52,293         | 11,863       | 17       | 4        | 6,691        | 0        | 0        |
| 10       | 881      | RENTS                      | 10DEM        | <u>0</u>      | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 497,796       | 367,319        | 83,331       | 119      | 25       | 47,002       | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |              |          |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10DEM        | 1,119         | 826            | 187          | 0        | 0        | 106          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 883           | 652            | 148          | 0        | 0        | 83           | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 325,845       | 240,438        | 54,546       | 78       | 16       | 30,766       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 48,750        | 35,972         | 8,161        | 12       | 2        | 4,603        | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10DEM        | <u>16,060</u> | <u>11,851</u>  | <u>2,688</u> | <u>4</u> | <u>1</u> | <u>1,516</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 392,657       | 289,739        | 65,730       | 94       | 19       | 37,074       | 0        | 0        |



DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
FORTHETWELVEMONTHSENDED12/31/2017

ATTACHMENT CEN-1  
PAGE 118 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL DEMAND   | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML    | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|----------------|----------------|---------------|-----------|----------|---------------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)            | (E)            | (F)           | (G)       | (H)      | (I)           | (J)      | (K)      |
|          |          |                                 |              | \$             | \$             | \$            | \$        | \$       | \$            | \$       | \$       |
| 1        |          | SALES                           |              |                |                |               |           |          |               |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u> | <u>0</u>      | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL SALES                     |              | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u> | <u>0</u>      | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 890,453        | 657,058        | 149,061       | 213       | 44       | 84,076        | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                |                |               |           |          |               |          |          |
| 9        | 920      | SALARIES                        | 12DEM        | 183,460        | 135,373        | 30,711        | 44        | 9        | 17,322        | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12DEM        | 532            | 393            | 89            | 0         | 0        | 50            | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 19       | 931      | RENTS                           | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                |                |               |           |          |               |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12DEM        | 0              | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12DEM        | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u> | <u>0</u>      | <u>0</u> | <u>0</u> |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>183,992</u> | <u>135,766</u> | <u>30,800</u> | <u>44</u> | <u>9</u> | <u>17,372</u> | <u>0</u> | <u>0</u> |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 1,074,445      | 792,824        | 179,861       | 257       | 53       | 101,448       | 0        | 0        |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER     | IUS       | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|--------------|-----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)          | (G)       | (H)      | (I)          | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$           | \$        | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |              |           |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11DEM        | 170,642       | 125,915        | 28,565       | 41        | 9        | 16,112       | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 1,070,824     | 790,150        | 179,256      | 257       | 54       | 101,107      | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 41,640        | 30,726         | 6,971        | 10        | 2        | 3,932        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | (0)           | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 11DEM        | 263,865       | 194,703        | 44,171       | 63        | 13       | 24,914       | 0        | 0        |
| 10       | 881      | RENTS                      | 11DEM        | <u>17,894</u> | <u>13,204</u>  | <u>2,995</u> | <u>4</u>  | <u>1</u> | <u>1,690</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 1,564,865     | 1,154,698      | 261,958      | 375       | 79       | 147,755      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |              |           |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11DEM        | 560           | 413            | 94           | 0         | 0        | 53           | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 88,584        | 65,365         | 14,829       | 21        | 4        | 8,364        | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 774,580       | 571,555        | 129,665      | 186       | 39       | 73,136       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 50,911        | 37,567         | 8,522        | 12        | 3        | 4,807        | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 11DEM        | <u>43,467</u> | <u>32,074</u>  | <u>7,276</u> | <u>10</u> | <u>2</u> | <u>4,104</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 958,102       | 706,974        | 160,386      | 229       | 48       | 90,464       | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 120 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|--------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)          | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$           | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |              |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21           | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 905      | MISC.                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |              |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6            | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 17       | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                              | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS   | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|--|--------------|--------------|----------------|----------|-------|-------|---------|----------|----------|
|          | (A)      | (B)  | (C)          | (D)          | (E)            | (F)      | (G)   | (H)   | (I)     | (J)      | (K)      |
|          |          |  |              | \$           | \$             | \$       | \$    | \$    | \$      | \$       | \$       |
| 1        |          | SALES                                      |              |              |                |          |       |       |         |          |          |
| 2        | 911      | SUPERVISION                                | 6            | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING                    | 6            | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                                | 6            | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 5        | 916      | MISC.                                      | 6            | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                                |              | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                |              | 2,522,967    | 1,861,672      | 422,344  | 604   | 127   | 238,219 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL                   |              |              |                |          |       |       |         |          |          |
| 9        | 920      | SALARIES                                   | 13DEM        | 491,280      | 362,461        | 82,324   | 118   | 25    | 46,352  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                 | 13DEM        | 148,231      | 109,363        | 24,839   | 36    | 7     | 13,986  | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                 | 13DEM        | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                           | 13DEM        | 1,304,717    | 962,607        | 218,631  | 313   | 65    | 123,100 | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE                         | 13DEM        | 13,553       | 9,999          | 2,271    | 3     | 1     | 1,279   | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES                       | 12DEM        | 173,070      | 127,707        | 28,972   | 42    | 9     | 16,341  | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS               | 12DEM        | 555,633      | 409,996        | 93,013   | 133   | 28    | 52,463  | 0        | 0        |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |              | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 17       | 928      | REG COMMISSION EXP - GENERAL               | 13DEM        | 32,786       | 24,189         | 5,494    | 8     | 2     | 3,093   | 0        | 0        |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13DEM        | 29,210       | 21,551         | 4,895    | 7     | 1     | 2,756   | 0        | 0        |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV            | 13DEM        | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 20       | 930.20   | MISC. - GENERAL                            | 13DEM        | (10,299)     | (7,599)        | (1,726)  | (2)   | (1)   | (972)   | 0        | 0        |
| 21       | 931      | RENTS                                      | 13DEM        | 106,465      | 78,549         | 17,840   | 26    | 5     | 10,045  | 0        | 0        |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                | 13DEM        | 22           | 16             | 4        | 0     | 0     | 2       | 0        | 0        |
| 23       | 935.23   | MAINT. - GEN'L OFFICE                      |              |              |                |          |       |       |         |          |          |
| 24       |          | FURNITURE & EQUIPMENT                      | 13DEM        | 0            | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 25       | 932      | MAINT.-MISCELLANEOUS                       | 13DEM        | 42,959       | 31,695         | 7,199    | 10    | 2     | 4,053   | 0        | 0        |
| 26       |          | TOTAL ADMIN & GENERAL - M & E              |              | 2,887,627    | 2,130,534      | 483,756  | 694   | 144   | 272,498 | 0        | 0        |
| 27       |          | TOTAL O & M EXPENSE - M & E                |              | 5,412,733    | 3,993,510      | 906,897  | 1,300 | 271   | 510,754 | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 122 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|------------------|------------------|----------------|--------------|------------|----------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)              | (E)              | (F)            | (G)          | (H)        | (I)            | (J)      | (K)      |
|          |          |                              |              | \$               | \$               | \$             | \$           | \$         | \$             | \$       | \$       |
| 1        |          | LABOR                        |              |                  |                  |                |              |            |                |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 497,796          | 367,319          | 83,331         | 119          | 25         | 47,002         | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 392,657          | 289,739          | 65,730         | 94           | 19         | 37,074         | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>183,992</u>   | <u>135,766</u>   | <u>30,800</u>  | <u>44</u>    | <u>9</u>   | <u>17,372</u>  | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 1,074,445        | 792,824          | 179,861        | 257          | 53         | 101,448        | 0        | 0        |
| 10       |          | M & E                        |              |                  |                  |                |              |            |                |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 2,139            | 1,304            | 797            | 2            | 0          | 37             | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 1,564,865        | 1,154,698        | 261,958        | 375          | 79         | 147,755        | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 958,102          | 706,974          | 160,386        | 229          | 48         | 90,464         | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | (0)              | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>2,887,627</u> | <u>2,130,534</u> | <u>483,756</u> | <u>694</u>   | <u>144</u> | <u>272,498</u> | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>5,412,733</u> | <u>3,993,510</u> | <u>906,897</u> | <u>1,300</u> | <u>271</u> | <u>510,754</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 6,487,179        | 4,786,334        | 1,086,758      | 1,557        | 324        | 612,202        | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 123 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS  | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|--------------|----------------|----------|-----|-------|--------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)    | (J)      | (K)      |
|          |          |                            |              | \$           | \$             | \$       | \$  | \$    | \$     | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7DEM         | 846,190      | 624,277        | 141,627  | 203 | 203   | 79,880 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12DEM        | 75,095       | 55,412         | 12,571   | 18  | 4     | 7,090  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 921,285      | 679,689        | 154,198  | 221 | 207   | 86,970 | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|----------------|--------------|------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)              | (F)            | (G)          | (H)        | (I)            | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$             | \$           | \$         | \$             | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 5,292,125        | 2,471,977        | 2,398,443      | 2,601        | 102,371    | 316,744        | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                  |                |              |            |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 2,396,039        | 1,626,120        | 627,116        | 1,292        | 349        | 141,162        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19DEM        | 2,985,604        | 2,202,629        | 499,701        | 717          | 717        | 281,841        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>2,125,736</u> | <u>1,568,382</u> | <u>355,809</u> | <u>507</u>   | <u>356</u> | <u>200,676</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | 859,868          | 634,247          | 143,892        | 210          | 361        | 81,165         | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12DEM        | (569)            | (420)            | (95)           | 0            | 0          | (54)           | 0        | 0        |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>3,255,338</u> | <u>2,259,947</u> | <u>770,913</u> | <u>1,502</u> | <u>710</u> | <u>222,273</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | 2,036,787        | 212,030          | 1,627,530      | 1,099        | 101,661    | 94,471         | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | 122,207          | 12,722           | 97,651         | 66           | 6,100      | 5,668          | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19DEM        | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | 122,207          | 12,722           | 97,651         | 66           | 6,100      | 5,668          | 0        | 0        |

DEMAND RELATED  
 CUSTOMER-DEMAND  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 125 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS | NOT USED | NOT USED |
|----------|----------|---|--------------|--------------|----------------|----------|-----|-------|-------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)   | (J)      | (K)      |
|          |          |   |              | \$           | \$             | \$       | \$  | \$    | \$    | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |              |                |          |     |       |       |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |              |                |          |     |       |       |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19DEM        | (3,479)      | (2,567)        | (582)    | (1) | (1)   | (328) | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (3,479)      | (2,567)        | (582)    | (1) | (1)   | (328) | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | 118,728      | 10,155         | 97,069   | 65  | 6,099 | 5,340 | 0        | 0        |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|------------------|------------------|------------------|--------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)              | (E)              | (F)              | (G)          | (H)          | (I)            | (J)      | (K)      |
|          |          |                                      |              | \$               | \$               | \$               | \$           | \$           | \$             | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 15,086,946       | 9,698,655        | 4,038,828        | 4,948        | 103,320      | 1,241,195      | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>9,794,820</u> | <u>7,226,678</u> | <u>1,640,385</u> | <u>2,347</u> | <u>949</u>   | <u>924,451</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 5,292,125        | 2,471,977        | 2,398,443        | 2,601        | 102,371      | 316,744        | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                  |                  |                  |              |              |                |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 2,396,039        | 1,626,120        | 627,116          | 1,292        | 349          | 141,162        | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19DEM        | 2,985,604        | 2,202,629        | 499,701          | 717          | 717          | 281,841        | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>2,125,736</u> | <u>1,568,382</u> | <u>355,809</u>   | <u>507</u>   | <u>356</u>   | <u>200,676</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | 859,868          | 634,247          | 143,892          | 210          | 361          | 81,165         | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12DEM        | (569)            | (420)            | (95)             | 0            | 0            | (54)           | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>122,207</u>   | <u>12,722</u>    | <u>97,651</u>    | <u>66</u>    | <u>6,100</u> | <u>5,668</u>   | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 3,377,545        | 2,272,669        | 868,564          | 1,568        | 6,810        | 227,941        | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | 1,914,581        | 199,308          | 1,529,879        | 1,033        | 95,561       | 88,803         | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 650,958          | 67,765           | 520,159          | 351          | 32,491       | 30,193         | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19DEM        | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 650,958          | 67,765           | 520,159          | 351          | 32,491       | 30,193         | 0        | 0        |

DEMAND RELATED  
CUSTOMER-DEMAND  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
PAGE 127 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL DEMAND    | GS-RESIDENTIAL  | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |            |            |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19DEM        | 7,315           | 5,397           | 1,224          | 2          | 2          | 691            | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |            |            |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19DEM        | <u>(11,153)</u> | <u>(8,228)</u>  | <u>(1,867)</u> | <u>(3)</u> | <u>(3)</u> | <u>(1,053)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(11,153)</u> | <u>(8,228)</u>  | <u>(1,867)</u> | <u>(3)</u> | <u>(3)</u> | <u>(1,053)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(18,468)</u> | <u>(13,625)</u> | <u>(3,091)</u> | <u>(5)</u> | <u>(5)</u> | <u>(1,744)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | 632,490         | 54,140          | 517,068        | 346        | 32,486     | 28,449         | 0        | 0        |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND      | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|-----------|---|--------------|-------------------|-------------------|-------------------|---------------|--------------|------------------|----------|----------|
|          | (A)       | (B)                                     | (C)          | (D)               | (E)               | (F)               | (G)           | (H)          | (I)              | (J)      | (K)      |
|          |           |   |              | \$                | \$                | \$                | \$            | \$           | \$               | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                         |              | 89,571,619        | 66,081,496        | 14,991,540        | 21,493        | 21,786       | 8,455,311        | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                  |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]                |              | <u>24,966,509</u> | <u>18,420,087</u> | <u>4,178,863</u>  | <u>5,990</u>  | <u>4,664</u> | <u>2,356,905</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                               |              | 64,605,110        | 47,661,409        | 10,812,677        | 15,503        | 17,121       | 6,098,406        | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 1,101,717         | 812,792           | 184,394           | 264           | 264          | 104,002          | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                  |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                       | 3            | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT       | 19DEM        | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 17,625,850        | 13,003,471        | 2,950,039         | 4,230         | 4,230        | 1,663,880        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                           |              | 48,080,977        | 35,470,730        | 8,047,032         | 11,537        | 13,155       | 4,538,528        | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                   |              |                   |                   |                   |               |              |                  |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF           |              |                   |                   |                   |               |              |                  |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]            |              | 810,897           | 598,292           | 135,845           | 195           | 41           | 76,525           | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                              | 2            | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                    | 7DEM         | 16,776            | 12,376            | 2,808             | 4             | 4            | 1,584            | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                             | 13DEM        | 77,840            | 57,430            | 13,044            | 19            | 4            | 7,344            | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS            | 2            | <u>41,772,551</u> | <u>25,456,610</u> | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>     | <u>723,083</u>   | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                               |              | 90,759,041        | 61,595,438        | 23,754,409        | 48,933        | 13,204       | 5,347,064        | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 109, [2] PAGE 111, |              |                   |                   |                   |               |              |                  |          |          |
|          |           | [3] TOTAL O & M EXPENSE                 |              | 6,487,179         | 4,786,334         | 1,086,758         | 1,557         | 324          | 612,202          | 0        | 0        |
|          |           | LESS: COST OF GAS                       |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                    |              | 6,487,179         | 4,786,334         | 1,086,758         | 1,557         | 324          | 612,202          | 0        | 0        |

COLUMBIA GAS OF KENTUCKY, INC.  
 ALLOCATION FACTORS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-1  
 PAGE 129 OF 129  
 WITNESS: C. NOTESTONE

DEMAND RELATED  
 FORECASTED TEST YEAR - ORIGINAL FILING

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOC FACTOR<br>(B) | TOTAL DEMAND<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|---------------------|---------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                   | 100.000%            | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                   | 100.000%            | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                   | 100.000%            | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                   | 100.000%            | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                   | 100.000%            | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                   | 100.000%            | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7DEM                | 100.000%            | 73.775%               | 16.737%         | 0.024%     | 0.024%       | 9.440%       | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                   | 100.000%            | 0.000%                | 100.000%        | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                   | 100.000%            | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10DEM               | 100.000%            | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11DEM               | 100.000%            | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12DEM               | 100.000%            | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13DEM               | 100.000%            | 73.779%               | 16.757%         | 0.024%     | 0.005%       | 9.435%       | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14DEM               | 100.000%            | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                  | 100.000%            | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                  | 100.000%            | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                  | 100.000%            | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18DEM               | 100.000%            | 73.789%               | 16.740%         | 0.024%     | 0.005%       | 9.442%       | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19DEM               | 100.000%            | 73.775%               | 16.737%         | 0.024%     | 0.024%       | 9.440%       | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                  | 100.000%            | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                  | 100.000%            | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

## COLUMBIA GAS OF KENTUCKY, INC.

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STUDY: ATTACHMENT CEN-2  
CASE NO.: 2016 - 00162  
WITNESS: C. NOTESTONE  
STUDY TYPE: FORECASTED TEST YEAR - ORIGINAL FILING  
ALLOCATION BASIS: DEMAND-COMMODITY  
TEST YEAR: 12/31/2017  
RATE BASE: 12/31/17

| <b>TOTAL COMPANY</b>  | <b>CUSTOMER</b>              | <b>COMMODITY</b>         | <b>DEMAND</b>            |                          |
|-----------------------|------------------------------|--------------------------|--------------------------|--------------------------|
| <b><u>SUMMARY</u></b> | <b><u>CLASSIFICATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> |
| <b>PAGE</b>           | <b>PAGE</b>                  | <b>PAGE</b>              | <b>PAGE</b>              | <b>PAGE</b>              |
| 1                     | 26                           | 52                       | 78                       | 104                      |
| 2                     | 27                           | 53                       | 79                       | 105                      |
| 3                     | 28                           | 54                       | 80                       | 106                      |
| 4                     | 29                           | 55                       | 81                       | 107                      |
| 5                     | 30                           | 56                       | 82                       | 108                      |
| 6                     | 31                           | 57                       | 83                       | 109                      |
| 7                     | 32                           | 58                       | 84                       | 110                      |
| 8                     | 33                           | 59                       | 85                       | 111                      |
| 9                     | 34                           | 60                       | 86                       | 112                      |
| 10                    | 35                           | 61                       | 87                       | 113                      |
| 11                    | 36                           | 62                       | 88                       | 114                      |
| 12                    | 37                           | 63                       | 89                       | 115                      |
| 13                    | 38                           | 64                       | 90                       | 116                      |
| 14                    | 39                           | 65                       | 91                       | 117                      |
| 15                    | 40                           | 66                       | 92                       | 118                      |
| 16                    | 41                           | 67                       | 93                       | 119                      |
| 17                    | 42                           | 68                       | 94                       | 120                      |
| 18                    | 43                           | 69                       | 95                       | 121                      |
| 19                    | 44                           | 70                       | 96                       | 122                      |
| 20                    | 45                           | 71                       | 97                       | 123                      |
| 21                    | 46                           | 72                       | 98                       | 124                      |
| 22                    | 47                           | 73                       | 99                       | 125                      |
| 23                    | 48                           | 74                       | 100                      | 126                      |
| 24                    | 49                           | 75                       | 101                      | 127                      |
| 25                    | 50                           | 76                       | 102                      | 128                      |
| N/A                   | 51                           | 77                       | 103                      | 129                      |

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RATE OF RETURN - PROFORMA @ AUTHORIZED RETURN  
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GROSS DIST. & GENERAL PLANT ALLOCATION (ACCTS 101,106)  
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GROSS DIST. & GENERAL PLANT ALLOCATION DEPR. RESERVE  
GROSS INTANGIBLE, PROD., & DIST. PLANT ALLOC. DEPR. EXPENSE  
GROSS DIST. & GENERAL PLANT ALLOCATION DEPR. EXPENSE  
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SALES AND A & G EXPENSE ALLOCATION - LABOR  
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 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED REVENUE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 1 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)          | (K)          |
|          |          |  |              | \$                | \$                | \$               | \$           | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 92,682,167        | 59,679,824        | 26,685,285       | 48,080       | 481,735       | 5,787,242        | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>25,408,373</u> | <u>16,471,876</u> | <u>6,826,911</u> | <u>8,147</u> | <u>2</u>      | <u>2,101,436</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 118,090,539       | 76,151,700        | 33,512,196       | 56,228       | 481,737       | 7,888,678        | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 21,475,950        | 13,807,095        | 7,643,847        | 25,009       | 0             | 0                | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 45,377,927        | 29,674,073        | 9,243,341        | 12,141       | 59,307        | 6,389,065        | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 15,939,784        | 10,262,609        | 3,150,131        | 4,212        | 17,840        | 2,504,992        | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 7,781,833         | 5,580,264         | 3,374,496        | 2,848        | 118,907       | (1,294,682)      | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 1,416,521         | 1,018,830         | 621,583          | 520          | 22,323        | (246,734)        | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>4,790,882</u>  | <u>2,789,635</u>  | <u>1,052,137</u> | <u>1,604</u> | <u>8,556</u>  | <u>938,950</u>   | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 96,782,897        | 63,132,506        | 25,085,535       | 46,334       | 226,933       | 8,291,591        | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 21,307,642        | 13,019,194        | 8,426,662        | 9,894        | 254,805       | (402,913)        | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>6,688,725</u>  | <u>3,655,277</u>  | <u>1,693,088</u> | <u>3,176</u> | <u>12,817</u> | <u>1,324,367</u> | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 14,618,917        | 9,363,917         | 6,733,574        | 6,718        | 241,988       | (1,727,280)      | 0            | 0            |
| 14       |          | RATE BASE                              |              | 253,360,781       | 138,457,476       | 64,132,114       | 120,294      | 485,505       | 50,165,419       | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>      | <b>9.40%</b>      | <b>13.14%</b>    | <b>8.23%</b> | <b>52.48%</b> | <b>-0.80%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00              | 1.12              | 1.56             | 0.98         | 6.24          | (0.10)           | 0.00         | 0.00         |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 2 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)              | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 118,090,544      | 73,876,083       | 28,492,060       | 56,596       | 127,592       | 15,538,212       | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0             | 0                | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 45,377,927       | 29,648,735       | 9,187,445        | 12,145       | 55,364        | 6,474,238        | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 15,939,787       | 10,262,609       | 3,150,131        | 4,212        | 17,840        | 2,504,992        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 7,781,834        | 4,839,922        | 1,741,261        | 2,968        | 3,690         | 1,193,993        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 1,416,522        | 883,814          | 323,728          | 542          | 1,311         | 207,128          | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>4,790,882</u> | <u>2,789,635</u> | <u>1,052,137</u> | <u>1,604</u> | <u>8,556</u>  | <u>938,950</u>   | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 96,782,902       | 62,231,810       | 23,098,549       | 46,480       | 86,761        | 11,319,301       | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 21,307,642       | 11,644,274       | 5,393,511        | 10,117       | 40,831        | 4,218,912        | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>6,688,725</u> | <u>3,655,277</u> | <u>1,693,088</u> | <u>3,176</u> | <u>12,817</u> | <u>1,324,367</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 14,618,917       | 7,988,997        | 3,700,423        | 6,941        | 28,014        | 2,894,545        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 253,360,781      | 138,457,476      | 64,132,114       | 120,294      | 485,505       | 50,165,419       | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b> | <b>8.41%</b>  | <b>8.41%</b>     | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00             | 1.00         | 1.00          | 1.00             | 0.00         | 0.00         |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 3 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>Company<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F)   | DS-ML<br>(G)     | DS/IS<br>(H)     | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|-------------------------|-----------------------|-----------------|--------------|------------------|------------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 25,408,378              | 14,196,259            | 1,806,775       | 8,516        | (354,143)        | 9,750,970        | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                       | 0                     | 0               | 0            | 0                | 0                | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 234,603                 | 131,078               | 16,682          | 79           | (3,270)          | 90,034           | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>48,302</u>           | <u>26,987</u>         | <u>3,435</u>    | <u>16</u>    | <u>(673)</u>     | <u>18,537</u>    | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 25,125,473              | 14,038,194            | 1,786,658       | 8,421        | (350,200)        | 9,642,399        | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>1,507,528</u>        | <u>842,292</u>        | <u>107,199</u>  | <u>505</u>   | <u>(21,012)</u>  | <u>578,544</u>   | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 23,617,945              | 13,195,902            | 1,679,459       | 7,916        | (329,188)        | 9,063,855        | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>8,266,281</u>        | <u>4,618,566</u>      | <u>587,811</u>  | <u>2,771</u> | <u>(115,216)</u> | <u>3,172,349</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 15,351,664              | 8,577,336             | 1,091,648       | 5,145        | (213,972)        | 5,891,506        | 0               | 0               |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY CLASS - @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 4 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|-------------------------------------|--------------|------------------|------------------|------------------|--------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)              | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$               | \$           | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 92,682,167       | 59,679,824       | 26,685,285       | 48,080       | 481,735       | 5,787,242        | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0             | 0                | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 45,095,029       | 29,490,670       | 9,167,328        | 12,050       | 59,307        | 6,365,667        | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 15,939,787       | 10,262,609       | 3,150,131        | 4,212        | 17,840        | 2,504,992        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (484,451)        | 221,356          | 1,153,450        | 197          | 118,906       | (1,978,356)      | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (91,006)         | 41,522           | 216,529          | 37           | 22,323        | (371,416)        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>4,790,881</u> | <u>2,789,635</u> | <u>1,052,137</u> | <u>1,604</u> | <u>8,556</u>  | <u>938,950</u>   | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 86,726,189       | 56,612,887       | 22,383,422       | 43,109       | 226,932       | 7,459,837        | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 5,955,978        | 3,066,938        | 4,301,863        | 4,972        | 254,803       | (1,672,594)      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>6,688,725</u> | <u>3,655,277</u> | <u>1,693,088</u> | <u>3,176</u> | <u>12,817</u> | <u>1,324,367</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | (732,747)        | (588,339)        | 2,608,775        | 1,796        | 241,986       | (2,996,961)      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 253,360,781      | 138,457,476      | 64,132,114       | 120,294      | 485,505       | 50,165,419       | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>2.35%</b>     | <b>2.22%</b>     | <b>6.71%</b>     | <b>4.13%</b> | <b>52.48%</b> | <b>-3.33%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | 0.94             | 2.86             | 1.76         | 22.33         | (1.42)           | 0.00         | 0.00         |

REFERENCES: [1] PAGE 11, [2] PAGE 19, [3] PAGE 10, [4] PAGE 24, [5] PAGE 22, [6] PAGE 20, [7] PAGE 23, [8] PAGE 25.

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 5 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                  |              |               |                  |          |          |
| 2        | 301.00   | ORGANIZATION                              |              | 521              | 298              | 114              | 0            | 1             | 108              | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    |              | 74,348           | 42,566           | 16,208           | 25           | 133           | 15,414           | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            |              | <u>8,341,319</u> | <u>4,775,674</u> | <u>1,818,292</u> | <u>2,904</u> | <u>14,987</u> | <u>1,729,462</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 8,416,188        | 4,818,538        | 1,834,614        | 2,929        | 15,121        | 1,744,984        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                  |              |               |                  |          |          |
| 9        | 304.10   | LAND                                      |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             |              | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                  |              |               |                  |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            |              | 206              | 80               | 54               | 0            | 0             | 72               | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 |              | 877,756          | 342,184          | 231,718          | 500          | 0             | 303,352          | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          |              | 661,306          | 257,804          | 174,578          | 376          | 0             | 228,548          | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             |              | 2,729,828        | 1,064,196        | 720,648          | 1,556        | 0             | 943,428          | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         |              | 2,125            | 828              | 561              | 2            | 0             | 734              | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 |              | 2,176,686        | 848,560          | 574,624          | 1,240        | 0             | 752,262          | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 46,211           | 0                | 0                | 0            | 46,211        | 0                | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         |              | 8,761,416        | 5,016,193        | 1,909,866        | 3,051        | 15,741        | 1,816,564        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV |              | 259,809          | 148,749          | 56,634           | 90           | 467           | 53,869           | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 26       | 376.00   | MAINS                                     |              | 221,300,854      | 86,271,925       | 58,421,212       | 126,142      | 0             | 76,481,576       | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 11,682           | 0                | 0                | 0            | 11,682        | 0                | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             |              | 518,504          | 202,134          | 136,880          | 296          | 0             | 179,194          | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                |              | 9,175,090        | 3,576,818        | 2,422,132        | 5,230        | 0             | 3,170,912        | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         |              | 45,443           | 17,716           | 11,996           | 26           | 0             | 15,705           | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          |              | 254,901          | 99,370           | 67,292           | 146          | 0             | 88,094           | 0        | 0        |
| 32       | 380.00   | SERVICES                                  |              | 127,467,343      | 112,461,887      | 14,554,221       | 1,275        | 0             | 449,960          | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 6 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 2        | 381.00   | METERS                                |              | 22,789,579       | 16,395,279       | 6,292,659        | 2,963        | 0             | 98,679           | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   |              | 9,462,175        | 6,807,278        | 2,612,696        | 1,230        | 0             | 40,971           | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      |              | 5,770,311        | 4,151,277        | 1,593,298        | 750          | 0             | 24,985           | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               |              | 2,257,522        | 1,624,106        | 623,347          | 293          | 0             | 9,775            | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     |              | 2,697,547        | 0                | 700,742          | 782          | 0             | 1,996,050        | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 677,829          | 0                | 0                | 0            | 677,829       | 0                | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             |              | 735,771          | 421,252          | 160,388          | 256          | 1,321         | 152,552          | 0        | 0        |
| 10       | 387.42   | RADIO                                 |              | 795,187          | 455,271          | 173,340          | 277          | 1,428         | 164,871          | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   |              | 133,590          | 76,485           | 29,121           | 46           | 239           | 27,698           | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          |              | 3,779,585        | 2,163,935        | 823,897          | 1,315        | 6,791         | 783,647          | 0        | 0        |
| 13       | 387.46   | CIS                                   |              | <u>113,644</u>   | <u>65,065</u>    | <u>24,772</u>    | <u>40</u>    | <u>204</u>    | <u>23,562</u>    | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 423,501,900      | 242,468,392      | 92,316,676       | 147,882      | 761,913       | 87,807,060       | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                  |                  |              |               |                  |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 735,278          | 420,971          | 160,280          | 256          | 1,320         | 152,451          | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 18,816           | 10,772           | 4,102            | 6            | 33            | 3,901            | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 1,257,641        | 720,040          | 274,148          | 437          | 2,260         | 260,755          | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 95,778           | 54,836           | 20,878           | 34           | 173           | 19,858           | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 24,462           | 14,005           | 5,332            | 8            | 45            | 5,072            | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 24,241           | 13,879           | 5,284            | 8            | 44            | 5,026            | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 3,259,030        | 1,865,900        | 710,424          | 1,135        | 5,855         | 675,717          | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  |              | 9,258            | 5,300            | 2,017            | 4            | 17            | 1,919            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 253,135          | 144,928          | 55,180           | 88           | 455           | 52,484           | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>294,060</u>   | <u>168,360</u>   | <u>64,102</u>    | <u>103</u>   | <u>529</u>    | <u>60,970</u>    | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>5,971,699</u> | <u>3,418,991</u> | <u>1,301,747</u> | <u>2,079</u> | <u>10,731</u> | <u>1,238,153</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 437,889,787      | 250,705,921      | 95,453,037       | 152,890      | 787,765       | 90,790,197       | 0        | 0        |



| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 6,025,045        | 4,334,538        | 1,663,635      | 783        | 0            | 26,088         | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 4,714,156        | 3,391,458        | 1,301,673      | 613        | 0            | 20,412         | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 1,568,587        | 1,128,473        | 433,118        | 204        | 0            | 6,792          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 1,780,729        | 1,281,092        | 491,695        | 231        | 0            | 7,711          | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 823,118          | 0                | 213,821        | 239        | 0            | 609,066        | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766          | 0                | 0              | 0          | 133,766      | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           |              | (59,912)         | (34,301)         | (13,060)       | (21)       | (107)        | (12,422)       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 399,816          | 228,907          | 87,154         | 139        | 719          | 82,897         | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 567,414          | 324,863          | 123,688        | 197        | 1,020        | 117,645        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 50,650           | 29,000           | 11,041         | 17         | 92           | 10,501         | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 529,513          | 303,164          | 115,426        | 185        | 951          | 109,787        | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>114,357</u>   | <u>65,473</u>    | <u>24,928</u>  | <u>40</u>  | <u>206</u>   | <u>23,711</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 145,887,056      | 92,163,676       | 29,252,707     | 41,287     | 154,790      | 24,274,603     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                  |                  |                |            |              |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | (33,247)         | (19,036)         | (7,247)        | (13)       | (59)         | (6,893)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | (11,355)         | (6,502)          | (2,474)        | (4)        | (21)         | (2,355)        | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 750,133          | 429,475          | 163,518        | 261        | 1,347        | 155,530        | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 27,035           | 15,479           | 5,894          | 8          | 49           | 5,605          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 6,309            | 3,612            | 1,375          | 2          | 10           | 1,308          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 15,095           | 8,643            | 3,290          | 6          | 27           | 3,129          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 37,937           | 21,720           | 8,269          | 13         | 69           | 7,865          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 185              | 106              | 40             | 0          | 0            | 39             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 1,333,005        | 763,188          | 290,577        | 464        | 2,395        | 276,380        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 7,764            | 4,445            | 1,693          | 2          | 15           | 1,610          | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 202,598          | 115,994          | 44,164         | 71         | 364          | 42,006         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | 12,094           | <u>6,924</u>     | <u>2,636</u>   | <u>4</u>   | <u>22</u>    | <u>2,507</u>   | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>2,347,553</u> | <u>1,344,048</u> | <u>511,735</u> | <u>814</u> | <u>4,218</u> | <u>486,731</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 151,708,251      | 95,496,496       | 30,521,646     | 43,311     | 165,248      | 25,481,547     | 0        | 0        |



TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 10 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML     | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|---------------|----------------|--------------|----------|-----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)           | (E)            | (F)          | (G)      | (H)       | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$            | \$             | \$           | \$       | \$        | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 1,172,264     | 843,350        | 323,686      | 152      | 0         | 5,076        | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 230,831       | 166,064        | 63,737       | 30       | 0         | 999          | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 157,520       | 113,323        | 43,494       | 20       | 0         | 682          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 22,800        | 16,403         | 6,296        | 3        | 0         | 99           | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 158,316       | 0              | 41,126       | 46       | 0         | 117,146      | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065        | 0              | 0            | 0        | 13,065    | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 27,516        | 15,754         | 5,998        | 10       | 50        | 5,705        | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 29,736        | 17,026         | 6,482        | 10       | 53        | 6,165        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 4,992         | 2,859          | 1,088        | 2        | 8         | 1,035        | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 140,832       | 80,630         | 30,700       | 48       | 253       | 29,200       | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>4,248</u>  | <u>2,432</u>   | <u>926</u>   | <u>2</u> | <u>7</u>  | <u>881</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 14,206,216    | 9,270,082      | 2,772,237    | 3,614    | 14,724    | 2,145,561    | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |               |                |              |          |           |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 36,561        | 20,932         | 7,970        | 13       | 67        | 7,580        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 1,260         | 722            | 275          | 0        | 2         | 261          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 253,397       | 145,079        | 55,237       | 88       | 456       | 52,539       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 8,760         | 5,016          | 1,909        | 2        | 17        | 1,816        | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 2,244         | 1,285          | 489          | 0        | 4         | 465          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 972           | 556            | 212          | 0        | 2         | 201          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 129,657       | 74,233         | 28,263       | 44       | 233       | 26,883       | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 468           | 268            | 102          | 0        | 1         | 97           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 6,552         | 3,750          | 1,429        | 2        | 11        | 1,358        | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>19,604</u> | <u>11,225</u>  | <u>4,273</u> | <u>6</u> | <u>34</u> | <u>4,064</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 459,475       | 263,066        | 100,159      | 155      | 827       | 95,264       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 15,939,787    | 10,262,609     | 3,150,131    | 4,212    | 17,840    | 2,504,992    | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 11 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|------------------|------------------|---------------|----------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)              | (F)              | (G)           | (H)            | (I)              | (J)      | (K)      |
|          |          |                              |              | \$                | \$               | \$               | \$            | \$             | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |                   |                  |                  |               |                |                  |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 49,696,061        | 49,696,061       | 0                | 0             | 0              | 0                | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 18,520,317        | 0                | 18,520,317       | 0             | 0              | 0                | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | <u>1,458,726</u>  | <u>0</u>         | <u>1,410,902</u> | <u>47,824</u> | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL SALES REVENUE          |              | 69,675,105        | 49,696,061       | 19,931,219       | 47,824        | 0              | 0                | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 476,000           | 305,532          | 137,766          | 249           | 2,494          | 29,959           | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        |              | 137,000           | 122,833          | 14,082           | 1             | 5              | 79               | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 21,807,062        | 9,029,105        | 6,541,880        | 0             | 479,213        | 5,756,864        | 0        | 0        |
| 9        | 495.00   | OTHER                        |              | <u>587,000</u>    | <u>526,293</u>   | <u>60,338</u>    | <u>6</u>      | <u>23</u>      | <u>340</u>       | <u>0</u> | <u>0</u> |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | <u>23,007,062</u> | <u>9,983,763</u> | <u>6,754,066</u> | <u>256</u>    | <u>481,735</u> | <u>5,787,242</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATING REVENUE      |              | 92,682,167        | 59,679,824       | 26,685,285       | 48,080        | 481,735        | 5,787,242        | 0        | 0        |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)               | (E)               | (F)              | (G)           | (H)      | (I)      | (J)      | (K)      |
|          |           |                                   |              | \$                | \$                | \$               | \$            | \$       | \$       | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |                   |                   |                  |               |          |          |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |                   |                   |                  |               |          |          |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         |              | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |              | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |                   |                   |                  |               |          |          |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |                   |                   |                  |               |          |          |          |          |
| 16       | 803 - 806 |                                   |              |                   |                   |                  |               |          |          |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0        | 0        | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       |              | 341,557           | 219,590           | 121,570          | 396           | 0        | 0        | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | <u>21,817,507</u> | <u>14,026,685</u> | <u>7,765,417</u> | <u>25,405</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 21,819,646        | 14,027,989        | 7,766,214        | 25,407        | 0        | 37       | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 13 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC  | TOTAL          |                |               |           |            |               |          |          |
|------|------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (C)    | (D)            | (E)            | (F)           | (G)       |            | (I)           | (J)      | (K)      |
|      | (B)  |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      |        |                |                |               |           |            |               |          |          |
|      |      |        |                |                |               |           |            |               |          |          |
|      |      |        |                |                |               |           |            |               |          |          |
| 2    | 870  |        | 97,461         | 59,643         | 23,973        | 27        | 189        | 13,629        | 0        | 0        |
| 3    | 871  |        | 66,644         | 22,273         | 16,093        | 32        | 0          | 28,246        | 0        | 0        |
| 4    | 874  |        | 1,726,536      | 983,776        | 361,249       | 630       | 54         | 380,825       | 0        | 0        |
| 5    | 875  |        | 82,347         | 32,100         | 21,738        | 46        | 4          | 28,458        | 0        | 0        |
| 6    | 876  |        | 38,736         | 0              | 8,042         | 9         | 7,779      | 22,907        | 0        | 0        |
| 7    | 878  |        | 1,279,637      | 920,596        | 353,333       | 166       | 0          | 5,541         | 0        | 0        |
| 8    | 879  |        | 1,500,691      | 1,079,627      | 414,371       | 195       | 0          | 6,498         | 0        | 0        |
| 9    | 880  |        | 547,972        | 335,343        | 134,787       | 151       | 1,059      | 76,631        | 0        | 0        |
| 10   | 881  |        | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u>   | <u>0</u>      | <u>0</u> | <u>0</u> |
| 11   |      |        | 5,340,024      | 3,433,358      | 1,333,586     | 1,256     | 9,085      | 562,735       | 0        | 0        |
| 12   |      |        |                |                |               |           |            |               |          |          |
|      |      |        |                |                |               |           |            |               |          |          |
| 13   | 885  |        | 8,649          | 5,293          | 2,127         | 3         | 17         | 1,209         | 0        | 0        |
| 14   | 886  |        | 2,509          | 978            | 662           | 2         | 0          | 867           | 0        | 0        |
| 15   | 887  |        | 926,354        | 361,112        | 244,538       | 528       | 46         | 320,130       | 0        | 0        |
| 16   | 889  |        | 138,594        | 54,026         | 36,586        | 78        | 6          | 47,896        | 0        | 0        |
| 17   | 890  |        | 19,419         | 0              | 4,032         | 4         | 3,900      | 11,483        | 0        | 0        |
| 18   | 892  |        | 298,657        | 263,499        | 34,101        | 3         | 0          | 1,054         | 0        | 0        |
| 19   | 893  |        | 26,851         | 19,317         | 7,414         | 3         | 0          | 116           | 0        | 0        |
| 20   | 894  |        | <u>124,180</u> | <u>75,995</u>  | <u>30,545</u> | <u>35</u> | <u>240</u> | <u>17,366</u> | <u>0</u> | <u>0</u> |
| 21   |      |        | 1,545,213      | 780,220        | 360,005       | 656       | 4,209      | 400,121       | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|---------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)           | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$            | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |               |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    |              | 165,331       | 148,232        | 16,994   | 2        | 7        | 96       | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   |              | 692,556       | 620,932        | 71,188   | 7        | 28       | 402      | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 905      | MISC.                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 857,887       | 769,164        | 88,182   | 9        | 35       | 498      | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |               |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              |              | 12,982        | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 17       | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | 12,982        | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVEMONTHSENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 15 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML  | DS/IS     | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|---------------|----------------|-----------|-------|--------|-----------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)           | (E)            | (F)       | (G)   | (H)    | (I)       | (J)      | (K)      |
|          |          |                                 |              | \$            | \$             | \$        | \$    | \$     | \$        | \$       | \$       |
| 1        |          | SALES                           |              |               |                |           |       |        |           |          |          |
| 2        | 911      | SUPERVISION                     |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 4        | 913      | ADVERTISING                     |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 5        | 916      | MISC.                           |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 6        |          | TOTAL SALES                     |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 7,756,106     | 4,994,381      | 1,783,107 | 1,921 | 13,330 | 963,362   | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |               |                |           |       |        |           |          |          |
| 9        | 920      | SALARIES                        |              | 1,597,984     | 1,028,989      | 367,369   | 399   | 2,743  | 198,485   | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                |              | 4,636         | 2,985          | 1,067     | 0     | 8      | 576       | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 19       | 931      | RENTS                           |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |               |                |           |       |        |           |          |          |
|          |          | FURNITURE & EQUIPMENT           |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 22       | 932      | MAINT.-MISCELLANEOUS            |              | 0             | 0              | 0         | 0     | 0      | 0         | 0        | 0        |
| 23       |          | TOTAL ADMIN & GENERAL - LABOR   |              | 1,602,620     | 1,031,974      | 368,436   | 399   | 2,751  | 199,061   | 0        | 0        |
| 24       |          | TOTAL O & M EXPENSE - LABOR     |              | 9,358,726     | 6,026,355      | 2,151,543 | 2,320 | 16,081 | 1,162,423 | 0        | 0        |

| LINE | ACCT | ALLOC                      | TOTAL  |                |                |               |           |            |               |          |          |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       | (H)        | (I)           | (J)      | (K)      |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |               |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  |        | 783,470        | 428,192        | 180,130       | 295       | 1,401      | 173,451       | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH |        | 17,885         | 5,977          | 4,319         | 9         | 0          | 7,580         | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           |        | 4,797,660      | 2,733,696      | 1,003,829     | 1,754     | 152        | 1,058,229     | 0        | 0        |
| 5    | 875  | M & R - GENERAL            |        | 118,379        | 46,146         | 31,250        | 68        | 6          | 40,910        | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         |        | 29,602         | 0              | 6,146         | 7         | 5,944      | 17,505        | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  |        | 485,057        | 348,960        | 133,934       | 63        | 0          | 2,100         | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      |        | 655,941        | 471,897        | 181,118       | 85        | 0          | 2,840         | 0        | 0        |
| 9    | 880  | OTHER                      |        | 1,211,487      | 662,118        | 278,536       | 457       | 2,168      | 268,209       | 0        | 0        |
| 10   | 881  | RENTS                      |        | <u>82,157</u>  | <u>44,901</u>  | <u>18,889</u> | <u>31</u> | <u>146</u> | <u>18,189</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 8,181,638      | 4,741,887      | 1,838,151     | 2,769     | 9,817      | 1,589,013     | 0        | 0        |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |               |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  |        | 2,571          | 1,405          | 591           | 0         | 5          | 569           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  |        | 251,838        | 98,172         | 66,480        | 144       | 12         | 87,030        | 0        | 0        |
| 15   | 887  | MAINS                      |        | 2,202,076      | 858,414        | 581,304       | 1,256     | 110        | 760,994       | 0        | 0        |
| 16   | 889  | M & R - GENERAL            |        | 144,736        | 56,420         | 38,208        | 82        | 8          | 50,018        | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         |        | 51,880         | 0              | 10,771        | 12        | 10,418     | 30,679        | 0        | 0        |
| 18   | 892  | SERVICES                   |        | 431,251        | 380,484        | 49,240        | 4         | 0          | 1,522         | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  |        | 118,176        | 85,018         | 32,631        | 15        | 0          | 512           | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            |        | <u>199,573</u> | <u>109,072</u> | <u>45,884</u> | <u>75</u> | <u>357</u> | <u>44,184</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 3,402,101      | 1,588,985      | 825,109       | 1,588     | 10,910     | 975,508       | 0        | 0        |

| LINE | ACCT |                                  | ALLOC  | TOTAL     |                |          |          |          |          |          |          |
|------|------|----------------------------------|--------|-----------|----------------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | COMPANY   | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|      | (A)  | (B)                              | (C)    | (D)       | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |        | \$        | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |                |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    |        | 399,502   | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   |        | 3,252,912 | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           |        | 1,027,585 | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6    | 905  | MISC.                            |        | 1,073     | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7    | 920  | SALARIES                         |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      |        | 253       | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        |        | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |                |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      |        | (2,789)   | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              |        | 1,198,971 | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            |        | 65,932    | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    |        | 257,797   | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17   | 920  | SALARIES                         |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      |        | 13,868    | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19   | 931  | RENTS                            |        | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        |        | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT   | ALLOC  | TOTAL  |                   |                   |                  |              |               |                  |          |          |
|------|--------|--|--------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
| NO.  | NO.    | ACCOUNT TITLE                                  | FACTOR | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|      | (A)    | (B)  | (C)    | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|      |        |  |        | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1    |        | SALES  |        |                   |                   |                  |              |               |                  |          |          |
| 2    | 911    | SUPERVISION                                    |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3    | 912    | DEMONSTRATION & SELLING                        |        | 37,477            | 33,601            | 3,852            | 0            | 1             | 22               | 0        | 0        |
| 4    | 913    | ADVERTISING                                    |        | 138,706           | 124,361           | 14,258           | 1            | 6             | 80               | 0        | 0        |
| 5    | 916    | MISC.  |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 6    |        | TOTAL SALES                                    |        | <u>176,183</u>    | <u>157,962</u>    | <u>18,110</u>    | <u>1</u>     | <u>7</u>      | <u>102</u>       | <u>0</u> | <u>0</u> |
| 7    |        | TOTAL DISTRIBUTION EXPENSES                    |        | 17,975,026        | 12,031,567        | 3,349,629        | 4,432        | 21,004        | 2,568,392        | 0        | 0        |
| 8    |        | ADMINISTRATIVE & GENERAL                       |        |                   |                   |                  |              |               |                  |          |          |
| 9    | 920    | SALARIES                                       |        | 2,963,302         | 1,945,722         | 571,422          | 817          | 3,592         | 441,749          | 0        | 0        |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES                     |        | 894,098           | 587,070           | 172,412          | 247          | 1,083         | 133,286          | 0        | 0        |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED                     |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 12   | 923    | OUTSIDE SERVICES                               |        | 7,869,789         | 5,167,352         | 1,517,556        | 2,171        | 9,537         | 1,173,174        | 0        | 0        |
| 13   | 924    | PROPERTY INSURANCE                             |        | 81,748            | 53,676            | 15,764           | 23           | 99            | 12,186           | 0        | 0        |
| 14   | 925    | INJURIES AND DAMAGES                           |        | 1,043,923         | 632,095           | 245,265          | 310          | 1,530         | 164,723          | 0        | 0        |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS                   |        | 3,351,467         | 2,029,310         | 787,415          | 996          | 4,912         | 528,834          | 0        | 0        |
| 16   | 926    | DIRECT EMPLOYEE PENSIONS & BENEFITS            |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 17   | 928    | REG COMMISSION EXP - GENERAL                   |        | 197,760           | 129,851           | 38,135           | 55           | 239           | 29,481           | 0        | 0        |
| 18   | 928    | REGULATORY COMMISSION EXP - PSC @ 0.001901     |        | 176,190           | 115,687           | 33,975           | 49           | 214           | 26,265           | 0        | 0        |
| 19   | 930.10 | MISC. - INSTITUT & GOODWILL ADV                |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 20   | 930.20 | MISC. - GENERAL                                |        | (62,123)          | (40,791)          | (11,979)         | (17)         | (76)          | (9,262)          | 0        | 0        |
| 21   | 931    | RENTS  |        | 642,175           | 421,656           | 123,832          | 177          | 778           | 95,731           | 0        | 0        |
| 22   | 935.13 | MAINT. STRUCTURES & IMPROV.                    |        | 130               | 85                | 25               | 0            | 0             | 20               | 0        | 0        |
| 23   | 935.23 | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT |        | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 24   | 932    | MAINT.-MISCELLANEOUS                           |        | <u>259,121</u>    | <u>170,141</u>    | <u>49,967</u>    | <u>72</u>    | <u>314</u>    | <u>38,628</u>    | <u>0</u> | <u>0</u> |
| 25   |        | TOTAL ADMIN & GENERAL - M & E                  |        | <u>17,417,580</u> | <u>11,211,854</u> | <u>3,543,789</u> | <u>4,900</u> | <u>22,222</u> | <u>2,634,815</u> | <u>0</u> | <u>0</u> |
| 26   |        | TOTAL O & M EXPENSE - M & E                    |        | 35,736,302        | 23,464,315        | 7,015,785        | 9,730        | 43,226        | 5,203,244        | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 19 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |                              |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | LABOR                        |              |                   |                   |                  |              |               |                  |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 5,340,024         | 3,433,358         | 1,333,586        | 1,256        | 9,085         | 562,735          | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 1,545,213         | 780,220           | 360,005          | 656          | 4,209         | 400,121          | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 857,887           | 769,164           | 88,182           | 9            | 35            | 498              | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 12,982            | 11,639            | 1,334            | 0            | 1             | 8                | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>1,602,620</u>  | <u>1,031,974</u>  | <u>368,436</u>   | <u>399</u>   | <u>2,751</u>  | <u>199,061</u>   | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 9,358,726         | 6,026,355         | 2,151,543        | 2,320        | 16,081        | 1,162,423        | 0        | 0        |
| 10       |          | M & E                        |              |                   |                   |                  |              |               |                  |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 343,696           | 220,894           | 122,367          | 398          | 0             | 37               | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 8,181,638         | 4,741,887         | 1,838,151        | 2,769        | 9,817         | 1,589,013        | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 3,402,101         | 1,588,985         | 825,109          | 1,588        | 10,910        | 975,508          | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58           | 208           | 2,880            | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16           | 62            | 889              | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 176,183           | 157,962           | 18,110           | 1            | 7             | 102              | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>17,417,580</u> | <u>11,211,854</u> | <u>3,543,789</u> | <u>4,900</u> | <u>22,222</u> | <u>2,634,815</u> | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>35,736,302</u> | <u>23,464,315</u> | <u>7,015,785</u> | <u>9,730</u> | <u>43,226</u> | <u>5,203,244</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 45,095,029        | 29,490,670        | 9,167,328        | 12,050       | 59,307        | 6,365,667        | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 20 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|-----------|-------|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)       | (G)   | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$        | \$    | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    |              | 4,136,779     | 2,368,440      | 901,761   | 1,441 | 7,433 | 857,705 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     |              | 654,102       | 421,195        | 150,376   | 163   | 1,123 | 81,245  | 0        | 0        |
| 3        | 408      | OTHER TAXES                |              | 0             | 0              | 0         | 0     | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 4,790,881     | 2,789,635      | 1,052,137 | 1,604 | 8,556 | 938,950 | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 21 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|-------------------|------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)               | (E)              | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |   |              | \$                | \$               | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 5,380,520         | 3,329,816        | 5,671,842        | 5,206        | 396,032       | (4,022,367)      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                   |                  |                  |              |               |                  |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 6,688,725         | 3,655,277        | 1,693,088        | 3,176        | 12,817        | 1,324,367        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    |              | 14,595,754        | 8,356,539        | 3,181,671        | 5,082        | 26,225        | 3,026,236        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>14,665,691</u> | <u>9,533,148</u> | <u>2,872,396</u> | <u>3,769</u> | <u>15,551</u> | <u>2,240,825</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (69,937)          | (1,176,609)      | 309,275          | 1,313        | 10,674        | 785,411          | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 |              | <u>(4,960)</u>    | (3,194)          | (1,140)          | 0            | (8)           | (616)            | 0        | 0        |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>6,613,828</u>  | <u>2,475,474</u> | <u>2,001,223</u> | <u>4,489</u> | <u>23,483</u> | <u>2,109,162</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (1,233,308)       | 854,342          | 3,670,619        | 717          | 372,549       | (6,131,529)      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (73,998)          | 51,260           | 220,236          | 43           | 22,353        | (367,889)        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      |              | <u>0</u>          | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (73,998)          | 51,260           | 220,236          | 43           | 22,353        | (367,889)        | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 22 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML  | DS/IS     | NOT USED | NOT USED |
|----------|----------|---|--------------|---------------|----------------|----------|-----|--------|-----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)           | (E)            | (F)      | (G) | (H)    | (I)       | (J)      | (K)      |
|          |          |   |              | \$            | \$             | \$       | \$  | \$     | \$        | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |               |                |          |     |        |           |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |               |                |          |     |        |           |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       |              | (17,008)      | (9,738)        | (3,707)  | (6) | (30)   | (3,527)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (17,008)      | (9,738)        | (3,707)  | (6) | (30)   | (3,527)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (91,006)      | 41,522         | 216,529  | 37  | 22,323 | (371,416) | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 23 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|-------------------|---------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)               | (G)           | (H)           | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$                | \$            | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 92,682,167        | 59,679,824        | 26,685,285        | 48,080        | 481,735       | 5,787,242        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>87,301,646</u> | <u>56,350,009</u> | <u>21,013,443</u> | <u>42,875</u> | <u>85,703</u> | <u>9,809,609</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 5,380,520         | 3,329,816         | 5,671,842         | 5,206         | 396,032       | (4,022,367)      | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                   |               |               |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 6,688,725         | 3,655,277         | 1,693,088         | 3,176         | 12,817        | 1,324,367        | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          |              | 14,595,754        | 8,356,539         | 3,181,671         | 5,082         | 26,225        | 3,026,236        | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>14,665,691</u> | <u>9,533,148</u>  | <u>2,872,396</u>  | <u>3,769</u>  | <u>15,551</u> | <u>2,240,825</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | (69,937)          | (1,176,609)       | 309,275           | 1,313         | 10,674        | 785,411          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      |              | (4,960)           | (3,194)           | (1,140)           | 0             | (8)           | (616)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(73,998)</u>   | <u>51,260</u>     | <u>220,236</u>    | <u>43</u>     | <u>22,353</u> | <u>(367,889)</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 6,539,830         | 2,526,734         | 2,221,459         | 4,532         | 45,836        | 1,741,273        | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (1,159,310)       | 803,082           | 3,450,383         | 674           | 350,196       | (5,763,639)      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | 273,048           | 1,173,130         | 229           | 119,067       | (1,959,637)      | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | 273,048           | 1,173,130         | 229           | 119,067       | (1,959,637)      | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 24 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY   | GS-RESIDENTIAL  | GS-OTHER        | IUS         | DS-ML        | DS/IS           | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|-----------------|-------------|--------------|-----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)             | (G)         | (H)          | (I)             | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$              | \$          | \$           | \$              | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                 |             |              |                 |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     |              | 35,760          | 20,474          | 7,795           | 13          | 63           | 7,414           | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                 |             |              |                 |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL |              | <u>(54,526)</u> | <u>(31,218)</u> | <u>(11,885)</u> | <u>(19)</u> | <u>(98)</u>  | <u>(11,305)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(54,526)</u> | <u>(31,218)</u> | <u>(11,885)</u> | <u>(19)</u> | <u>(98)</u>  | <u>(11,305)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(90,286)</u> | <u>(51,692)</u> | <u>(19,680)</u> | <u>(32)</u> | <u>(161)</u> | <u>(18,719)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (484,451)       | 221,356         | 1,153,450       | 197         | 118,906      | (1,978,356)     | 0        | 0        |

TOTAL COMPANY  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 25 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO.                            | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMPANY      | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML          | DS/IS             | NOT USED | NOT USED |
|-------------------------------------|-----------|-----------------------------------|--------------|--------------------|-------------------|-------------------|---------------|----------------|-------------------|----------|----------|
|                                     | (A)       | (B)                               | (C)          | (D)                | (E)               | (F)               | (G)           | (H)            | (I)               | (J)      | (K)      |
|                                     |           |                                   |              | \$                 | \$                | \$                | \$            | \$             | \$                | \$       | \$       |
| 1                                   | 101 & 106 | GROSS PLANT [1]                   |              | 437,889,787        | 250,705,921       | 95,453,037        | 152,890       | 787,765        | 90,790,197        | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                   |                   |               |                |                   |          |          |
| 2                                   | 108-111   | DEPRECIATION RESERVE [2]          |              | <u>151,708,251</u> | <u>95,496,496</u> | <u>30,521,646</u> | <u>43,311</u> | <u>165,248</u> | <u>25,481,547</u> | <u>0</u> | <u>0</u> |
| 3                                   |           | NET PLANT                         |              | 286,181,536        | 155,209,425       | 64,931,391        | 109,579       | 622,516        | 65,308,650        | 0        | 0        |
| 4                                   | 190.00    | ACCUMULATED DEF INCOME TAX        |              | \$5,385,973        | 3,083,643         | 1,174,068         | 1,876         | 9,677          | 1,116,711         | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                   |                   |               |                |                   |          |          |
| 5                                   | 252.00    | CUSTOMER ADVANCES                 |              | 0                  | 0                 | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 6                                   | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT |              | 0                  | 0                 | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 7                                   | 282.00    | ACCUMULATED DEF INCOME TAX        |              | 86,167,687         | 49,333,778        | 18,783,358        | 30,004        | 154,818        | 17,865,728        | 0        | 0        |
| 8                                   | 283.00    | ACCUMULATED DEF INCOME TAX        |              | <u>0</u>           | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>          | <u>0</u> | <u>0</u> |
| 9                                   |           | NET RATE BASE                     |              | 205,399,822        | 108,959,290       | 47,322,101        | 81,451        | 477,375        | 48,559,633        | 0        | 0        |
| 10                                  |           | PLUS WORKING CAPITAL:             |              |                    |                   |                   |               |                |                   |          |          |
| 11                                  |           | CASH WORKING CAPITAL @ 1/8 OF     |              |                    |                   |                   |               |                |                   |          |          |
| 12                                  |           | O & M EXCLUDING GAS COST [3]      |              | 5,636,879          | 3,686,334         | 1,145,916         | 1,506         | 7,413          | 795,708           | 0        | 0        |
| 13                                  | 151.00    | FUEL STOCK                        |              | 0                  | 0                 | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 14                                  | 154.00    | MATERIALS & SUPPLIES              |              | 82,011             | 46,954            | 17,878            | 29            | 148            | 17,003            | 0        | 0        |
| 15                                  | 165.00    | PREPAYMENTS                       |              | 469,518            | 308,288           | 90,539            | 130           | 569            | 69,992            | 0        | 0        |
| 16                                  | 164.00    | GAS STORED UNDERGROUND - FSS      |              | <u>41,772,551</u>  | <u>25,456,610</u> | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>       | <u>723,083</u>    | <u>0</u> | <u>0</u> |
| 17                                  |           | RATE BASE                         |              | 253,360,781        | 138,457,476       | 64,132,114        | 120,294       | 485,505        | 50,165,419        | 0        | 0        |
| REFERENCES: [1] PAGE 6, [2] PAGE 8, |           |                                   |              |                    |                   |                   |               |                |                   |          |          |
|                                     |           | [3] TOTAL O & M EXPENSE           |              | 66,570,979         | 43,297,765        | 16,811,175        | 37,059        | 59,307         | 6,365,667         | 0        | 0        |
|                                     |           | LESS: COST OF GAS                 |              | <u>21,475,950</u>  | <u>13,807,095</u> | <u>7,643,847</u>  | <u>25,009</u> | <u>0</u>       | <u>0</u>          | <u>0</u> | <u>0</u> |
|                                     |           | O & M EXCL. GAS COST              |              | 45,095,029         | 29,490,670        | 9,167,328         | 12,050        | 59,307         | 6,365,667         | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | CLASSIFICATION FACTOR | TOTAL             |                   |                  |                  |
|----------|----------|--|-----------------------|-------------------|-------------------|------------------|------------------|
|          | (A)      | (B)                                    | (C)                   | COMPANY (D)       | CUSTOMER (E)      | COMMODITY (F)    | DEMAND (G)       |
|          |          |  |                       | \$                | \$                | \$               | \$               |
| 1        |          | TOTAL REVENUES                         |                       | 92,682,167        | 35,066,460        | 37,773,621       | 19,842,086       |
| 2        |          | PROPOSED INCREASE                      |                       | <u>25,408,373</u> | <u>12,009,000</u> | <u>5,893,383</u> | <u>7,505,990</u> |
| 3        |          | TOTAL PROPOSED REVENUES                |                       | 118,090,539       | 47,075,460        | 43,667,004       | 27,348,075       |
| 4        |          | COST OF GAS                            |                       | 21,475,950        | 0                 | 21,475,950       | 0                |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |                       | 45,377,932        | 26,951,231        | 9,268,657        | 9,158,049        |
| 6        |          | DEPRECIATION & AMORTIZATION            |                       | 15,939,787        | 9,155,554         | 3,392,118        | 3,392,118        |
| 7        |          | FEDERAL INCOME TAX                     |                       | 7,781,828         | 3,081,518         | 1,676,082        | 3,024,225        |
| 8        |          | KENTUCKY STATE INCOME TAX              |                       | 1,416,522         | 557,528           | 304,358          | 554,636          |
| 9        |          | TAXES OTHER THAN INCOME                |                       | <u>4,790,881</u>  | <u>2,165,396</u>  | <u>1,315,911</u> | <u>1,309,574</u> |
| 10       |          | TOTAL EXPENSES & TAXES                 |                       | 96,782,899        | 41,911,227        | 37,433,076       | 17,438,602       |
| 11       |          | OPERATING INCOME                       |                       | 21,307,640        | 5,164,233         | 6,233,928        | 9,909,473        |
| 12       |          | INTEREST EXPENSE                       |                       | <u>6,688,725</u>  | <u>1,910,314</u>  | <u>1,837,904</u> | <u>2,940,506</u> |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |                       | 14,618,915        | 3,253,919         | 4,396,024        | 6,968,967        |
| 14       |          | RATE BASE                              |                       | 253,360,780       | 72,360,386        | 69,617,593       | 111,382,801      |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |                       | <b>8.41%</b>      | <b>7.14%</b>      | <b>8.95%</b>     | <b>8.90%</b>     |
| 16       |          | UNITIZED RETURN                        |                       | 1.00              | 0.85              | 1.06             | 1.06             |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | CLASSIFICATION FACTOR | TOTAL            |                  |                  |                  |
|----------|----------|--|-----------------------|------------------|------------------|------------------|------------------|
|          | (A)      | (B)                                    | (C)                   | COMPANY (D)      | CUSTOMER (E)     | COMMODITY (F)    | DEMAND (G)       |
|          |          |  |                       | \$               | \$               | \$               | \$               |
| 1        |          | TOTAL REVENUES                         |                       | 118,090,543      | 48,600,252       | 43,039,580       | 26,450,720       |
| 2        |          | COST OF GAS                            |                       | 21,475,950       | 0                | 21,475,950       | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |                       | 45,377,932       | 26,968,208       | 9,261,671        | 9,148,057        |
| 4        |          | DEPRECIATION & AMORTIZATION            |                       | 15,939,787       | 9,155,554        | 3,392,118        | 3,392,118        |
| 5        |          | FEDERAL INCOME TAX                     |                       | 7,781,830        | 3,577,589        | 1,471,958        | 2,732,282        |
| 6        |          | KENTUCKY STATE INCOME TAX              |                       | 1,416,522        | 647,997          | 267,132          | 501,394          |
| 7        |          | TAXES OTHER THAN INCOME                |                       | <u>4,790,881</u> | <u>2,165,396</u> | <u>1,315,911</u> | <u>1,309,574</u> |
| 8        |          | TOTAL EXPENSES & TAXES                 |                       | 96,782,901       | 42,514,744       | 37,184,740       | 17,083,425       |
| 9        |          | OPERATING INCOME                       |                       | 21,307,642       | 6,085,508        | 5,854,839        | 9,367,295        |
| 10       |          | INTEREST EXPENSE                       |                       | <u>6,688,725</u> | <u>1,910,314</u> | <u>1,837,904</u> | <u>2,940,506</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |                       | 14,618,917       | 4,175,194        | 4,016,935        | 6,426,789        |
| 12       |          | RATE BASE                              |                       | 253,360,780      | 72,360,386       | 69,617,593       | 111,382,801      |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |                       | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>     |
| 14       |          | UNITIZED RETURN                        |                       | 1.00             | 1.00             | 1.00             | 1.00             |

| LINE NO. | DESCRIPTION<br>(A)                       | CLASSIFICATION FACTOR<br>(B) | Total Company<br>(C) | CUSTOMER<br>(D)  | COMMODITY<br>(E) | DEMAND<br>(F)    |
|----------|--|------------------------------|----------------------|------------------|------------------|------------------|
| 1        | OPERATING REVENUE                        |                              | 25,408,377           | 13,533,792       | 5,265,959        | 6,608,634        |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                              | 0                    | 0                | 0                | 0                |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                              | 234,603              | 124,961          | 48,622           | 61,019           |
| 4        | LESS: PSC FEES @ 0.00190100              |                              | <u>48,301</u>        | <u>25,728</u>    | <u>10,011</u>    | <u>12,563</u>    |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                              | 25,125,473           | 13,383,103       | 5,207,326        | 6,535,052        |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                              | <u>1,507,528</u>     | <u>802,986</u>   | <u>312,440</u>   | <u>392,103</u>   |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                              | 23,617,945           | 12,580,117       | 4,894,886        | 6,142,949        |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                              | <u>8,266,281</u>     | <u>4,403,041</u> | <u>1,713,210</u> | <u>2,150,032</u> |
| 9        | OPERATING INCOME                         |                              | 15,351,664           | 8,177,076        | 3,181,676        | 3,992,917        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL            |                  |                  |                  |
|----------|----------|-------------------------------------|-----------------------|------------------|------------------|------------------|------------------|
|          | (A)      | (B)                                 | (C)                   | COMPANY (D)      | CUSTOMER (E)     | COMMODITY (F)    | DEMAND (G)       |
|          |          |                                     |                       | \$               | \$               | \$               | \$               |
| 1        |          | TOTAL REVENUES [1]                  |                       | 92,682,167       | 35,066,460       | 37,773,621       | 19,842,086       |
| 2        |          | COST OF GAS                         |                       | 21,475,950       | 0                | 21,475,950       | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |                       | 45,095,028       | 26,817,519       | 9,203,038        | 9,074,475        |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |                       | 15,939,787       | 9,155,554        | 3,392,118        | 3,392,118        |
| 5        |          | FEDERAL INCOME TAX [4]              |                       | (484,451)        | (825,452)        | (241,252)        | 582,250          |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |                       | (91,006)         | (154,989)        | (45,308)         | 109,291          |
| 7        |          | TAXES OTHER THAN INCOME [6]         |                       | <u>4,790,881</u> | <u>2,165,396</u> | <u>1,315,911</u> | <u>1,309,574</u> |
| 8        |          | TOTAL EXPENSES & TAXES              |                       | 86,726,188       | 37,158,028       | 35,100,457       | 14,467,708       |
| 9        |          | OPERATING INCOME                    |                       | 5,955,978        | (2,091,568)      | 2,673,164        | 5,374,377        |
| 10       |          | INTEREST EXPENSE [7]                |                       | <u>6,688,725</u> | <u>1,910,314</u> | <u>1,837,904</u> | <u>2,940,506</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |                       | (732,747)        | (4,001,882)      | 835,260          | 2,433,871        |
| 12       |          | RATE BASE [8]                       |                       | 253,360,780      | 72,360,386       | 69,617,593       | 111,382,801      |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |                       | <b>2.35%</b>     | <b>-2.89%</b>    | <b>3.84%</b>     | <b>4.83%</b>     |
| 14       |          | UNITIZED RETURN                     |                       | 1.00             | (1.23)           | 1.63             | 2.06             |

REFERENCES: [1] PAGE 36, [2] PAGE 44, [3] PAGE 35, [4] PAGE 49, [5] PAGE 47, [6] PAGE 45, [7] PAGE 48, [8] PAGE 50.

CLASSIFICATION  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
PAGE 30 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                            | TOTAL  |                  |                  |                  |                  |
|------|--------|---|--------|------------------|------------------|------------------|------------------|
| NO.  | NO.    | ACCOUNT TITLE                             | FACTOR | COMPANY          | CUSTOMER         | COMMODITY        | DEMAND           |
|      | (A)    | (B)                                       | (C)    | (D)              | (E)              | (F)              | (G)              |
|      |        |   |        | \$               | \$               | \$               | \$               |
| 1    |        | INTANGIBLE PLANT                          |        |                  |                  |                  |                  |
| 2    | 301.00 | ORGANIZATION                              | 7DC    | 521              | 218              | 151              | 151              |
| 3    | 303.00 | MISC. INTANGIBLE PLANT                    | 7DC    | 74,348           | 31,112           | 21,618           | 21,618           |
| 4    | 303.10 | DIS SOFTWARE                              | 7DC    | 0                | 0                | 0                | 0                |
| 5    | 303.20 | FARA SOFTWARE                             | 7DC    | 0                | 0                | 0                | 0                |
| 6    | 303.30 | OTHER SOFTWARE                            | 7DC    | <u>8,341,319</u> | <u>3,490,598</u> | <u>2,425,360</u> | <u>2,425,360</u> |
| 7    |        | TOTAL INTANGIBLE PLANT                    |        | 8,416,188        | 3,521,928        | 2,447,129        | 2,447,129        |
| 8    |        | PRODUCTION PLANT                          |        |                  |                  |                  |                  |
| 9    | 304.10 | LAND                                      | 2      | 0                | 0                | 0                | 0                |
| 10   | 305.00 | STRUCTURES & IMPROVEMENTS                 | 2      | 0                | 0                | 0                | 0                |
| 11   | 311.00 | LIQUEFIED PETROLEUM GAS EQUIP             | 2      | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>         |
| 12   |        | TOTAL PRODUCTION PLANT                    |        | 0                | 0                | 0                | 0                |
| 13   |        | DISTRIBUTION PLANT                        |        |                  |                  |                  |                  |
| 14   | 374.10 | LAND - CITY GATE & M/L IND M&R            | 5      | 206              | 0                | 103              | 103              |
| 15   | 374.20 | LAND - OTHER DISTRIBUTION                 | 5      | 877,756          | 0                | 438,878          | 438,878          |
| 16   | 374.40 | LAND RIGHTS - OTHER DISTRIBUTION          | 5      | 661,306          | 0                | 330,653          | 330,653          |
| 17   | 374.50 | RIGHTS OF WAY                             | 5      | 2,729,828        | 0                | 1,364,914        | 1,364,914        |
| 18   | 375.20 | CITY GATE - MEAS & REG STRUCTURES         | 5      | 2,125            | 0                | 1,063            | 1,063            |
| 19   | 375.30 | STRUC & IMPROV-GENERAL M&R                | 5      | 0                | 0                | 0                | 0                |
| 20   | 375.40 | STRUC & IMPROV-REGULATING                 | 5      | 2,176,686        | 0                | 1,088,343        | 1,088,343        |
| 21   | 375.40 | DIRECT STRUC & IMPROV-REGULATING          | 5      | 46,211           | 0                | 23,105           | 23,105           |
| 22   | 375.60 | STRUC & IMPROV-DIST. IND. M & R           | 8      | 0                | 0                | 0                | 0                |
| 23   | 375.70 | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7DC    | 8,761,416        | 3,666,397        | 2,547,510        | 2,547,510        |
| 24   | 375.71 | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7DC    | 259,809          | 108,722          | 75,543           | 75,543           |
| 25   | 375.80 | STRUC & IMPROV-COMMUNICATION              | 5      | 0                | 0                | 0                | 0                |
| 26   | 376.00 | MAINS                                     | 5      | 221,300,854      | 0                | 110,650,427      | 110,650,427      |
| 27   | 376.00 | DIRECT MAINS                              | 5      | 11,682           | 0                | 5,841            | 5,841            |
| 28   | 378.10 | M & R GENERAL                             | 5      | 518,504          | 0                | 259,252          | 259,252          |
| 29   | 378.20 | M & R GENERAL - REGULATING                | 5      | 9,175,090        | 0                | 4,587,545        | 4,587,545        |
| 30   | 378.30 | M & R EQUIP - LOCAL GAS PURCHASES         | 5      | 45,443           | 0                | 22,722           | 22,722           |
| 31   | 379.10 | STA EQUIP - CITY                          | 5      | 254,901          | 0                | 127,451          | 127,451          |
| 32   | 380.00 | SERVICES                                  | 15     | 127,467,343      | 127,467,343      | 0                | 0                |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 31 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY        | DEMAND           |
|----------|----------|---------------------------------------|-----------------------|------------------|------------------|------------------|------------------|
|          | (A)      | (B)                                   | (C)                   | (D)              | (E)              | (F)              | (G)              |
|          |          |                                       |                       | \$               | \$               | \$               | \$               |
| 1        | 380.00   | DIRECT SERVICES                       | 15                    | 0                | 0                | 0                | 0                |
| 2        | 381.00   | METERS                                | 16                    | 22,789,579       | 22,789,579       | 0                | 0                |
| 3        | 382.00   | METER INSTALLATIONS                   | 16                    | 9,462,175        | 9,462,175        | 0                | 0                |
| 4        | 383.00   | HOUSE REGULATORS                      | 16                    | 5,770,311        | 5,770,311        | 0                | 0                |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 2,257,522        | 2,257,522        | 0                | 0                |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 2,697,547        | 2,697,547        | 0                | 0                |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 677,829          | 677,829          | 0                | 0                |
| 8        | 387.20   | ODORIZATION                           | 7DC                   | 0                | 0                | 0                | 0                |
| 9        | 387.41   | TELEPHONE                             | 7DC                   | 735,771          | 307,899          | 213,936          | 213,936          |
| 10       | 387.42   | RADIO                                 | 7DC                   | 795,187          | 332,763          | 231,212          | 231,212          |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7DC                   | 133,590          | 55,904           | 38,843           | 38,843           |
| 12       | 387.45   | TELEMETERING                          | 7DC                   | 3,779,585        | 1,581,646        | 1,098,970        | 1,098,970        |
| 13       | 387.46   | CIS                                   | 7DC                   | <u>113,644</u>   | <u>47,557</u>    | <u>33,044</u>    | <u>33,044</u>    |
| 14       |          | TOTAL DISTRIBUTION PLANT              |                       | 423,501,900      | 177,223,194      | 123,139,355      | 123,139,355      |
| 15       |          | GENERAL PLANT                         |                       |                  |                  |                  |                  |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DC                   | 735,278          | 307,692          | 213,793          | 213,793          |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DC                   | 18,816           | 7,874            | 5,471            | 5,471            |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DC                   | 1,257,641        | 526,286          | 365,677          | 365,677          |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DC                   | 95,778           | 40,080           | 27,849           | 27,849           |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DC                   | 24,462           | 10,237           | 7,113            | 7,113            |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DC                   | 24,241           | 10,144           | 7,048            | 7,048            |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DC                   | 0                | 0                | 0                | 0                |
| 23       | 393.00   | STORES EQUIPMENT                      | 7DC                   | 0                | 0                | 0                | 0                |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7DC                   | 0                | 0                | 0                | 0                |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DC                   | 3,259,030        | 1,363,809        | 947,611          | 947,611          |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7DC                   | 9,258            | 3,874            | 2,692            | 2,692            |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DC                   | 253,135          | 105,930          | 73,603           | 73,603           |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7DC                   | 0                | 0                | 0                | 0                |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DC                   | <u>294,060</u>   | <u>123,056</u>   | <u>85,502</u>    | <u>85,502</u>    |
| 30       |          | TOTAL GENERAL PLANT                   |                       | <u>5,971,699</u> | <u>2,498,982</u> | <u>1,736,359</u> | <u>1,736,359</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |                       | 437,889,787      | 183,244,104      | 127,322,843      | 127,322,843      |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION RESERVE ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 32 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND         |
|----------|----------|---|-----------------------|------------------|------------------|----------------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)              | (F)            | (G)            |
|          |          |   |                       | \$               | \$               | \$             | \$             |
| 1        |          | INTANGIBLE PLANT                          |                       |                  |                  |                |                |
| 2        | 301.00   | ORGANIZATION                              | 7DC                   | 0                | 0                | 0              | 0              |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7DC                   | 49,104           | 20,549           | 14,278         | 14,278         |
| 4        | 303.10   | DIS SOFTWARE                              | 7DC                   | 0                | 0                | 0              | 0              |
| 5        | 303.20   | FARA SOFTWARE                             | 7DC                   | 0                | 0                | 0              | 0              |
| 6        | 303.30   | OTHER SOFTWARE                            | 7DC                   | <u>3,424,538</u> | <u>1,433,069</u> | <u>995,734</u> | <u>995,734</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |                       | 3,473,642        | 1,453,618        | 1,010,012      | 1,010,012      |
| 8        |          | PRODUCTION PLANT                          |                       |                  |                  |                |                |
| 9        | 304.10   | LAND                                      | 2                     | 0                | 0                | 0              | 0              |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0                | 0              | 0              |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>       |
| 12       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0                | 0              | 0              |
| 13       |          | DISTRIBUTION PLANT                        |                       |                  |                  |                |                |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 5                     | 0                | 0                | 0              | 0              |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 5                     | (523)            | 0                | (262)          | (262)          |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 5                     | 184,637          | 0                | 92,319         | 92,319         |
| 17       | 374.50   | RIGHTS OF WAY                             | 5                     | 942,676          | 0                | 471,338        | 471,338        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 5                     | 2,063            | 0                | 1,032          | 1,032          |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 5                     | (78)             | 0                | (39)           | (39)           |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 5                     | 497,862          | 0                | 248,931        | 248,931        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 5                     | 3,028            | 0                | 1,514          | 1,514          |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0                | 0              | 0              |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7DC                   | 3,369,677        | 1,410,111        | 979,783        | 979,783        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7DC                   | 199,220          | 83,368           | 57,926         | 57,926         |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 5                     | 0                | 0                | 0              | 0              |
| 26       | 376.00   | MAINS                                     | 5                     | 58,817,583       | 0                | 29,408,791     | 29,408,791     |
| 27       | 376.00   | DIRECT MAINS                              | 5                     | 8,703            | 0                | 4,352          | 4,352          |
| 28       | 378.10   | M & R GENERAL                             | 5                     | 372,072          | 0                | 186,036        | 186,036        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 5                     | 3,453,479        | 0                | 1,726,740      | 1,726,740      |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 5                     | 36,634           | 0                | 18,317         | 18,317         |
| 31       | 379.10   | STA EQUIP - CITY                          | 5                     | 267,731          | 0                | 133,866        | 133,866        |
| 32       | 380.00   | SERVICES                                  | 15                    | 61,085,053       | 61,085,053       | 0              | 0              |
| 33       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0                | 0              | 0              |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 33 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER       | COMMODITY      | DEMAND         |
|----------|----------|---------------------------------------|-----------------------|------------------|----------------|----------------|----------------|
|          | (A)      | (B)                                   | (C)                   | (D)              | (E)            | (F)            | (G)            |
|          |          |                                       |                       | \$               | \$             | \$             | \$             |
| 1        | 381.00   | METERS                                | 16                    | 6,025,045        | 6,025,045      | 0              | 0              |
| 2        | 382.00   | METER INSTALLATIONS                   | 16                    | 4,714,156        | 4,714,156      | 0              | 0              |
| 3        | 383.00   | HOUSE REGULATORS                      | 16                    | 1,568,587        | 1,568,587      | 0              | 0              |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 1,780,729        | 1,780,729      | 0              | 0              |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 823,118          | 823,118        | 0              | 0              |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 133,766          | 133,766        | 0              | 0              |
| 7        | 387.20   | ODORIZATION                           | 7DC                   | (59,912)         | (25,071)       | (17,420)       | (17,420)       |
| 8        | 387.41   | TELEPHONE                             | 7DC                   | 399,816          | 167,311        | 116,252        | 116,252        |
| 9        | 387.42   | RADIO                                 | 7DC                   | 567,414          | 237,446        | 164,984        | 164,984        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DC                   | 50,650           | 21,196         | 14,727         | 14,727         |
| 11       | 387.45   | TELEMETERING                          | 7DC                   | 529,513          | 221,586        | 153,964        | 153,964        |
| 12       | 387.46   | CIS                                   | 7DC                   | <u>114,357</u>   | <u>47,855</u>  | <u>33,251</u>  | <u>33,251</u>  |
| 13       |          | TOTAL DISTRIBUTION PLANT              |                       | 145,887,056      | 78,294,256     | 33,796,402     | 33,796,402     |
| 14       |          | GENERAL PLANT                         |                       |                  |                |                |                |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DC                   | (33,247)         | (13,913)       | (9,667)        | (9,667)        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DC                   | (11,355)         | (4,752)        | (3,302)        | (3,302)        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DC                   | 750,133          | 313,909        | 218,112        | 218,112        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DC                   | 27,035           | 11,313         | 7,861          | 7,861          |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DC                   | 6,309            | 2,640          | 1,834          | 1,834          |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DC                   | 15,095           | 6,317          | 4,389          | 4,389          |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DC                   | 37,937           | 15,876         | 11,031         | 11,031         |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DC                   | 0                | 0              | 0              | 0              |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DC                   | 185              | 77             | 54             | 54             |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DC                   | 1,333,005        | 557,824        | 387,591        | 387,591        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DC                   | 7,764            | 3,249          | 2,257          | 2,257          |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DC                   | 202,598          | 84,781         | 58,908         | 58,908         |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7DC                   | 0                | 0              | 0              | 0              |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DC                   | 12,094           | <u>5,061</u>   | <u>3,517</u>   | <u>3,517</u>   |
| 29       |          | TOTAL GENERAL PLANT                   |                       | <u>2,347,553</u> | <u>982,382</u> | <u>682,585</u> | <u>682,585</u> |
| 30       |          | TOTAL PLANT RESERVE                   |                       | 151,708,251      | 80,730,256     | 35,488,999     | 35,488,999     |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION EXPENSE ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 34 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER       | COMMODITY      | DEMAND         |
|----------|----------|---|-----------------------|------------------|----------------|----------------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)            | (F)            | (G)            |
|          |          |   |                       | \$               | \$             | \$             | \$             |
|          |          | INTANGIBLE PLANT                          |                       |                  |                |                |                |
| 1        | 301.00   | ORGANIZATION                              | 7DC                   | 0                | 0              | 0              | 0              |
| 2        | 303.00   | MISC. INTANGIBLE PLANT                    | 7DC                   | 2,478            | 1,037          | 721            | 721            |
| 3        | 303.10   | DIS SOFTWARE                              | 7DC                   | 0                | 0              | 0              | 0              |
| 4        | 303.20   | FARA SOFTWARE                             | 7DC                   | 0                | 0              | 0              | 0              |
| 5        | 303.30   | OTHER SOFTWARE                            | 7DC                   | <u>1,271,617</u> | <u>532,135</u> | <u>369,741</u> | <u>369,741</u> |
| 6        |          | TOTAL INTANGIBLE PLANT                    |                       | 1,274,096        | 533,172        | 370,462        | 370,462        |
| 7        |          | PRODUCTION PLANT                          |                       |                  |                |                |                |
| 8        | 304.10   | LAND                                      | 2                     | 0                | 0              | 0              | 0              |
| 9        | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0              | 0              | 0              |
| 10       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>       | <u>0</u>       | <u>0</u>       |
| 11       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0              | 0              | 0              |
| 12       |          | DISTRIBUTION PLANT                        |                       |                  |                |                |                |
| 13       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 5                     | 0                | 0              | 0              | 0              |
| 14       | 374.20   | LAND - OTHER DISTRIBUTION                 | 5                     | 0                | 0              | 0              | 0              |
| 15       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 5                     | 11,508           | 0              | 5,754          | 5,754          |
| 16       | 374.50   | RIGHTS OF WAY                             | 5                     | 35,215           | 0              | 17,608         | 17,608         |
| 17       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 5                     | 72               | 0              | 36             | 36             |
| 18       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 5                     | 0                | 0              | 0              | 0              |
| 19       | 375.40   | STRUC & IMPROV-REGULATING                 | 5                     | 69,888           | 0              | 34,944         | 34,944         |
| 20       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 5                     | 744              | 0              | 372            | 372            |
| 21       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0              | 0              | 0              |
| 22       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7DC                   | 185,730          | 77,723         | 54,004         | 54,004         |
| 23       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7DC                   | 33,049           | 13,830         | 9,609          | 9,609          |
| 24       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 5                     | 0                | 0              | 0              | 0              |
| 25       | 376.00   | MAINS                                     | 5                     | 5,087,613        | 0              | 2,543,807      | 2,543,807      |
| 26       | 376.00   | DIRECT MAINS                              | 5                     | 151              | 0              | 75             | 75             |
| 27       | 378.10   | M & R GENERAL                             | 5                     | 17,220           | 0              | 8,610          | 8,610          |
| 28       | 378.20   | M & R GENERAL - REGULATING                | 5                     | 304,399          | 0              | 152,200        | 152,200        |
| 29       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 5                     | 1,512            | 0              | 756            | 756            |
| 30       | 379.10   | STA EQUIP - CITY                          | 5                     | 0                | 0              | 0              | 0              |
| 31       | 380.00   | SERVICES                                  | 15                    | 6,496,995        | 6,496,995      | 0              | 0              |
| 32       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0              | 0              | 0              |

CLASSIFICATION  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
PAGE 35 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND    |
|----------|----------|---------------------------------------|-----------------------|---------------|-----------|-----------|-----------|
|          | (A)      | (B)                                   | (C)                   | (D)           | (E)       | (F)       | (G)       |
|          |          |                                       |                       | \$            | \$        | \$        | \$        |
| 1        | 381.00   | METERS                                | 16                    | 1,172,264     | 1,172,264 | 0         | 0         |
| 2        | 382.00   | METER INSTALLATIONS                   | 16                    | 230,831       | 230,831   | 0         | 0         |
| 3        | 383.00   | HOUSE REGULATORS                      | 16                    | 157,520       | 157,520   | 0         | 0         |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 22,800        | 22,800    | 0         | 0         |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 158,316       | 158,316   | 0         | 0         |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 13,065        | 13,065    | 0         | 0         |
| 7        | 387.20   | ODORIZATION                           | 7DC                   | 0             | 0         | 0         | 0         |
| 8        | 387.41   | TELEPHONE                             | 7DC                   | 27,516        | 11,515    | 8,001     | 8,001     |
| 9        | 387.42   | RADIO                                 | 7DC                   | 29,736        | 12,444    | 8,646     | 8,646     |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DC                   | 4,992         | 2,089     | 1,451     | 1,451     |
| 11       | 387.45   | TELEMETERING                          | 7DC                   | 140,832       | 58,934    | 40,949    | 40,949    |
| 12       | 387.46   | CIS                                   | 7DC                   | 4,248         | 1,778     | 1,235     | 1,235     |
| 13       |          | TOTAL DISTRIBUTION PLANT              |                       | 14,206,216    | 8,430,104 | 2,888,057 | 2,888,057 |
| 14       |          | GENERAL PLANT                         |                       |               |           |           |           |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DC                   | 36,561        | 15,300    | 10,631    | 10,631    |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DC                   | 1,260         | 527       | 366       | 366       |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DC                   | 253,397       | 106,039   | 73,679    | 73,679    |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DC                   | 8,760         | 3,666     | 2,547     | 2,547     |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DC                   | 2,244         | 939       | 652       | 652       |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DC                   | 972           | 407       | 283       | 283       |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DC                   | 0             | 0         | 0         | 0         |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DC                   | 0             | 0         | 0         | 0         |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DC                   | 0             | 0         | 0         | 0         |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DC                   | 129,657       | 54,258    | 37,700    | 37,700    |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DC                   | 468           | 196       | 136       | 136       |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DC                   | 6,552         | 2,742     | 1,905     | 1,905     |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DC                   | 19,604        | 8,204     | 5,700     | 5,700     |
| 28       |          | TOTAL GENERAL PLANT                   |                       | 459,475       | 192,278   | 133,599   | 133,599   |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |                       | 15,939,787    | 9,155,554 | 3,392,118 | 3,392,118 |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 36 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL       |              |               |            |
|----------|----------|------------------------------|-----------------------|-------------|--------------|---------------|------------|
|          | (A)      | (B)                          | (C)                   | COMPANY (D) | CUSTOMER (E) | COMMODITY (F) | DEMAND (G) |
|          |          |                              |                       | \$          | \$           | \$            | \$         |
| 1        |          | OPERATING REVENUE            |                       |             |              |               |            |
| 2        | 480.00   | RESIDENTIAL SALES            | 22                    | 49,696,061  | 17,486,899   | 22,106,060    | 10,103,103 |
| 3        | 481.10   | COMMERCIAL SALES             | 22                    | 18,520,317  | 5,563,210    | 9,742,948     | 3,214,159  |
| 4        | 481.20   | INDUSTRIAL SALES             | 22                    | 1,458,726   | 434,929      | 772,516       | 251,281    |
| 5        |          | TOTAL SALES REVENUE          |                       | 69,675,105  | 23,485,038   | 32,621,523    | 13,568,543 |
| 6        | 487.00   | FORFEITED DISCOUNTS          | 22                    | 476,000     | 231,930      | 109,434       | 134,636    |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6                     | 137,000     | 137,000      | 0             | 0          |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  | 22                    | 21,807,062  | 10,625,492   | 5,042,664     | 6,138,906  |
| 9        | 495.00   | OTHER                        | 6                     | 587,000     | 587,000      | 0             | 0          |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |                       | 23,007,062  | 11,581,422   | 5,152,098     | 6,273,542  |
| 11       |          | TOTAL OPERATING REVENUE      |                       | 92,682,167  | 35,066,460   | 37,773,621    | 19,842,086 |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER | COMMODITY         | DEMAND   |
|----------|-----------|-----------------------------------|-----------------------|-------------------|----------|-------------------|----------|
|          | (A)       | (B)                               | (C)                   | (D)               | (E)      | (F)               | (G)      |
|          |           |                                   |                       | \$                | \$       | \$                | \$       |
| 1        |           | OPERATING EXPENSES                |                       |                   |          |                   |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |                       |                   |          |                   |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2                     | 0                 | 0        | 0                 | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2                     | 2,139             | 0        | 0                 | 2,139    |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2                     | 0                 | 0        | 0                 | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |                       | 2,139             | 0        | 0                 | 2,139    |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |                       |                   |          |                   |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2                     | 0                 | 0        | 0                 | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2                     | 0                 | 0        | 0                 | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2                     | 0                 | 0        | 0                 | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |                       | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |                       | 2,139             | 0        | 0                 | 2,139    |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |                       |                   |          |                   |          |
| 16       | 803 - 806 |                                   |                       |                   |          |                   |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           | 9                     | 21,475,950        | 0        | 21,475,950        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9                     | 0                 | 0        | 0                 | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9                     | 341,557           | 0        | 341,557           | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |                       | <u>21,817,507</u> | <u>0</u> | <u>21,817,507</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |                       | 21,819,646        | 0        | 21,817,507        | 2,139    |

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | CLASSIFICATION FACTOR | TOTAL          |               |               |               |
|----------|----------|----------------------------|-----------------------|----------------|---------------|---------------|---------------|
|          | (A)      | (B)                        | (C)                   | COMPANY (D)    | CUSTOMER (E)  | COMMODITY (F) | DEMAND (G)    |
|          |          |                            |                       | \$             | \$            | \$            | \$            |
| 1        |          | DISTRIBUTION EXPENSES      |                       |                |               |               |               |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10DC                  | 97,461         | 60,564        | 18,980        | 17,917        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4                     | 66,644         | 0             | 66,644        | 0             |
| 4        | 874      | MAINS & SERVICES           | 14DC                  | 1,726,536      | 630,991       | 547,773       | 547,773       |
| 5        | 875      | M & R - GENERAL            | 18DC                  | 82,347         | 0             | 41,174        | 41,174        |
| 6        | 876      | M & R - INDUSTRIAL         | 8                     | 38,736         | 38,736        | 0             | 0             |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16                    | 1,279,637      | 1,279,637     | 0             | 0             |
| 8        | 879      | CUSTOMER INSTALLATION      | 16                    | 1,500,691      | 1,500,691     | 0             | 0             |
| 9        | 880      | OTHER                      | 10DC                  | 547,972        | 340,519       | 106,716       | 100,736       |
| 10       | 881      | RENTS                      | 10DC                  | <u>0</u>       | <u>0</u>      | <u>0</u>      | <u>0</u>      |
| 11       |          | TOTAL OPERATION            |                       | 5,340,024      | 3,851,138     | 781,287       | 707,600       |
| 12       |          | MAINTENANCE                |                       |                |               |               |               |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10DC                  | 8,649          | 5,375         | 1,684         | 1,590         |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DC                  | 2,509          | 0             | 1,255         | 1,255         |
| 15       | 887      | MAINS                      | 18DC                  | 926,354        | 0             | 463,177       | 463,177       |
| 16       | 889      | M & R - GENERAL            | 18DC                  | 138,594        | 0             | 69,297        | 69,297        |
| 17       | 890      | M & R - INDUSTRIAL         | 8                     | 19,419         | 19,419        | 0             | 0             |
| 18       | 892      | SERVICES                   | 15                    | 298,657        | 298,657       | 0             | 0             |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16                    | 26,851         | 26,851        | 0             | 0             |
| 20       | 894      | OTHER EQUIPMENT            | 10DC                  | <u>124,180</u> | <u>77,168</u> | <u>24,184</u> | <u>22,829</u> |
| 21       |          | TOTAL MAINTENANCE          |                       | 1,545,213      | 427,470       | 559,597       | 558,148       |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER | COMMODITY | DEMAND   |
|----------|----------|----------------------------------|-----------------------|---------------|----------|-----------|----------|
|          | (A)      | (B)                              | (C)                   | (D)           | (E)      | (F)       | (G)      |
|          |          |                                  |                       | \$            | \$       | \$        | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |                       |               |          |           |          |
| 2        | 901      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 3        | 902      | METER READING                    | 6                     | 165,331       | 165,331  | 0         | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6                     | 692,556       | 692,556  | 0         | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21                    | 0             | 0        | 0         | 0        |
| 6        | 905      | MISC.                            | 6                     | 0             | 0        | 0         | 0        |
| 7        | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 9        | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |                       | 857,887       | 857,887  | 0         | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |                       |               |          |           |          |
| 13       | 907      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6                     | 12,982        | 12,982   | 0         | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6                     | 0             | 0        | 0         | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6                     | 0             | 0        | 0         | 0        |
| 17       | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 19       | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |                       | 12,982        | 12,982   | 0         | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND    |
|----------|----------|---------------------------------|-----------------------|---------------|-----------|-----------|-----------|
|          | (A)      | (B)                             | (C)                   | (D)           | (E)       | (F)       | (G)       |
|          |          |                                 |                       | \$            | \$        | \$        | \$        |
| 1        |          | SALES                           |                       |               |           |           |           |
| 2        | 911      | SUPERVISION                     | 6                     | 0             | 0         | 0         | 0         |
| 3        | 912      | DEMONSTRATION & SELLING         | 6                     | 0             | 0         | 0         | 0         |
| 4        | 913      | ADVERTISING                     | 6                     | 0             | 0         | 0         | 0         |
| 5        | 916      | MISC.                           | 6                     | 0             | 0         | 0         | 0         |
| 6        |          | TOTAL SALES                     |                       | 0             | 0         | 0         | 0         |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |                       | 7,756,106     | 5,149,477 | 1,340,884 | 1,265,748 |
| 8        |          | ADMINISTRATIVE & GENERAL        |                       |               |           |           |           |
| 9        | 920      | SALARIES                        | 12DC                  | 1,597,984     | 1,060,942 | 276,261   | 260,781   |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12DC                  | 0             | 0         | 0         | 0         |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12DC                  | 0             | 0         | 0         | 0         |
| 12       | 923      | OUTSIDE SERVICES                | 12DC                  | 4,636         | 3,078     | 802       | 757       |
| 13       | 924      | PROPERTY INSURANCE              | 12DC                  | 0             | 0         | 0         | 0         |
| 14       | 925      | INJURIES AND DAMAGES            | 12DC                  | 0             | 0         | 0         | 0         |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12DC                  | 0             | 0         | 0         | 0         |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12DC                  | 0             | 0         | 0         | 0         |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12DC                  | 0             | 0         | 0         | 0         |
| 18       | 930.20   | MISC. - GENERAL                 | 12DC                  | 0             | 0         | 0         | 0         |
| 19       | 931      | RENTS                           | 12DC                  | 0             | 0         | 0         | 0         |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12DC                  | 0             | 0         | 0         | 0         |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |                       |               |           |           |           |
| 22       |          | FURNITURE & EQUIPMENT           | 12DC                  | 0             | 0         | 0         | 0         |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12DC                  | 0             | 0         | 0         | 0         |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |                       | 1,602,620     | 1,064,020 | 277,063   | 261,538   |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |                       | 9,358,726     | 6,213,497 | 1,617,947 | 1,527,286 |

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | CLASSIFICATION FACTOR | TOTAL          |               |               |               |
|----------|----------|----------------------------|-----------------------|----------------|---------------|---------------|---------------|
|          | (A)      | (B)                        | (C)                   | COMPANY (D)    | CUSTOMER (E)  | COMMODITY (F) | DEMAND (G)    |
|          |          |                            |                       | \$             | \$            | \$            | \$            |
| 1        |          | DISTRIBUTION EXPENSES      |                       |                |               |               |               |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11DC                  | 783,470        | 296,842       | 244,067       | 242,561       |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4                     | 17,885         | 0             | 17,885        | 0             |
| 4        | 874      | MAINS & SERVICES           | 14DC                  | 4,797,660      | 1,753,384     | 1,522,138     | 1,522,138     |
| 5        | 875      | M & R - GENERAL            | 18DC                  | 118,379        | 0             | 59,190        | 59,190        |
| 6        | 876      | M & R - INDUSTRIAL         | 8                     | 29,602         | 29,602        | 0             | 0             |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16                    | 485,057        | 485,057       | 0             | 0             |
| 8        | 879      | CUSTOMER INSTALLATION      | 16                    | 655,941        | 655,941       | 0             | 0             |
| 9        | 880      | OTHER                      | 11DC                  | 1,211,487      | 459,009       | 377,403       | 375,075       |
| 10       | 881      | RENTS                      | 11DC                  | <u>82,157</u>  | <u>31,128</u> | <u>25,594</u> | <u>25,436</u> |
| 11       |          | TOTAL OPERATION            |                       | 8,181,638      | 3,710,963     | 2,246,277     | 2,224,400     |
| 12       |          | MAINTENANCE                |                       |                |               |               |               |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11DC                  | 2,571          | 974           | 801           | 796           |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DC                  | 251,838        | 0             | 125,919       | 125,919       |
| 15       | 887      | MAINS                      | 18DC                  | 2,202,076      | 0             | 1,101,038     | 1,101,038     |
| 16       | 889      | M & R - GENERAL            | 18DC                  | 144,736        | 0             | 72,368        | 72,368        |
| 17       | 890      | M & R - INDUSTRIAL         | 8                     | 51,880         | 51,880        | 0             | 0             |
| 18       | 892      | SERVICES                   | 15                    | 431,251        | 431,251       | 0             | 0             |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16                    | 118,176        | 118,176       | 0             | 0             |
| 20       | 894      | OTHER EQUIPMENT            | 11DC                  | <u>199,573</u> | <u>75,614</u> | <u>62,171</u> | <u>61,788</u> |
| 21       |          | TOTAL MAINTENANCE          |                       | 3,402,101      | 677,895       | 1,362,297     | 1,361,909     |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | CLASSIFICATION FACTOR | TOTAL       |              |               |            |
|----------|----------|----------------------------------|-----------------------|-------------|--------------|---------------|------------|
|          | (A)      | (B)                              | (C)                   | COMPANY (D) | CUSTOMER (E) | COMMODITY (F) | DEMAND (G) |
|          |          |                                  |                       | \$          | \$           | \$            | \$         |
| 1        |          | CUSTOMER ACCOUNTS                |                       |             |              |               |            |
| 2        | 901      | SUPERVISION                      | 6                     | 0           | 0            | 0             | 0          |
| 3        | 902      | METER READING                    | 6                     | 399,502     | 399,502      | 0             | 0          |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6                     | 3,252,912   | 3,252,912    | 0             | 0          |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21                    | 1,027,585   | 1,027,585    | 0             | 0          |
| 6        | 905      | MISC.                            | 6                     | 1,073       | 1,073        | 0             | 0          |
| 7        | 920      | SALARIES                         | 6                     | 0           | 0            | 0             | 0          |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 253         | 253          | 0             | 0          |
| 9        | 931      | RENTS                            | 6                     | 0           | 0            | 0             | 0          |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>    | <u>0</u>     | <u>0</u>      | <u>0</u>   |
| 11       |          | TOTAL CUSTOMER ACCT.             |                       | 4,681,325   | 4,681,325    | 0             | 0          |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |                       |             |              |               |            |
| 13       | 907      | SUPERVISION                      | 6                     | (2,789)     | (2,789)      | 0             | 0          |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6                     | 1,198,971   | 1,198,971    | 0             | 0          |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6                     | 65,932      | 65,932       | 0             | 0          |
| 16       | 910      | MISCELLANEOUS                    | 6                     | 257,797     | 257,797      | 0             | 0          |
| 17       | 920      | SALARIES                         | 6                     | 0           | 0            | 0             | 0          |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 13,868      | 13,868       | 0             | 0          |
| 19       | 931      | RENTS                            | 6                     | 0           | 0            | 0             | 0          |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>    | <u>0</u>     | <u>0</u>      | <u>0</u>   |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |                       | 1,533,779   | 1,533,779    | 0             | 0          |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                  | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER         | COMMODITY        | DEMAND           |
|----------|----------|--|-----------------------|-------------------|------------------|------------------|------------------|
|          | (A)      | (B)  | (C)                   | (D)               | (E)              | (F)              | (G)              |
|          |          |  |                       | \$                | \$               | \$               | \$               |
| 1        |          | SALES  |                       |                   |                  |                  |                  |
| 2        | 911      | SUPERVISION                                    | 6                     | 0                 | 0                | 0                | 0                |
| 3        | 912      | DEMONSTRATION & SELLING                        | 6                     | 37,477            | 37,477           | 0                | 0                |
| 4        | 913      | ADVERTISING                                    | 6                     | 138,706           | 138,706          | 0                | 0                |
| 5        | 916      | MISC.  | 6                     | 0                 | 0                | 0                | 0                |
| 6        |          | TOTAL SALES                                    |                       | <u>176,183</u>    | <u>176,183</u>   | <u>0</u>         | <u>0</u>         |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                    |                       | 17,975,026        | 10,780,145       | 3,608,574        | 3,586,309        |
| 8        |          | ADMINISTRATIVE & GENERAL                       |                       |                   |                  |                  |                  |
| 9        | 920      | SALARIES                                       | 13DC                  | 2,963,302         | 1,671,364        | 618,426          | 673,512          |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                     | 13DC                  | 894,098           | 504,290          | 186,594          | 203,214          |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                     | 13DC                  | 0                 | 0                | 0                | 0                |
| 12       | 923      | OUTSIDE SERVICES                               | 13DC                  | 7,869,789         | 4,438,725        | 1,642,385        | 1,788,679        |
| 13       | 924      | PROPERTY INSURANCE                             | 13DC                  | 81,748            | 46,108           | 17,060           | 18,580           |
| 14       | 925      | INJURIES AND DAMAGES                           | 13DC                  | 1,043,923         | 588,794          | 217,861          | 237,267          |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS                   | 13DC                  | 3,351,467         | 1,890,297        | 699,434          | 761,736          |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS            | 13DC                  | 0                 | 0                | 0                | 0                |
| 17       | 928      | REG COMMISSION EXP - GENERAL                   | 13DC                  | 197,760           | 111,541          | 41,272           | 44,948           |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901     | 13DC                  | 176,189           | 99,374           | 36,770           | 40,045           |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV                | 13DC                  | 0                 | 0                | 0                | 0                |
| 20       | 930.20   | MISC. - GENERAL                                | 13DC                  | (62,123)          | (35,039)         | (12,965)         | (14,120)         |
| 21       | 931      | RENTS  | 13DC                  | 642,175           | 362,200          | 134,019          | 145,956          |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                    | 13DC                  | 130               | 73               | 27               | 30               |
| 23       | 935.23   | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT | 13DC                  | 0                 | 0                | 0                | 0                |
| 24       | 932      | MAINT.-MISCELLANEOUS                           | 13DC                  | <u>259,121</u>    | <u>146,150</u>   | <u>54,077</u>    | <u>58,894</u>    |
| 25       |          | TOTAL ADMIN & GENERAL - M & E                  |                       | <u>17,417,579</u> | <u>9,823,877</u> | <u>3,634,960</u> | <u>3,958,741</u> |
| 26       |          | TOTAL O & M EXPENSE - M & E                    |                       | 35,736,301        | 20,604,022       | 7,585,091        | 7,547,189        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY        | DEMAND           |
|----------|----------|------------------------------|-----------------------|-------------------|-------------------|------------------|------------------|
|          | (A)      | (B)                          | (C)                   | (D)               | (E)               | (F)              | (G)              |
|          |          |                              |                       | \$                | \$                | \$               | \$               |
| 1        |          | LABOR                        |                       |                   |                   |                  |                  |
| 2        |          | PRODUCTION                   | PAGE 13               | 0                 | 0                 | 0                | 0                |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14               | 5,340,024         | 3,851,138         | 781,287          | 707,600          |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14               | 1,545,213         | 427,470           | 559,597          | 558,148          |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15               | 857,887           | 857,887           | 0                | 0                |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15               | 12,982            | 12,982            | 0                | 0                |
| 7        |          | SALES                        | PAGE 16               | 0                 | 0                 | 0                | 0                |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16               | <u>1,602,620</u>  | <u>1,064,020</u>  | <u>277,063</u>   | <u>261,538</u>   |
| 9        |          | TOTAL LABOR EXPENSE          |                       | 9,358,726         | 6,213,497         | 1,617,947        | 1,527,286        |
| 10       |          | M & E                        |                       |                   |                   |                  |                  |
| 11       |          | PRODUCTION                   | PAGE 13               | 343,696           | 0                 | 341,557          | 2,139            |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17               | 8,181,638         | 3,710,963         | 2,246,277        | 2,224,400        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17               | 3,402,101         | 677,895           | 1,362,297        | 1,361,909        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18               | 4,681,325         | 4,681,325         | 0                | 0                |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18               | 1,533,779         | 1,533,779         | 0                | 0                |
| 16       |          | SALES                        | PAGE 19               | 176,183           | 176,183           | 0                | 0                |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19               | <u>17,417,579</u> | <u>9,823,877</u>  | <u>3,634,960</u> | <u>3,958,741</u> |
| 18       |          | TOTAL M & E EXPENSE          |                       | <u>35,736,301</u> | <u>20,604,022</u> | <u>7,585,091</u> | <u>7,547,189</u> |
| 19       |          | TOTAL O & M EXPENSES         |                       | 45,095,028        | 26,817,519        | 9,203,038        | 9,074,475        |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 45 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)       | CLASSIFICATION FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | CUSTOMER<br>(E)<br>\$ | COMMODITY<br>(F)<br>\$ | DEMAND<br>(G)<br>\$ |
|----------|-----------------|----------------------------|------------------------------|----------------------------|-----------------------|------------------------|---------------------|
| 1        | 408             | TAXES BASED ON PROPERTY    | 7DC                          | 4,136,779                  | 1,731,121             | 1,202,829              | 1,202,829           |
| 2        | 408             | TAXES BASED ON PAYROLL     | 12DC                         | 654,102                    | 434,275               | 113,082                | 106,745             |
| 3        | 408             | OTHER TAXES                | 12DC                         | 0                          | 0                     | 0                      | 0                   |
| 4        |                 | TOTAL TAXES OTHER THAN FIT |                              | 4,790,881                  | 2,165,396             | 1,315,911              | 1,309,574           |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 46 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER         | COMMODITY        | DEMAND           |
|----------|----------|---|-----------------------|-------------------|------------------|------------------|------------------|
|          | (A)      | (B)   | (C)                   | (D)               | (E)              | (F)              | (G)              |
|          |          |   |                       | \$                | \$               | \$               | \$               |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |                       | 5,380,521         | (3,072,009)      | 2,386,604        | 6,065,919        |
| 2        |          | LESS: RECONCILING ITEMS:                        |                       |                   |                  |                  |                  |
| 3        |          | IMPUTED INTEREST                                |                       | 6,688,725         | 1,910,314        | 1,837,904        | 2,940,506        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19DC                  | 14,595,754        | 6,107,897        | 4,243,929        | 4,243,929        |
| 5        |          | BOOK DEPRECIATION                               |                       | <u>14,665,691</u> | <u>8,622,382</u> | <u>3,021,656</u> | <u>3,021,656</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |                       | (69,937)          | (2,514,485)      | 1,222,273        | 1,222,273        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12DC                  | <u>(4,960)</u>    | <u>(3,293)</u>   | <u>(857)</u>     | <u>(809)</u>     |
| 8        |          | TOTAL RECONCILING ITEMS                         |                       | <u>6,613,828</u>  | <u>(607,464)</u> | <u>3,059,320</u> | <u>4,161,970</u> |
| 9        |          | TAXABLE INCOME                                  |                       | (1,233,307)       | (2,464,545)      | (672,716)        | 1,903,949        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |                       | (73,998)          | (147,872)        | (40,363)         | 114,236          |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19DC                  | <u>0</u>          | <u>0</u>         | <u>0</u>         | <u>0</u>         |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |                       | (73,998)          | (147,872)        | (40,363)         | 114,236          |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 47 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND  |
|----------|----------|---|-----------------------|---------------|-----------|-----------|---------|
|          | (A)      | (B)                                     | (C)                   | (D)           | (E)       | (F)       | (G)     |
|          |          |   |                       | \$            | \$        | \$        | \$      |
| 1        |          | DEFERRED TAXES                          |                       |               |           |           |         |
| 2        |          | RECONCILIATION ITEMS:                   |                       |               |           |           |         |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19DC                  | (17,008)      | (7,117)   | (4,945)   | (4,945) |
| 4        |          | TOTAL DEFERRED INCOME TAX               |                       | (17,008)      | (7,117)   | (4,945)   | (4,945) |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |                       | (91,006)      | (154,989) | (45,308)  | 109,291 |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY         | DEMAND            |
|----------|----------|--------------------------------------|-----------------------|-------------------|-------------------|-------------------|-------------------|
|          | (A)      | (B)                                  | (C)                   | (D)               | (E)               | (F)               | (G)               |
|          |          |                                      |                       | \$                | \$                | \$                | \$                |
| 1        |          | OPERATING REVENUE                    |                       | 92,682,167        | 35,066,460        | 37,773,621        | 19,842,086        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |                       | <u>87,301,645</u> | <u>38,138,469</u> | <u>35,387,017</u> | <u>13,776,167</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |                       | 5,380,521         | (3,072,009)       | 2,386,604         | 6,065,919         |
| 4        |          | LESS: RECONCILING ITEMS:             |                       |                   |                   |                   |                   |
| 5        |          | IMPUTED INTEREST                     |                       | 6,688,725         | 1,910,314         | 1,837,904         | 2,940,506         |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19DC                  | 14,595,754        | 6,107,897         | 4,243,929         | 4,243,929         |
| 7        |          | BOOK DEPRECIATION                    |                       | <u>14,665,691</u> | <u>8,622,382</u>  | <u>3,021,656</u>  | <u>3,021,656</u>  |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |                       | (69,937)          | (2,514,485)       | 1,222,273         | 1,222,273         |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12DC                  | (4,960)           | <u>(3,293)</u>    | <u>(857)</u>      | <u>(809)</u>      |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |                       | <u>(73,998)</u>   | <u>(147,872)</u>  | <u>(40,363)</u>   | <u>114,236</u>    |
| 11       |          | TOTAL RECONCILING ITEMS              |                       | 6,539,830         | (755,336)         | 3,018,957         | 4,276,206         |
| 12       |          | TAXABLE INCOME                       |                       | (1,159,309)       | (2,316,673)       | (632,353)         | 1,789,712         |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (787,669)         | (215,000)         | 608,502           |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19DC                  | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>          |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (787,669)         | (215,000)         | 608,502           |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL COMPANY   | CUSTOMER        | COMMODITY       | DEMAND          |
|----------|----------|-------------------------------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
|          | (A)      | (B)                                 | (C)                   | (D)             | (E)             | (F)             | (G)             |
|          |          |                                     |                       | \$              | \$              | \$              | \$              |
| 1        |          | DEFERRED INCOME TAXES               |                       |                 |                 |                 |                 |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19DC                  | 35,760          | 14,965          | 10,398          | 10,398          |
| 3        |          | OTHER TAX DEFERRALS                 |                       |                 |                 |                 |                 |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19DC                  | <u>(54,526)</u> | <u>(22,818)</u> | <u>(15,854)</u> | <u>(15,854)</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |                       | (54,526)        | (22,818)        | (15,854)        | (15,854)        |
| 6        |          | TOTAL DEFERRED INCOME TAX           |                       | <u>(90,286)</u> | <u>(37,783)</u> | <u>(26,252)</u> | <u>(26,252)</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |                       | (484,451)       | (825,452)       | (241,252)       | 582,250         |

CLASSIFICATION  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 50 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | CLASSIFICATION FACTOR | TOTAL COMPANY      | CUSTOMER          | COMMODITY         | DEMAND            |
|----------|-----------|-----------------------------------|-----------------------|--------------------|-------------------|-------------------|-------------------|
|          | (A)       | (B)                               | (C)                   | (D)                | (E)               | (F)               | (G)               |
|          |           |                                   |                       | \$                 | \$                | \$                | \$                |
| 1        | 101 & 106 | GROSS PLANT [1]                   |                       | 437,889,787        | 183,244,104       | 127,322,843       | 127,322,843       |
|          |           | LESS:                             |                       |                    |                   |                   |                   |
| 2        | 108-111   | DEPRECIATION RESERVE [2]          |                       | <u>151,708,251</u> | <u>80,730,256</u> | <u>35,488,999</u> | <u>35,488,999</u> |
| 3        |           | NET PLANT                         |                       | 286,181,536        | 102,513,848       | 91,833,844        | 91,833,844        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX        | 19DC                  | \$5,385,973        | 2,253,872         | 1,566,050         | 1,566,050         |
|          |           | LESS:                             |                       |                    |                   |                   |                   |
| 5        | 252.00    | CUSTOMER ADVANCES                 | 5                     | 0                  | 0                 | 0                 | 0                 |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT | 19DC                  | 0                  | 0                 | 0                 | 0                 |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX        | 19DC                  | 86,167,687         | 36,058,661        | 25,054,513        | 25,054,513        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX        | 19DC                  | <u>0</u>           | <u>0</u>          | <u>0</u>          | <u>0</u>          |
| 9        |           | NET RATE BASE                     |                       | 205,399,822        | 68,709,059        | 68,345,381        | 68,345,381        |
| 10       |           | PLUS WORKING CAPITAL:             |                       |                    |                   |                   |                   |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF     |                       |                    |                   |                   |                   |
| 12       |           | O & M EXCLUDING GAS COST [3]      |                       | 5,636,878          | 3,352,190         | 1,150,380         | 1,134,309         |
| 13       | 151.00    | FUEL STOCK                        | 2                     | 0                  | 0                 | 0                 | 0                 |
| 14       | 154.00    | MATERIALS & SUPPLIES              | 7DC                   | 82,011             | 34,319            | 23,846            | 23,846            |
| 15       | 165.00    | PREPAYMENTS                       | 13DC                  | 469,518            | 264,818           | 97,986            | 106,714           |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS      | 2                     | <u>41,772,551</u>  | <u>0</u>          | <u>0</u>          | <u>41,772,551</u> |
| 17       |           | RATE BASE                         |                       | 253,360,780        | 72,360,386        | 69,617,593        | 111,382,801       |

REFERENCES: [1] PAGE 31, [2] PAGE 33,  
 [3] TOTAL O & M EXPENSE  
 LESS: COST OF GAS  
 O & M EXCL. GAS COST

|                   |            |                   |           |
|-------------------|------------|-------------------|-----------|
| 66,570,978        | 26,817,519 | 30,678,988        | 9,074,475 |
| <u>21,475,950</u> | <u>0</u>   | <u>21,475,950</u> | <u>0</u>  |
| 45,095,028        | 26,817,519 | 9,203,038         | 9,074,475 |

COLUMBIA GAS OF KENTUCKY, INC.

CLASSIFICATION FACTORS

CLASSIFICATION  
FORECASTED TEST YEAR - ORIGINAL FILING

FOR THE TWELVE MONTHS ENDED 12/31/2017

WITNESS: C. NOTESTONE

| LINE<br>NO. | DESCRIPTION<br>(A)                               | CLASSIFICATION<br>FACTOR<br>(B) | TOTAL          |                 |                  |               |
|-------------|--|---------------------------------|----------------|-----------------|------------------|---------------|
|             |  |                                 | COMPANY<br>(C) | CUSTOMER<br>(D) | COMMODITY<br>(E) | DEMAND<br>(F) |
| 1           | DEMAND DESIGN DAY                                | 1                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 2           | DESIGN DAY EXCL. INTERR DEMAND (MCF)             | 2                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 3           | MINIMUM SYSTEM MAINS                             | 3                               | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 4           | COMMODITY THROUGHPUT                             | 4                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 5           | COMPOSITE OF 1 & 4 - DEMAND/COMMODITY            | 5                               | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 6           | CUSTOMER   | 6                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 7           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - C/D  | 7CD                             | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 8           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - D/C  | 7DC                             | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 9           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - AVG  | 7AVG                            | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 10          | TOTAL PLANT ACCOUNT 385                          | 8                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 11          | GAS PURCHASE EXPENSE EX OFF SYST                 | 9                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 12          | OTHER DIST. EXP - LABOR - C/D                    | 10CD                            | 100.000%       | 85.976%         | 1.091%           | 12.933%       |
| 13          | OTHER DIST. EXP - LABOR - D/C                    | 10DC                            | 100.000%       | 62.142%         | 19.475%          | 18.383%       |
| 14          | OTHER DIST. EXP - LABOR - AVG                    | 10AVG                           | 100.000%       | 74.059%         | 10.283%          | 15.658%       |
| 15          | OTHER DIST. EXP EXCL - M & E - C/D               | 11CD                            | 100.000%       | 78.028%         | 0.192%           | 21.780%       |
| 16          | OTHER DIST. EXP EXCL - M & E - D/C               | 11DC                            | 100.000%       | 37.888%         | 31.152%          | 30.960%       |
| 17          | OTHER DIST. EXP EXCL - M & E - AVG               | 11AVG                           | 100.000%       | 57.958%         | 15.672%          | 26.370%       |
| 18          | O & M EXCL A & G - LABOR - C/D                   | 12CD                            | 100.000%       | 87.551%         | 0.969%           | 11.481%       |
| 19          | O & M EXCL A & G - LABOR - D/C                   | 12DC                            | 100.000%       | 66.393%         | 17.288%          | 16.319%       |
| 20          | O & M EXCL A & G - LABOR - AVG                   | 12AVG                           | 100.000%       | 76.972%         | 9.128%           | 13.900%       |
| 21          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - C/D | 13CD                            | 100.000%       | 83.292%         | 0.129%           | 16.579%       |
| 22          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - D/C | 13DC                            | 100.000%       | 56.402%         | 20.869%          | 22.728%       |
| 23          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - AVG | 13AVG                           | 100.000%       | 69.847%         | 10.499%          | 19.654%       |
| 24          | ACCT 376/380 - MAINS/SERVICES - C/D              | 14CD                            | 100.000%       | 77.680%         | 0.000%           | 22.320%       |
| 25          | ACCT 376/380 - MAINS/SERVICES - D/C              | 14DC                            | 100.000%       | 36.547%         | 31.727%          | 31.727%       |
| 26          | ACCT 376/380 - MAINS/SERVICES - AVG              | 14AVG                           | 100.000%       | 57.113%         | 15.863%          | 27.023%       |
| 27          | DIRECT PLANT ACCT 380                            | 15                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 28          | DIRECT PLANT ACCTS 381                           | 16                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 29          | DIRECT PLANT ACCT 385                            | 17                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 30          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - C/D        | 18CD                            | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 31          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - D/C        | 18DC                            | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 32          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - AVG        | 18AVG                           | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 33          | TOTAL PLANT - C/D                                | 19CD                            | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 34          | TOTAL PLANT - D/C                                | 19DC                            | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 35          | TOTAL PLANT - AVG                                | 19AVG                           | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 36          | AVERAGE C/D & D/C                                | 20                              | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 37          | UNCOLLECTIBLES                                   | 21                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 38          | REVREQ   | 22                              | 100.000%       | 48.725%         | 23.124%          | 28.151%       |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL   | GS-OTHER         | IUS            | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-------------------|------------------|------------------|----------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)               | (E)              | (F)              | (G)            | (H)           | (I)              | (J)          | (K)          |
|          |          |  |              | \$                | \$               | \$               | \$             | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 35,066,457        | 22,684,324       | 9,316,099        | 11,245         | 234,740       | 2,820,049        | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>12,009,003</u> | <u>7,693,086</u> | <u>3,288,254</u> | <u>3,966</u>   | <u>(13)</u>   | <u>1,023,710</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 47,075,460        | 30,377,410       | 12,604,353       | 15,211         | 234,727       | 3,843,759        | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                 | 0                | 0                | 0              | 0             | 0                | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 26,951,232        | 22,314,584       | 4,329,676        | 1,357          | 58,419        | 247,196          | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 9,155,554         | 7,618,315        | 1,359,472        | 350            | 16,645        | 160,772          | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 3,081,518         | (196,451)        | 2,127,782        | 4,311          | 41,471        | 1,104,405        | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 557,528           | (50,323)         | 393,715          | 803            | 7,785         | 205,548          | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>2,165,395</u>  | <u>1,766,713</u> | <u>359,323</u>   | <u>108</u>     | <u>7,967</u>  | <u>31,284</u>    | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 41,911,227        | 31,452,838       | 8,569,968        | 6,929          | 132,287       | 1,749,205        | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 5,164,233         | (1,075,428)      | 4,034,385        | 8,282          | 102,440       | 2,094,554        | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>1,910,316</u>  | <u>1,550,193</u> | <u>312,174</u>   | <u>99</u>      | <u>11,827</u> | <u>36,023</u>    | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 3,253,917         | (2,625,621)      | 3,722,211        | 8,183          | 90,613        | 2,058,531        | 0            | 0            |
| 14       |          | RATE BASE                              |              | 72,360,386        | 58,719,448       | 11,824,755       | 3,734          | 447,979       | 1,364,492        | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>7.14%</b>      | <b>-1.83%</b>    | <b>34.12%</b>    | <b>221.81%</b> | <b>22.87%</b> | <b>153.50%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00              | (0.22)           | 4.06             | 26.37          | 2.72          | 18.25            | 0.00         | 0.00         |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML           | DS/IS         | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|--------------|-----------------|---------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)          | (H)             | (I)           | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$           | \$              | \$            | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 48,600,252       | 40,330,678       | 7,573,010      | 2,024        | 127,535         | 567,011       | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0            | 0               | 0             | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 26,968,210       | 22,425,407       | 4,273,656      | 1,210        | 57,225          | 210,712       | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 9,155,554        | 7,618,315        | 1,359,472      | 350          | 16,645          | 160,772       | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 3,577,592        | 3,041,714        | 490,901        | 21           | 6,598           | 38,358        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 647,997          | 540,223          | 95,196         | 21           | 1,425           | 11,132        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>2,165,395</u> | <u>1,766,713</u> | <u>359,323</u> | <u>108</u>   | <u>7,967</u>    | <u>31,284</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 42,514,748       | 35,392,372       | 6,578,548      | 1,710        | 89,860          | 452,258       | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 6,085,505        | 4,938,306        | 994,462        | 314          | 37,675          | 114,754       | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>1,910,316</u> | <u>1,550,193</u> | <u>312,174</u> | <u>99</u>    | <u>11,827</u>   | <u>36,023</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 4,175,189        | 3,388,113        | 682,288        | 215          | 25,848          | 78,731        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 72,360,386       | 58,719,448       | 11,824,755     | 3,734        | 447,979         | 1,364,492     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.42%</b> | <b>8.41%</b>    | <b>8.41%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00         | 1.00            | 1.00          | 0.00         | 0.00         |
| 15       |          | AVERAGE ANNUAL CUSTOMERS               |              | 135,979          | 121,915          | 13,977         | 2            | 6               | 79            | 0            | 0            |
| 16       |          | <b>MONTHLY CUSTOMER BASED COST [1]</b> |              | <b>29.78</b>     | <b>27.57</b>     | <b>45.15</b>   | <b>84.33</b> | <b>1,771.32</b> | <b>598.11</b> | <b>0.00</b>  | <b>0.00</b>  |

[1] LINE 1 / LINE 15 / 12 MONTHS.

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 54 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION (A)                          | ALLOC FACTOR (B) | Total CUSTOMER (C) | GS-RESIDENTIAL (D) | GS-OTHER (E)     | IUS (F)        | DS-ML (G)       | DS/IS (H)        | NOT USED (I) | NOT USED (J) |
|----------|--|------------------|--------------------|--------------------|------------------|----------------|-----------------|------------------|--------------|--------------|
| 1        | OPERATING REVENUE                        |                  | 13,533,792         | 17,646,354         | (1,743,089)      | (9,221)        | (107,205)       | (2,253,038)      | 0            | 0            |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                  | 0                  | 0                  | 0                | 0              | 0               | 0                | 0            | 0            |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                  | 124,962            | 162,934            | (16,094)         | (85)           | (990)           | (20,803)         | 0            | 0            |
| 4        | LESS: PSC FEES @ 0.00190100              |                  | <u>25,727</u>      | <u>33,546</u>      | <u>(3,314)</u>   | <u>(18)</u>    | <u>(204)</u>    | <u>(4,283)</u>   | <u>0</u>     | <u>0</u>     |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                  | 13,383,103         | 17,449,874         | (1,723,681)      | (9,118)        | (106,011)       | (2,227,952)      | 0            | 0            |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                  | <u>802,986</u>     | <u>1,046,992</u>   | <u>(103,421)</u> | <u>(547)</u>   | <u>(6,361)</u>  | <u>(133,677)</u> | <u>0</u>     | <u>0</u>     |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                  | 12,580,117         | 16,402,882         | (1,620,260)      | (8,571)        | (99,650)        | (2,094,275)      | 0            | 0            |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                  | <u>4,403,045</u>   | <u>5,741,009</u>   | <u>(567,091)</u> | <u>(3,000)</u> | <u>(34,877)</u> | <u>(732,996)</u> | <u>0</u>     | <u>0</u>     |
| 9        | OPERATING INCOME                         |                  | 8,177,072          | 10,661,873         | (1,053,169)      | (5,571)        | (64,773)        | (1,361,279)      | 0            | 0            |

| LINE | ACCT                                | ALLOC  | TOTAL            |                  |                |                |               |                |              |              |
|------|-------------------------------------|--------|------------------|------------------|----------------|----------------|---------------|----------------|--------------|--------------|
| NO.  | NO.                                 | FACTOR | CUSTOMER         | GS-RESIDENTIAL   | GS-OTHER       | IUS            | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|      | (A)                                 | (C)    | (D)              | (E)              | (F)            | (G)            | (H)           | (I)            | (J)          | (K)          |
|      | (B)                                 |        | \$               | \$               | \$             | \$             | \$            | \$             | \$           | \$           |
| 1    | TOTAL REVENUES [1]                  |        | 35,066,460       | 22,684,324       | 9,316,099      | 11,245         | 234,740       | 2,820,049      | 0            | 0            |
| 2    | COST OF GAS                         |        | 0                | 0                | 0              | 0              | 0             | 0              | 0            | 0            |
| 3    | OPERATING & MAINTENANCE EXPENSE [2] |        | 26,817,519       | 22,228,927       | 4,293,064      | 1,313          | 58,419        | 235,798        | 0            | 0            |
| 4    | DEPRECIATION & AMORTIZATION [3]     |        | 9,155,554        | 7,618,315        | 1,359,472      | 350            | 16,645        | 160,772        | 0            | 0            |
| 5    | FEDERAL INCOME TAX [4]              |        | (825,452)        | (2,699,295)      | 1,057,992      | 3,021          | 41,475        | 771,354        | 0            | 0            |
| 6    | KENTUCKY STATE INCOME TAX [5]       |        | (154,989)        | (506,769)        | 198,617        | 568            | 7,786         | 144,809        | 0            | 0            |
| 7    | TAXES OTHER THAN INCOME [6]         |        | <u>2,165,396</u> | <u>1,766,713</u> | <u>359,323</u> | <u>108</u>     | <u>7,967</u>  | <u>31,284</u>  | <u>0</u>     | <u>0</u>     |
| 8    | TOTAL EXPENSES & TAXES              |        | 37,158,028       | 28,407,891       | 7,268,468      | 5,360          | 132,292       | 1,344,017      | 0            | 0            |
| 9    | OPERATING INCOME                    |        | (2,091,568)      | (5,723,567)      | 2,047,631      | 5,885          | 102,448       | 1,476,032      | 0            | 0            |
| 10   | INTEREST EXPENSE [7]                |        | <u>1,910,314</u> | <u>1,550,193</u> | <u>312,174</u> | <u>99</u>      | <u>11,827</u> | <u>36,023</u>  | <u>0</u>     | <u>0</u>     |
| 11   | INCOME AVAILABLE FOR COMMON EQUITY  |        | (4,001,882)      | (7,273,760)      | 1,735,457      | 5,786          | 90,621        | 1,440,009      | 0            | 0            |
| 12   | RATE BASE [8]                       |        | 72,360,386       | 58,719,448       | 11,824,755     | 3,734          | 447,979       | 1,364,492      | 0            | 0            |
| 13   | RATE OF RETURN EARNED ON RATE BASE  |        | <b>-2.89%</b>    | <b>-9.75%</b>    | <b>17.32%</b>  | <b>157.62%</b> | <b>22.87%</b> | <b>108.17%</b> | <b>0.00%</b> | <b>0.00%</b> |
| 14   | UNITIZED RETURN                     |        | 1.00             | 3.37             | (5.99)         | (54.54)        | (7.91)        | (37.43)        | 0.00         | 0.00         |

REFERENCES: [1] PAGE 62, [2] PAGE 70, [3] PAGE 61, [4] PAGE 75, [5] PAGE 73, [6] PAGE 71, [7] PAGE 74, [8] PAGE 76.

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 56 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML         | DS/IS         | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|----------------|------------|---------------|---------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)            | (G)        | (H)           | (I)           | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$             | \$         | \$            | \$            | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                |            |               |               |          |          |
| 2        | 301.00   | ORGANIZATION                              | 7CUST        | 218              | 180              | 34             | 0          | 1             | 3             | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7CUST        | 31,112           | 25,716           | 4,796          | 1          | 123           | 476           | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              | 7CUST        | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             | 7CUST        | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            | 7CUST        | <u>3,490,598</u> | <u>2,885,154</u> | <u>538,041</u> | <u>140</u> | <u>13,823</u> | <u>53,441</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 3,521,928        | 2,911,050        | 542,871        | 141        | 13,947        | 53,920        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                |            |               |               |          |          |
| 9        | 304.10   | LAND                                      | 2            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2            | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>   | <u>0</u>      | <u>0</u>      | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                |            |               |               |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CUST        | 3,666,397        | 3,030,460        | 565,138        | 147        | 14,519        | 56,133        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CUST        | 108,722          | 89,864           | 16,758         | 4          | 431           | 1,665         | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 26       | 376.00   | MAINS                                     | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          | 5            | 0                | 0                | 0              | 0          | 0             | 0             | 0        | 0        |
| 32       | 380.00   | SERVICES                                  | 15           | 127,467,343      | 112,461,887      | 14,554,221     | 1,275      | 0             | 449,960       | 0        | 0        |

CUSTOMER RELATED  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL CUSTOMER<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|---------------------------------------|---------------------|-----------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        | 380.00          | DIRECT SERVICES                       |                     | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 2        | 381.00          | METERS                                | 16                  | 22,789,579                  | 16,395,279                  | 6,292,659             | 2,963            | 0                  | 98,679             | 0                     | 0                     |
| 3        | 382.00          | METER INSTALLATIONS                   | 16                  | 9,462,175                   | 6,807,278                   | 2,612,696             | 1,230            | 0                  | 40,971             | 0                     | 0                     |
| 4        | 383.00          | HOUSE REGULATORS                      | 16                  | 5,770,311                   | 4,151,277                   | 1,593,298             | 750              | 0                  | 24,985             | 0                     | 0                     |
| 5        | 384.00          | HOUSE REG INSTALLATIONS               | 16                  | 2,257,522                   | 1,624,106                   | 623,347               | 293              | 0                  | 9,775              | 0                     | 0                     |
| 6        | 385.00          | IND M&R EQUIPMENT                     | 17                  | 2,697,547                   | 0                           | 700,742               | 782              | 0                  | 1,996,050          | 0                     | 0                     |
| 7        | 385.00          | DIRECT IND M&R EQUIPMENT              |                     | 677,829                     | 0                           | 0                     | 0                | 677,829            | 0                  | 0                     | 0                     |
| 8        | 387.20          | ODORIZATION                           | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 9        | 387.41          | TELEPHONE                             | 7CUST               | 307,899                     | 254,494                     | 47,460                | 12               | 1,219              | 4,714              | 0                     | 0                     |
| 10       | 387.42          | RADIO                                 | 7CUST               | 332,763                     | 275,045                     | 51,292                | 13               | 1,318              | 5,095              | 0                     | 0                     |
| 11       | 387.44          | OTHER COMMUNICATION                   | 7CUST               | 55,904                      | 46,207                      | 8,617                 | 2                | 221                | 856                | 0                     | 0                     |
| 12       | 387.45          | TELEMETERING                          | 7CUST               | 1,581,646                   | 1,307,310                   | 243,795               | 63               | 6,263              | 24,215             | 0                     | 0                     |
| 13       | 387.46          | CIS                                   | 7CUST               | <u>47,557</u>               | <u>39,308</u>               | <u>7,330</u>          | <u>2</u>         | <u>188</u>         | <u>728</u>         | <u>0</u>              | <u>0</u>              |
| 14       |                 | TOTAL DISTRIBUTION PLANT              |                     | 177,223,194                 | 146,482,515                 | 27,317,353            | 7,536            | 701,988            | 2,713,826          | 0                     | 0                     |
| 15       |                 | GENERAL PLANT                         |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 16       | 391.10          | OFF FURN & EQUIP - UNSPEC             | 7CUST               | 307,692                     | 254,323                     | 47,428                | 12               | 1,218              | 4,711              | 0                     | 0                     |
| 17       | 391.11          | OFF FURN & EQUIP - DATA HAND          | 7CUST               | 7,874                       | 6,508                       | 1,214                 | 0                | 31                 | 121                | 0                     | 0                     |
| 18       | 391.12          | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST               | 526,286                     | 435,002                     | 81,122                | 21               | 2,084              | 8,057              | 0                     | 0                     |
| 19       | 392.20          | TR EQ - TRAILER > \$1,000             | 7CUST               | 40,080                      | 33,128                      | 6,178                 | 2                | 159                | 614                | 0                     | 0                     |
| 20       | 392.21          | TR EQ - TRAILER < \$1,000             | 7CUST               | 10,237                      | 8,461                       | 1,578                 | 0                | 41                 | 157                | 0                     | 0                     |
| 21       | 394.10          | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST               | 10,144                      | 8,385                       | 1,564                 | 0                | 40                 | 155                | 0                     | 0                     |
| 22       | 394.13          | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 23       | 393.00          | STORES EQUIPMENT                      | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 24       | 394.20          | SHOP EQUIPMENT                        | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 25       | 394.30          | TOOLS & OTHER EQUIPMENT               | 7CUST               | 1,363,809                   | 1,127,256                   | 210,218               | 55               | 5,401              | 20,880             | 0                     | 0                     |
| 26       | 395.00          | LABORATORY EQUIPMENT                  | 7CUST               | 3,874                       | 3,202                       | 597                   | 0                | 15                 | 59                 | 0                     | 0                     |
| 27       | 396.00          | POWER OP EQUIP-GEN TOOLS              | 7CUST               | 105,930                     | 87,556                      | 16,328                | 4                | 419                | 1,622              | 0                     | 0                     |
| 28       | 397.50          | COMMUNICATION EQUIP - TELEMETERING    | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 29       | 398.00          | MISCELLANEOUS EQUIPMENT               | 7CUST               | <u>123,056</u>              | <u>101,712</u>              | <u>18,968</u>         | <u>5</u>         | <u>487</u>         | <u>1,884</u>       | <u>0</u>              | <u>0</u>              |
| 30       |                 | TOTAL GENERAL PLANT                   |                     | <u>2,498,982</u>            | <u>2,065,533</u>            | <u>385,195</u>        | <u>99</u>        | <u>9,895</u>       | <u>38,260</u>      | <u>0</u>              | <u>0</u>              |
| 31       |                 | TOTAL PLANT IN SERVICE (101 - 106)    |                     | 183,244,104                 | 151,459,098                 | 28,245,419            | 7,776            | 725,830            | 2,806,006          | 0                     | 0                     |



CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 59 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER       | IUS       | DS-ML        | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|----------------|-----------|--------------|---------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)            | (G)       | (H)          | (I)           | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$             | \$        | \$           | \$            | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 6,025,045      | 4,334,538      | 1,663,635      | 783       | 0            | 26,088        | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 4,714,156      | 3,391,458      | 1,301,673      | 613       | 0            | 20,412        | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 1,568,587      | 1,128,473      | 433,118        | 204       | 0            | 6,792         | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 1,780,729      | 1,281,092      | 491,695        | 231       | 0            | 7,711         | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 823,118        | 0              | 213,821        | 239       | 0            | 609,066       | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766        | 0              | 0              | 0         | 133,766      | 0             | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | (25,071)       | (20,722)       | (3,864)        | (1)       | (99)         | (384)         | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 167,311        | 138,291        | 25,789         | 7         | 663          | 2,562         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 237,446        | 196,261        | 36,600         | 9         | 940          | 3,635         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 21,196         | 17,520         | 3,267          | 1         | 84           | 325           | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 221,586        | 183,152        | 34,155         | 9         | 877          | 3,392         | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | <u>47,855</u>  | <u>39,555</u>  | <u>7,376</u>   | <u>2</u>  | <u>190</u>   | <u>733</u>    | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 78,294,256     | 65,818,174     | 11,412,161     | 2,767     | 142,335      | 918,827       | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |                |           |              |               |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | (13,913)       | (11,500)       | (2,145)        | (1)       | (55)         | (213)         | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | (4,752)        | (3,928)        | (732)          | 0         | (19)         | (73)          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 313,909        | 259,461        | 48,386         | 13        | 1,243        | 4,806         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 11,313         | 9,351          | 1,744          | 0         | 45           | 173           | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 2,640          | 2,182          | 407            | 0         | 10           | 40            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 6,317          | 5,221          | 974            | 0         | 25           | 97            | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 15,876         | 13,122         | 2,447          | 1         | 63           | 243           | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0              | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 77             | 64             | 12             | 0         | 0            | 1             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 557,824        | 461,069        | 85,983         | 22        | 2,209        | 8,540         | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 3,249          | 2,685          | 501            | 0         | 13           | 50            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 84,781         | 70,076         | 13,068         | 3         | 336          | 1,298         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7CUST        | 0              | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | <u>5,061</u>   | <u>4,183</u>   | <u>780</u>     | <u>0</u>  | <u>20</u>    | <u>77</u>     | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>982,382</u> | <u>811,986</u> | <u>151,425</u> | <u>38</u> | <u>3,890</u> | <u>15,039</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 80,730,256     | 67,831,648     | 11,787,646     | 2,863     | 151,981      | 956,121       | 0        | 0        |



CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML     | DS/IS      | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|--------------|----------|-----------|------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)          | (G)      | (H)       | (I)        | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$           | \$       | \$        | \$         | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 1,172,264      | 843,350        | 323,686      | 152      | 0         | 5,076      | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 230,831        | 166,064        | 63,737       | 30       | 0         | 999        | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 157,520        | 113,323        | 43,494       | 20       | 0         | 682        | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 22,800         | 16,403         | 6,296        | 3        | 0         | 99         | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 158,316        | 0              | 41,126       | 46       | 0         | 117,146    | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065         | 0              | 0            | 0        | 13,065    | 0          | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 11,515         | 9,518          | 1,775        | 0        | 46        | 176        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 12,444         | 10,286         | 1,918        | 0        | 49        | 191        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 2,089          | 1,727          | 322          | 0        | 8         | 32         | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 58,934         | 48,712         | 9,084        | 2        | 233       | 902        | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | <u>1,778</u>   | <u>1,470</u>   | <u>274</u>   | <u>0</u> | <u>7</u>  | <u>27</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 8,430,104      | 7,018,695      | 1,247,651    | 322      | 13,771    | 149,666    | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |              |          |           |            |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | 15,300         | 12,646         | 2,358        | 1        | 61        | 234        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | 527            | 436            | 81           | 0        | 2         | 8          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 106,039        | 87,647         | 16,345       | 4        | 420       | 1,623      | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 3,666          | 3,030          | 565          | 0        | 15        | 56         | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 939            | 776            | 145          | 0        | 4         | 14         | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 407            | 336            | 63           | 0        | 2         | 6          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 0              | 0              | 0            | 0        | 0         | 0          | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 54,258         | 44,847         | 8,363        | 2        | 215       | 831        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 196            | 162            | 30           | 0        | 1         | 3          | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 2,742          | 2,266          | 423          | 0        | 11        | 42         | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | <u>8,204</u>   | <u>6,781</u>   | <u>1,265</u> | <u>0</u> | <u>32</u> | <u>126</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 192,278        | 158,927        | 29,638       | 7        | 763       | 2,943      | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 9,155,554      | 7,618,315      | 1,359,472    | 350      | 16,645    | 160,772    | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML          | DS/IS            | NOT USED (J) | NOT USED (K) |
|----------|----------|------------------------------|--------------|-------------------|------------------|------------------|---------------|----------------|------------------|--------------|--------------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)              | (F)              | (G)           | (H)            | (I)              | (J)          | (K)          |
|          |          |                              |              | \$                | \$               | \$               | \$            | \$             | \$               | \$           | \$           |
| 1        |          | OPERATING REVENUE            |              |                   |                  |                  |               |                |                  |              |              |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 17,486,899        | 17,486,899       | 0                | 0             | 0              | 0                | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES             |              | 5,563,210         | 0                | 5,563,210        | 0             | 0              | 0                | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES             |              | <u>434,929</u>    | <u>0</u>         | <u>423,812</u>   | <u>11,117</u> | <u>0</u>       | <u>0</u>         | <u>0</u>     | <u>0</u>     |
| 5        |          | TOTAL SALES REVENUE          |              | 23,485,038        | 17,486,899       | 5,987,022        | 11,117        | 0              | 0                | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 231,930           | 148,870          | 67,126           | 121           | 1,215          | 14,598           | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 137,000           | 122,831          | 14,082           | 1             | 5              | 79               | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 10,625,492        | 4,399,432        | 3,187,531        | 0             | 233,497        | 2,805,032        | 0            | 0            |
| 9        | 495.00   | OTHER                        | 6            | <u>587,000</u>    | <u>526,292</u>   | <u>60,338</u>    | <u>6</u>      | <u>23</u>      | <u>340</u>       | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | <u>11,581,422</u> | <u>5,197,425</u> | <u>3,329,077</u> | <u>128</u>    | <u>234,740</u> | <u>2,820,049</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL OPERATING REVENUE      |              | 35,066,460        | 22,684,324       | 9,316,099        | 11,245        | 234,740        | 2,820,049        | 0            | 0            |



CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 64 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT |                            | ALLOC  | TOTAL         |                |               |          |            |              |          |          |
|------|------|----------------------------|--------|---------------|----------------|---------------|----------|------------|--------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | CUSTOMER      | GS-RESIDENTIAL | GS-OTHER      | IUS      | DS-ML      | DS/IS        | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)           | (E)            | (F)           | (G)      |            | (I)          | (J)      | (K)      |
|      |      |                            |        | \$            | \$             | \$            | \$       | \$         | \$           | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |               |                |               |          |            |              |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  | 10CUST | 60,564        | 45,319         | 14,257        | 6        | 187        | 795          | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           | 14CUST | 630,991       | 556,711        | 72,047        | 6        | 0          | 2,227        | 0        | 0        |
| 5    | 875  | M & R - GENERAL            | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 38,736        | 0              | 8,042         | 9        | 7,779      | 22,907       | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 1,279,637     | 920,596        | 353,333       | 166      | 0          | 5,541        | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 1,500,691     | 1,079,627      | 414,371       | 195      | 0          | 6,498        | 0        | 0        |
| 9    | 880  | OTHER                      | 10CUST | 340,519       | 254,807        | 80,158        | 34       | 1,049      | 4,471        | 0        | 0        |
| 10   | 881  | RENTS                      | 10CUST | <u>0</u>      | <u>0</u>       | <u>0</u>      | <u>0</u> | <u>0</u>   | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 3,851,138     | 2,857,060      | 942,208       | 416      | 9,015      | 42,439       | 0        | 0        |
| 12   |      | MAINTENANCE                |        |               |                |               |          |            |              |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  | 10CUST | 5,375         | 4,022          | 1,265         | 1        | 17         | 71           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 15   | 887  | MAINS                      | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 16   | 889  | M & R - GENERAL            | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 19,419        | 0              | 4,032         | 4        | 3,900      | 11,483       | 0        | 0        |
| 18   | 892  | SERVICES                   | 15     | 298,657       | 263,499        | 34,101        | 3        | 0          | 1,054        | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 26,851        | 19,317         | 7,414         | 3        | 0          | 116          | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            | 10CUST | <u>77,168</u> | <u>57,744</u>  | <u>18,165</u> | <u>8</u> | <u>238</u> | <u>1,013</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 427,470       | 344,582        | 64,977        | 19       | 4,155      | 13,737       | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED (J) | NOT USED (K) |
|----------|----------|----------------------------------|--------------|----------------|----------------|----------|----------|----------|----------|--------------|--------------|
|          | (A)      | (B)                              | (C)          | (D)            | (E)            | (F)      | (G)      | (H)      | (I)      | (J)          | (K)          |
|          |          |                                  |              | \$             | \$             | \$       | \$       | \$       | \$       | \$           | \$           |
| 1        |          | CUSTOMER ACCOUNTS                |              |                |                |          |          |          |          |              |              |
| 2        | 901      | SUPERVISION                      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 3        | 902      | METER READING                    | 6            | 165,331        | 148,232        | 16,994   | 2        | 7        | 96       | 0            | 0            |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6            | 692,556        | 620,932        | 71,188   | 7        | 28       | 402      | 0            | 0            |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21           | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 6        | 905      | MISC.                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 7        | 920      | SALARIES                         | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 9        | 931      | RENTS                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>       | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 857,887        | 769,164        | 88,182   | 9        | 35       | 498      | 0            | 0            |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |                |                |          |          |          |          |              |              |
| 13       | 907      | SUPERVISION                      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6            | 12,982         | 11,639         | 1,334    | 0        | 1        | 8        | 0            | 0            |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 16       | 910      | MISCELLANEOUS                    | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 17       | 920      | SALARIES                         | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 19       | 931      | RENTS                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>       | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | 12,982         | 11,639         | 1,334    | 0        | 1        | 8        | 0            | 0            |

| LINE | ACCT                                   | ALLOC  | TOTAL            |                |                |           |              |               |          |          |
|------|--|--------|------------------|----------------|----------------|-----------|--------------|---------------|----------|----------|
| NO.  | NO.                                    | FACTOR | CUSTOMER         | GS-RESIDENTIAL | GS-OTHER       | IUS       | DS-ML        | DS/IS         | NOT USED | NOT USED |
|      | (A)                                    | (C)    | (D)              | (E)            | (F)            | (G)       | (H)          | (I)           | (J)      | (K)      |
|      |  |        | \$               | \$             | \$             | \$        | \$           | \$            | \$       | \$       |
| 1    | SALES                                  |        |                  |                |                |           |              |               |          |          |
| 2    | 911 SUPERVISION                        | 6      | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 3    | 912 DEMONSTRATION & SELLING            | 6      | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 4    | 913 ADVERTISING                        | 6      | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 5    | 916 MISC.                              | 6      | <u>0</u>         | <u>0</u>       | <u>0</u>       | <u>0</u>  | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u> |
| 6    | TOTAL SALES                            |        | <u>0</u>         | <u>0</u>       | <u>0</u>       | <u>0</u>  | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u> |
| 7    | TOTAL DISTRIBUTION EXPENSES            |        | 5,149,477        | 3,982,445      | 1,096,701      | 444       | 13,206       | 56,682        | 0        | 0        |
| 8    | ADMINISTRATIVE & GENERAL               |        |                  |                |                |           |              |               |          |          |
| 9    | 920 SALARIES                           | 12CUST | 1,060,942        | 820,501        | 225,949        | 95        | 2,716        | 11,681        | 0        | 0        |
| 10   | 921 OFFICE SUPPLIES & EXPENSES         | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 11   | 922 ADMIN. EXPENSES TRANSFERED         | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 12   | 923 OUTSIDE SERVICES                   | 12CUST | 3,078            | 2,380          | 656            | 0         | 8            | 34            | 0        | 0        |
| 13   | 924 PROPERTY INSURANCE                 | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 14   | 925 INJURIES AND DAMAGES               | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 15   | 926 EMPLOYEE PENSIONS & BENEFITS       | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 16   | 928 REG COMMISSION EXP - GENERAL       | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 17   | 930.10 MISC. - INSTITUT & GOODWILL ADV | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 18   | 930.20 MISC. - GENERAL                 | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 19   | 931 RENTS                              | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 20   | 935.13 MAINT. STRUCTURES & IMPROV.     | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 21   | 935.23 MAINT. - GEN'L OFFICE           |        |                  |                |                |           |              |               |          |          |
| 22   | FURNITURE & EQUIPMENT                  | 12CUST | 0                | 0              | 0              | 0         | 0            | 0             | 0        | 0        |
| 23   | 932 MAINT.-MISCELLANEOUS               | 12CUST | <u>0</u>         | <u>0</u>       | <u>0</u>       | <u>0</u>  | <u>0</u>     | <u>0</u>      | <u>0</u> | <u>0</u> |
| 24   | TOTAL ADMIN & GENERAL - LABOR          |        | <u>1,064,020</u> | <u>822,881</u> | <u>226,605</u> | <u>95</u> | <u>2,724</u> | <u>11,715</u> | <u>0</u> | <u>0</u> |
| 25   | TOTAL O & M EXPENSE - LABOR            |        | 6,213,497        | 4,805,326      | 1,323,306      | 539       | 15,930       | 68,397        | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 67 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC                      | TOTAL  |               |                |               |          |            |              |          |          |
|------|------|----------------------------|--------|---------------|----------------|---------------|----------|------------|--------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | CUSTOMER      | GS-RESIDENTIAL | GS-OTHER      | IUS      | DS-ML      | DS/IS        | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)           | (E)            | (F)           | (G)      | (H)        | (I)          | (J)      | (K)      |
|      |      |                            |        | \$            | \$             | \$            | \$       | \$         | \$           | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |               |                |               |          |            |              |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  | 11CUST | 296,842       | 238,578        | 51,704        | 18       | 1,377      | 5,165        | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           | 14CUST | 1,753,384     | 1,546,976      | 200,201       | 18       | 0          | 6,189        | 0        | 0        |
| 5    | 875  | M & R - GENERAL            | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 29,602        | 0              | 6,146         | 7        | 5,944      | 17,505       | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 485,057       | 348,960        | 133,934       | 63       | 0          | 2,100        | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 655,941       | 471,897        | 181,118       | 85       | 0          | 2,840        | 0        | 0        |
| 9    | 880  | OTHER                      | 11CUST | 459,009       | 368,915        | 79,950        | 28       | 2,130      | 7,987        | 0        | 0        |
| 10   | 881  | RENTS                      | 11CUST | <u>31,128</u> | <u>25,018</u>  | <u>5,422</u>  | <u>2</u> | <u>144</u> | <u>542</u>   | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 3,710,963     | 3,000,344      | 658,475       | 221      | 9,595      | 42,328       | 0        | 0        |
| 12   |      | MAINTENANCE                |        |               |                |               |          |            |              |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  | 11CUST | 974           | 783            | 170           | 0        | 5          | 17           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 15   | 887  | MAINS                      | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 16   | 889  | M & R - GENERAL            | 18CUST | 0             | 0              | 0             | 0        | 0          | 0            | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 51,880        | 0              | 10,771        | 12       | 10,418     | 30,679       | 0        | 0        |
| 18   | 892  | SERVICES                   | 15     | 431,251       | 380,484        | 49,240        | 4        | 0          | 1,522        | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 118,176       | 85,018         | 32,631        | 15       | 0          | 512          | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            | 11CUST | <u>75,614</u> | <u>60,772</u>  | <u>13,170</u> | <u>5</u> | <u>351</u> | <u>1,316</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 677,895       | 527,057        | 105,982       | 36       | 10,774     | 34,046       | 0        | 0        |

| LINE | ACCT |                                  | ALLOC  | TOTAL     |                |          | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|------|------|----------------------------------|--------|-----------|----------------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | CUSTOMER  | GS-RESIDENTIAL | GS-OTHER |          |          |          |          |          |
|      | (A)  | (B)                              | (C)    | (D)       | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |        | \$        | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |                |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    | 6      | 399,502   | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   | 6      | 3,252,912 | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           | 21     | 1,027,585 | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6    | 905  | MISC.                            | 6      | 1,073     | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7    | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 253       | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |                |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      | 6      | (2,789)   | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              | 6      | 1,198,971 | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            | 6      | 65,932    | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    | 6      | 257,797   | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17   | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 13,868    | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19   | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT   |  | ALLOC  | TOTAL            |                  |                  |            |               |               |          |          |
|------|--------|--|--------|------------------|------------------|------------------|------------|---------------|---------------|----------|----------|
| NO.  | NO.    | ACCOUNT TITLE                              | FACTOR | CUSTOMER         | GS-RESIDENTIAL   | GS-OTHER         | IUS        | DS-ML         | DS/IS         | NOT USED | NOT USED |
|      | (A)    | (B)  | (C)    | (D)              | (E)              | (F)              | (G)        | (H)           | (I)           | (J)      | (K)      |
|      |        |  |        | \$               | \$               | \$               | \$         | \$            | \$            | \$       | \$       |
| 1    |        | SALES                                      |        |                  |                  |                  |            |               |               |          |          |
| 2    | 911    | SUPERVISION                                | 6      | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 3    | 912    | DEMONSTRATION & SELLING                    | 6      | 37,477           | 33,601           | 3,852            | 0          | 1             | 22            | 0        | 0        |
| 4    | 913    | ADVERTISING                                | 6      | 138,706          | 124,361          | 14,258           | 1          | 6             | 80            | 0        | 0        |
| 5    | 916    | MISC.                                      | 6      | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 6    |        | TOTAL SALES                                |        | <u>176,183</u>   | <u>157,962</u>   | <u>18,110</u>    | <u>1</u>   | <u>7</u>      | <u>102</u>    | <u>0</u> | <u>0</u> |
| 7    |        | TOTAL DISTRIBUTION EXPENSES                |        | 10,780,145       | 9,228,096        | 1,450,826        | 332        | 20,646        | 80,245        | 0        | 0        |
| 8    |        | ADMINISTRATIVE & GENERAL                   |        |                  |                  |                  |            |               |               |          |          |
| 9    | 920    | SALARIES                                   | 13CUST | 1,671,364        | 1,428,665        | 225,500          | 50         | 3,527         | 13,622        | 0        | 0        |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES                 | 13CUST | 504,290          | 431,062          | 68,039           | 15         | 1,064         | 4,110         | 0        | 0        |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED                 | 13CUST | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 12   | 923    | OUTSIDE SERVICES                           | 13CUST | 4,438,725        | 3,794,178        | 598,873          | 133        | 9,366         | 36,176        | 0        | 0        |
| 13   | 924    | PROPERTY INSURANCE                         | 13CUST | 46,108           | 39,413           | 6,221            | 1          | 97            | 376           | 0        | 0        |
| 14   | 925    | INJURIES AND DAMAGES                       | 12CUST | 588,794          | 455,356          | 125,395          | 53         | 1,507         | 6,483         | 0        | 0        |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS               | 12CUST | 1,890,297        | 1,461,899        | 402,577          | 170        | 4,839         | 20,812        | 0        | 0        |
| 16   | 926    | DIRECT EMPLOYEE PENSIONS & BENEFITS        |        | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 17   | 928    | REG COMMISSION EXP - GENERAL               | 13CUST | 111,541          | 95,344           | 15,049           | 3          | 235           | 909           | 0        | 0        |
| 18   | 928    | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13CUST | 99,374           | 84,944           | 13,408           | 3          | 210           | 810           | 0        | 0        |
| 19   | 930.10 | MISC. - INSTITUT & GOODWILL ADV            | 13CUST | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 20   | 930.20 | MISC. - GENERAL                            | 13CUST | (35,039)         | (29,951)         | (4,727)          | (1)        | (74)          | (286)         | 0        | 0        |
| 21   | 931    | RENTS                                      | 13CUST | 362,200          | 309,605          | 48,868           | 11         | 764           | 2,952         | 0        | 0        |
| 22   | 935.13 | MAINT. STRUCTURES & IMPROV.                | 13CUST | 73               | 62               | 10               | 0          | 0             | 1             | 0        | 0        |
| 23   | 935.23 | MAINT. - GEN'L OFFICE                      |        |                  |                  |                  |            |               |               |          |          |
| 24   |        | FURNITURE & EQUIPMENT                      | 13CUST | 0                | 0                | 0                | 0          | 0             | 0             | 0        | 0        |
| 25   | 932    | MAINT.-MISCELLANEOUS                       | 13CUST | <u>146,150</u>   | <u>124,928</u>   | <u>19,719</u>    | <u>4</u>   | <u>308</u>    | <u>1,191</u>  | <u>0</u> | <u>0</u> |
| 26   |        | TOTAL ADMIN & GENERAL - M & E              |        | <u>9,823,877</u> | <u>8,195,505</u> | <u>1,518,932</u> | <u>442</u> | <u>21,843</u> | <u>87,156</u> | <u>0</u> | <u>0</u> |
| 27   |        | TOTAL O & M EXPENSE - M & E                |        | 20,604,022       | 17,423,601       | 2,969,758        | 774        | 42,489        | 167,401       | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS        | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|-------------------|------------------|------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)               | (F)              | (G)        | (H)           | (I)            | (J)      | (K)      |
|          |          |                              |              | \$                | \$                | \$               | \$         | \$            | \$             | \$       | \$       |
| 1        |          | LABOR                        |              |                   |                   |                  |            |               |                |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                 | 0                 | 0                | 0          | 0             | 0              | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 3,851,138         | 2,857,060         | 942,208          | 416        | 9,015         | 42,439         | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 427,470           | 344,582           | 64,977           | 19         | 4,155         | 13,737         | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 857,887           | 769,164           | 88,182           | 9          | 35            | 498            | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 12,982            | 11,639            | 1,334            | 0          | 1             | 8              | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                 | 0                 | 0                | 0          | 0             | 0              | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>1,064,020</u>  | <u>822,881</u>    | <u>226,605</u>   | <u>95</u>  | <u>2,724</u>  | <u>11,715</u>  | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 6,213,497         | 4,805,326         | 1,323,306        | 539        | 15,930        | 68,397         | 0        | 0        |
| 10       |          | M & E                        |              |                   |                   |                  |            |               |                |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 0                 | 0                 | 0                | 0          | 0             | 0              | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 3,710,963         | 3,000,344         | 658,475          | 221        | 9,595         | 42,328         | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 677,895           | 527,057           | 105,982          | 36         | 10,774        | 34,046         | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58         | 208           | 2,880          | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16         | 62            | 889            | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 176,183           | 157,962           | 18,110           | 1          | 7             | 102            | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>9,823,877</u>  | <u>8,195,505</u>  | <u>1,518,932</u> | <u>442</u> | <u>21,843</u> | <u>87,156</u>  | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>20,604,022</u> | <u>17,423,601</u> | <u>2,969,758</u> | <u>774</u> | <u>42,489</u> | <u>167,401</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 26,817,519        | 22,228,927        | 4,293,064        | 1,313      | 58,419        | 235,798        | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 71 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS  | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|----------------|----------------|----------|-----|-------|--------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)            | (E)            | (F)      | (G) | (H)   | (I)    | (J)      | (K)      |
|          |          |                            |              | \$             | \$             | \$       | \$  | \$    | \$     | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7CUST        | 1,731,121      | 1,430,858      | 266,835  | 69  | 6,855 | 26,503 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12CUST       | 434,275        | 335,855        | 92,488   | 39  | 1,112 | 4,781  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12CUST       | 0              | 0              | 0        | 0   | 0     | 0      | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 2,165,396      | 1,766,713      | 359,323  | 108 | 7,967 | 31,284 | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER         | IUS        | DS-ML         | DS/IS           | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|------------|---------------|-----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)              | (F)              | (G)        | (H)           | (I)             | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$         | \$            | \$              | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | (3,072,009)      | (8,929,631)      | 3,304,240        | 9,474      | 151,709       | 2,392,195       | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                  |                  |            |               |                 |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 1,910,314        | 1,550,193        | 312,174          | 99         | 11,827        | 36,023          | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19CUST       | 6,107,897        | 5,048,482        | 941,471          | 244        | 24,187        | 93,512          | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>8,622,382</u> | <u>7,177,622</u> | <u>1,277,289</u> | <u>329</u> | <u>14,534</u> | <u>152,609</u>  | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (2,514,485)      | (2,129,140)      | (335,818)        | (85)       | 9,653         | (59,097)        | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12CUST       | <u>(3,293)</u>   | <u>(2,547)</u>   | <u>(701)</u>     | <u>0</u>   | <u>(8)</u>    | <u>(36)</u>     | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>(607,464)</u> | <u>(581,494)</u> | <u>(24,345)</u>  | <u>14</u>  | <u>21,472</u> | <u>(23,110)</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (2,464,545)      | (8,348,137)      | 3,328,585        | 9,460      | 130,237       | 2,415,305       | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (147,872)        | (500,886)        | 199,714          | 568        | 7,814         | 144,918         | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19CUST       | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>   | <u>0</u>      | <u>0</u>        | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (147,872)        | (500,886)        | 199,714          | 568        | 7,814         | 144,918         | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 73 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|---|--------------|----------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)            | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |   |              | \$             | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                |                |          |     |       |         |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                |                |          |     |       |         |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19CUST       | (7,117)        | (5,883)        | (1,097)  | 0   | (28)  | (109)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (7,117)        | (5,883)        | (1,097)  | 0   | (28)  | (109)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (154,989)      | (506,769)      | 198,617  | 568 | 7,786 | 144,809 | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 35,066,460        | 22,684,324        | 9,316,099        | 11,245       | 234,740       | 2,820,049      | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>38,138,469</u> | <u>31,613,955</u> | <u>6,011,859</u> | <u>1,771</u> | <u>83,031</u> | <u>427,854</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | (3,072,009)       | (8,929,631)       | 3,304,240        | 9,474        | 151,709       | 2,392,195      | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                  |              |               |                |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 1,910,314         | 1,550,193         | 312,174          | 99           | 11,827        | 36,023         | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19CUST       | 6,107,897         | 5,048,482         | 941,471          | 244          | 24,187        | 93,512         | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>8,622,382</u>  | <u>7,177,622</u>  | <u>1,277,289</u> | <u>329</u>   | <u>14,534</u> | <u>152,609</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | (2,514,485)       | (2,129,140)       | (335,818)        | (85)         | 9,653         | (59,097)       | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12CUST       | (3,293)           | (2,547)           | (701)            | 0            | (8)           | (36)           | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(147,872)</u>  | <u>(500,886)</u>  | <u>199,714</u>   | <u>568</u>   | <u>7,814</u>  | <u>144,918</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | (755,336)         | (1,082,380)       | 175,369          | 582          | 29,286        | 121,808        | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (2,316,673)       | (7,847,251)       | 3,128,871        | 8,892        | 122,423       | 2,270,387      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (787,669)         | (2,668,066)       | 1,063,816        | 3,023        | 41,624        | 771,932        | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19CUST       | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (787,669)         | (2,668,066)       | 1,063,816        | 3,023        | 41,624        | 771,932        | 0        | 0        |

CUSTOMER RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 75 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL CUSTOMER  | GS-RESIDENTIAL  | GS-OTHER       | IUS        | DS-ML        | DS/IS        | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|------------|--------------|--------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)        | (H)          | (I)          | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$         | \$           | \$           | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |            |              |              |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19CUST       | 14,965          | 12,369          | 2,307          | 1          | 59           | 229          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |            |              |              |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19CUST       | <u>(22,818)</u> | <u>(18,860)</u> | <u>(3,517)</u> | <u>(1)</u> | <u>(90)</u>  | <u>(349)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(22,818)</u> | <u>(18,860)</u> | <u>(3,517)</u> | <u>(1)</u> | <u>(90)</u>  | <u>(349)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(37,783)</u> | <u>(31,229)</u> | <u>(5,824)</u> | <u>(2)</u> | <u>(149)</u> | <u>(578)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (825,452)       | (2,699,295)     | 1,057,992      | 3,021      | 41,475       | 771,354      | 0        | 0        |

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL CUSTOMER<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|---------------------------------------|---------------------|-----------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        | 101 & 106       | GROSS PLANT [1]                       |                     | 183,244,104                 | 151,459,098                 | 28,245,419            | 7,776            | 725,830            | 2,806,006          | 0                     | 0                     |
|          |                 | LESS:                                 |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 2        | 108-111         | DEPRECIATION RESERVE [2]              |                     | <u>80,730,256</u>           | <u>67,831,648</u>           | <u>11,787,646</u>     | <u>2,863</u>     | <u>151,981</u>     | <u>956,121</u>     | <u>0</u>              | <u>0</u>              |
| 3        |                 | NET PLANT                             |                     | 102,513,848                 | 83,627,450                  | 16,457,773            | 4,913            | 573,849            | 1,849,885          | 0                     | 0                     |
| 4        | 190.00          | ACCUMULATED DEF INCOME TAX            | 19CUST              | 2,253,872                   | 1,862,938                   | 347,412               | 90               | 8,925              | 34,507             | 0                     | 0                     |
|          |                 | LESS:                                 |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 5        | 252.00          | CUSTOMER ADVANCES                     | 5                   | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 6        | 255.00          | (1962 - 69) INVESTMENT TAX CREDIT     | 19CUST              | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 7        | 282.00          | ACCUMULATED DEF INCOME TAX            | 19CUST              | 36,058,661                  | 29,804,286                  | 5,558,082             | 1,442            | 142,792            | 552,058            | 0                     | 0                     |
| 8        | 283.00          | ACCUMULATED DEF INCOME TAX            | 19CUST              | <u>0</u>                    | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
| 9        |                 | NET RATE BASE                         |                     | 68,709,059                  | 55,686,102                  | 11,247,103            | 3,561            | 439,982            | 1,332,334          | 0                     | 0                     |
| 10       |                 | PLUS WORKING CAPITAL:                 |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 11       |                 | CASH WORKING CAPITAL @ 1/8 OF         |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 12       |                 | O & M EXCLUDING GAS COST [3]          |                     | 3,352,190                   | 2,778,616                   | 536,633               | 164              | 7,302              | 29,475             | 0                     | 0                     |
| 13       | 151.00          | FUEL STOCK                            | 2                   | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 14       | 154.00          | MATERIALS & SUPPLIES                  | 7CUST               | 34,319                      | 28,366                      | 5,290                 | 1                | 136                | 525                | 0                     | 0                     |
| 15       | 165.00          | PREPAYMENTS                           | 13CUST              | 264,818                     | 226,364                     | 35,729                | 8                | 559                | 2,158              | 0                     | 0                     |
| 16       | 164.00          | GAS STORED UNDERGROUND - FSS          | 2                   | <u>0</u>                    | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
| 17       |                 | RATE BASE                             |                     | 72,360,386                  | 58,719,448                  | 11,824,755            | 3,734            | 447,979            | 1,364,492          | 0                     | 0                     |
|          |                 | REFERENCES: [1] PAGE 57, [2] PAGE 59, |                     |                             |                             |                       |                  |                    |                    |                       |                       |
|          |                 | [3] TOTAL O & M EXPENSE               |                     | 26,817,519                  | 22,228,927                  | 4,293,064             | 1,313            | 58,419             | 235,798            | 0                     | 0                     |
|          |                 | LESS: COST OF GAS                     |                     | <u>0</u>                    | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
|          |                 | O & M EXCL. GAS COST                  |                     | 26,817,519                  | 22,228,927                  | 4,293,064             | 1,313            | 58,419             | 235,798            | 0                     | 0                     |

COLUMBIA GAS OF KENTUCKY, INC.

ATTACHMENT CEN-2

ALLOCATION FACTORS

PAGE 77 OF 129

CUSTOMER RELATED  
FORECASTED TEST YEAR - ORIGINAL FILING

FOR THE TWELVE MONTHS ENDED 12/31/2017

WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOC FACTOR<br>(B) | TOTAL CUSTOMER<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|---------------------|-----------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                   | 100.000%              | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                   | 100.000%              | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                   | 100.000%              | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                   | 100.000%              | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                   | 100.000%              | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                   | 100.000%              | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7CUST               | 100.000%              | 82.655%               | 15.414%         | 0.004%     | 0.396%       | 1.531%       | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                   | 100.000%              | 0.000%                | 20.761%         | 0.023%     | 20.081%      | 59.135%      | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                   | 100.000%              | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10CUST              | 100.000%              | 74.829%               | 23.540%         | 0.010%     | 0.308%       | 1.313%       | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11CUST              | 100.000%              | 80.372%               | 17.418%         | 0.006%     | 0.464%       | 1.740%       | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12CUST              | 100.000%              | 77.337%               | 21.297%         | 0.009%     | 0.256%       | 1.101%       | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13CUST              | 100.000%              | 85.479%               | 13.492%         | 0.003%     | 0.211%       | 0.815%       | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14CUST              | 100.000%              | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                  | 100.000%              | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                  | 100.000%              | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                  | 100.000%              | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18CUST              | 100.000%              | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19CUST              | 100.000%              | 82.655%               | 15.414%         | 0.004%     | 0.396%       | 1.531%       | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                  | 100.000%              | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                  | 100.000%              | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

| LINE | ACCT                                   | ALLOC  | TOTAL            |                  |                  |              |                |                |              |              |    |
|------|--|--------|------------------|------------------|------------------|--------------|----------------|----------------|--------------|--------------|----|
| NO.  | NO.                                    | FACTOR | COMMODITY        | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |    |
|      | (A)                                    | (C)    | (D)              | (E)              | (F)              | (G)          | (H)            | (I)            | (J)          | (K)          |    |
|      |  |        | \$               | \$               | \$               | \$           | \$             | \$             | \$           | \$           | \$ |
| 1    | TOTAL REVENUES                         |        | 37,773,621       | 24,264,601       | 12,036,706       | 30,285       | 110,813        | 1,331,217      | 0            | 0            |    |
| 2    | PROPOSED INCREASE                      |        | <u>5,893,383</u> | <u>3,808,957</u> | <u>1,588,939</u> | <u>1,943</u> | <u>584</u>     | <u>492,960</u> | <u>0</u>     | <u>0</u>     |    |
| 3    | TOTAL PROPOSED REVENUES                |        | 43,667,004       | 28,073,558       | 13,625,645       | 32,228       | 111,397        | 1,824,177      | 0            | 0            |    |
| 4    | COST OF GAS                            |        | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0              | 0              | 0            | 0            |    |
| 5    | OPERATING & MAINTENANCE EXPENSE        |        | 9,268,652        | 3,765,859        | 2,496,067        | 5,586        | 444            | 3,000,696      | 0            | 0            |    |
| 6    | DEPRECIATION & AMORTIZATION            |        | 3,392,117        | 1,322,148        | 895,331          | 1,931        | 597            | 1,172,110      | 0            | 0            |    |
| 7    | FEDERAL INCOME TAX                     |        | 1,676,084        | 2,413,608        | 466,682          | (890)        | 34,854         | (1,238,170)    | 0            | 0            |    |
| 8    | KENTUCKY STATE INCOME TAX              |        | 304,358          | 446,464          | 84,835           | (171)        | 6,543          | (233,313)      | 0            | 0            |    |
| 9    | TAXES OTHER THAN INCOME                |        | <u>1,315,912</u> | <u>512,520</u>   | <u>347,172</u>   | <u>749</u>   | <u>295</u>     | <u>455,176</u> | <u>0</u>     | <u>0</u>     |    |
| 10   | TOTAL EXPENSES & TAXES                 |        | 37,433,074       | 22,267,693       | 11,933,934       | 32,214       | 42,733         | 3,156,499      | 0            | 0            |    |
| 11   | OPERATING INCOME                       |        | 6,233,931        | 5,805,864        | 1,691,711        | 14           | 68,664         | (1,332,322)    | 0            | 0            |    |
| 12   | INTEREST EXPENSE                       |        | <u>1,837,905</u> | <u>716,803</u>   | <u>485,238</u>   | <u>1,049</u> | <u>495</u>     | <u>634,320</u> | <u>0</u>     | <u>0</u>     |    |
| 13   | INCOME AVAILABLE FOR COMMON EQUITY     |        | 4,396,026        | 5,089,061        | 1,206,473        | (1,035)      | 68,169         | (1,966,642)    | 0            | 0            |    |
| 14   | RATE BASE                              |        | 69,617,593       | 27,151,627       | 18,380,223       | 39,716       | 18,762         | 24,027,267     | 0            | 0            |    |
| 15   | RATE OF RETURN AUTHORIZED ON RATE BASE |        | <b>8.95%</b>     | <b>21.38%</b>    | <b>9.20%</b>     | <b>0.04%</b> | <b>365.98%</b> | <b>-5.55%</b>  | <b>0.00%</b> | <b>0.00%</b> |    |
| 16   | UNITIZED RETURN                        |        | 1.00             | 2.54             | 1.09             | 0.00         | 43.52          | (0.66)         | 0.00         | 0.00         |    |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL | GS-OTHER       | IUS          | DS-ML        | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|----------------|----------------|--------------|--------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)            | (F)            | (G)          | (H)          | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$             | \$             | \$           | \$           | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 43,039,580       | 22,243,650     | 13,384,112     | 37,733       | 362          | 7,373,718      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950       | 13,807,095     | 7,643,847      | 25,009       | 0            | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 9,261,664        | 3,700,947      | 2,493,377      | 5,647        | (793)        | 3,062,486      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 3,392,118        | 1,322,148      | 895,331        | 1,931        | 597          | 1,172,110      | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 1,471,958        | 516,924        | 388,103        | 901          | (1,270)      | 567,300        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 267,131          | 100,564        | 70,504         | 156          | (45)         | 95,952         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>1,315,912</u> | <u>512,520</u> | <u>347,172</u> | <u>749</u>   | <u>295</u>   | <u>455,176</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 37,184,734       | 19,960,197     | 11,838,334     | 34,393       | (1,216)      | 5,353,024      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 5,854,846        | 2,283,453      | 1,545,777      | 3,340        | 1,578        | 2,020,693      | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>1,837,905</u> | <u>716,803</u> | <u>485,238</u> | <u>1,049</u> | <u>495</u>   | <u>634,320</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 4,016,941        | 1,566,650      | 1,060,539      | 2,291        | 1,083        | 1,386,373      | 0            | 0            |
| 12       |          | RATE BASE                              |              | 69,617,593       | 27,151,627     | 18,380,223     | 39,716       | 18,762       | 24,027,267     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b>   | <b>8.41%</b> | <b>8.41%</b> | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00           | 1.00           | 1.00         | 1.00         | 1.00           | 0.00         | 0.00         |

| LINE NO. | DESCRIPTION (A)                          | ALLOC FACTOR (B) | Total COMMODITY (C) | GS-RESIDENTIAL (D) | GS-OTHER (E)   | IUS (F)      | DS-ML (G)       | DS/IS (H)        | NOT USED (I) | NOT USED (J) |
|----------|--|------------------|---------------------|--------------------|----------------|--------------|-----------------|------------------|--------------|--------------|
| 1        | OPERATING REVENUE                        |                  | 5,265,959           | (2,020,950)        | 1,347,406      | 7,448        | (110,451)       | 6,042,501        | 0            | 0            |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                  | 0                   | 0                  | 0              | 0            | 0               | 0                | 0            | 0            |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                  | 48,622              | (18,660)           | 12,441         | 69           | (1,020)         | 55,792           | 0            | 0            |
| 4        | LESS: PSC FEES @ 0.00190100              |                  | <u>10,010</u>       | <u>(3,842)</u>     | <u>2,561</u>   | <u>14</u>    | <u>(210)</u>    | <u>11,487</u>    | <u>0</u>     | <u>0</u>     |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                  | 5,207,327           | (1,998,448)        | 1,332,404      | 7,365        | (109,221)       | 5,975,222        | 0            | 0            |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                  | <u>312,440</u>      | <u>(119,907)</u>   | <u>79,944</u>  | <u>442</u>   | <u>(6,553)</u>  | <u>358,513</u>   | <u>0</u>     | <u>0</u>     |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                  | 4,894,887           | (1,878,541)        | 1,252,460      | 6,923        | (102,668)       | 5,616,709        | 0            | 0            |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                  | <u>1,713,208</u>    | <u>(657,490)</u>   | <u>438,361</u> | <u>2,423</u> | <u>(35,934)</u> | <u>1,965,848</u> | <u>0</u>     | <u>0</u>     |
| 9        | OPERATING INCOME                         |                  | 3,181,679           | (1,221,051)        | 814,099        | 4,500        | (66,734)        | 3,650,861        | 0            | 0            |

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|-------------------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | TOTAL REVENUES [1]                  |                     | 37,773,621                   | 24,264,601                  | 12,036,706            | 30,285           | 110,813            | 1,331,217          | 0                     | 0                     |
| 2        |                 | COST OF GAS                         |                     | 21,475,950                   | 13,807,095                  | 7,643,847             | 25,009           | 0                  | 0                  | 0                     | 0                     |
| 3        |                 | OPERATING & MAINTENANCE EXPENSE [2] |                     | 9,203,038                    | 3,723,449                   | 2,478,375             | 5,564            | 437                | 2,995,207          | 0                     | 0                     |
| 4        |                 | DEPRECIATION & AMORTIZATION [3]     |                     | 3,392,118                    | 1,322,148                   | 895,331               | 1,931            | 597                | 1,172,110          | 0                     | 0                     |
| 5        |                 | FEDERAL INCOME TAX [4]              |                     | (241,252)                    | 1,174,414                   | (50,258)              | (1,522)          | 34,664             | (1,398,548)        | 0                     | 0                     |
| 6        |                 | KENTUCKY STATE INCOME TAX [5]       |                     | (45,308)                     | 220,471                     | (9,440)               | (286)            | 6,508              | (262,561)          | 0                     | 0                     |
| 7        |                 | TAXES OTHER THAN INCOME [6]         |                     | <u>1,315,911</u>             | <u>512,520</u>              | <u>347,172</u>        | <u>749</u>       | <u>295</u>         | <u>455,176</u>     | <u>0</u>              | <u>0</u>              |
| 8        |                 | TOTAL EXPENSES & TAXES              |                     | 35,100,457                   | 20,760,096                  | 11,305,027            | 31,445           | 42,501             | 2,961,384          | 0                     | 0                     |
| 9        |                 | OPERATING INCOME                    |                     | 2,673,164                    | 3,504,504                   | 731,679               | (1,160)          | 68,312             | (1,630,167)        | 0                     | 0                     |
| 10       |                 | INTEREST EXPENSE [7]                |                     | <u>1,837,904</u>             | <u>716,803</u>              | <u>485,238</u>        | <u>1,049</u>     | <u>495</u>         | <u>634,320</u>     | <u>0</u>              | <u>0</u>              |
| 11       |                 | INCOME AVAILABLE FOR COMMON EQUITY  |                     | 835,260                      | 2,787,701                   | 246,441               | (2,209)          | 67,817             | (2,264,487)        | 0                     | 0                     |
| 12       |                 | RATE BASE [8]                       |                     | 69,617,593                   | 27,151,627                  | 18,380,223            | 39,716           | 18,762             | 24,027,267         | 0                     | 0                     |
| 13       |                 | RATE OF RETURN EARNED ON RATE BASE  |                     | <b>3.84%</b>                 | <b>12.91%</b>               | <b>3.98%</b>          | <b>-2.92%</b>    | <b>364.10%</b>     | <b>-6.78%</b>      | <b>0.00%</b>          | <b>0.00%</b>          |
| 14       |                 | UNITIZED RETURN                     |                     | 1.00                         | 3.36                        | 1.04                  | (0.76)           | 94.82              | (1.77)             | 0.00                  | 0.00                  |

REFERENCES: [1] PAGE 88, [2] PAGE 96, [3] PAGE 87, [4] PAGE 101, [5] PAGE 99, [6] PAGE 97, [7] PAGE 100, [8] PAGE 102.



| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           | 7COMM        | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             | 7COMM        | 213,936          | 83,379         | 56,464         | 122        | 51         | 73,919         | 0        | 0        |
| 10       | 387.42   | RADIO                                 | 7COMM        | 231,212          | 90,113         | 61,024         | 132        | 55         | 79,888         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 38,843           | 15,139         | 10,252         | 22         | 9          | 13,421         | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          | 7COMM        | 1,098,970        | 428,313        | 290,051        | 626        | 264        | 379,716        | 0        | 0        |
| 13       | 387.46   | CIS                                   | 7COMM        | <u>33,044</u>    | <u>12,879</u>  | <u>8,721</u>   | <u>19</u>  | <u>8</u>   | <u>11,417</u>  | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 123,139,355      | 47,992,939     | 32,499,662     | 70,173     | 29,962     | 42,546,618     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                |                |            |            |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | 213,793          | 83,324         | 56,426         | 122        | 51         | 73,870         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | 5,471            | 2,132          | 1,444          | 3          | 1          | 1,890          | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 365,677          | 142,519        | 96,513         | 208        | 88         | 126,349        | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 27,849           | 10,854         | 7,350          | 16         | 7          | 9,622          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 7,113            | 2,772          | 1,877          | 4          | 2          | 2,458          | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 7,048            | 2,747          | 1,860          | 4          | 2          | 2,435          | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 947,611          | 369,322        | 250,103        | 540        | 227        | 327,419        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 2,692            | 1,049          | 710            | 2          | 1          | 930            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 73,603           | 28,686         | 19,426         | 42         | 18         | 25,431         | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7COMM        | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>85,502</u>    | <u>33,324</u>  | <u>22,567</u>  | <u>49</u>  | <u>21</u>  | <u>29,543</u>  | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>1,736,359</u> | <u>676,729</u> | <u>458,276</u> | <u>990</u> | <u>418</u> | <u>599,947</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 127,322,843      | 49,623,412     | 33,603,809     | 72,557     | 30,967     | 43,992,096     | 0        | 0        |



COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|-----------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)             | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$              | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7COMM        | (17,420)        | (6,789)        | (4,598)        | (10)       | (4)        | (6,019)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7COMM        | 116,252         | 45,308         | 30,682         | 66         | 28         | 40,167         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7COMM        | 164,984         | 64,301         | 43,544         | 94         | 40         | 57,005         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 14,727          | 5,740          | 3,887          | 8          | 4          | 5,088          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7COMM        | 153,964         | 60,006         | 40,636         | 88         | 37         | 53,198         | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7COMM        | <u>33,251</u>   | <u>12,959</u>  | <u>8,776</u>   | <u>19</u>  | <u>8</u>   | <u>11,489</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 33,796,402      | 13,172,752     | 8,920,273      | 19,260     | 6,228      | 11,677,888     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                 |                |                |            |            |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | (9,667)         | (3,768)        | (2,551)        | (6)        | (2)        | (3,340)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | (3,302)         | (1,287)        | (871)          | (2)        | (1)        | (1,141)        | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 218,112         | 85,007         | 57,566         | 124        | 52         | 75,362         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 7,861           | 3,064          | 2,075          | 4          | 2          | 2,716          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 1,834           | 715            | 484            | 1          | 0          | 634            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 4,389           | 1,711          | 1,158          | 3          | 1          | 1,516          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 11,031          | 4,299          | 2,911          | 6          | 3          | 3,811          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 54              | 21             | 14             | 0          | 0          | 19             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 387,591         | 151,060        | 102,297        | 221        | 93         | 133,920        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 2,257           | 880            | 596            | 1          | 1          | 780            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 58,908          | 22,959         | 15,548         | 34         | 14         | 20,354         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>3,517</u>    | <u>1,371</u>   | <u>928</u>     | <u>2</u>   | <u>1</u>   | <u>1,215</u>   | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>682,585</u>  | <u>266,032</u> | <u>180,155</u> | <u>388</u> | <u>164</u> | <u>235,846</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 35,488,999      | 13,832,426     | 9,367,000      | 20,224     | 6,634      | 12,262,713     | 0        | 0        |



COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 87 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|-----------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)             | (E)            | (F)          | (G)      | (H)      | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$              | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7COMM        | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7COMM        | 8,001           | 3,118          | 2,112        | 5        | 2        | 2,765        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7COMM        | 8,646           | 3,370          | 2,282        | 5        | 2        | 2,987        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 1,451           | 566            | 383          | 1        | 0        | 501          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7COMM        | 40,949          | 15,959         | 10,808       | 23       | 10       | 14,149       | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7COMM        | <u>1,235</u>    | <u>481</u>     | <u>326</u>   | <u>1</u> | <u>0</u> | <u>427</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 2,888,057       | 1,125,695      | 762,294      | 1,646    | 476      | 997,948      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                 |                |              |          |          |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | 10,631          | 4,143          | 2,806        | 6        | 3        | 3,673        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | 366             | 143            | 97           | 0        | 0        | 126          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 73,679          | 28,716         | 19,446       | 42       | 18       | 25,458       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 2,547           | 993            | 672          | 1        | 1        | 880          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 652             | 254            | 172          | 0        | 0        | 225          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 283             | 110            | 75           | 0        | 0        | 98           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 37,700          | 14,693         | 9,950        | 21       | 9        | 13,026       | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 136             | 53             | 36           | 0        | 0        | 47           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 1,905           | 742            | 503          | 1        | 0        | 658          | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>5,700</u>    | <u>2,222</u>   | <u>1,504</u> | <u>3</u> | <u>1</u> | <u>1,969</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 133,599         | 52,069         | 35,261       | 74       | 32       | 46,160       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 3,392,118       | 1,322,148      | 895,331      | 1,931    | 597      | 1,172,110    | 0        | 0        |

COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 88 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                  | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER   | IUS    | DS-ML   | DS/IS     | NOT USED (J) | NOT USED (K) |
|----------|----------|--|--------------|-----------------|----------------|------------|--------|---------|-----------|--------------|--------------|
|          | (A)      | (B)  | (C)          | (D)             | (E)            | (F)        | (G)    | (H)     | (I)       | (J)          | (K)          |
|          |          |  |              | \$              | \$             | \$         | \$     | \$      | \$        | \$           | \$           |
| 1        |          | OPERATING REVENUE                              |              |                 |                |            |        |         |           |              |              |
| 2        | 480.00   | RESIDENTIAL SALES                              |              | 22,106,060      | 22,106,060     | 0          | 0      | 0       | 0         | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES                               |              | 9,742,948       | 0              | 9,742,948  | 0      | 0       | 0         | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES                               |              | 772,516         | 0              | 742,231    | 30,285 | 0       | 0         | 0            | 0            |
| 5        |          | TOTAL SALES REVENUE                            |              | 32,621,523      | 22,106,060     | 10,485,179 | 30,285 | 0       | 0         | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS                            |              | 109,434         | 70,651         | 38,783     | 0      | 0       | 0         | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE                          | 6            | 0               | 0              | 0          | 0      | 0       | 0         | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION - GS - Residential |              | 5,042,664       | 2,087,890      | 1,512,744  | 0      | 110,813 | 1,331,217 | 0            | 0            |
| 9        | 495.00   | OTHER  | 6            | 0               | 0              | 0          | 0      | 0       | 0         | 0            | 0            |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE                   |              | 5,152,098       | 2,158,541      | 1,551,527  | 0      | 110,813 | 1,331,217 | 0            | 0            |
| 11       |          | TOTAL OPERATING REVENUE                        |              | 37,773,621      | 24,264,601     | 12,036,706 | 30,285 | 110,813 | 1,331,217 | 0            | 0            |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMMODITY   | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)               | (E)               | (F)              | (G)           | (H)      | (I)      | (J)      | (K)      |
|          |           |                                   |              | \$                | \$                | \$               | \$            | \$       | \$       | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |                   |                   |                  |               |          |          |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |                   |                   |                  |               |          |          |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |                   |                   |                  |               |          |          |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |                   |                   |                  |               |          |          |          |          |
| 16       | 803 - 806 |                                   |              |                   |                   |                  |               |          |          |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0        | 0        | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9            | 341,557           | 219,590           | 121,570          | 396           | 0        | 0        | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | <u>21,817,507</u> | <u>14,026,685</u> | <u>7,765,417</u> | <u>25,405</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 21,817,507        | 14,026,685        | 7,765,417        | 25,405        | 0        | 0        | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS       | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|-----------------|----------------|--------------|-----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)          | (G)       |          | (I)          | (J)      | (K)      |
|          |          |                            |              | \$              | \$             | \$           | \$        | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |              |           |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10COMM       | 18,980          | 7,340          | 4,986        | 11        | 1        | 6,642        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 66,644          | 22,273         | 16,093       | 32        | 0        | 28,246       | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 547,773         | 213,533        | 144,601      | 312       | 27       | 189,299      | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 41,174          | 16,050         | 10,869       | 23        | 2        | 14,229       | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 10COMM       | 106,716         | 41,267         | 28,036       | 60        | 5        | 37,347       | 0        | 0        |
| 10       | 881      | RENTS                      | 10COMM       | <u>0</u>        | <u>0</u>       | <u>0</u>     | <u>0</u>  | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 781,287         | 300,463        | 204,585      | 438       | 35       | 275,763      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |                 |                |              |           |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10COMM       | 1,684           | 651            | 442          | 1         | 0        | 589          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 1,255           | 489            | 331          | 1         | 0        | 434          | 0        | 0        |
| 15       | 887      | MAINS                      | 18COMM       | 463,177         | 180,556        | 122,269      | 264       | 23       | 160,065      | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 69,297          | 27,013         | 18,293       | 39        | 3        | 23,948       | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10COMM       | <u>24,184</u>   | <u>9,352</u>   | <u>6,354</u> | <u>14</u> | <u>1</u> | <u>8,464</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 559,597         | 218,061        | 147,689      | 319       | 27       | 193,500      | 0        | 0        |



COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 92 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER      | IUS        | DS-ML     | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|-----------------|----------------|---------------|------------|-----------|---------------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)             | (E)            | (F)           | (G)        | (H)       | (I)           | (J)      | (K)      |
|          |          |                                 |              | \$              | \$             | \$            | \$         | \$        | \$            | \$       | \$       |
| 1        |          | SALES                           |              |                 |                |               |            |           |               |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | <u>0</u>        | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL SALES                     |              | <u>0</u>        | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 1,340,884       | 518,524        | 352,274       | 757        | 62        | 469,263       | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                 |                |               |            |           |               |          |          |
| 9        | 920      | SALARIES                        | 12COMM       | 276,261         | 106,830        | 72,579        | 155        | 14        | 96,683        | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12COMM       | 802             | 310            | 211           | 0          | 0         | 281           | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 19       | 931      | RENTS                           | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                 |                |               |            |           |               |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12COMM       | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12COMM       | <u>0</u>        | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>277,063</u>  | <u>107,140</u> | <u>72,790</u> | <u>155</u> | <u>14</u> | <u>96,964</u> | <u>0</u> | <u>0</u> |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 1,617,947       | 625,664        | 425,064       | 912        | 76        | 566,227       | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML    | DS/IS         | NOT USED (J) | NOT USED (K) |
|----------|----------|----------------------------|--------------|-----------------|----------------|---------------|-----------|----------|---------------|--------------|--------------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)           | (G)       | (H)      | (I)           | (J)          | (K)          |
|          |          |                            |              | \$              | \$             | \$            | \$        | \$       | \$            | \$           | \$           |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |               |           |          |               |              |              |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11COMM       | 244,067         | 95,059         | 64,395        | 139       | 12       | 84,462        | 0            | 0            |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 17,885          | 5,977          | 4,319         | 9         | 0        | 7,580         | 0            | 0            |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 1,522,138       | 593,360        | 401,814       | 868       | 76       | 526,020       | 0            | 0            |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 59,190          | 23,073         | 15,625        | 34        | 3        | 20,455        | 0            | 0            |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 9        | 880      | OTHER                      | 11COMM       | 377,403         | 146,991        | 99,574        | 215       | 19       | 130,604       | 0            | 0            |
| 10       | 881      | RENTS                      | 11COMM       | <u>25,594</u>   | <u>9,968</u>   | <u>6,753</u>  | <u>15</u> | <u>1</u> | <u>8,857</u>  | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL OPERATION            |              | 2,246,277       | 874,428        | 592,480       | 1,280     | 111      | 777,978       | 0            | 0            |
| 12       |          | MAINTENANCE                |              |                 |                |               |           |          |               |              |              |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11COMM       | 801             | 312            | 211           | 0         | 0        | 277           | 0            | 0            |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 125,919         | 49,086         | 33,240        | 72        | 6        | 43,515        | 0            | 0            |
| 15       | 887      | MAINS                      | 18COMM       | 1,101,038       | 429,207        | 290,652       | 628       | 55       | 380,497       | 0            | 0            |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 72,368          | 28,210         | 19,104        | 41        | 4        | 25,009        | 0            | 0            |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0             | 0         | 0        | 0             | 0            | 0            |
| 20       | 894      | OTHER EQUIPMENT            | 11COMM       | <u>62,171</u>   | <u>24,214</u>  | <u>16,403</u> | <u>35</u> | <u>3</u> | <u>21,515</u> | <u>0</u>     | <u>0</u>     |
| 21       |          | TOTAL MAINTENANCE          |              | 1,362,297       | 531,029        | 359,610       | 776       | 68       | 470,813       | 0            | 0            |



| LINE NO. | ACCT NO. | ACCOUNT TITLE                              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML | DS/IS     | NOT USED | NOT USED |
|----------|----------|--|--------------|-----------------|----------------|-----------|-------|-------|-----------|----------|----------|
|          | (A)      | (B)  | (C)          | (D)             | (E)            | (F)       | (G)   | (H)   | (I)       | (J)      | (K)      |
|          |          |  |              | \$              | \$             | \$        | \$    | \$    | \$        | \$       | \$       |
| 1        |          | SALES                                      |              |                 |                |           |       |       |           |          |          |
| 2        | 911      | SUPERVISION                                | 6            | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING                    | 6            | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 4        | 913      | ADVERTISING                                | 6            | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 5        | 916      | MISC.                                      | 6            | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 6        |          | TOTAL SALES                                |              | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                |              | 3,608,574       | 1,405,457      | 952,090   | 2,056 | 179   | 1,248,791 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL                   |              |                 |                |           |       |       |           |          |          |
| 9        | 920      | SALARIES                                   | 13COMM       | 618,426         | 254,414        | 168,088   | 383   | 31    | 195,509   | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                 | 13COMM       | 186,594         | 76,763         | 50,716    | 116   | 9     | 58,990    | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                 | 13COMM       | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                           | 13COMM       | 1,642,385       | 675,661        | 446,400   | 1,018 | 82    | 519,224   | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE                         | 13COMM       | 17,060          | 7,018          | 4,637     | 11    | 1     | 5,393     | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES                       | 12COMM       | 217,861         | 84,247         | 57,236    | 122   | 11    | 76,245    | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS               | 12COMM       | 699,434         | 270,471        | 183,755   | 392   | 35    | 244,781   | 0        | 0        |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |              | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 17       | 928      | REG COMMISSION EXP - GENERAL               | 13COMM       | 41,272          | 16,979         | 11,218    | 26    | 2     | 13,048    | 0        | 0        |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13COMM       | 36,770          | 15,127         | 9,994     | 23    | 2     | 11,624    | 0        | 0        |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV            | 13COMM       | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 20       | 930.20   | MISC. - GENERAL                            | 13COMM       | (12,965)        | (5,334)        | (3,524)   | (8)   | (1)   | (4,099)   | 0        | 0        |
| 21       | 931      | RENTS                                      | 13COMM       | 134,019         | 55,134         | 36,426    | 83    | 7     | 42,369    | 0        | 0        |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                | 13COMM       | 27              | 11             | 7         | 0     | 0     | 9         | 0        | 0        |
| 23       | 935.23   | MAINT. - GEN'L OFFICE                      |              |                 |                |           |       |       |           |          |          |
| 24       |          | FURNITURE & EQUIPMENT                      | 13COMM       | 0               | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 25       | 932      | MAINT.-MISCELLANEOUS                       | 13COMM       | 54,077          | 22,247         | 14,698    | 34    | 3     | 17,096    | 0        | 0        |
| 26       |          | TOTAL ADMIN & GENERAL - M & E              |              | 3,634,960       | 1,472,738      | 979,651   | 2,200 | 182   | 1,180,189 | 0        | 0        |
| 27       |          | TOTAL O & M EXPENSE - M & E                |              | 7,585,091       | 3,097,785      | 2,053,311 | 4,652 | 361   | 2,428,980 | 0        | 0        |

COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 96 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)         | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|------------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | LABOR                        |                     |                              |                             |                       |                  |                    |                    |                       |                       |
| 2        |                 | PRODUCTION                   | PAGE 13             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 3        |                 | DISTRIBUTION - O&M OPERATION | PAGE 14             | 781,287                      | 300,463                     | 204,585               | 438              | 35                 | 275,763            | 0                     | 0                     |
| 4        |                 | DISTRIBUTION - O&M MAINT.    | PAGE 14             | 559,597                      | 218,061                     | 147,689               | 319              | 27                 | 193,500            | 0                     | 0                     |
| 5        |                 | CUSTOMER ACCOUNTS            | PAGE 15             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 6        |                 | CUSTOMER SERVICE & INFOR.    | PAGE 15             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 7        |                 | SALES                        | PAGE 16             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 8        |                 | ADMINISTRATIVE & GENERAL     | PAGE 16             | <u>277,063</u>               | <u>107,140</u>              | <u>72,790</u>         | <u>155</u>       | <u>14</u>          | <u>96,964</u>      | <u>0</u>              | <u>0</u>              |
| 9        |                 | TOTAL LABOR EXPENSE          |                     | 1,617,947                    | 625,664                     | 425,064               | 912              | 76                 | 566,227            | 0                     | 0                     |
| 10       |                 | M & E                        |                     |                              |                             |                       |                  |                    |                    |                       |                       |
| 11       |                 | PRODUCTION                   | PAGE 13             | 341,557                      | 219,590                     | 121,570               | 396              | 0                  | 0                  | 0                     | 0                     |
| 12       |                 | DISTRIBUTION - O&M OPERATION | PAGE 17             | 2,246,277                    | 874,428                     | 592,480               | 1,280            | 111                | 777,978            | 0                     | 0                     |
| 13       |                 | DISTRIBUTION - O&M MAINT.    | PAGE 17             | 1,362,297                    | 531,029                     | 359,610               | 776              | 68                 | 470,813            | 0                     | 0                     |
| 14       |                 | CUSTOMER ACCOUNTS            | PAGE 18             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 15       |                 | CUSTOMER SERVICE & INFOR.    | PAGE 18             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 16       |                 | SALES                        | PAGE 19             | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 17       |                 | ADMINISTRATIVE & GENERAL     | PAGE 19             | <u>3,634,960</u>             | <u>1,472,738</u>            | <u>979,651</u>        | <u>2,200</u>     | <u>182</u>         | <u>1,180,189</u>   | <u>0</u>              | <u>0</u>              |
| 18       |                 | TOTAL M & E EXPENSE          |                     | <u>7,585,091</u>             | <u>3,097,785</u>            | <u>2,053,311</u>      | <u>4,652</u>     | <u>361</u>         | <u>2,428,980</u>   | <u>0</u>              | <u>0</u>              |
| 19       |                 | TOTAL O & M EXPENSES         |                     | 9,203,038                    | 3,723,449                   | 2,478,375             | 5,564            | 437                | 2,995,207          | 0                     | 0                     |

COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 97 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)       | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|----------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        | 408             | TAXES BASED ON PROPERTY    | 7COMM               | 1,202,829                    | 468,791                     | 317,463               | 686              | 289                | 415,601            | 0                     | 0                     |
| 2        | 408             | TAXES BASED ON PAYROLL     | 12COMM              | 113,082                      | 43,729                      | 29,709                | 63               | 6                  | 39,575             | 0                     | 0                     |
| 3        | 408             | OTHER TAXES                | 12COMM              | 0                            | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 4        |                 | TOTAL TAXES OTHER THAN FIT |                     | 1,315,911                    | 512,520                     | 347,172               | 749              | 295                | 455,176            | 0                     | 0                     |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|----------------|--------------|--------------|------------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)              | (F)            | (G)          | (H)          | (I)              | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$             | \$           | \$           | \$               | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 2,386,604        | 4,899,389        | 671,981        | (2,968)      | 109,484      | (3,291,276)      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                  |                |              |              |                  |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 1,837,904        | 716,803          | 485,238        | 1,049        | 495          | 634,320          | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19COMM       | 4,243,929        | 1,654,029        | 1,120,100      | 2,419        | 1,019        | 1,466,362        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>3,021,656</u> | <u>1,177,764</u> | <u>797,555</u> | <u>1,720</u> | <u>508</u>   | <u>1,044,108</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | 1,222,273        | 476,265          | 322,545        | 699          | 511          | 422,254          | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12COMM       | <u>(857)</u>     | <u>(331)</u>     | <u>(225)</u>   | <u>0</u>     | <u>0</u>     | <u>(300)</u>     | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>3,059,320</u> | <u>1,192,737</u> | <u>807,558</u> | <u>1,748</u> | <u>1,006</u> | <u>1,056,274</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (672,716)        | 3,706,652        | (135,577)      | (4,716)      | 108,478      | (4,347,550)      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (40,363)         | 222,398          | (8,135)        | (283)        | 6,509        | (260,852)        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19COMM       | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>     | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (40,363)         | 222,398          | (8,135)        | (283)        | 6,509        | (260,852)        | 0        | 0        |

COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 99 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS   | DS-ML | DS/IS     | NOT USED | NOT USED |
|----------|----------|---|--------------|-----------------|----------------|----------|-------|-------|-----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)             | (E)            | (F)      | (G)   | (H)   | (I)       | (J)      | (K)      |
|          |          |   |              | \$              | \$             | \$       | \$    | \$    | \$        | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                 |                |          |       |       |           |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                 |                |          |       |       |           |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19COMM       | (4,945)         | (1,927)        | (1,305)  | (3)   | (1)   | (1,709)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (4,945)         | (1,927)        | (1,305)  | (3)   | (1)   | (1,709)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (45,308)        | 220,471        | (9,440)  | (286) | 6,508 | (262,561) | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL COMMODITY   | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|-------------------|---------------|--------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)               | (G)           | (H)          | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$                | \$            | \$           | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 37,773,621        | 24,264,601        | 12,036,706        | 30,285        | 110,813      | 1,331,217        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>35,387,017</u> | <u>19,365,212</u> | <u>11,364,725</u> | <u>33,253</u> | <u>1,329</u> | <u>4,622,493</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 2,386,604         | 4,899,389         | 671,981           | (2,968)       | 109,484      | (3,291,276)      | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                   |               |              |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 1,837,904         | 716,803           | 485,238           | 1,049         | 495          | 634,320          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19COMM       | 4,243,929         | 1,654,029         | 1,120,100         | 2,419         | 1,019        | 1,466,362        | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>3,021,656</u>  | <u>1,177,764</u>  | <u>797,555</u>    | <u>1,720</u>  | <u>508</u>   | <u>1,044,108</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | 1,222,273         | 476,265           | 322,545           | 699           | 511          | 422,254          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12COMM       | (857)             | (331)             | (225)             | 0             | 0            | (300)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(40,363)</u>   | <u>222,398</u>    | <u>(8,135)</u>    | <u>(283)</u>  | <u>6,509</u> | <u>(260,852)</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 3,018,957         | 1,415,135         | 799,423           | 1,465         | 7,515        | 795,422          | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (632,353)         | 3,484,254         | (127,442)         | (4,433)       | 101,969      | (4,086,698)      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (215,000)         | 1,184,646         | (43,330)          | (1,507)       | 34,670       | (1,389,477)      | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19COMM       | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (215,000)         | 1,184,646         | (43,330)          | (1,507)       | 34,670       | (1,389,477)      | 0        | 0        |

COMMODITY RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 101 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL  | GS-OTHER       | IUS         | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|-------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)         | (H)        | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$          | \$         | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |             |            |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19COMM       | 10,398          | 4,053           | 2,744          | 6           | 2          | 3,593          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |             |            |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19COMM       | <u>(15,854)</u> | <u>(6,179)</u>  | <u>(4,184)</u> | <u>(9)</u>  | <u>(4)</u> | <u>(5,478)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(15,854)</u> | <u>(6,179)</u>  | <u>(4,184)</u> | <u>(9)</u>  | <u>(4)</u> | <u>(5,478)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(26,252)</u> | <u>(10,232)</u> | <u>(6,928)</u> | <u>(15)</u> | <u>(6)</u> | <u>(9,071)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (241,252)       | 1,174,414       | (50,258)       | (1,522)     | 34,664     | (1,398,548)    | 0        | 0        |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY   | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML        | DS/IS             | NOT USED | NOT USED |
|----------|-----------|---------------------------------------|--------------|-------------------|-------------------|------------------|---------------|--------------|-------------------|----------|----------|
|          | (A)       | (B)                                   | (C)          | (D)               | (E)               | (F)              | (G)           | (H)          | (I)               | (J)      | (K)      |
|          |           |                                       |              | \$                | \$                | \$               | \$            | \$           | \$                | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                       |              | 127,322,843       | 49,623,412        | 33,603,809       | 72,557        | 30,967       | 43,992,096        | 0        | 0        |
|          |           | LESS:                                 |              |                   |                   |                  |               |              |                   |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]              |              | <u>35,488,999</u> | <u>13,832,426</u> | <u>9,367,000</u> | <u>20,224</u> | <u>6,634</u> | <u>12,262,713</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                             |              | 91,833,844        | 35,790,986        | 24,236,809       | 52,333        | 24,333       | 31,729,383        | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | 1,566,050         | 610,352           | 413,328          | 893           | 376          | 541,102           | 0        | 0        |
|          |           | LESS:                                 |              |                   |                   |                  |               |              |                   |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                     | 5            | 0                 | 0                 | 0                | 0             | 0            | 0                 | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT     | 19COMM       | 0                 | 0                 | 0                | 0             | 0            | 0                 | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | 25,054,513        | 9,764,746         | 6,612,638        | 14,281        | 6,013        | 8,656,835         | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u>     | <u>0</u>          | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                         |              | 68,345,381        | 26,636,592        | 18,037,499       | 38,945        | 18,696       | 23,613,650        | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                 |              |                   |                   |                  |               |              |                   |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF         |              |                   |                   |                  |               |              |                   |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]          |              | 1,150,380         | 465,431           | 309,797          | 696           | 55           | 374,401           | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                            | 2            | 0                 | 0                 | 0                | 0             | 0            | 0                 | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                  | 7COMM        | 23,846            | 9,294             | 6,294            | 14            | 6            | 8,239             | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                           | 13COMM       | 97,986            | 40,310            | 26,633           | 61            | 5            | 30,977            | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS          | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u>     | <u>0</u>          | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                             |              | 69,617,593        | 27,151,627        | 18,380,223       | 39,716        | 18,762       | 24,027,267        | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 83, [2] PAGE 85, |              |                   |                   |                  |               |              |                   |          |          |
|          |           | [3] TOTAL O & M EXPENSE               |              | 30,678,988        | 17,530,544        | 10,122,222       | 30,573        | 437          | 2,995,207         | 0        | 0        |
|          |           | LESS: COST OF GAS                     |              | <u>21,475,950</u> | <u>13,807,095</u> | <u>7,643,847</u> | <u>25,009</u> | <u>0</u>     | <u>0</u>          | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                  |              | 9,203,038         | 3,723,449         | 2,478,375        | 5,564         | 437          | 2,995,207         | 0        | 0        |

| LINE NO. | DESCRIPTION (A)                            | ALLOC FACTOR (B) | TOTAL COMMODITY (C) | GS-RESIDENTIAL (D) | GS-OTHER (E) | IUS (F) | DS-ML (G) | DS/IS (H) | NOT USED (I) | NOT USED (K) |
|----------|--|------------------|---------------------|--------------------|--------------|---------|-----------|-----------|--------------|--------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                | 100.000%            | 44.549%            | 28.650%      | 0.065%  | 0.000%    | 26.736%   | 0.000%       | 0.000%       |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                | 100.000%            | 60.941%            | 37.239%      | 0.089%  | 0.000%    | 1.731%    | 0.000%       | 0.000%       |
| 3        | MINIMUM SYSTEM MAINS                       | 3                | 100.000%            | 73.793%            | 16.741%      | 0.024%  | 0.000%    | 9.442%    | 0.000%       | 0.000%       |
| 4        | THROUGHPUT EXCL MLS                        | 4                | 100.000%            | 33.421%            | 24.147%      | 0.048%  | 0.000%    | 42.384%   | 0.000%       | 0.000%       |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                | 100.000%            | 38.984%            | 26.399%      | 0.057%  | 0.000%    | 34.560%   | 0.000%       | 0.000%       |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                | 100.000%            | 89.658%            | 10.279%      | 0.001%  | 0.004%    | 0.058%    | 0.000%       | 0.000%       |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7COMM            | 100.000%            | 38.974%            | 26.393%      | 0.057%  | 0.024%    | 34.552%   | 0.000%       | 0.000%       |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                | 100.000%            | 0.000%             | 100.000%     | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                | 100.000%            | 64.291%            | 35.593%      | 0.116%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 10       | OTHER DIST. EXP - LABOR                    | 10COMM           | 100.000%            | 38.670%            | 26.272%      | 0.056%  | 0.005%    | 34.997%   | 0.000%       | 0.000%       |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11COMM           | 100.000%            | 38.948%            | 26.384%      | 0.057%  | 0.005%    | 34.606%   | 0.000%       | 0.000%       |
| 12       | O & M EXCL A & G - LABOR                   | 12COMM           | 100.000%            | 38.670%            | 26.272%      | 0.056%  | 0.005%    | 34.997%   | 0.000%       | 0.000%       |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13COMM           | 100.000%            | 41.139%            | 27.180%      | 0.062%  | 0.005%    | 31.614%   | 0.000%       | 0.000%       |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14COMM           | 100.000%            | 38.982%            | 26.398%      | 0.057%  | 0.005%    | 34.558%   | 0.000%       | 0.000%       |
| 15       | DIRECT PLANT ACCT 380                      | 15               | 100.000%            | 88.228%            | 11.418%      | 0.001%  | 0.000%    | 0.353%    | 0.000%       | 0.000%       |
| 16       | DIRECT PLANT ACCTS 381                     | 16               | 100.000%            | 71.942%            | 27.612%      | 0.013%  | 0.000%    | 0.433%    | 0.000%       | 0.000%       |
| 17       | DIRECT PLANT ACCT 385                      | 17               | 100.000%            | 0.000%             | 25.977%      | 0.029%  | 0.000%    | 73.995%   | 0.000%       | 0.000%       |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18COMM           | 100.000%            | 38.982%            | 26.398%      | 0.057%  | 0.005%    | 34.558%   | 0.000%       | 0.000%       |
| 19       | TOTAL PLANT                                | 19COMM           | 100.000%            | 38.974%            | 26.393%      | 0.057%  | 0.024%    | 34.552%   | 0.000%       | 0.000%       |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20               | 100.000%            | 56.388%            | 21.570%      | 0.041%  | 0.000%    | 22.001%   | 0.000%       | 0.000%       |
| 21       | UNCOLLECTIBLES                             | 21               | 100.000%            | 86.777%            | 13.141%      | 0.002%  | 0.006%    | 0.074%    | 0.000%       | 0.000%       |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)            | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 19,842,086       | 12,730,897       | 5,332,480        | 6,551        | 136,182        | 1,635,976      | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>7,505,990</u> | <u>4,969,836</u> | <u>1,949,718</u> | <u>2,238</u> | <u>(569)</u>   | <u>584,766</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 27,348,075       | 17,700,733       | 7,282,198        | 8,789        | 135,613        | 2,220,742      | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                | 0                | 0                | 0            | 0              | 0              | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 9,158,044        | 3,593,630        | 2,417,598        | 5,198        | 445            | 3,141,173      | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 3,392,113        | 1,322,146        | 895,328          | 1,931        | 598            | 1,172,110      | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 3,024,229        | 3,363,105        | 780,031          | (574)        | 42,582         | (1,160,915)    | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 554,635          | 622,689          | 143,032          | (112)        | 7,995          | (218,969)      | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>1,309,575</u> | <u>510,402</u>   | <u>345,642</u>   | <u>747</u>   | <u>294</u>     | <u>452,490</u> | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 17,438,596       | 9,411,972        | 4,581,631        | 7,190        | 51,914         | 3,385,889      | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 9,909,479        | 8,288,761        | 2,700,567        | 1,599        | 83,700         | (1,165,147)    | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>2,940,506</u> | <u>1,388,281</u> | <u>895,676</u>   | <u>2,029</u> | <u>495</u>     | <u>654,025</u> | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 6,968,973        | 6,900,480        | 1,804,891        | (430)        | 83,205         | (1,819,172)    | 0            | 0            |
| 14       |          | RATE BASE                              |              | 111,382,802      | 52,586,401       | 33,927,136       | 76,845       | 18,764         | 24,773,661     | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.90%</b>     | <b>15.76%</b>    | <b>7.96%</b>     | <b>2.08%</b> | <b>446.05%</b> | <b>-4.70%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00             | 1.87             | 0.95             | 0.25         | 53.04          | (0.56)         | 0.00         | 0.00         |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML        | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|--------------|--------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)          | (H)          | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$           | \$           | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 26,450,711       | 11,301,750       | 7,534,938      | 16,840       | (305)        | 7,597,486      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0            | 0            | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 9,148,052        | 3,522,381        | 2,420,412      | 5,288        | (1,068)      | 3,201,039      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 3,392,115        | 1,322,146        | 895,328        | 1,931        | 598          | 1,172,110      | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 2,732,282        | 1,281,280        | 862,257        | 2,045        | (1,638)      | 588,338        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 501,392          | 243,025          | 158,027        | 365          | (69)         | 100,044        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>1,309,575</u> | <u>510,402</u>   | <u>345,642</u> | <u>747</u>   | <u>294</u>   | <u>452,490</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 17,083,416       | 6,879,234        | 4,681,666      | 10,376       | (1,883)      | 5,514,021      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 9,367,295        | 4,422,516        | 2,853,272      | 6,463        | 1,578        | 2,083,465      | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>2,940,506</u> | <u>1,388,281</u> | <u>895,676</u> | <u>2,029</u> | <u>495</u>   | <u>654,025</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 6,426,789        | 3,034,235        | 1,957,596      | 4,434        | 1,083        | 1,429,440      | 0            | 0            |
| 12       |          | RATE BASE                              |              | 111,382,802      | 52,586,401       | 33,927,136     | 76,845       | 18,764       | 24,773,661     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b> | <b>8.41%</b> | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00         | 1.00         | 1.00           | 0.00         | 0.00         |

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total DEMAND<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F)   | DS-ML<br>(G)    | DS/IS<br>(H)     | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|---------------------|-----------------------|-----------------|--------------|-----------------|------------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 6,608,625           | (1,429,147)           | 2,202,458       | 10,289       | (136,487)       | 5,961,510        | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                   | 0                     | 0               | 0            | 0               | 0                | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 61,019              | (13,196)              | 20,336          | 95           | (1,260)         | 55,044           | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>12,564</u>       | <u>(2,717)</u>        | <u>4,187</u>    | <u>20</u>    | <u>(259)</u>    | <u>11,333</u>    | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 6,535,042           | (1,413,234)           | 2,177,935       | 10,174       | (134,968)       | 5,895,133        | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>392,103</u>      | <u>(84,794)</u>       | <u>130,676</u>  | <u>610</u>   | <u>(8,098)</u>  | <u>353,708</u>   | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 6,142,939           | (1,328,440)           | 2,047,259       | 9,564        | (126,870)       | 5,541,425        | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>2,150,028</u>    | <u>(464,954)</u>      | <u>716,541</u>  | <u>3,347</u> | <u>(44,405)</u> | <u>1,939,499</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 3,992,911           | (863,486)             | 1,330,718       | 6,217        | (82,465)        | 3,601,926        | 0               | 0               |

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                | ALLOC FACTOR<br>(C) | TOTAL DEMAND<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|-------------------------------------|---------------------|---------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | TOTAL REVENUES [1]                  |                     | 19,842,086                | 12,730,897                  | 5,332,480             | 6,551            | 136,182            | 1,635,976          | 0                     | 0                     |
| 2        |                 | COST OF GAS                         |                     | 0                         | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 3        |                 | OPERATING & MAINTENANCE EXPENSE [2] |                     | 9,074,471                 | 3,538,294                   | 2,395,889             | 5,173            | 451                | 3,134,662          | 0                     | 0                     |
| 4        |                 | DEPRECIATION & AMORTIZATION [3]     |                     | 3,392,115                 | 1,322,146                   | 895,328               | 1,931            | 598                | 1,172,110          | 0                     | 0                     |
| 5        |                 | FEDERAL INCOME TAX [4]              |                     | 582,253                   | 1,746,234                   | 145,716               | (1,302)          | 42,767             | (1,351,161)        | 0                     | 0                     |
| 6        |                 | KENTUCKY STATE INCOME TAX [5]       |                     | 109,290                   | 327,819                     | 27,351                | (245)            | 8,029              | (253,664)          | 0                     | 0                     |
| 7        |                 | TAXES OTHER THAN INCOME [6]         |                     | <u>1,309,574</u>          | <u>510,402</u>              | <u>345,642</u>        | <u>747</u>       | <u>294</u>         | <u>452,490</u>     | <u>0</u>              | <u>0</u>              |
| 8        |                 | TOTAL EXPENSES & TAXES              |                     | 14,467,703                | 7,444,895                   | 3,809,926             | 6,304            | 52,139             | 3,154,437          | 0                     | 0                     |
| 9        |                 | OPERATING INCOME                    |                     | 5,374,383                 | 5,286,002                   | 1,522,554             | 246              | 84,043             | (1,518,461)        | 0                     | 0                     |
| 10       |                 | INTEREST EXPENSE [7]                |                     | <u>2,940,506</u>          | <u>1,388,281</u>            | <u>895,676</u>        | <u>2,029</u>     | <u>495</u>         | <u>654,025</u>     | <u>0</u>              | <u>0</u>              |
| 11       |                 | INCOME AVAILABLE FOR COMMON EQUITY  |                     | 2,433,877                 | 3,897,721                   | 626,878               | (1,783)          | 83,548             | (2,172,486)        | 0                     | 0                     |
| 12       |                 | RATE BASE [8]                       |                     | 111,382,802               | 52,586,401                  | 33,927,136            | 76,845           | 18,764             | 24,773,661         | 0                     | 0                     |
| 13       |                 | RATE OF RETURN EARNED ON RATE BASE  |                     | <b>4.83%</b>              | <b>10.05%</b>               | <b>4.49%</b>          | <b>0.32%</b>     | <b>447.88%</b>     | <b>-6.13%</b>      | <b>0.00%</b>          | <b>0.00%</b>          |
| 14       |                 | UNITIZED RETURN                     |                     | 1.00                      | 2.08                        | 0.93                  | 0.07             | 92.73              | (1.27)             | 0.00                  | 0.00                  |

REFERENCES: [1] PAGE 114, [2] PAGE 122, [3] PAGE 113, [4] PAGE 127, [5] PAGE 125, [6] PAGE 123, [7] PAGE 126, [8] PAGE 128.



DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 109 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             | 7DEM         | 213,936          | 83,379         | 56,464         | 122        | 51         | 73,919         | 0        | 0        |
| 10       | 387.42   | RADIO                                 | 7DEM         | 231,212          | 90,113         | 61,024         | 132        | 55         | 79,888         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 38,843           | 15,139         | 10,252         | 22         | 9          | 13,421         | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          | 7DEM         | 1,098,969        | 428,312        | 290,051        | 626        | 264        | 379,716        | 0        | 0        |
| 13       | 387.46   | CIS                                   | 7DEM         | <u>33,043</u>    | <u>12,878</u>  | <u>8,721</u>   | <u>19</u>  | <u>8</u>   | <u>11,417</u>  | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 123,139,351      | 47,992,938     | 32,499,661     | 70,173     | 29,963     | 42,546,616     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                |                |            |            |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 213,793          | 83,324         | 56,426         | 122        | 51         | 73,870         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 5,471            | 2,132          | 1,444          | 3          | 1          | 1,890          | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 365,678          | 142,519        | 96,513         | 208        | 88         | 126,349        | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 27,849           | 10,854         | 7,350          | 16         | 7          | 9,622          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 7,112            | 2,772          | 1,877          | 4          | 2          | 2,457          | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 7,049            | 2,747          | 1,860          | 4          | 2          | 2,436          | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 947,610          | 369,322        | 250,103        | 540        | 227        | 327,418        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 2,692            | 1,049          | 710            | 2          | 1          | 930            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 73,602           | 28,686         | 19,426         | 42         | 18         | 25,431         | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>85,502</u>    | <u>33,324</u>  | <u>22,567</u>  | <u>49</u>  | <u>21</u>  | <u>29,543</u>  | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>1,736,358</u> | <u>676,729</u> | <u>458,276</u> | <u>990</u> | <u>418</u> | <u>599,946</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 127,322,840      | 49,623,411     | 33,603,809     | 72,557     | 30,968     | 43,992,095     | 0        | 0        |



DEMAND RELATED  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
PAGE 111 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND   | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)            | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | (17,421)       | (6,790)        | (4,598)        | (10)       | (4)        | (6,019)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 116,253        | 45,308         | 30,683         | 66         | 28         | 40,168         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 164,984        | 64,301         | 43,544         | 94         | 40         | 57,005         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 14,727         | 5,740          | 3,887          | 8          | 4          | 5,088          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 153,963        | 60,006         | 40,635         | 88         | 37         | 53,197         | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | <u>33,251</u>  | <u>12,959</u>  | <u>8,776</u>   | <u>19</u>  | <u>8</u>   | <u>11,489</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 33,796,398     | 13,172,750     | 8,920,273      | 19,260     | 6,227      | 11,677,888     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |                |            |            |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | (9,667)        | (3,768)        | (2,551)        | (6)        | (2)        | (3,340)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | (3,301)        | (1,287)        | (871)          | (2)        | (1)        | (1,141)        | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 218,112        | 85,007         | 57,566         | 124        | 52         | 75,362         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 7,861          | 3,064          | 2,075          | 4          | 2          | 2,716          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 1,835          | 715            | 484            | 1          | 0          | 634            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 4,389          | 1,711          | 1,158          | 3          | 1          | 1,516          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 11,030         | 4,299          | 2,911          | 6          | 3          | 3,811          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 54             | 21             | 14             | 0          | 0          | 19             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 387,590        | 151,059        | 102,297        | 221        | 93         | 133,920        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 2,258          | 880            | 596            | 1          | 1          | 780            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 58,909         | 22,959         | 15,548         | 34         | 14         | 20,354         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7DEM         | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>3,516</u>   | <u>1,370</u>   | <u>928</u>     | <u>2</u>   | <u>1</u>   | <u>1,215</u>   | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>682,586</u> | <u>266,030</u> | <u>180,155</u> | <u>388</u> | <u>164</u> | <u>235,846</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 35,488,996     | 13,832,422     | 9,367,000      | 20,224     | 6,633      | 12,262,713     | 0        | 0        |



DEMAND RELATED  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
PAGE 113 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|--------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)          | (E)            | (F)          | (G)      | (H)      | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$           | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)          | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 8,000        | 3,118          | 2,111        | 5        | 2        | 2,764        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 8,646        | 3,370          | 2,282        | 5        | 2        | 2,987        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 1,452        | 566            | 383          | 1        | 0        | 502          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 40,949       | 15,959         | 10,808       | 23       | 10       | 14,149       | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | <u>1,235</u> | <u>481</u>     | <u>326</u>   | <u>1</u> | <u>0</u> | <u>427</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 2,888,055    | 1,125,692      | 762,292      | 1,646    | 477      | 997,947      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |              |                |              |          |          |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 10,630       | 4,143          | 2,806        | 6        | 3        | 3,673        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 367          | 143            | 97           | 0        | 0        | 127          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 73,679       | 28,716         | 19,446       | 42       | 18       | 25,458       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 2,547        | 993            | 672          | 1        | 1        | 880          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 653          | 255            | 172          | 0        | 0        | 226          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 282          | 110            | 74           | 0        | 0        | 97           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 37,699       | 14,693         | 9,950        | 21       | 9        | 13,026       | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 136          | 53             | 36           | 0        | 0        | 47           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 1,905        | 742            | 503          | 1        | 0        | 658          | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>5,700</u> | <u>2,222</u>   | <u>1,504</u> | <u>3</u> | <u>1</u> | <u>1,969</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 133,598      | 52,070         | 35,260       | 74       | 32       | 46,161       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 3,392,115    | 1,322,146      | 895,328      | 1,931    | 598      | 1,172,110    | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 114 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML   | DS/IS     | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|--------------|----------------|-----------|-------|---------|-----------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)          | (E)            | (F)       | (G)   | (H)     | (I)       | (J)      | (K)      |
|          |          |                              |              | \$           | \$             | \$        | \$    | \$      | \$        | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |              |                |           |       |         |           |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 10,103,103   | 10,103,103     | 0         | 0     | 0       | 0         | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 3,214,159    | 0              | 3,214,159 | 0     | 0       | 0         | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | 251,281      | 0              | 244,859   | 6,423 | 0       | 0         | 0        | 0        |
| 5        |          | TOTAL SALES REVENUE          |              | 13,568,543   | 10,103,103     | 3,459,018 | 6,423 | 0       | 0         | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 134,636      | 86,011         | 31,857    | 128   | 1,279   | 15,361    | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 6,138,906    | 2,541,783      | 1,841,605 | 0     | 134,903 | 1,620,615 | 0        | 0        |
| 9        | 495.00   | OTHER                        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | 6,273,542    | 2,627,794      | 1,873,462 | 128   | 136,182 | 1,635,976 | 0        | 0        |
| 11       |          | TOTAL OPERATING REVENUE      |              | 19,842,086   | 12,730,897     | 5,332,480 | 6,551 | 136,182 | 1,635,976 | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 PRODUCTION EXPENSE ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 115 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|--------------|----------------|----------|-----|-------|-------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)   | (J)      | (K)      |
|          |           |                                   |              | \$           | \$             | \$       | \$  | \$    | \$    | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |              |                |          |     |       |       |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |              |                |          |     |       |       |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2            | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 7        |           | TOTAL OPERATION                   |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |              |                |          |     |       |       |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 13       |           | TOTAL MAINTENANCE                 |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |              |                |          |     |       |       |          |          |
| 16       | 803 - 806 |                                   |              |              |                |          |     |       |       |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9            | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | 0            | 0              | 0        | 0   | 0     | 0     | 0        | 0        |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 2,139        | 1,304          | 797      | 2   | 0     | 37    | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 116 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER     | IUS       | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|--------------|-----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)          | (G)       |          | (I)          | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$           | \$        | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |              |           |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10DEM        | 17,917        | 6,984          | 4,730        | 10        | 1        | 6,192        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 547,772       | 213,532        | 144,601      | 312       | 27       | 189,299      | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 41,173        | 16,050         | 10,869       | 23        | 2        | 14,229       | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 10DEM        | 100,737       | 39,269         | 26,593       | 57        | 5        | 34,813       | 0        | 0        |
| 10       | 881      | RENTS                      | 10DEM        | <u>0</u>      | <u>0</u>       | <u>0</u>     | <u>0</u>  | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 707,599       | 275,835        | 186,793      | 402       | 35       | 244,533      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |              |           |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10DEM        | 1,590         | 620            | 420          | 1         | 0        | 549          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 1,254         | 489            | 331          | 1         | 0        | 433          | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 463,177       | 180,556        | 122,269      | 264       | 23       | 160,065      | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 69,297        | 27,013         | 18,293       | 39        | 3        | 23,948       | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0         | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10DEM        | <u>22,828</u> | <u>8,899</u>   | <u>6,026</u> | <u>13</u> | <u>1</u> | <u>7,889</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 558,146       | 217,577        | 147,339      | 318       | 27       | 192,884      | 0        | 0        |



DEMAND RELATED  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
FORTHETWELVEMONTHSENDED12/31/2017

ATTACHMENT CEN-2  
PAGE 118 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL DEMAND   | GS-RESIDENTIAL | GS-OTHER      | IUS        | DS-ML     | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|----------------|----------------|---------------|------------|-----------|---------------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)            | (E)            | (F)           | (G)        | (H)       | (I)           | (J)      | (K)      |
|          |          |                                 |              | \$             | \$             | \$            | \$         | \$        | \$            | \$       | \$       |
| 1        |          | SALES                           |              |                |                |               |            |           |               |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL SALES                     |              | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 1,265,745      | 493,412        | 334,132       | 720        | 62        | 437,417       | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                |                |               |            |           |               |          |          |
| 9        | 920      | SALARIES                        | 12DEM        | 260,781        | 101,658        | 68,841        | 149        | 13        | 90,121        | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12DEM        | 756            | 295            | 200           | 0          | 0         | 261           | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 19       | 931      | RENTS                           | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                |                |               |            |           |               |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12DEM        | 0              | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12DEM        | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>   | <u>0</u>  | <u>0</u>      | <u>0</u> | <u>0</u> |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>261,537</u> | <u>101,953</u> | <u>69,041</u> | <u>149</u> | <u>13</u> | <u>90,382</u> | <u>0</u> | <u>0</u> |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 1,527,282      | 595,365        | 403,173       | 869        | 75        | 527,799       | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 119 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML    | DS/IS         | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|---------------|-----------|----------|---------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)           | (G)       | (H)      | (I)           | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$            | \$        | \$       | \$            | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |               |           |          |               |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11DEM        | 242,561       | 94,555         | 64,031        | 138       | 12       | 83,824        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 1,522,138     | 593,360        | 401,814       | 868       | 76       | 526,020       | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 59,189        | 23,073         | 15,625        | 34        | 3        | 20,455        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | (0)           | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 9        | 880      | OTHER                      | 11DEM        | 375,075       | 146,212        | 99,012        | 214       | 19       | 129,618       | 0        | 0        |
| 10       | 881      | RENTS                      | 11DEM        | <u>25,435</u> | <u>9,915</u>   | <u>6,714</u>  | <u>14</u> | <u>1</u> | <u>8,790</u>  | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 2,224,398     | 867,115        | 587,196       | 1,268     | 111      | 768,707       | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |               |           |          |               |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11DEM        | 796           | 310            | 210           | 0         | 0        | 275           | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 125,919       | 49,086         | 33,240        | 72        | 6        | 43,515        | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 1,101,038     | 429,207        | 290,652       | 628       | 55       | 380,497       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 72,368        | 28,210         | 19,104        | 41        | 4        | 25,009        | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 11DEM        | <u>61,788</u> | <u>24,086</u>  | <u>16,311</u> | <u>35</u> | <u>3</u> | <u>21,353</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 1,361,909     | 530,899        | 359,517       | 776       | 68       | 470,649       | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 120 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|--------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)          | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$           | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |              |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21           | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 905      | MISC.                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |              |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6            | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 17       | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |

DEMAND RELATED  
DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
PAGE 121 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                              | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML      | DS/IS            | NOT USED | NOT USED |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|------------|------------------|----------|----------|
|          | (A)      | (B)  | (C)          | (D)              | (E)              | (F)              | (G)          | (H)        | (I)              | (J)      | (K)      |
|          |          |  |              | \$               | \$               | \$               | \$           | \$         | \$               | \$       | \$       |
| 1        |          | SALES                                      |              |                  |                  |                  |              |            |                  |          |          |
| 2        | 911      | SUPERVISION                                | 6            | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING                    | 6            | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 4        | 913      | ADVERTISING                                | 6            | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 5        | 916      | MISC.                                      | 6            | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>   | <u>0</u>         | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL SALES                                |              | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>   | <u>0</u>         | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                |              | 3,586,307        | 1,398,014        | 946,713          | 2,044        | 179        | 1,239,356        | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL                   |              |                  |                  |                  |              |            |                  |          |          |
| 9        | 920      | SALARIES                                   | 13DEM        | 673,512          | 262,643          | 177,834          | 384          | 34         | 232,618          | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                 | 13DEM        | 203,214          | 79,245           | 53,657           | 116          | 10         | 70,186           | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                 | 13DEM        | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                           | 13DEM        | 1,788,679        | 697,513          | 472,283          | 1,020        | 89         | 617,774          | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE                         | 13DEM        | 18,580           | 7,245            | 4,906            | 11           | 1          | 6,417            | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES                       | 12DEM        | 237,268          | 92,492           | 62,634           | 135          | 12         | 81,995           | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS               | 12DEM        | 761,736          | 296,940          | 201,083          | 434          | 38         | 263,241          | 0        | 0        |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |              | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 17       | 928      | REG COMMISSION EXP - GENERAL               | 13DEM        | 44,947           | 17,528           | 11,868           | 26           | 2          | 15,524           | 0        | 0        |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13DEM        | 40,045           | 15,616           | 10,573           | 23           | 2          | 13,831           | 0        | 0        |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV            | 13DEM        | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 20       | 930.20   | MISC. - GENERAL                            | 13DEM        | (14,119)         | (5,506)          | (3,728)          | (8)          | (1)        | (4,877)          | 0        | 0        |
| 21       | 931      | RENTS                                      | 13DEM        | 145,956          | 56,917           | 38,538           | 83           | 7          | 50,410           | 0        | 0        |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                | 13DEM        | 30               | 12               | 8                | 0            | 0          | 10               | 0        | 0        |
| 23       | 935.23   | MAINT. - GEN'L OFFICE                      |              |                  |                  |                  |              |            |                  |          |          |
| 24       |          | FURNITURE & EQUIPMENT                      | 13DEM        | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 25       | 932      | MAINT.-MISCELLANEOUS                       | 13DEM        | <u>58,894</u>    | <u>22,966</u>    | <u>15,550</u>    | <u>34</u>    | <u>3</u>   | <u>20,341</u>    | <u>0</u> | <u>0</u> |
| 26       |          | TOTAL ADMIN & GENERAL - M & E              |              | <u>3,958,742</u> | <u>1,543,611</u> | <u>1,045,206</u> | <u>2,258</u> | <u>197</u> | <u>1,367,470</u> | <u>0</u> | <u>0</u> |
| 27       |          | TOTAL O & M EXPENSE - M & E                |              | 7,547,188        | 2,942,929        | 1,992,716        | 4,304        | 376        | 2,606,863        | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML      | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|------------------|------------------|------------------|--------------|------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)              | (E)              | (F)              | (G)          | (H)        | (I)              | (J)      | (K)      |
|          |          |                              |              | \$               | \$               | \$               | \$           | \$         | \$               | \$       | \$       |
| 1        |          | LABOR                        |              |                  |                  |                  |              |            |                  |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 707,599          | 275,835          | 186,793          | 402          | 35         | 244,533          | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 558,146          | 217,577          | 147,339          | 318          | 27         | 192,884          | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>261,537</u>   | <u>101,953</u>   | <u>69,041</u>    | <u>149</u>   | <u>13</u>  | <u>90,382</u>    | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 1,527,282        | 595,365          | 403,173          | 869          | 75         | 527,799          | 0        | 0        |
| 10       |          | M & E                        |              |                  |                  |                  |              |            |                  |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 2,139            | 1,304            | 797              | 2            | 0          | 37               | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 2,224,398        | 867,115          | 587,196          | 1,268        | 111        | 768,707          | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 1,361,909        | 530,899          | 359,517          | 776          | 68         | 470,649          | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | (0)              | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>3,958,742</u> | <u>1,543,611</u> | <u>1,045,206</u> | <u>2,258</u> | <u>197</u> | <u>1,367,470</u> | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>7,547,188</u> | <u>2,942,929</u> | <u>1,992,716</u> | <u>4,304</u> | <u>376</u> | <u>2,606,863</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 9,074,471        | 3,538,294        | 2,395,889        | 5,173        | 451        | 3,134,662        | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 123 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|--------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$           | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7DEM         | 1,202,829    | 468,791        | 317,463  | 686 | 289   | 415,601 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12DEM        | 106,745      | 41,611         | 28,179   | 61  | 5     | 36,889  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 1,309,574    | 510,402        | 345,642  | 747 | 294   | 452,490 | 0        | 0        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|--------------|--------------|------------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)              | (F)              | (G)          | (H)          | (I)              | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$           | \$           | \$               | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 6,065,926        | 7,360,055        | 1,695,621        | (1,300)      | 134,839      | (3,123,286)      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                  |                  |              |              |                  |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 2,940,506        | 1,388,281        | 895,676          | 2,029        | 495          | 654,025          | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19DEM        | 4,243,928        | 1,654,028        | 1,120,100        | 2,419        | 1,019        | 1,466,362        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>3,021,653</u> | <u>1,177,762</u> | <u>797,552</u>   | <u>1,720</u> | <u>509</u>   | <u>1,044,108</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | 1,222,275        | 476,266          | 322,548          | 699          | 510          | 422,254          | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12DEM        | (810)            | (316)            | (214)            | 0            | 0            | (280)            | 0        | 0        |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>4,161,971</u> | <u>1,864,231</u> | <u>1,218,010</u> | <u>2,728</u> | <u>1,005</u> | <u>1,075,999</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | 1,903,955        | 5,495,824        | 477,611          | (4,028)      | 133,834      | (4,199,285)      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | 114,236          | 329,747          | 28,656           | (242)        | 8,030        | (251,955)        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19DEM        | 0                | 0                | 0                | 0            | 0            | 0                | 0        | 0        |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | 114,236          | 329,747          | 28,656           | (242)        | 8,030        | (251,955)        | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 125 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS   | DS-ML | DS/IS     | NOT USED | NOT USED |
|----------|----------|---|--------------|--------------|----------------|----------|-------|-------|-----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)          | (E)            | (F)      | (G)   | (H)   | (I)       | (J)      | (K)      |
|          |          |   |              | \$           | \$             | \$       | \$    | \$    | \$        | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |              |                |          |       |       |           |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |              |                |          |       |       |           |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19DEM        | (4,946)      | (1,928)        | (1,305)  | (3)   | (1)   | (1,709)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (4,946)      | (1,928)        | (1,305)  | (3)   | (1)   | (1,709)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | 109,290      | 327,819        | 27,351   | (245) | 8,029 | (253,664) | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL DEMAND      | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|------------------|------------------|--------------|--------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)              | (F)              | (G)          | (H)          | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$               | \$               | \$           | \$           | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 19,842,086        | 12,730,897       | 5,332,480        | 6,551        | 136,182      | 1,635,976        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>13,776,159</u> | <u>5,370,842</u> | <u>3,636,859</u> | <u>7,851</u> | <u>1,343</u> | <u>4,759,262</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 6,065,926         | 7,360,055        | 1,695,621        | (1,300)      | 134,839      | (3,123,286)      | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                  |                  |              |              |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 2,940,506         | 1,388,281        | 895,676          | 2,029        | 495          | 654,025          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19DEM        | 4,243,928         | 1,654,028        | 1,120,100        | 2,419        | 1,019        | 1,466,362        | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>3,021,653</u>  | <u>1,177,762</u> | <u>797,552</u>   | <u>1,720</u> | <u>509</u>   | <u>1,044,108</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | 1,222,275         | 476,266          | 322,548          | 699          | 510          | 422,254          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12DEM        | (810)             | (316)            | (214)            | 0            | 0            | (280)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>114,236</u>    | <u>329,747</u>   | <u>28,656</u>    | <u>(242)</u> | <u>8,030</u> | <u>(251,955)</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 4,276,207         | 2,193,978        | 1,246,666        | 2,486        | 9,035        | 824,044          | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | 1,789,719         | 5,166,077        | 448,955          | (3,787)      | 125,804      | (3,947,330)      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 608,504           | 1,756,465        | 152,644          | (1,287)      | 42,773       | (1,342,091)      | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19DEM        | <u>0</u>          | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 608,504           | 1,756,465        | 152,644          | (1,287)      | 42,773       | (1,342,091)      | 0        | 0        |

DEMAND RELATED  
 DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 127 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL DEMAND    | GS-RESIDENTIAL  | GS-OTHER       | IUS         | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|-------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)         | (H)        | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$          | \$         | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |             |            |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19DEM        | 10,397          | 4,052           | 2,744          | 6           | 2          | 3,592          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |             |            |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19DEM        | <u>(15,854)</u> | <u>(6,179)</u>  | <u>(4,184)</u> | <u>(9)</u>  | <u>(4)</u> | <u>(5,478)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | (15,854)        | (6,179)         | (4,184)        | (9)         | (4)        | (5,478)        | 0        | 0        |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(26,251)</u> | <u>(10,231)</u> | <u>(6,928)</u> | <u>(15)</u> | <u>(6)</u> | <u>(9,070)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | 582,253         | 1,746,234       | 145,716        | (1,302)     | 42,767     | (1,351,161)    | 0        | 0        |

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND      | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML        | DS/IS             | NOT USED | NOT USED |
|----------|-----------|---|--------------|-------------------|-------------------|-------------------|---------------|--------------|-------------------|----------|----------|
|          | (A)       | (B)                                     | (C)          | (D)               | (E)               | (F)               | (G)           | (H)          | (I)               | (J)      | (K)      |
|          |           |   |              | \$                | \$                | \$                | \$            | \$           | \$                | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                         |              | 127,322,840       | 49,623,411        | 33,603,809        | 72,557        | 30,968       | 43,992,095        | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                   |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]                |              | <u>35,488,996</u> | <u>13,832,422</u> | <u>9,367,000</u>  | <u>20,224</u> | <u>6,633</u> | <u>12,262,713</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                               |              | 91,833,844        | 35,790,989        | 24,236,809        | 52,333        | 24,334       | 31,729,382        | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 1,566,051         | 610,353           | 413,328           | 893           | 376          | 541,102           | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                   |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                       | 5            | 0                 | 0                 | 0                 | 0             | 0            | 0                 | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT       | 19DEM        | 0                 | 0                 | 0                 | 0             | 0            | 0                 | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 25,054,513        | 9,764,746         | 6,612,638         | 14,281        | 6,013        | 8,656,835         | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>          | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                           |              | 68,345,382        | 26,636,596        | 18,037,499        | 38,945        | 18,697       | 23,613,649        | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                   |              |                   |                   |                   |               |              |                   |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF           |              |                   |                   |                   |               |              |                   |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]            |              | 1,134,309         | 442,287           | 299,486           | 647           | 56           | 391,833           | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                              | 2            | 0                 | 0                 | 0                 | 0             | 0            | 0                 | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                    | 7DEM         | 23,846            | 9,294             | 6,294             | 14            | 6            | 8,239             | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                             | 13DEM        | 106,714           | 41,614            | 28,177            | 61            | 5            | 36,857            | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS            | 2            | <u>41,772,551</u> | <u>25,456,610</u> | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>     | <u>723,083</u>    | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                               |              | 111,382,802       | 52,586,401        | 33,927,136        | 76,845        | 18,764       | 24,773,661        | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 109, [2] PAGE 111, |              |                   |                   |                   |               |              |                   |          |          |
|          |           | [3] TOTAL O & M EXPENSE                 |              | 9,074,471         | 3,538,294         | 2,395,889         | 5,173         | 451          | 3,134,662         | 0        | 0        |
|          |           | LESS: COST OF GAS                       |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>          | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                    |              | 9,074,471         | 3,538,294         | 2,395,889         | 5,173         | 451          | 3,134,662         | 0        | 0        |

COLUMBIA GAS OF KENTUCKY, INC.  
 ALLOCATION FACTORS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-2  
 PAGE 129 OF 129  
 WITNESS: C. NOTESTONE

DEMAND RELATED  
 FORECASTED TEST YEAR - ORIGINAL FILING

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOCFACTOR<br>(B) | TOTAL DEMAND<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|--------------------|---------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                  | 100.000%            | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                  | 100.000%            | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                  | 100.000%            | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                  | 100.000%            | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                  | 100.000%            | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                  | 100.000%            | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7DEM               | 100.000%            | 38.974%               | 26.393%         | 0.057%     | 0.024%       | 34.552%      | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                  | 100.000%            | 0.000%                | 100.000%        | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                  | 100.000%            | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10DEM              | 100.000%            | 38.982%               | 26.398%         | 0.057%     | 0.005%       | 34.558%      | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11DEM              | 100.000%            | 38.982%               | 26.398%         | 0.057%     | 0.005%       | 34.558%      | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12DEM              | 100.000%            | 38.982%               | 26.398%         | 0.057%     | 0.005%       | 34.558%      | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13DEM              | 100.000%            | 38.996%               | 26.404%         | 0.057%     | 0.005%       | 34.538%      | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14DEM              | 100.000%            | 38.982%               | 26.398%         | 0.057%     | 0.005%       | 34.558%      | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                 | 100.000%            | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                 | 100.000%            | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                 | 100.000%            | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18DEM              | 100.000%            | 38.982%               | 26.398%         | 0.057%     | 0.005%       | 34.558%      | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19DEM              | 100.000%            | 38.974%               | 26.393%         | 0.057%     | 0.024%       | 34.552%      | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                 | 100.000%            | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                 | 100.000%            | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

## COLUMBIA GAS OF KENTUCKY, INC.

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STUDY: ATTACHMENT CEN-3

CASE NO.: 2016 - 00162

WITNESS: C. NOTESTONE

STUDY TYPE: FORECASTED TEST YEAR - ORIGINAL FILING

ALLOCATION BASIS: AVERAGE OF CUSTOMER-DEMAND &amp; DEMAND-COMMODITY

TEST YEAR: 12/31/2017

RATE BASE: 12/31/17

| <b>TOTAL COMPANY</b>  |                              | <b>CUSTOMER</b>          | <b>COMMODITY</b>         | <b>DEMAND</b>            |   |
|-----------------------|------------------------------|--------------------------|--------------------------|--------------------------|---|
| <b><u>SUMMARY</u></b> | <b><u>CLASSIFICATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>ALLOCATION</u></b> | <b><u>DESCRIPTION</u></b>                                     |
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| 7                     | 32                           | 58                       | 84                       | 110                      | GROSS INTANGIBLE, PROD., & DIST. PLANT ALLOC. DEPR. RESERVE   |
| 8                     | 33                           | 59                       | 85                       | 111                      | GROSS DIST. & GENERAL PLANT ALLOCATION DEPR. RESERVE          |
| 9                     | 34                           | 60                       | 86                       | 112                      | GROSS INTANGIBLE, PROD., & DIST. PLANT ALLOC. DEPR. EXPENSE   |
| 10                    | 35                           | 61                       | 87                       | 113                      | GROSS DIST. & GENERAL PLANT ALLOCATION DEPR. EXPENSE          |
| 11                    | 36                           | 62                       | 88                       | 114                      | OPERATING REVENUE @ CURRENT RATES                             |
| 12                    | 37                           | 63                       | 89                       | 115                      | PRODUCTION EXPENSE ALLOCATION                                 |
| 13                    | 38                           | 64                       | 90                       | 116                      | DISTRIBUTION O & M EXPENSE ALLOCATION - LABOR                 |
| 14                    | 39                           | 65                       | 91                       | 117                      | CUST ACCTS & CUST SERVICE & INFOR EXP ALLOC - LABOR           |
| 15                    | 40                           | 66                       | 92                       | 118                      | SALES AND A & G EXPENSE ALLOCATION - LABOR                    |
| 16                    | 41                           | 67                       | 93                       | 119                      | DISTRIBUTION O & M EXPENSE ALLOCATION - M & E                 |
| 17                    | 42                           | 68                       | 94                       | 120                      | CUST ACCTS & CUST SERVICE & INFOR EXP ALLOC - M & E           |
| 18                    | 43                           | 69                       | 95                       | 121                      | SALES AND A & G EXPENSE ALLOCATION - M & E                    |
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TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED REVENUE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 1 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT                                   | ALLOC  | TOTAL             |                   |                  |               |               |                  |              |              |    |
|------|--|--------|-------------------|-------------------|------------------|---------------|---------------|------------------|--------------|--------------|----|
| NO.  | NO.                                    | FACTOR | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML         | DS/IS            | NOT USED     | NOT USED     |    |
|      | (A)                                    | (C)    | (D)               | (E)               | (F)              | (G)           | (H)           | (I)              | (J)          | (K)          |    |
|      | (B)                                    |        | \$                | \$                | \$               | \$            | \$            | \$               | \$           | \$           | \$ |
| 1    | TOTAL REVENUES                         |        | 92,682,167        | 59,679,824        | 26,685,285       | 48,080        | 481,735       | 5,787,242        | 0            | 0            |    |
| 2    | PROPOSED INCREASE                      |        | <u>25,408,373</u> | <u>16,471,876</u> | <u>6,826,911</u> | <u>8,147</u>  | <u>2</u>      | <u>2,101,436</u> | <u>0</u>     | <u>0</u>     |    |
| 3    | TOTAL PROPOSED REVENUES                |        | 118,090,539       | 76,151,700        | 33,512,196       | 56,228        | 481,737       | 7,888,678        | 0            | 0            |    |
| 4    | COST OF GAS                            |        | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0             | 0                | 0            | 0            |    |
| 5    | OPERATING & MAINTENANCE EXPENSE        |        | 45,377,931        | 32,757,538        | 8,394,235        | 9,216         | 59,720        | 4,157,222        | 0            | 0            |    |
| 6    | DEPRECIATION & AMORTIZATION            |        | 15,939,783        | 11,443,117        | 2,822,575        | 3,137         | 17,845        | 1,653,109        | 0            | 0            |    |
| 7    | FEDERAL INCOME TAX                     |        | 7,781,829         | 3,722,615         | 3,887,877        | 4,568         | 118,754       | 48,015           | 0            | 0            |    |
| 8    | KENTUCKY STATE INCOME TAX              |        | 1,416,522         | 670,082           | 717,964          | 842           | 22,293        | 5,340            | 0            | 0            |    |
| 9    | TAXES OTHER THAN INCOME                |        | <u>4,790,882</u>  | <u>3,245,357</u>  | <u>925,681</u>   | <u>1,196</u>  | <u>8,572</u>  | <u>610,076</u>   | <u>0</u>     | <u>0</u>     |    |
| 10   | TOTAL EXPENSES & TAXES                 |        | 96,782,897        | 65,645,804        | 24,392,179       | 43,968        | 227,184       | 6,473,762        | 0            | 0            |    |
| 11   | OPERATING INCOME                       |        | 21,307,642        | 10,505,896        | 9,120,018        | 12,260        | 254,553       | 1,414,915        | 0            | 0            |    |
| 12   | INTEREST EXPENSE                       |        | <u>6,688,727</u>  | <u>4,294,449</u>  | <u>1,515,763</u> | <u>2,583</u>  | <u>12,814</u> | <u>863,118</u>   | <u>0</u>     | <u>0</u>     |    |
| 13   | INCOME AVAILABLE FOR COMMON EQUITY     |        | 14,618,915        | 6,211,447         | 7,604,255        | 9,677         | 241,739       | 551,797          | 0            | 0            |    |
| 14   | RATE BASE                              |        | 253,360,781       | 162,668,511       | 57,415,257       | 97,824        | 485,360       | 32,693,845       | 0            | 0            |    |
| 15   | RATE OF RETURN AUTHORIZED ON RATE BASE |        | <b>8.41%</b>      | <b>6.46%</b>      | <b>15.88%</b>    | <b>12.53%</b> | <b>52.45%</b> | <b>4.33%</b>     | <b>0.00%</b> | <b>0.00%</b> |    |
| 16   | UNITIZED RETURN                        |        | 1.00              | 0.77              | 1.89             | 1.49          | 6.24          | 0.51             | 0.00         | 0.00         |    |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
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 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 118,090,544      | 81,405,824       | 26,409,553       | 49,552       | 127,988       | 10,097,622     | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 45,377,931       | 32,816,038       | 8,315,152        | 9,142        | 55,782        | 4,181,817      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 15,939,787       | 11,443,117       | 2,822,575        | 3,137        | 17,845        | 1,653,109      | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 7,781,828        | 5,431,975        | 1,577,125        | 2,396        | 3,666         | 766,666        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 1,416,522        | 981,820          | 296,550          | 446          | 1,304         | 136,401        | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>4,790,882</u> | <u>3,245,357</u> | <u>925,681</u>   | <u>1,196</u> | <u>8,572</u>  | <u>610,076</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 96,782,900       | 67,725,402       | 21,580,930       | 41,326       | 87,169        | 7,348,069      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 21,307,645       | 13,680,422       | 4,828,623        | 8,227        | 40,819        | 2,749,553      | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>6,688,727</u> | <u>4,294,449</u> | <u>1,515,763</u> | <u>2,583</u> | <u>12,814</u> | <u>863,118</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 14,618,918       | 9,385,973        | 3,312,860        | 5,644        | 28,005        | 1,886,435      | 0            | 0            |
| 12       |          | RATE BASE                              |              | 253,360,781      | 162,668,511      | 57,415,257       | 97,824       | 485,360       | 32,693,845     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b> | <b>8.41%</b>  | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00             | 1.00         | 1.00          | 1.00           | 0.00         | 0.00         |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 3 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>Company<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G)     | DS/IS<br>(H)     | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|-------------------------|-----------------------|-----------------|------------|------------------|------------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 25,408,378              | 21,725,999            | (275,732)       | 1,472      | (353,747)        | 4,310,380        | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                       | 0                     | 0               | 0          | 0                | 0                | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 234,603                 | 200,602               | (2,546)         | 14         | (3,266)          | 39,799           | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>48,302</u>           | <u>41,301</u>         | <u>(524)</u>    | <u>3</u>   | <u>(672)</u>     | <u>8,194</u>     | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 25,125,473              | 21,484,096            | (272,662)       | 1,455      | (349,809)        | 4,262,387        | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>1,507,528</u>        | <u>1,289,046</u>      | <u>(16,360)</u> | <u>87</u>  | <u>(20,989)</u>  | <u>255,743</u>   | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 23,617,945              | 20,195,050            | (256,302)       | 1,368      | (328,820)        | 4,006,644        | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>8,266,279</u>        | <u>7,068,268</u>      | <u>(89,706)</u> | <u>479</u> | <u>(115,087)</u> | <u>1,402,325</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 15,351,666              | 13,126,782            | (166,596)       | 889        | (213,733)        | 2,604,319        | 0               | 0               |

TOTAL COMPANY  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY CLASS - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
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WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|-------------------------------------|--------------|------------------|------------------|------------------|--------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$               | \$           | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 92,682,167       | 59,679,824       | 26,685,285       | 48,080       | 481,735       | 5,787,242      | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 21,475,950       | 13,807,095       | 7,643,847        | 25,009       | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 45,095,029       | 32,574,135       | 8,318,222        | 9,125        | 59,720        | 4,133,824      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 15,939,787       | 11,443,117       | 2,822,575        | 3,137        | 17,845        | 1,653,109      | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (484,451)        | (1,636,293)      | 1,666,831        | 1,917        | 118,753       | (635,659)      | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (91,006)         | (307,226)        | 312,910          | 359          | 22,293        | (119,342)      | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>4,790,881</u> | <u>3,245,357</u> | <u>925,681</u>   | <u>1,196</u> | <u>8,572</u>  | <u>610,076</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 86,726,189       | 59,126,185       | 21,690,066       | 40,743       | 227,183       | 5,642,008      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 5,955,978        | 553,639          | 4,995,219        | 7,338        | 254,552       | 145,234        | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>6,688,725</u> | <u>4,294,449</u> | <u>1,515,763</u> | <u>2,583</u> | <u>12,814</u> | <u>863,118</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | (732,747)        | (3,740,810)      | 3,479,456        | 4,755        | 241,738       | (717,884)      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 253,360,781      | 162,668,511      | 57,415,257       | 97,824       | 485,360       | 32,693,845     | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>2.35%</b>     | <b>0.34%</b>     | <b>8.70%</b>     | <b>7.50%</b> | <b>52.45%</b> | <b>0.44%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | 0.14             | 3.70             | 3.19         | 22.32         | 0.19           | 0.00         | 0.00         |

REFERENCES: [1] PAGE 11, [2] PAGE 19, [3] PAGE 10, [4] PAGE 24, [5] PAGE 22, [6] PAGE 20, [7] PAGE 23, [8] PAGE 25.

TOTAL COMPANY  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 5 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                  |              |               |                  |          |          |
| 2        | 301.00   | ORGANIZATION                              |              | 521              | 351              | 99               | 0            | 1             | 70               | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    |              | 74,348           | 50,089           | 14,120           | 19           | 134           | 9,987            | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            |              | <u>8,341,319</u> | <u>5,619,671</u> | <u>1,584,090</u> | <u>2,154</u> | <u>15,014</u> | <u>1,120,389</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 8,416,188        | 5,670,111        | 1,598,309        | 2,173        | 15,149        | 1,130,446        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                  |              |               |                  |          |          |
| 9        | 304.10   | LAND                                      |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             |              | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                  |              |               |                  |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            |              | 206              | 116              | 44               | 0            | 0             | 45               | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 |              | 877,756          | 494,949          | 189,332          | 360          | 0             | 193,116          | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          |              | 661,306          | 372,897          | 142,643          | 271          | 0             | 145,494          | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             |              | 2,729,828        | 1,539,295        | 588,824          | 1,120        | 0             | 600,589          | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         |              | 2,125            | 1,198            | 459              | 0            | 0             | 468              | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 |              | 2,176,686        | 1,227,390        | 469,511          | 892          | 0             | 478,892          | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 46,211           | 0                | 0                | 0            | 46,211        | 0                | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         |              | 8,761,416        | 5,902,697        | 1,663,870        | 2,263        | 15,770        | 1,176,816        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV |              | 259,809          | 175,037          | 49,341           | 66           | 467           | 34,897           | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              |              | 0                | 0                | 0                | 0            | 0             | 0                | 0        | 0        |
| 26       | 376.00   | MAINS                                     |              | 221,300,854      | 124,787,126      | 47,734,594       | 90,733       | 0             | 48,688,401       | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 11,682           | 0                | 0                | 0            | 11,682        | 0                | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             |              | 518,504          | 292,375          | 111,841          | 213          | 0             | 114,076          | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                |              | 9,175,090        | 5,173,650        | 1,979,067        | 3,761        | 0             | 2,018,611        | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         |              | 45,443           | 25,624           | 9,802            | 19           | 0             | 9,999            | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          |              | 254,901          | 143,734          | 54,982           | 105          | 0             | 56,080           | 0        | 0        |
| 32       | 380.00   | SERVICES                                  |              | 127,467,343      | 112,461,887      | 14,554,221       | 1,275        | 0             | 449,960          | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                |              | 22,789,579       | 16,395,279       | 6,292,659        | 2,963        | 0             | 98,679         | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   |              | 9,462,175        | 6,807,278        | 2,612,696        | 1,230        | 0             | 40,971         | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      |              | 5,770,311        | 4,151,277        | 1,593,298        | 750          | 0             | 24,985         | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               |              | 2,257,522        | 1,624,106        | 623,347          | 293          | 0             | 9,775          | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     |              | 2,697,547        | 0                | 700,742          | 782          | 0             | 1,996,050      | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 677,829          | 0                | 0                | 0            | 677,829       | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             |              | 735,771          | 495,700          | 139,730          | 190          | 1,325         | 98,828         | 0        | 0        |
| 10       | 387.42   | RADIO                                 |              | 795,187          | 535,729          | 151,013          | 205          | 1,431         | 106,808        | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   |              | 133,590          | 90,002           | 25,370           | 35           | 241           | 17,943         | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          |              | 3,779,585        | 2,546,363        | 717,777          | 976          | 6,803         | 507,667        | 0        | 0        |
| 13       | 387.46   | CIS                                   |              | <u>113,644</u>   | <u>76,563</u>    | <u>21,582</u>    | <u>30</u>    | <u>205</u>    | <u>15,265</u>  | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 423,501,900      | 285,320,272      | 80,426,745       | 108,532      | 761,964       | 56,884,415     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                  |                  |              |               |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 735,278          | 495,368          | 139,635          | 190          | 1,324         | 98,761         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 18,816           | 12,676           | 3,574            | 5            | 34            | 2,528          | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 1,257,641        | 847,292          | 238,837          | 325          | 2,264         | 168,924        | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 95,778           | 64,527           | 18,189           | 25           | 172           | 12,865         | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 24,462           | 16,481           | 4,646            | 5            | 44            | 3,286          | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 24,241           | 16,332           | 4,604            | 5            | 43            | 3,256          | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 3,259,030        | 2,195,658        | 618,919          | 841          | 5,866         | 437,747        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  |              | 9,258            | 6,238            | 1,757            | 3            | 17            | 1,243          | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 253,135          | 170,540          | 48,072           | 66           | 456           | 34,001         | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    |              | 0                | 0                | 0                | 0            | 0             | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>294,060</u>   | <u>198,112</u>   | <u>55,844</u>    | <u>77</u>    | <u>529</u>    | <u>39,498</u>  | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>5,971,699</u> | <u>4,023,224</u> | <u>1,134,077</u> | <u>1,542</u> | <u>10,749</u> | <u>802,109</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 437,889,787      | 295,013,607      | 83,159,131       | 112,247      | 787,862       | 58,816,970     | 0        | 0        |



| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 6,025,045        | 4,334,538        | 1,663,635      | 783        | 0            | 26,088         | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 4,714,156        | 3,391,458        | 1,301,673      | 613        | 0            | 20,412         | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 1,568,587        | 1,128,473        | 433,118        | 204        | 0            | 6,792          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 1,780,729        | 1,281,092        | 491,695        | 231        | 0            | 7,711          | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 823,118          | 0                | 213,821        | 239        | 0            | 609,066        | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766          | 0                | 0              | 0          | 133,766      | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           |              | (59,912)         | (40,364)         | (11,378)       | (16)       | (108)        | (8,048)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 399,816          | 269,362          | 75,928         | 104        | 720          | 53,702         | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 567,414          | 382,276          | 107,756        | 147        | 1,022        | 76,214         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 50,650           | 34,124           | 9,619          | 13         | 91           | 6,803          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 529,513          | 356,741          | 100,559        | 137        | 952          | 71,123         | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>114,357</u>   | <u>77,044</u>    | <u>21,718</u>  | <u>30</u>  | <u>206</u>   | <u>15,361</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 145,887,056      | 103,925,348      | 25,989,241     | 30,492     | 154,804      | 15,787,178     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                  |                  |                |            |              |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | (33,247)         | (22,399)         | (6,313)        | (8)        | (60)         | (4,465)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | (11,355)         | (7,650)          | (2,156)        | (3)        | (20)         | (1,526)        | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 750,133          | 505,376          | 142,457        | 194        | 1,350        | 100,757        | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 27,035           | 18,214           | 5,135          | 8          | 49           | 3,631          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 6,309            | 4,250            | 1,198          | 2          | 11           | 848            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 15,095           | 10,169           | 2,866          | 4          | 28           | 2,028          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 37,937           | 25,559           | 7,204          | 10         | 68           | 5,096          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 185              | 124              | 35             | 0          | 0            | 25             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 1,333,005        | 898,065          | 253,150        | 343        | 2,400        | 179,047        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 7,764            | 5,230            | 1,474          | 2          | 13           | 1,043          | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 202,598          | 136,493          | 38,475         | 53         | 365          | 27,212         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | 12,094           | <u>8,148</u>     | <u>2,297</u>   | <u>3</u>   | <u>22</u>    | <u>1,625</u>   | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>2,347,553</u> | <u>1,581,579</u> | <u>445,822</u> | <u>608</u> | <u>4,226</u> | <u>315,321</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 151,708,251      | 107,847,172      | 27,094,739     | 31,998     | 165,283      | 16,569,072     | 0        | 0        |



TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML     | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|---------------|----------------|--------------|----------|-----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)           | (E)            | (F)          | (G)      | (H)       | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$            | \$             | \$           | \$       | \$        | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                |              | 1,172,264     | 843,350        | 323,686      | 152      | 0         | 5,076        | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   |              | 230,831       | 166,064        | 63,737       | 30       | 0         | 999          | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      |              | 157,520       | 113,323        | 43,494       | 20       | 0         | 682          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               |              | 22,800        | 16,403         | 6,296        | 3        | 0         | 99           | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     |              | 158,316       | 0              | 41,126       | 46       | 0         | 117,146      | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065        | 0              | 0            | 0        | 13,065    | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             |              | 27,516        | 18,538         | 5,226        | 8        | 50        | 3,696        | 0        | 0        |
| 9        | 387.42   | RADIO                                 |              | 29,736        | 20,033         | 5,647        | 8        | 54        | 3,994        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   |              | 4,992         | 3,363          | 949          | 1        | 9         | 671          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          |              | 140,832       | 94,881         | 26,745       | 36       | 253       | 18,916       | 0        | 0        |
| 12       | 387.46   | CIS                                   |              | <u>4,248</u>  | <u>2,861</u>   | <u>807</u>   | <u>0</u> | <u>7</u>  | <u>570</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 14,206,216    | 10,275,184     | 2,493,355    | 2,689    | 14,726    | 1,420,259    | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |               |                |              |          |           |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             |              | 36,561        | 24,632         | 6,943        | 10       | 65        | 4,911        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          |              | 1,260         | 849            | 239          | 0        | 2         | 169          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        |              | 253,397       | 170,718        | 48,122       | 66       | 456       | 34,036       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             |              | 8,760         | 5,902          | 1,664        | 3        | 16        | 1,176        | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             |              | 2,244         | 1,512          | 426          | 0        | 4         | 301          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    |              | 972           | 655            | 184          | 0        | 2         | 131          | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        |              | 0             | 0              | 0            | 0        | 0         | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               |              | 129,657       | 87,351         | 24,623       | 34       | 234       | 17,415       | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  |              | 468           | 315            | 89           | 0        | 1         | 63           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              |              | 6,552         | 4,414          | 1,245        | 2        | 11        | 881          | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               |              | <u>19,604</u> | <u>13,208</u>  | <u>3,723</u> | <u>5</u> | <u>35</u> | <u>2,633</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 459,475       | 309,556        | 87,258       | 120      | 826       | 61,716       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 15,939,787    | 11,443,117     | 2,822,575    | 3,137    | 17,845    | 1,653,109    | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 11 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL   | GS-OTHER         | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|-------------------|------------------|------------------|---------------|----------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)               | (E)              | (F)              | (G)           | (H)            | (I)              | (J)      | (K)      |
|          |          |                              |              | \$                | \$               | \$               | \$            | \$             | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |                   |                  |                  |               |                |                  |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 49,696,061        | 49,696,061       | 0                | 0             | 0              | 0                | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 18,520,317        | 0                | 18,520,317       | 0             | 0              | 0                | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | <u>1,458,726</u>  | <u>0</u>         | <u>1,410,902</u> | <u>47,824</u> | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL SALES REVENUE          |              | 69,675,105        | 49,696,061       | 19,931,219       | 47,824        | 0              | 0                | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 476,000           | 305,532          | 137,766          | 249           | 2,494          | 29,959           | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        |              | 137,000           | 122,833          | 14,082           | 1             | 5              | 79               | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 21,807,062        | 9,029,105        | 6,541,880        | 0             | 479,213        | 5,756,864        | 0        | 0        |
| 9        | 495.00   | OTHER                        |              | <u>587,000</u>    | <u>526,293</u>   | <u>60,338</u>    | <u>6</u>      | <u>23</u>      | <u>340</u>       | <u>0</u> | <u>0</u> |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | <u>23,007,062</u> | <u>9,983,763</u> | <u>6,754,066</u> | <u>256</u>    | <u>481,735</u> | <u>5,787,242</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATING REVENUE      |              | 92,682,167        | 59,679,824       | 26,685,285       | 48,080        | 481,735        | 5,787,242        | 0        | 0        |

TOTAL COMPANY  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
PRODUCTION EXPENSE ALLOCATION  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 12 OF 129  
WITNESS: C. NOTESTONE

| LINE | ACCT                              | ALLOC                           | TOTAL             |                   |                  |               |          |          |          |          |
|------|-----------------------------------|---------------------------------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|
| NO.  | NO.                               | FACTOR                          | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML    | DS/IS    | NOT USED | NOT USED |
|      | (A)                               | (C)                             | (D)               | (E)               | (F)              | (G)           | (H)      | (I)      | (J)      | (K)      |
|      |                                   |                                 | \$                | \$                | \$               | \$            | \$       | \$       | \$       | \$       |
| 1    | OPERATING EXPENSES                |                                 |                   |                   |                  |               |          |          |          |          |
| 2    | PRODUCTION EXPENSES - OPERATION   |                                 |                   |                   |                  |               |          |          |          |          |
| 3    | 717                               | LIQUE PETRO GAS EXP - LABOR     | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 4    | 717                               | LIQUE PETRO GAS EXP - M&E       | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 5    | 723                               | LIQUIFIED PETROLEUM GAS PROCESS | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 6    | 728                               | LIQUIFIED PETROLEUM GAS         | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7    |                                   | TOTAL OPERATION                 | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 8    | PRODUCTION EXPENSES - MAINTENANCE |                                 |                   |                   |                  |               |          |          |          |          |
| 9    | 741                               | STRUCTURES & IMPROV - LABOR     | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 10   | 741                               | STRUCTURES & IMPROV - M&E       | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 11   | 742                               | PRODUCTION EQUIPMENT - LABOR    | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 12   | 742                               | PRODUCTION EQUIPMENT - M&E      | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13   |                                   | TOTAL MAINTENANCE               | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14   |                                   | TOTAL MANUFACTURED GAS          | 2,139             | 1,304             | 797              | 2             | 0        | 37       | 0        | 0        |
| 15   | OTHER GAS SUPPLIES EXPENSE        |                                 |                   |                   |                  |               |          |          |          |          |
| 16   | 803 - 806                         |                                 |                   |                   |                  |               |          |          |          |          |
| 17   | & 808                             | COST OF GAS @ CITY GATE         | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0        | 0        | 0        | 0        |
| 18   | 807                               | OTHER PURCHASED GAS - LABOR     | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 19   | 807                               | OTHER PURCHASED GAS - M & E     | 341,557           | 219,590           | 121,570          | 396           | 0        | 0        | 0        | 0        |
| 20   | 812                               | GAS USED IN OPERATIONS          | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |                                   | TOTAL OTHER GAS SUPPLIES EXP    | <u>21,817,507</u> | <u>14,026,685</u> | <u>7,765,417</u> | <u>25,405</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22   |                                   | TOTAL PRODUCTION EXPENSE        | 21,819,646        | 14,027,989        | 7,766,214        | 25,407        | 0        | 37       | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 13 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC                      | TOTAL  |                |                |               |           |            |               |          |          |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       |            | (I)           | (J)      | (K)      |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |               |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  |        | 97,461         | 65,880         | 22,243        | 21        | 189        | 9,130         | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH |        | 66,644         | 22,273         | 16,093        | 32        | 0          | 28,246        | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           |        | 1,726,536      | 1,174,442      | 308,340       | 451       | 57         | 243,246       | 0        | 0        |
| 5    | 875  | M & R - GENERAL            |        | 82,347         | 46,432         | 17,761        | 33        | 4          | 18,116        | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         |        | 38,736         | 0              | 8,042         | 9         | 7,779      | 22,907        | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  |        | 1,279,637      | 920,596        | 353,333       | 166       | 0          | 5,541         | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      |        | 1,500,691      | 1,079,627      | 414,371       | 195       | 0          | 6,498         | 0        | 0        |
| 9    | 880  | OTHER                      |        | 547,972        | 370,406        | 125,059       | 120       | 1,058      | 51,329        | 0        | 0        |
| 10   | 881  | RENTS                      |        | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u>   | <u>0</u>      | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 5,340,024      | 3,679,656      | 1,265,242     | 1,027     | 9,087      | 385,013       | 0        | 0        |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |               |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  |        | 8,649          | 5,847          | 1,973         | 2         | 17         | 810           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  |        | 2,509          | 1,415          | 541           | 0         | 0          | 552           | 0        | 0        |
| 15   | 887  | MAINS                      |        | 926,354        | 522,324        | 199,805       | 380       | 47         | 203,798       | 0        | 0        |
| 16   | 889  | M & R - GENERAL            |        | 138,594        | 78,146         | 29,893        | 56        | 7          | 30,491        | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         |        | 19,419         | 0              | 4,032         | 4         | 3,900      | 11,483        | 0        | 0        |
| 18   | 892  | SERVICES                   |        | 298,657        | 263,499        | 34,101        | 3         | 0          | 1,054         | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  |        | 26,851         | 19,317         | 7,414         | 3         | 0          | 116           | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            |        | <u>124,180</u> | <u>83,941</u>  | <u>28,340</u> | <u>27</u> | <u>240</u> | <u>11,632</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 1,545,213      | 974,489        | 306,099       | 475       | 4,211      | 259,936       | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|---------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)           | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$            | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |               |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    |              | 165,331       | 148,232        | 16,994   | 2        | 7        | 96       | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   |              | 692,556       | 620,932        | 71,188   | 7        | 28       | 402      | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 905      | MISC.                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 857,887       | 769,164        | 88,182   | 9        | 35       | 498      | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |               |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              |              | 12,982        | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 17       | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | 12,982        | 11,639         | 1,334    | 0        | 1        | 8        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 15 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMPANY    | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|------------------|------------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                 |              | \$               | \$               | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        |          | SALES                           |              |                  |                  |                |            |              |                |          |          |
| 2        | 911      | SUPERVISION                     |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 4        | 913      | ADVERTISING                     |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 5        | 916      | MISC.                           |              | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>   | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL SALES                     |              | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>   | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 7,756,106        | 5,434,948        | 1,660,857      | 1,511      | 13,334       | 645,455        | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                  |                  |                |            |              |                |          |          |
| 9        | 920      | SALARIES                        |              | 1,597,984        | 1,119,752        | 342,189        | 312        | 2,749        | 132,981        | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                |              | 4,636            | 3,248            | 992            | 0          | 8            | 386            | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 19       | 931      | RENTS                           |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                  |                  |                |            |              |                |          |          |
|          |          | FURNITURE & EQUIPMENT           |              | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 22       | 932      | MAINT.-MISCELLANEOUS            |              | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>   | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> |
| 23       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>1,602,620</u> | <u>1,123,000</u> | <u>343,181</u> | <u>312</u> | <u>2,757</u> | <u>133,367</u> | <u>0</u> | <u>0</u> |
| 24       |          | TOTAL O & M EXPENSE - LABOR     |              | 9,358,726        | 6,557,948        | 2,004,038      | 1,823      | 16,091       | 778,822        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 16 OF 129  
 WITNESS: C. NOTESTONE

| LINE | ACCT | ALLOC                      | TOTAL  |                |                |               |           |            |               |          |          |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | COMPANY        | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       | (H)        | (I)           | (J)      | (K)      |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |               |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  |        | 783,470        | 512,618        | 156,702       | 217       | 1,401      | 112,531       | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH |        | 17,885         | 5,977          | 4,319         | 9         | 0          | 7,580         | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           |        | 4,797,660      | 3,263,513      | 856,810       | 1,255     | 158        | 675,925       | 0        | 0        |
| 5    | 875  | M & R - GENERAL            |        | 118,379        | 66,748         | 25,533        | 49        | 6          | 26,043        | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         |        | 29,602         | 0              | 6,146         | 7         | 5,944      | 17,505        | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  |        | 485,057        | 348,960        | 133,934       | 63        | 0          | 2,100         | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      |        | 655,941        | 471,897        | 181,118       | 85        | 0          | 2,840         | 0        | 0        |
| 9    | 880  | OTHER                      |        | 1,211,487      | 792,666        | 242,310       | 335       | 2,167      | 174,008       | 0        | 0        |
| 10   | 881  | RENTS                      |        | <u>82,157</u>  | <u>53,755</u>  | <u>16,432</u> | <u>23</u> | <u>147</u> | <u>11,800</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 8,181,638      | 5,516,134      | 1,623,304     | 2,043     | 9,823      | 1,030,332     | 0        | 0        |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |               |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  |        | 2,571          | 1,682          | 514           | 0         | 5          | 369           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  |        | 251,838        | 141,999        | 54,319        | 103       | 12         | 55,404        | 0        | 0        |
| 15   | 887  | MAINS                      |        | 2,202,076      | 1,241,641      | 474,965       | 904       | 111        | 484,457       | 0        | 0        |
| 16   | 889  | M & R - GENERAL            |        | 144,736        | 81,609         | 31,219        | 59        | 7          | 31,842        | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         |        | 51,880         | 0              | 10,771        | 12        | 10,418     | 30,679        | 0        | 0        |
| 18   | 892  | SERVICES                   |        | 431,251        | 380,484        | 49,240        | 4         | 0          | 1,522         | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  |        | 118,176        | 85,018         | 32,631        | 15        | 0          | 512           | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            |        | <u>199,573</u> | <u>130,578</u> | <u>39,916</u> | <u>56</u> | <u>358</u> | <u>28,665</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 3,402,101      | 2,063,011      | 693,575       | 1,153     | 10,911     | 633,450       | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
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 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|---------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)           | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$            | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |               |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    |              | 399,502       | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   |              | 3,252,912     | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           |              | 1,027,585     | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6        | 905      | MISC.                            |              | 1,073         | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7        | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 253           | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 4,681,325     | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |               |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      |              | (2,789)       | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              |              | 1,198,971     | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            |              | 65,932        | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    |              | 257,797       | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17       | 920      | SALARIES                         |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      |              | 13,868        | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19       | 931      | RENTS                            |              | 0             | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        |              | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | 1,533,779     | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT                     | ALLOC  | TOTAL             |                   |                  |              |               |                  |          |          |          |
|------|--------------------------|--|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|----------|
| NO.  | NO.                      | FACTOR   | COMPANY           | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |          |
|      | (A)                      | (C)  | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |          |
|      |                          |  | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       | \$       |
| 1    | SALES                    |  |                   |                   |                  |              |               |                  |          |          |          |
| 2    | 911                      | SUPERVISION                                    | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 3    | 912                      | DEMONSTRATION & SELLING                        | 37,477            | 33,601            | 3,852            | 0            | 1             | 22               | 0        | 0        | 0        |
| 4    | 913                      | ADVERTISING                                    | 138,706           | 124,361           | 14,258           | 1            | 6             | 80               | 0        | 0        | 0        |
| 5    | 916                      | MISC.  | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 6    |                          | TOTAL SALES                                    | <u>176,183</u>    | <u>157,962</u>    | <u>18,110</u>    | <u>1</u>     | <u>7</u>      | <u>102</u>       | <u>0</u> | <u>0</u> | <u>0</u> |
| 7    |                          | TOTAL DISTRIBUTION EXPENSES                    | 17,975,026        | 13,279,840        | 3,003,248        | 3,271        | 21,011        | 1,667,653        | 0        | 0        | 0        |
| 8    | ADMINISTRATIVE & GENERAL |  |                   |                   |                  |              |               |                  |          |          |          |
| 9    | 920                      | SALARIES                                       | 2,963,302         | 2,160,328         | 511,198          | 611          | 3,580         | 287,585          | 0        | 0        | 0        |
| 10   | 921                      | OFFICE SUPPLIES & EXPENSES                     | 894,098           | 651,822           | 154,241          | 184          | 1,081         | 86,771           | 0        | 0        | 0        |
| 11   | 922                      | ADMIN. EXPENSES TRANSFERED                     | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 12   | 923                      | OUTSIDE SERVICES                               | 7,869,789         | 5,737,294         | 1,357,612        | 1,622        | 9,510         | 763,751          | 0        | 0        | 0        |
| 13   | 924                      | PROPERTY INSURANCE                             | 81,748            | 59,597            | 14,102           | 18           | 99            | 7,933            | 0        | 0        | 0        |
| 14   | 925                      | INJURIES AND DAMAGES                           | 1,043,923         | 717,718           | 223,757          | 225          | 1,634         | 100,589          | 0        | 0        | 0        |
| 15   | 926                      | EMPLOYEE PENSIONS & BENEFITS                   | 3,351,467         | 2,304,198         | 718,362          | 722          | 5,248         | 322,939          | 0        | 0        | 0        |
| 16   | 926                      | DIRECT EMPLOYEE PENSIONS & BENEFITS            | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 17   | 928                      | REG COMMISSION EXP - GENERAL                   | 197,762           | 144,174           | 34,116           | 41           | 239           | 19,193           | 0        | 0        | 0        |
| 18   | 928                      | REGULATORY COMMISSION EXP - PSC @ 0.001901     | 176,188           | 128,447           | 30,394           | 36           | 213           | 17,098           | 0        | 0        | 0        |
| 19   | 930.10                   | MISC. - INSTITUT & GOODWILL ADV                | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 20   | 930.20                   | MISC. - GENERAL                                | (62,123)          | (45,290)          | (10,717)         | (12)         | (75)          | (6,029)          | 0        | 0        | 0        |
| 21   | 931                      | RENTS  | 642,175           | 468,163           | 110,781          | 133          | 776           | 62,322           | 0        | 0        | 0        |
| 22   | 935.13                   | MAINT. STRUCTURES & IMPROV.                    | 130               | 95                | 22               | 0            | 0             | 12               | 0        | 0        | 0        |
| 23   | 935.23                   | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        | 0        |
| 24   | 932                      | MAINT.-MISCELLANEOUS                           | <u>259,121</u>    | <u>188,907</u>    | <u>44,701</u>    | <u>53</u>    | <u>313</u>    | <u>25,148</u>    | <u>0</u> | <u>0</u> | <u>0</u> |
| 25   |                          | TOTAL ADMIN & GENERAL - M & E                  | <u>17,417,580</u> | <u>12,515,453</u> | <u>3,188,569</u> | <u>3,633</u> | <u>22,618</u> | <u>1,687,312</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 26   |                          | TOTAL O & M EXPENSE - M & E                    | 35,736,302        | 26,016,187        | 6,314,184        | 7,302        | 43,629        | 3,355,002        | 0        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 19 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.                     | ACCOUNT TITLE | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|------------------------------|---------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)                          | (B)           | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |                              |               |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        | LABOR                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 2        | PRODUCTION                   |               | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3        | DISTRIBUTION - O&M OPERATION |               | PAGE 14      | 5,340,024         | 3,679,656         | 1,265,242        | 1,027        | 9,087         | 385,013          | 0        | 0        |
| 4        | DISTRIBUTION - O&M MAINT.    |               | PAGE 14      | 1,545,213         | 974,489           | 306,099          | 475          | 4,211         | 259,936          | 0        | 0        |
| 5        | CUSTOMER ACCOUNTS            |               | PAGE 15      | 857,887           | 769,164           | 88,182           | 9            | 35            | 498              | 0        | 0        |
| 6        | CUSTOMER SERVICE & INFOR.    |               | PAGE 15      | 12,982            | 11,639            | 1,334            | 0            | 1             | 8                | 0        | 0        |
| 7        | SALES                        |               | PAGE 16      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 8        | ADMINISTRATIVE & GENERAL     |               | PAGE 16      | <u>1,602,620</u>  | <u>1,123,000</u>  | <u>343,181</u>   | <u>312</u>   | <u>2,757</u>  | <u>133,367</u>   | <u>0</u> | <u>0</u> |
| 9        | TOTAL LABOR EXPENSE          |               |              | 9,358,726         | 6,557,948         | 2,004,038        | 1,823        | 16,091        | 778,822          | 0        | 0        |
| 10       | M & E                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 11       | PRODUCTION                   |               | PAGE 13      | 343,696           | 220,894           | 122,367          | 398          | 0             | 37               | 0        | 0        |
| 12       | DISTRIBUTION - O&M OPERATION |               | PAGE 17      | 8,181,638         | 5,516,134         | 1,623,304        | 2,043        | 9,823         | 1,030,332        | 0        | 0        |
| 13       | DISTRIBUTION - O&M MAINT.    |               | PAGE 17      | 3,402,101         | 2,063,011         | 693,575          | 1,153        | 10,911        | 633,450          | 0        | 0        |
| 14       | CUSTOMER ACCOUNTS            |               | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58           | 208           | 2,880            | 0        | 0        |
| 15       | CUSTOMER SERVICE & INFOR.    |               | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16           | 62            | 889              | 0        | 0        |
| 16       | SALES                        |               | PAGE 19      | 176,183           | 157,962           | 18,110           | 1            | 7             | 102              | 0        | 0        |
| 17       | ADMINISTRATIVE & GENERAL     |               | PAGE 19      | <u>17,417,580</u> | <u>12,515,453</u> | <u>3,188,569</u> | <u>3,633</u> | <u>22,618</u> | <u>1,687,312</u> | <u>0</u> | <u>0</u> |
| 18       | TOTAL M & E EXPENSE          |               |              | <u>35,736,302</u> | <u>26,016,187</u> | <u>6,314,184</u> | <u>7,302</u> | <u>43,629</u> | <u>3,355,002</u> | <u>0</u> | <u>0</u> |
| 19       | TOTAL O & M EXPENSES         |               |              | 45,095,029        | 32,574,135        | 8,318,222        | 9,125        | 59,720        | 4,133,824        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 20 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS   | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|----------|-------|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)      | (G)   | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$       | \$    | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    |              | 4,136,779     | 2,787,009      | 785,612  | 1,069 | 7,446 | 555,644 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     |              | 654,102       | 458,348        | 140,069  | 127   | 1,126 | 54,432  | 0        | 0        |
| 3        | 408      | OTHER TAXES                |              | 0             | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 4,790,881     | 3,245,357      | 925,681  | 1,196 | 8,572 | 610,076 | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 21 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|---|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |   |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 5,380,520         | (1,389,879)       | 6,974,960        | 9,614        | 395,598       | (609,767)        | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                   |                   |                  |              |               |                  |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 6,688,725         | 4,294,449         | 1,515,763        | 2,583        | 12,814        | 863,118          | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    |              | 14,595,754        | 9,833,377         | 2,771,863        | 3,769        | 26,271        | 1,960,474        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>14,665,691</u> | <u>10,584,740</u> | <u>2,580,613</u> | <u>2,809</u> | <u>15,552</u> | <u>1,481,975</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (69,937)          | (751,363)         | 191,250          | 960          | 10,719        | 478,499          | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 |              | <u>(4,960)</u>    | (3,475)           | (1,063)          | 0            | (8)           | (413)            | 0        | 0        |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>6,613,828</u>  | <u>3,539,611</u>  | <u>1,705,950</u> | <u>3,543</u> | <u>23,525</u> | <u>1,341,204</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (1,233,308)       | (4,929,490)       | 5,269,010        | 6,071        | 372,073       | (1,950,971)      | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (73,998)          | (295,768)         | 316,139          | 364          | 22,324        | (117,058)        | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      |              | <u>0</u>          | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (73,998)          | (295,768)         | 316,139          | 364          | 22,324        | (117,058)        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 22 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMPANY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML  | DS/IS     | NOT USED | NOT USED |
|----------|----------|---|--------------|---------------|----------------|----------|-----|--------|-----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)           | (E)            | (F)      | (G) | (H)    | (I)       | (J)      | (K)      |
|          |          |   |              | \$            | \$             | \$       | \$  | \$     | \$        | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |               |                |          |     |        |           |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |               |                |          |     |        |           |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       |              | (17,008)      | (11,458)       | (3,229)  | (5) | (31)   | (2,284)   | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (17,008)      | (11,458)       | (3,229)  | (5) | (31)   | (2,284)   | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (91,006)      | (307,226)      | 312,910  | 359 | 22,293 | (119,342) | 0        | 0        |

TOTAL COMPANY  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 23 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL COMPANY     | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|-------------------|---------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)               | (G)           | (H)           | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$                | \$            | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 92,682,167        | 59,679,824        | 26,685,285        | 48,080        | 481,735       | 5,787,242        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>87,301,646</u> | <u>61,069,704</u> | <u>19,710,325</u> | <u>38,467</u> | <u>86,137</u> | <u>6,397,009</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 5,380,520         | (1,389,879)       | 6,974,960         | 9,614         | 395,598       | (609,767)        | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                   |               |               |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 6,688,725         | 4,294,449         | 1,515,763         | 2,583         | 12,814        | 863,118          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          |              | 14,595,754        | 9,833,377         | 2,771,863         | 3,769         | 26,271        | 1,960,474        | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>14,665,691</u> | <u>10,584,740</u> | <u>2,580,613</u>  | <u>2,809</u>  | <u>15,552</u> | <u>1,481,975</u> | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | (69,937)          | (751,363)         | 191,250           | 960           | 10,719        | 478,499          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      |              | (4,960)           | (3,475)           | (1,063)           | 0             | (8)           | (413)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(73,998)</u>   | <u>(295,768)</u>  | <u>316,139</u>    | <u>364</u>    | <u>22,324</u> | <u>(117,058)</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 6,539,830         | 3,243,843         | 2,022,089         | 3,907         | 45,849        | 1,224,146        | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (1,159,310)       | (4,633,723)       | 4,952,871         | 5,707         | 349,749       | (1,833,913)      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | (1,575,466)       | 1,683,976         | 1,940         | 118,915       | (623,531)        | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (394,165)         | (1,575,466)       | 1,683,976         | 1,940         | 118,915       | (623,531)        | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 24 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMPANY   | GS-RESIDENTIAL  | GS-OTHER        | IUS         | DS-ML        | DS/IS           | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|-----------------|-------------|--------------|-----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)             | (G)         | (H)          | (I)             | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$              | \$          | \$           | \$              | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                 |             |              |                 |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     |              | 35,760          | 24,092          | 6,791           | 9           | 64           | 4,804           | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                 |             |              |                 |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL |              | <u>(54,526)</u> | <u>(36,735)</u> | <u>(10,354)</u> | <u>(14)</u> | <u>(98)</u>  | <u>(7,324)</u>  | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | (54,526)        | (36,735)        | (10,354)        | (14)        | (98)         | (7,324)         | 0        | 0        |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(90,286)</u> | <u>(60,827)</u> | <u>(17,145)</u> | <u>(23)</u> | <u>(162)</u> | <u>(12,128)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (484,451)       | (1,636,293)     | 1,666,831       | 1,917       | 118,753      | (635,659)       | 0        | 0        |

TOTAL COMPANY  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 25 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO.                            | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMPANY      | GS-RESIDENTIAL     | GS-OTHER          | IUS           | DS-ML          | DS/IS             | NOT USED | NOT USED |
|-------------------------------------|-----------|-----------------------------------|--------------|--------------------|--------------------|-------------------|---------------|----------------|-------------------|----------|----------|
|                                     | (A)       | (B)                               | (C)          | (D)                | (E)                | (F)               | (G)           | (H)            | (I)               | (J)      | (K)      |
|                                     |           |                                   |              | \$                 | \$                 | \$                | \$            | \$             | \$                | \$       | \$       |
| 1                                   | 101 & 106 | GROSS PLANT [1]                   |              | 437,889,787        | 295,013,607        | 83,159,131        | 112,247       | 787,862        | 58,816,970        | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                    |                   |               |                |                   |          |          |
| 2                                   | 108-111   | DEPRECIATION RESERVE [2]          |              | <u>151,708,251</u> | <u>107,847,172</u> | <u>27,094,739</u> | <u>31,998</u> | <u>165,283</u> | <u>16,569,072</u> | <u>0</u> | <u>0</u> |
| 3                                   |           | NET PLANT                         |              | 286,181,536        | 187,166,435        | 56,064,392        | 80,249        | 622,578        | 42,247,898        | 0        | 0        |
| 4                                   | 190.00    | ACCUMULATED DEF INCOME TAX        |              | \$5,385,973        | 3,628,611          | 1,022,844         | 1,391         | 9,694          | 723,433           | 0        | 0        |
|                                     |           | LESS:                             |              |                    |                    |                   |               |                |                   |          |          |
| 5                                   | 252.00    | CUSTOMER ADVANCES                 |              | 0                  | 0                  | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 6                                   | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT |              | 0                  | 0                  | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 7                                   | 282.00    | ACCUMULATED DEF INCOME TAX        |              | 86,167,687         | 58,052,454         | 16,364,008        | 22,253        | 155,093        | 11,573,878        | 0        | 0        |
| 8                                   | 283.00    | ACCUMULATED DEF INCOME TAX        |              | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>          | <u>0</u> | <u>0</u> |
| 9                                   |           | NET RATE BASE                     |              | 205,399,822        | 132,742,592        | 40,723,228        | 59,387        | 477,179        | 31,397,453        | 0        | 0        |
| 10                                  |           | PLUS WORKING CAPITAL:             |              |                    |                    |                   |               |                |                   |          |          |
| 11                                  |           | CASH WORKING CAPITAL @ 1/8 OF     |              |                    |                    |                   |               |                |                   |          |          |
| 12                                  |           | O & M EXCLUDING GAS COST [3]      |              | 5,636,879          | 4,071,767          | 1,039,778         | 1,141         | 7,465          | 516,728           | 0        | 0        |
| 13                                  | 151.00    | FUEL STOCK                        |              | 0                  | 0                  | 0                 | 0             | 0              | 0                 | 0        | 0        |
| 14                                  | 154.00    | MATERIALS & SUPPLIES              |              | 82,011             | 55,251             | 15,574            | 21            | 148            | 11,016            | 0        | 0        |
| 15                                  | 165.00    | PREPAYMENTS                       |              | 469,518            | 342,291            | 80,997            | 97            | 568            | 45,565            | 0        | 0        |
| 16                                  | 164.00    | GAS STORED UNDERGROUND - FSS      |              | <u>41,772,551</u>  | <u>25,456,610</u>  | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>       | <u>723,083</u>    | <u>0</u> | <u>0</u> |
| 17                                  |           | RATE BASE                         |              | 253,360,781        | 162,668,511        | 57,415,257        | 97,824        | 485,360        | 32,693,845        | 0        | 0        |
| REFERENCES: [1] PAGE 6, [2] PAGE 8, |           |                                   |              |                    |                    |                   |               |                |                   |          |          |
|                                     |           | [3] TOTAL O & M EXPENSE           |              | 66,570,979         | 46,381,230         | 15,962,069        | 34,134        | 59,720         | 4,133,824         | 0        | 0        |
|                                     |           | LESS: COST OF GAS                 |              | <u>21,475,950</u>  | <u>13,807,095</u>  | <u>7,643,847</u>  | <u>25,009</u> | <u>0</u>       | <u>0</u>          | <u>0</u> | <u>0</u> |
|                                     |           | O & M EXCL. GAS COST              |              | 45,095,029         | 32,574,135         | 8,318,222         | 9,125         | 59,720         | 4,133,824         | 0        | 0        |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN - @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | CLASSIFICATION FACTOR | TOTAL             |                   |                  |                  |
|----------|----------|--|-----------------------|-------------------|-------------------|------------------|------------------|
|          | (A)      | (B)                                    | (C)                   | COMPANY (D)       | CUSTOMER (E)      | COMMODITY (F)    | DEMAND (G)       |
|          |          |  |                       | \$                | \$                | \$               | \$               |
| 1        |          | TOTAL REVENUES                         |                       | 92,682,167        | 45,398,449        | 29,819,555       | 17,464,163       |
| 2        |          | PROPOSED INCREASE                      |                       | <u>25,408,373</u> | <u>15,839,740</u> | <u>2,997,594</u> | <u>6,571,039</u> |
| 3        |          | TOTAL PROPOSED REVENUES                |                       | 118,090,539       | 61,238,189        | 32,817,149       | 24,035,201       |
| 4        |          | COST OF GAS                            |                       | 21,475,950        | 0                 | 21,475,950       | 0                |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |                       | 45,377,934        | 32,650,592        | 4,873,354        | 7,853,989        |
| 6        |          | DEPRECIATION & AMORTIZATION            |                       | 15,939,787        | 11,354,490        | 1,696,059        | 2,889,238        |
| 7        |          | FEDERAL INCOME TAX                     |                       | 7,781,828         | 4,197,390         | 839,380          | 2,745,059        |
| 8        |          | KENTUCKY STATE INCOME TAX              |                       | 1,416,521         | 760,318           | 152,341          | 503,862          |
| 9        |          | TAXES OTHER THAN INCOME                |                       | <u>4,790,881</u>  | <u>3,014,328</u>  | <u>661,123</u>   | <u>1,115,429</u> |
| 10       |          | TOTAL EXPENSES & TAXES                 |                       | 96,782,900        | 51,977,118        | 29,698,207       | 15,107,577       |
| 11       |          | OPERATING INCOME                       |                       | 21,307,639        | 9,261,071         | 3,118,942        | 8,927,624        |
| 12       |          | INTEREST EXPENSE                       |                       | <u>6,688,725</u>  | <u>3,100,705</u>  | <u>919,747</u>   | <u>2,668,272</u> |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |                       | 14,618,914        | 6,160,366         | 2,199,195        | 6,259,352        |
| 14       |          | RATE BASE                              |                       | 253,360,781       | 117,450,953       | 34,838,908       | 101,070,924      |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |                       | <b>8.41%</b>      | <b>7.89%</b>      | <b>8.95%</b>     | <b>8.83%</b>     |
| 16       |          | UNITIZED RETURN                        |                       | 1.00              | 0.94              | 1.06             | 1.05             |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN - @ AUTHORIZED RETURN  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 27 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | CLASSIFICATION FACTOR | TOTAL            |                  |                |                  |
|----------|----------|--|-----------------------|------------------|------------------|----------------|------------------|
|          | (A)      | (B)                                    | (C)                   | COMPANY (D)      | CUSTOMER (E)     | COMMODITY (F)  | DEMAND (G)       |
|          |          |  |                       | \$               | \$               | \$             | \$               |
| 1        |          | TOTAL REVENUES                         |                       | 118,090,544      | 62,258,641       | 32,504,353     | 23,327,553       |
| 2        |          | COST OF GAS                            |                       | 21,475,950       | 0                | 21,475,950     | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |                       | 45,377,934       | 32,661,954       | 4,869,872      | 7,846,109        |
| 4        |          | DEPRECIATION & AMORTIZATION            |                       | 15,939,787       | 11,354,490       | 1,696,059      | 2,889,238        |
| 5        |          | FEDERAL INCOME TAX                     |                       | 7,781,830        | 4,529,380        | 737,615        | 2,514,835        |
| 6        |          | KENTUCKY STATE INCOME TAX              |                       | 1,416,521        | 820,863          | 133,782        | 461,876          |
| 7        |          | TAXES OTHER THAN INCOME                |                       | <u>4,790,881</u> | <u>3,014,328</u> | <u>661,123</u> | <u>1,115,429</u> |
| 8        |          | TOTAL EXPENSES & TAXES                 |                       | 96,782,902       | 52,381,015       | 29,574,401     | 14,827,487       |
| 9        |          | OPERATING INCOME                       |                       | 21,307,642       | 9,877,625        | 2,929,952      | 8,500,066        |
| 10       |          | INTEREST EXPENSE                       |                       | <u>6,688,725</u> | <u>3,100,705</u> | <u>919,747</u> | <u>2,668,272</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |                       | 14,618,917       | 6,776,920        | 2,010,205      | 5,831,794        |
| 12       |          | RATE BASE                              |                       | 253,360,781      | 117,450,953      | 34,838,908     | 101,070,924      |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |                       | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b>     |
| 14       |          | UNITIZED RETURN                        |                       | 1.00             | 1.00             | 1.00           | 1.00             |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 28 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | CLASSIFICATION FACTOR<br>(B) | Total Company<br>(C) | CUSTOMER<br>(D)  | COMMODITY<br>(E) | DEMAND<br>(F)    |
|----------|--|------------------------------|----------------------|------------------|------------------|------------------|
| 1        | OPERATING REVENUE                        |                              | 25,408,378           | 16,860,192       | 2,684,798        | 5,863,390        |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                              | 0                    | 0                | 0                | 0                |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                              | 234,603              | 155,675          | 24,790           | 54,138           |
| 4        | LESS: PSC FEES @ 0.00190100              |                              | <u>48,301</u>        | <u>32,051</u>    | <u>5,104</u>     | <u>11,146</u>    |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                              | 25,125,474           | 16,672,466       | 2,654,904        | 5,798,106        |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                              | <u>1,507,528</u>     | <u>1,000,348</u> | <u>159,294</u>   | <u>347,886</u>   |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                              | 23,617,946           | 15,672,118       | 2,495,610        | 5,450,220        |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                              | <u>8,266,281</u>     | <u>5,485,241</u> | <u>873,463</u>   | <u>1,907,577</u> |
| 9        | OPERATING INCOME                         |                              | 15,351,665           | 10,186,877       | 1,622,147        | 3,542,643        |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 29 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND           |
|----------|----------|-------------------------------------|-----------------------|------------------|------------------|----------------|------------------|
|          | (A)      | (B)                                 | (C)                   | (D)              | (E)              | (F)            | (G)              |
|          |          |                                     |                       | \$               | \$               | \$             | \$               |
| 1        |          | TOTAL REVENUES [1]                  |                       | 92,682,167       | 45,398,449       | 29,819,555     | 17,464,163       |
| 2        |          | COST OF GAS                         |                       | 21,475,950       | 0                | 21,475,950     | 0                |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |                       | 45,095,030       | 32,474,228       | 4,839,978      | 7,780,825        |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |                       | 15,939,787       | 11,354,490       | 1,696,059      | 2,889,238        |
| 5        |          | FEDERAL INCOME TAX [4]              |                       | (484,451)        | (955,861)        | (135,848)      | 607,258          |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |                       | (91,007)         | (179,485)        | (25,512)       | 113,990          |
| 7        |          | TAXES OTHER THAN INCOME [6]         |                       | <u>4,790,881</u> | <u>3,014,328</u> | <u>661,123</u> | <u>1,115,429</u> |
| 8        |          | TOTAL EXPENSES & TAXES              |                       | 86,726,189       | 45,707,700       | 28,511,750     | 12,506,740       |
| 9        |          | OPERATING INCOME                    |                       | 5,955,978        | (309,251)        | 1,307,805      | 4,957,423        |
| 10       |          | INTEREST EXPENSE [7]                |                       | <u>6,688,725</u> | <u>3,100,705</u> | <u>919,747</u> | <u>2,668,272</u> |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |                       | (732,747)        | (3,409,956)      | 388,058        | 2,289,151        |
| 12       |          | RATE BASE [8]                       |                       | 253,360,781      | 117,450,953      | 34,838,908     | 101,070,924      |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |                       | <b>2.35%</b>     | <b>-0.26%</b>    | <b>3.75%</b>   | <b>4.90%</b>     |
| 14       |          | UNITIZED RETURN                     |                       | 1.00             | (0.11)           | 1.60           | 2.09             |

REFERENCES: [1] PAGE 36, [2] PAGE 44, [3] PAGE 35, [4] PAGE 49, [5] PAGE 47, [6] PAGE 45, [7] PAGE 48, [8] PAGE 50.

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY        | DEMAND           |
|----------|----------|---|-----------------------|------------------|------------------|------------------|------------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)              | (F)              | (G)              |
|          |          |   |                       | \$               | \$               | \$               | \$               |
| 1        |          | INTANGIBLE PLANT                          |                       |                  |                  |                  |                  |
| 2        | 301.00   | ORGANIZATION                              | 7AVG                  | 521              | 316              | 76               | 129              |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7AVG                  | 74,348           | 45,126           | 10,809           | 18,413           |
| 4        | 303.10   | DIS SOFTWARE                              | 7AVG                  | 0                | 0                | 0                | 0                |
| 5        | 303.20   | FARA SOFTWARE                             | 7AVG                  | 0                | 0                | 0                | 0                |
| 6        | 303.30   | OTHER SOFTWARE                            | 7AVG                  | <u>8,341,319</u> | <u>5,062,839</u> | <u>1,212,680</u> | <u>2,065,800</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |                       | 8,416,188        | 5,108,281        | 1,223,565        | 2,084,342        |
| 8        |          | PRODUCTION PLANT                          |                       |                  |                  |                  |                  |
| 9        | 304.10   | LAND                                      | 2                     | 0                | 0                | 0                | 0                |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0                | 0                | 0                |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>         | <u>0</u>         | <u>0</u>         |
| 12       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0                | 0                | 0                |
| 13       |          | DISTRIBUTION PLANT                        |                       |                  |                  |                  |                  |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 20                    | 206              | 67               | 52               | 88               |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 20                    | 877,756          | 284,503          | 219,439          | 373,814          |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 20                    | 661,306          | 214,346          | 165,327          | 281,634          |
| 17       | 374.50   | RIGHTS OF WAY                             | 20                    | 2,729,828        | 884,806          | 682,457          | 1,162,565        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 20                    | 2,125            | 689              | 531              | 905              |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 20                    | 0                | 0                | 0                | 0                |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 20                    | 2,176,686        | 705,518          | 544,172          | 926,996          |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 20                    | 46,211           | 14,978           | 11,553           | 19,680           |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0                | 0                | 0                |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7AVG                  | 8,761,416        | 5,317,820        | 1,273,755        | 2,169,841        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7AVG                  | 259,809          | 157,693          | 37,772           | 64,344           |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 20                    | 0                | 0                | 0                | 0                |
| 26       | 376.00   | MAINS                                     | 20                    | 221,300,854      | 71,729,139       | 55,325,214       | 94,246,501       |
| 27       | 376.00   | DIRECT MAINS                              | 20                    | 11,682           | 3,786            | 2,920            | 4,975            |
| 28       | 378.10   | M & R GENERAL                             | 20                    | 518,504          | 168,060          | 129,626          | 220,818          |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 20                    | 9,175,090        | 2,973,876        | 2,293,773        | 3,907,441        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 20                    | 45,443           | 14,729           | 11,361           | 19,353           |
| 31       | 379.10   | STA EQUIP - CITY                          | 20                    | 254,901          | 82,620           | 63,725           | 108,556          |
| 32       | 380.00   | SERVICES                                  | 15                    | 127,467,343      | 127,467,343      | 0                | 0                |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND           |
|----------|----------|---------------------------------------|-----------------------|------------------|------------------|----------------|------------------|
|          | (A)      | (B)                                   | (C)                   | (D)              | (E)              | (F)            | (G)              |
|          |          |                                       |                       | \$               | \$               | \$             | \$               |
| 1        | 380.00   | DIRECT SERVICES                       | 15                    | 0                | 0                | 0              | 0                |
| 2        | 381.00   | METERS                                | 16                    | 22,789,579       | 22,789,579       | 0              | 0                |
| 3        | 382.00   | METER INSTALLATIONS                   | 16                    | 9,462,175        | 9,462,175        | 0              | 0                |
| 4        | 383.00   | HOUSE REGULATORS                      | 16                    | 5,770,311        | 5,770,311        | 0              | 0                |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 2,257,522        | 2,257,522        | 0              | 0                |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 2,697,547        | 2,697,547        | 0              | 0                |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 677,829          | 677,829          | 0              | 0                |
| 8        | 387.20   | ODORIZATION                           | 7AVG                  | 0                | 0                | 0              | 0                |
| 9        | 387.41   | TELEPHONE                             | 7AVG                  | 735,771          | 446,583          | 106,968        | 182,220          |
| 10       | 387.42   | RADIO                                 | 7AVG                  | 795,187          | 482,646          | 115,606        | 196,935          |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7AVG                  | 133,590          | 81,084           | 19,422         | 33,085           |
| 12       | 387.45   | TELEMETERING                          | 7AVG                  | 3,779,585        | 2,294,053        | 549,485        | 936,047          |
| 13       | 387.46   | CIS                                   | 7AVG                  | <u>113,644</u>   | <u>68,977</u>    | <u>16,522</u>  | <u>28,145</u>    |
| 14       |          | TOTAL DISTRIBUTION PLANT              |                       | 423,501,900      | 257,048,279      | 61,569,680     | 104,883,943      |
| 15       |          | GENERAL PLANT                         |                       |                  |                  |                |                  |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7AVG                  | 735,278          | 446,284          | 106,896        | 182,098          |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7AVG                  | 18,816           | 11,421           | 2,736          | 4,660            |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7AVG                  | 1,257,641        | 763,337          | 182,839        | 311,466          |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7AVG                  | 95,778           | 58,133           | 13,924         | 23,720           |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7AVG                  | 24,462           | 14,847           | 3,556          | 6,058            |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7AVG                  | 24,241           | 14,713           | 3,524          | 6,003            |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7AVG                  | 0                | 0                | 0              | 0                |
| 23       | 393.00   | STORES EQUIPMENT                      | 7AVG                  | 0                | 0                | 0              | 0                |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7AVG                  | 0                | 0                | 0              | 0                |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7AVG                  | 3,259,030        | 1,978,098        | 473,805        | 807,127          |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7AVG                  | 9,258            | 5,619            | 1,346          | 2,293            |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7AVG                  | 253,135          | 153,643          | 36,801         | 62,691           |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7AVG                  | 0                | 0                | 0              | 0                |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7AVG                  | <u>294,060</u>   | <u>178,482</u>   | <u>42,751</u>  | <u>72,827</u>    |
| 30       |          | TOTAL GENERAL PLANT                   |                       | <u>5,971,699</u> | <u>3,624,577</u> | <u>868,178</u> | <u>1,478,943</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |                       | 437,889,787      | 265,781,137      | 63,661,423     | 108,447,228      |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION RESERVE ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND         |
|----------|----------|---|-----------------------|------------------|------------------|----------------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)              | (F)            | (G)            |
|          |          |   |                       | \$               | \$               | \$             | \$             |
| 1        |          | INTANGIBLE PLANT                          |                       |                  |                  |                |                |
| 2        | 301.00   | ORGANIZATION                              | 7AVG                  | 0                | 0                | 0              | 0              |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7AVG                  | 49,104           | 29,804           | 7,139          | 12,161         |
| 4        | 303.10   | DIS SOFTWARE                              | 7AVG                  | 0                | 0                | 0              | 0              |
| 5        | 303.20   | FARA SOFTWARE                             | 7AVG                  | 0                | 0                | 0              | 0              |
| 6        | 303.30   | OTHER SOFTWARE                            | 7AVG                  | <u>3,424,538</u> | <u>2,078,554</u> | <u>497,867</u> | <u>848,117</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |                       | 3,473,642        | 2,108,358        | 505,006        | 860,278        |
| 8        |          | PRODUCTION PLANT                          |                       |                  |                  |                |                |
| 9        | 304.10   | LAND                                      | 2                     | 0                | 0                | 0              | 0              |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0                | 0              | 0              |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>       |
| 12       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0                | 0              | 0              |
| 13       |          | DISTRIBUTION PLANT                        |                       |                  |                  |                |                |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 20                    | 0                | 0                | 0              | 0              |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 20                    | (523)            | (170)            | (131)          | (223)          |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 20                    | 184,637          | 59,845           | 46,159         | 78,632         |
| 17       | 374.50   | RIGHTS OF WAY                             | 20                    | 942,676          | 305,545          | 235,669        | 401,462        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 20                    | 2,063            | 669              | 516            | 879            |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 20                    | (78)             | (25)             | (20)           | (33)           |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 20                    | 497,862          | 161,370          | 124,466        | 212,027        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 20                    | 3,028            | 981              | 757            | 1,289          |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0                | 0              | 0              |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7AVG                  | 3,369,677        | 2,045,256        | 489,891        | 834,530        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7AVG                  | 199,220          | 120,918          | 28,963         | 49,339         |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 20                    | 0                | 0                | 0              | 0              |
| 26       | 376.00   | MAINS                                     | 20                    | 58,817,583       | 19,064,249       | 14,704,396     | 25,048,938     |
| 27       | 376.00   | DIRECT MAINS                              | 20                    | 8,703            | 2,821            | 2,176          | 3,706          |
| 28       | 378.10   | M & R GENERAL                             | 20                    | 372,072          | 120,598          | 93,018         | 158,456        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 20                    | 3,453,479        | 1,119,359        | 863,370        | 1,470,750      |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 20                    | 36,634           | 11,874           | 9,159          | 15,602         |
| 31       | 379.10   | STA EQUIP - CITY                          | 20                    | 267,731          | 86,778           | 66,933         | 114,020        |
| 32       | 380.00   | SERVICES                                  | 15                    | 61,085,053       | 61,085,053       | 0              | 0              |
| 33       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0                | 0              | 0              |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER         | COMMODITY      | DEMAND         |
|----------|----------|---------------------------------------|-----------------------|------------------|------------------|----------------|----------------|
|          | (A)      | (B)                                   | (C)                   | (D)              | (E)              | (F)            | (G)            |
|          |          |                                       |                       | \$               | \$               | \$             | \$             |
| 1        | 381.00   | METERS                                | 16                    | 6,025,045        | 6,025,045        | 0              | 0              |
| 2        | 382.00   | METER INSTALLATIONS                   | 16                    | 4,714,156        | 4,714,156        | 0              | 0              |
| 3        | 383.00   | HOUSE REGULATORS                      | 16                    | 1,568,587        | 1,568,587        | 0              | 0              |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 1,780,729        | 1,780,729        | 0              | 0              |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 823,118          | 823,118          | 0              | 0              |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 133,766          | 133,766          | 0              | 0              |
| 7        | 387.20   | ODORIZATION                           | 7AVG                  | (59,912)         | (36,364)         | (8,710)        | (14,838)       |
| 8        | 387.41   | TELEPHONE                             | 7AVG                  | 399,816          | 242,672          | 58,126         | 99,018         |
| 9        | 387.42   | RADIO                                 | 7AVG                  | 567,414          | 344,397          | 82,492         | 140,525        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7AVG                  | 50,650           | 30,742           | 7,364          | 12,544         |
| 11       | 387.45   | TELEMETERING                          | 7AVG                  | 529,513          | 321,393          | 76,982         | 131,139        |
| 12       | 387.46   | CIS                                   | 7AVG                  | <u>114,357</u>   | <u>69,410</u>    | <u>16,625</u>  | <u>28,322</u>  |
| 13       |          | TOTAL DISTRIBUTION PLANT              |                       | 145,887,056      | 100,202,772      | 16,898,201     | 28,786,084     |
| 14       |          | GENERAL PLANT                         |                       |                  |                  |                |                |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7AVG                  | (33,247)         | (20,180)         | (4,834)        | (8,234)        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7AVG                  | (11,355)         | (6,892)          | (1,651)        | (2,812)        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7AVG                  | 750,133          | 455,300          | 109,056        | 185,777        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7AVG                  | 27,035           | 16,409           | 3,930          | 6,695          |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7AVG                  | 6,309            | 3,829            | 917            | 1,562          |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7AVG                  | 15,095           | 9,162            | 2,195          | 3,738          |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7AVG                  | 37,937           | 23,026           | 5,515          | 9,395          |
| 22       | 393.00   | STORES EQUIPMENT                      | 7AVG                  | 0                | 0                | 0              | 0              |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7AVG                  | 185              | 112              | 27             | 46             |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7AVG                  | 1,333,005        | 809,079          | 193,795        | 330,130        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7AVG                  | 7,764            | 4,712            | 1,129          | 1,923          |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7AVG                  | 202,598          | 122,969          | 29,454         | 50,175         |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7AVG                  | 0                | 0                | 0              | 0              |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7AVG                  | 12,094           | <u>7,341</u>     | <u>1,758</u>   | <u>2,995</u>   |
| 29       |          | TOTAL GENERAL PLANT                   |                       | <u>2,347,553</u> | <u>1,424,867</u> | <u>341,291</u> | <u>581,390</u> |
| 30       |          | TOTAL PLANT RESERVE                   |                       | 151,708,251      | 103,735,997      | 17,744,498     | 30,227,752     |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
GROSS INTANGIBLE, PROD., & DIST. PLANT DEPRECIATION EXPENSE ALLOC.  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 34 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | CLASSIFICATION FACTOR | TOTAL COMPANY    | CUSTOMER       | COMMODITY      | DEMAND         |
|----------|----------|---|-----------------------|------------------|----------------|----------------|----------------|
|          | (A)      | (B)                                       | (C)                   | (D)              | (E)            | (F)            | (G)            |
|          |          |   |                       | \$               | \$             | \$             | \$             |
|          |          | INTANGIBLE PLANT                          |                       |                  |                |                |                |
| 1        | 301.00   | ORGANIZATION                              | 7AVG                  | 0                | 0              | 0              | 0              |
| 2        | 303.00   | MISC. INTANGIBLE PLANT                    | 7AVG                  | 2,478            | 1,504          | 360            | 614            |
| 3        | 303.10   | DIS SOFTWARE                              | 7AVG                  | 0                | 0              | 0              | 0              |
| 4        | 303.20   | FARA SOFTWARE                             | 7AVG                  | 0                | 0              | 0              | 0              |
| 5        | 303.30   | OTHER SOFTWARE                            | 7AVG                  | <u>1,271,617</u> | <u>771,820</u> | <u>184,871</u> | <u>314,927</u> |
| 6        |          | TOTAL INTANGIBLE PLANT                    |                       | 1,274,096        | 773,324        | 185,231        | 315,541        |
| 7        |          | PRODUCTION PLANT                          |                       |                  |                |                |                |
| 8        | 304.10   | LAND                                      | 2                     | 0                | 0              | 0              | 0              |
| 9        | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2                     | 0                | 0              | 0              | 0              |
| 10       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2                     | <u>0</u>         | <u>0</u>       | <u>0</u>       | <u>0</u>       |
| 11       |          | TOTAL PRODUCTION PLANT                    |                       | 0                | 0              | 0              | 0              |
| 12       |          | DISTRIBUTION PLANT                        |                       |                  |                |                |                |
| 13       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 20                    | 0                | 0              | 0              | 0              |
| 14       | 374.20   | LAND - OTHER DISTRIBUTION                 | 20                    | 0                | 0              | 0              | 0              |
| 15       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 20                    | 11,508           | 3,730          | 2,877          | 4,901          |
| 16       | 374.50   | RIGHTS OF WAY                             | 20                    | 35,215           | 11,414         | 8,804          | 14,997         |
| 17       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 20                    | 72               | 23             | 18             | 31             |
| 18       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 20                    | 0                | 0              | 0              | 0              |
| 19       | 375.40   | STRUC & IMPROV-REGULATING                 | 20                    | 69,888           | 22,652         | 17,472         | 29,764         |
| 20       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          | 20                    | 744              | 241            | 186            | 317            |
| 21       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8                     | 0                | 0              | 0              | 0              |
| 22       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7AVG                  | 185,730          | 112,730        | 27,002         | 45,998         |
| 23       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7AVG                  | 33,049           | 20,059         | 4,805          | 8,185          |
| 24       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 20                    | 0                | 0              | 0              | 0              |
| 25       | 376.00   | MAINS                                     | 20                    | 5,087,613        | 1,649,023      | 1,271,903      | 2,166,687      |
| 26       | 376.00   | DIRECT MAINS                              | 20                    | 151              | 49             | 38             | 64             |
| 27       | 378.10   | M & R GENERAL                             | 20                    | 17,220           | 5,581          | 4,305          | 7,334          |
| 28       | 378.20   | M & R GENERAL - REGULATING                | 20                    | 304,399          | 98,663         | 76,100         | 129,636        |
| 29       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 20                    | 1,512            | 490            | 378            | 644            |
| 30       | 379.10   | STA EQUIP - CITY                          | 20                    | 0                | 0              | 0              | 0              |
| 31       | 380.00   | SERVICES                                  | 15                    | 6,496,995        | 6,496,995      | 0              | 0              |
| 32       | 380.00   | DIRECT SERVICES                           | 15                    | 0                | 0              | 0              | 0              |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 35 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER   | COMMODITY | DEMAND    |
|----------|----------|---------------------------------------|-----------------------|---------------|------------|-----------|-----------|
|          | (A)      | (B)                                   | (C)                   | (D)           | (E)        | (F)       | (G)       |
|          |          |                                       |                       | \$            | \$         | \$        | \$        |
| 1        | 381.00   | METERS                                | 16                    | 1,172,264     | 1,172,264  | 0         | 0         |
| 2        | 382.00   | METER INSTALLATIONS                   | 16                    | 230,831       | 230,831    | 0         | 0         |
| 3        | 383.00   | HOUSE REGULATORS                      | 16                    | 157,520       | 157,520    | 0         | 0         |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16                    | 22,800        | 22,800     | 0         | 0         |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17                    | 158,316       | 158,316    | 0         | 0         |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              | 17                    | 13,065        | 13,065     | 0         | 0         |
| 7        | 387.20   | ODORIZATION                           | 7AVG                  | 0             | 0          | 0         | 0         |
| 8        | 387.41   | TELEPHONE                             | 7AVG                  | 27,516        | 16,701     | 4,000     | 6,815     |
| 9        | 387.42   | RADIO                                 | 7AVG                  | 29,736        | 18,049     | 4,323     | 7,364     |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7AVG                  | 4,992         | 3,030      | 726       | 1,236     |
| 11       | 387.45   | TELEMETERING                          | 7AVG                  | 140,832       | 85,479     | 20,474    | 34,878    |
| 12       | 387.46   | CIS                                   | 7AVG                  | 4,248         | 2,578      | 618       | 1,052     |
| 13       |          | TOTAL DISTRIBUTION PLANT              |                       | 14,206,216    | 10,302,283 | 1,444,029 | 2,459,903 |
| 14       |          | GENERAL PLANT                         |                       |               |            |           |           |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7AVG                  | 36,561        | 22,191     | 5,315     | 9,055     |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7AVG                  | 1,260         | 765        | 183       | 312       |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7AVG                  | 253,397       | 153,802    | 36,839    | 62,756    |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7AVG                  | 8,760         | 5,317      | 1,274     | 2,169     |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7AVG                  | 2,244         | 1,362      | 326       | 556       |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7AVG                  | 972           | 590        | 141       | 241       |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7AVG                  | 0             | 0          | 0         | 0         |
| 22       | 393.00   | STORES EQUIPMENT                      | 7AVG                  | 0             | 0          | 0         | 0         |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7AVG                  | 0             | 0          | 0         | 0         |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7AVG                  | 129,657       | 78,696     | 18,850    | 32,111    |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7AVG                  | 468           | 284        | 68        | 116       |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7AVG                  | 6,552         | 3,977      | 953       | 1,623     |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7AVG                  | 19,604        | 11,899     | 2,850     | 4,855     |
| 28       |          | TOTAL GENERAL PLANT                   |                       | 459,475       | 278,883    | 66,799    | 113,794   |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |                       | 15,939,787    | 11,354,490 | 1,696,059 | 2,889,238 |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL       |              |               |            |
|----------|----------|------------------------------|-----------------------|-------------|--------------|---------------|------------|
|          | (A)      | (B)                          | (C)                   | COMPANY (D) | CUSTOMER (E) | COMMODITY (F) | DEMAND (G) |
|          |          |                              |                       | \$          | \$           | \$            | \$         |
| 1        |          | OPERATING REVENUE            |                       |             |              |               |            |
| 2        | 480.00   | RESIDENTIAL SALES            | 22                    | 49,696,061  | 22,747,863   | 18,048,453    | 8,899,746  |
| 3        | 481.10   | COMMERCIAL SALES             | 22                    | 18,520,317  | 7,236,911    | 8,452,078     | 2,831,328  |
| 4        | 481.20   | INDUSTRIAL SALES             | 22                    | 1,458,726   | 565,779      | 671,596       | 221,351    |
| 5        |          | TOTAL SALES REVENUE          |                       | 69,675,105  | 30,550,553   | 27,172,126    | 11,952,425 |
| 6        | 487.00   | FORFEITED DISCOUNTS          | 22                    | 476,000     | 301,708      | 70,271        | 104,021    |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6                     | 137,000     | 137,000      | 0             | 0          |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  | 22                    | 21,807,062  | 13,822,188   | 2,577,158     | 5,407,716  |
| 9        | 495.00   | OTHER                        | 6                     | 587,000     | 587,000      | 0             | 0          |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |                       | 23,007,062  | 14,847,896   | 2,647,429     | 5,511,737  |
| 11       |          | TOTAL OPERATING REVENUE      |                       | 92,682,167  | 45,398,449   | 29,819,555    | 17,464,163 |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
PRODUCTION EXPENSE ALLOCATION  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 37 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER | COMMODITY         | DEMAND   |
|----------|-----------|-----------------------------------|-----------------------|-------------------|----------|-------------------|----------|
|          | (A)       | (B)                               | (C)                   | (D)               | (E)      | (F)               | (G)      |
|          |           |                                   |                       | \$                | \$       | \$                | \$       |
| 1        |           | OPERATING EXPENSES                |                       |                   |          |                   |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |                       |                   |          |                   |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2                     | 0                 | 0        | 0                 | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2                     | 2,139             | 0        | 0                 | 2,139    |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2                     | 0                 | 0        | 0                 | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |                       | 2,139             | 0        | 0                 | 2,139    |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |                       |                   |          |                   |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2                     | 0                 | 0        | 0                 | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2                     | 0                 | 0        | 0                 | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2                     | 0                 | 0        | 0                 | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |                       | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |                       | 2,139             | 0        | 0                 | 2,139    |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |                       |                   |          |                   |          |
| 16       | 803 - 806 |                                   |                       |                   |          |                   |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           | 9                     | 21,475,950        | 0        | 21,475,950        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9                     | 0                 | 0        | 0                 | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9                     | 341,557           | 0        | 341,557           | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9                     | <u>0</u>          | <u>0</u> | <u>0</u>          | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |                       | <u>21,817,507</u> | <u>0</u> | <u>21,817,507</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |                       | 21,819,646        | 0        | 21,817,507        | 2,139    |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 38 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | CLASSIFICATION FACTOR | TOTAL          |               |               |               |
|----------|----------|----------------------------|-----------------------|----------------|---------------|---------------|---------------|
|          | (A)      | (B)                        | (C)                   | COMPANY (D)    | CUSTOMER (E)  | COMMODITY (F) | DEMAND (G)    |
|          |          |                            |                       | \$             | \$            | \$            | \$            |
| 1        |          | DISTRIBUTION EXPENSES      |                       |                |               |               |               |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10AVG                 | 97,461         | 72,178        | 10,022        | 15,261        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4                     | 66,644         | 0             | 66,644        | 0             |
| 4        | 874      | MAINS & SERVICES           | 14AVG                 | 1,726,536      | 986,084       | 273,886       | 466,565       |
| 5        | 875      | M & R - GENERAL            | 18AVG                 | 82,347         | 26,691        | 20,587        | 35,070        |
| 6        | 876      | M & R - INDUSTRIAL         | 8                     | 38,736         | 38,736        | 0             | 0             |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16                    | 1,279,637      | 1,279,637     | 0             | 0             |
| 8        | 879      | CUSTOMER INSTALLATION      | 16                    | 1,500,691      | 1,500,691     | 0             | 0             |
| 9        | 880      | OTHER                      | 10AVG                 | 547,972        | 405,822       | 56,348        | 85,802        |
| 10       | 881      | RENTS                      | 10AVG                 | <u>0</u>       | <u>0</u>      | <u>0</u>      | <u>0</u>      |
| 11       |          | TOTAL OPERATION            |                       | 5,340,024      | 4,309,839     | 427,487       | 602,698       |
| 12       |          | MAINTENANCE                |                       |                |               |               |               |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10AVG                 | 8,649          | 6,405         | 889           | 1,354         |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18AVG                 | 2,509          | 813           | 627           | 1,069         |
| 15       | 887      | MAINS                      | 18AVG                 | 926,354        | 300,254       | 231,589       | 394,511       |
| 16       | 889      | M & R - GENERAL            | 18AVG                 | 138,594        | 44,922        | 34,649        | 59,024        |
| 17       | 890      | M & R - INDUSTRIAL         | 8                     | 19,419         | 19,419        | 0             | 0             |
| 18       | 892      | SERVICES                   | 15                    | 298,657        | 298,657       | 0             | 0             |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16                    | 26,851         | 26,851        | 0             | 0             |
| 20       | 894      | OTHER EQUIPMENT            | 10AVG                 | <u>124,180</u> | <u>91,966</u> | <u>12,769</u> | <u>19,444</u> |
| 21       |          | TOTAL MAINTENANCE          |                       | 1,545,213      | 789,287       | 280,523       | 475,402       |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER | COMMODITY | DEMAND   |
|----------|----------|----------------------------------|-----------------------|---------------|----------|-----------|----------|
|          | (A)      | (B)                              | (C)                   | (D)           | (E)      | (F)       | (G)      |
|          |          |                                  |                       | \$            | \$       | \$        | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |                       |               |          |           |          |
| 2        | 901      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 3        | 902      | METER READING                    | 6                     | 165,331       | 165,331  | 0         | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6                     | 692,556       | 692,556  | 0         | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21                    | 0             | 0        | 0         | 0        |
| 6        | 905      | MISC.                            | 6                     | 0             | 0        | 0         | 0        |
| 7        | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 9        | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |                       | 857,887       | 857,887  | 0         | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |                       |               |          |           |          |
| 13       | 907      | SUPERVISION                      | 6                     | 0             | 0        | 0         | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6                     | 12,982        | 12,982   | 0         | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6                     | 0             | 0        | 0         | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6                     | 0             | 0        | 0         | 0        |
| 17       | 920      | SALARIES                         | 6                     | 0             | 0        | 0         | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 0             | 0        | 0         | 0        |
| 19       | 931      | RENTS                            | 6                     | 0             | 0        | 0         | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>      | <u>0</u> | <u>0</u>  | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |                       | 12,982        | 12,982   | 0         | 0        |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
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 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND    |
|----------|----------|---------------------------------|-----------------------|---------------|-----------|-----------|-----------|
|          | (A)      | (B)                             | (C)                   | (D)           | (E)       | (F)       | (G)       |
|          |          |                                 |                       | \$            | \$        | \$        | \$        |
| 1        |          | SALES                           |                       |               |           |           |           |
| 2        | 911      | SUPERVISION                     | 6                     | 0             | 0         | 0         | 0         |
| 3        | 912      | DEMONSTRATION & SELLING         | 6                     | 0             | 0         | 0         | 0         |
| 4        | 913      | ADVERTISING                     | 6                     | 0             | 0         | 0         | 0         |
| 5        | 916      | MISC.                           | 6                     | 0             | 0         | 0         | 0         |
| 6        |          | TOTAL SALES                     |                       | 0             | 0         | 0         | 0         |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |                       | 7,756,106     | 5,969,995 | 708,010   | 1,078,100 |
| 8        |          | ADMINISTRATIVE & GENERAL        |                       |               |           |           |           |
| 9        | 920      | SALARIES                        | 12AVG                 | 1,597,984     | 1,229,993 | 145,871   | 222,120   |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12AVG                 | 0             | 0         | 0         | 0         |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12AVG                 | 0             | 0         | 0         | 0         |
| 12       | 923      | OUTSIDE SERVICES                | 12AVG                 | 4,636         | 3,569     | 423       | 644       |
| 13       | 924      | PROPERTY INSURANCE              | 12AVG                 | 0             | 0         | 0         | 0         |
| 14       | 925      | INJURIES AND DAMAGES            | 12AVG                 | 0             | 0         | 0         | 0         |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12AVG                 | 0             | 0         | 0         | 0         |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12AVG                 | 0             | 0         | 0         | 0         |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12AVG                 | 0             | 0         | 0         | 0         |
| 18       | 930.20   | MISC. - GENERAL                 | 12AVG                 | 0             | 0         | 0         | 0         |
| 19       | 931      | RENTS                           | 12AVG                 | 0             | 0         | 0         | 0         |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12AVG                 | 0             | 0         | 0         | 0         |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |                       |               |           |           |           |
| 22       |          | FURNITURE & EQUIPMENT           | 12AVG                 | 0             | 0         | 0         | 0         |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12AVG                 | 0             | 0         | 0         | 0         |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |                       | 1,602,620     | 1,233,562 | 146,294   | 222,764   |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |                       | 9,358,726     | 7,203,557 | 854,304   | 1,300,864 |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT | CLASSIFICATION             | TOTAL  |                |                |               |               |
|------|------|----------------------------|--------|----------------|----------------|---------------|---------------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | COMPANY        | CUSTOMER       | COMMODITY     | DEMAND        |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)           |
|      |      |                            |        | \$             | \$             | \$            | \$            |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |               |
| 2    | 870  | SUPERVISION & ENGINEERING  | 11AVG  | 783,470        | 454,082        | 122,787       | 206,601       |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 17,885         | 0              | 17,885        | 0             |
| 4    | 874  | MAINS & SERVICES           | 14AVG  | 4,797,660      | 2,740,110      | 761,069       | 1,296,481     |
| 5    | 875  | M & R - GENERAL            | 18AVG  | 118,379        | 38,370         | 29,595        | 50,415        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 29,602         | 29,602         | 0             | 0             |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 485,057        | 485,057        | 0             | 0             |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 655,941        | 655,941        | 0             | 0             |
| 9    | 880  | OTHER                      | 11AVG  | 1,211,487      | 702,151        | 189,866       | 319,470       |
| 10   | 881  | RENTS                      | 11AVG  | <u>82,157</u>  | <u>47,616</u>  | <u>12,876</u> | <u>21,665</u> |
| 11   |      | TOTAL OPERATION            |        | 8,181,638      | 5,152,929      | 1,134,078     | 1,894,632     |
| 12   |      | MAINTENANCE                |        |                |                |               |               |
| 13   | 885  | SUPERVISION & ENGINEERING  | 11AVG  | 2,571          | 1,490          | 403           | 678           |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18AVG  | 251,838        | 81,627         | 62,960        | 107,252       |
| 15   | 887  | MAINS                      | 18AVG  | 2,202,076      | 713,748        | 550,519       | 937,809       |
| 16   | 889  | M & R - GENERAL            | 18AVG  | 144,736        | 46,913         | 36,184        | 61,639        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 51,880         | 51,880         | 0             | 0             |
| 18   | 892  | SERVICES                   | 15     | 431,251        | 431,251        | 0             | 0             |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 118,176        | 118,176        | 0             | 0             |
| 20   | 894  | OTHER EQUIPMENT            | 11AVG  | <u>199,573</u> | <u>115,668</u> | <u>31,277</u> | <u>52,627</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 3,402,101      | 1,560,753      | 681,343       | 1,160,005     |

CLASSIFICATION  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - M & E  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | CLASSIFICATION FACTOR | TOTAL       |              |               |            |
|----------|----------|----------------------------------|-----------------------|-------------|--------------|---------------|------------|
|          | (A)      | (B)                              | (C)                   | COMPANY (D) | CUSTOMER (E) | COMMODITY (F) | DEMAND (G) |
|          |          |                                  |                       | \$          | \$           | \$            | \$         |
| 1        |          | CUSTOMER ACCOUNTS                |                       |             |              |               |            |
| 2        | 901      | SUPERVISION                      | 6                     | 0           | 0            | 0             | 0          |
| 3        | 902      | METER READING                    | 6                     | 399,502     | 399,502      | 0             | 0          |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6                     | 3,252,912   | 3,252,912    | 0             | 0          |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21                    | 1,027,585   | 1,027,585    | 0             | 0          |
| 6        | 905      | MISC.                            | 6                     | 1,073       | 1,073        | 0             | 0          |
| 7        | 920      | SALARIES                         | 6                     | 0           | 0            | 0             | 0          |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 253         | 253          | 0             | 0          |
| 9        | 931      | RENTS                            | 6                     | 0           | 0            | 0             | 0          |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>    | <u>0</u>     | <u>0</u>      | <u>0</u>   |
| 11       |          | TOTAL CUSTOMER ACCT.             |                       | 4,681,325   | 4,681,325    | 0             | 0          |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |                       |             |              |               |            |
| 13       | 907      | SUPERVISION                      | 6                     | (2,789)     | (2,789)      | 0             | 0          |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6                     | 1,198,971   | 1,198,971    | 0             | 0          |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6                     | 65,932      | 65,932       | 0             | 0          |
| 16       | 910      | MISCELLANEOUS                    | 6                     | 257,797     | 257,797      | 0             | 0          |
| 17       | 920      | SALARIES                         | 6                     | 0           | 0            | 0             | 0          |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6                     | 13,868      | 13,868       | 0             | 0          |
| 19       | 931      | RENTS                            | 6                     | 0           | 0            | 0             | 0          |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6                     | <u>0</u>    | <u>0</u>     | <u>0</u>      | <u>0</u>   |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |                       | 1,533,779   | 1,533,779    | 0             | 0          |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
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 WITNESS: C. NOTESTONE

| LINE | ACCT   | CLASSIFICATION                                 | TOTAL  |                   |                   |                  |                  |
|------|--------|--|--------|-------------------|-------------------|------------------|------------------|
| NO.  | NO.    | ACCOUNT TITLE                                  | FACTOR | COMPANY           | CUSTOMER          | COMMODITY        | DEMAND           |
|      | (A)    | (B)  | (C)    | (D)               | (E)               | (F)              | (G)              |
|      |        |  |        | \$                | \$                | \$               | \$               |
| 1    |        | SALES  |        |                   |                   |                  |                  |
| 2    | 911    | SUPERVISION                                    | 6      | 0                 | 0                 | 0                | 0                |
| 3    | 912    | DEMONSTRATION & SELLING                        | 6      | 37,477            | 37,477            | 0                | 0                |
| 4    | 913    | ADVERTISING                                    | 6      | 138,706           | 138,706           | 0                | 0                |
| 5    | 916    | MISC.  | 6      | 0                 | 0                 | 0                | 0                |
| 6    |        | TOTAL SALES                                    |        | <u>176,183</u>    | <u>176,183</u>    | <u>0</u>         | <u>0</u>         |
| 7    |        | TOTAL DISTRIBUTION EXPENSES                    |        | 17,975,026        | 13,104,969        | 1,815,421        | 3,054,637        |
| 8    |        | ADMINISTRATIVE & GENERAL                       |        |                   |                   |                  |                  |
| 9    | 920    | SALARIES                                       | 13AVG  | 2,963,302         | 2,069,785         | 311,121          | 582,396          |
| 10   | 921    | OFFICE SUPPLIES & EXPENSES                     | 13AVG  | 894,098           | 624,503           | 93,873           | 175,723          |
| 11   | 922    | ADMIN. EXPENSES TRANSFERED                     | 13AVG  | 0                 | 0                 | 0                | 0                |
| 12   | 923    | OUTSIDE SERVICES                               | 13AVG  | 7,869,789         | 5,496,831         | 826,260          | 1,546,698        |
| 13   | 924    | PROPERTY INSURANCE                             | 13AVG  | 81,748            | 57,099            | 8,583            | 16,066           |
| 14   | 925    | INJURIES AND DAMAGES                           | 13AVG  | 1,043,923         | 729,152           | 109,603          | 205,169          |
| 15   | 926    | EMPLOYEE PENSIONS & BENEFITS                   | 13AVG  | 3,351,467         | 2,340,907         | 351,875          | 658,684          |
| 16   | 926    | DIRECT EMPLOYEE PENSIONS & BENEFITS            | 13AVG  | 0                 | 0                 | 0                | 0                |
| 17   | 928    | REG COMMISSION EXP - GENERAL                   | 13AVG  | 197,762           | 138,131           | 20,763           | 38,867           |
| 18   | 928    | REGULATORY COMMISSION EXP - PSC @ 0.001901     | 13AVG  | 176,189           | 123,063           | 18,498           | 34,627           |
| 19   | 930.10 | MISC. - INSTITUT & GOODWILL ADV                | 13AVG  | 0                 | 0                 | 0                | 0                |
| 20   | 930.20 | MISC. - GENERAL                                | 13AVG  | (62,123)          | (43,391)          | (6,522)          | (12,209)         |
| 21   | 931    | RENTS  | 13AVG  | 642,175           | 448,542           | 67,423           | 126,211          |
| 22   | 935.13 | MAINT. STRUCTURES & IMPROV.                    | 13AVG  | 130               | 91                | 14               | 26               |
| 23   | 935.23 | MAINT. - GEN'L OFFICE<br>FURNITURE & EQUIPMENT | 13AVG  | 0                 | 0                 | 0                | 0                |
| 24   | 932    | MAINT.-MISCELLANEOUS                           | 13AVG  | <u>259,121</u>    | <u>180,989</u>    | <u>27,205</u>    | <u>50,927</u>    |
| 25   |        | TOTAL ADMIN & GENERAL - M & E                  |        | <u>17,417,581</u> | <u>12,165,702</u> | <u>1,828,696</u> | <u>3,423,185</u> |
| 26   |        | TOTAL O & M EXPENSE - M & E                    |        | 35,736,303        | 25,270,671        | 3,985,674        | 6,479,961        |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY        | DEMAND           |
|----------|----------|------------------------------|-----------------------|-------------------|-------------------|------------------|------------------|
|          | (A)      | (B)                          | (C)                   | (D)               | (E)               | (F)              | (G)              |
|          |          |                              |                       | \$                | \$                | \$               | \$               |
| 1        |          | LABOR                        |                       |                   |                   |                  |                  |
| 2        |          | PRODUCTION                   | PAGE 13               | 0                 | 0                 | 0                | 0                |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14               | 5,340,024         | 4,309,839         | 427,487          | 602,698          |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14               | 1,545,213         | 789,287           | 280,523          | 475,402          |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15               | 857,887           | 857,887           | 0                | 0                |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15               | 12,982            | 12,982            | 0                | 0                |
| 7        |          | SALES                        | PAGE 16               | 0                 | 0                 | 0                | 0                |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16               | <u>1,602,620</u>  | <u>1,233,562</u>  | <u>146,294</u>   | <u>222,764</u>   |
| 9        |          | TOTAL LABOR EXPENSE          |                       | 9,358,726         | 7,203,557         | 854,304          | 1,300,864        |
| 10       |          | M & E                        |                       |                   |                   |                  |                  |
| 11       |          | PRODUCTION                   | PAGE 13               | 343,696           | 0                 | 341,557          | 2,139            |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17               | 8,181,638         | 5,152,929         | 1,134,078        | 1,894,632        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17               | 3,402,101         | 1,560,753         | 681,343          | 1,160,005        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18               | 4,681,325         | 4,681,325         | 0                | 0                |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18               | 1,533,779         | 1,533,779         | 0                | 0                |
| 16       |          | SALES                        | PAGE 19               | 176,183           | 176,183           | 0                | 0                |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19               | <u>17,417,581</u> | <u>12,165,702</u> | <u>1,828,696</u> | <u>3,423,185</u> |
| 18       |          | TOTAL M & E EXPENSE          |                       | <u>35,736,303</u> | <u>25,270,671</u> | <u>3,985,674</u> | <u>6,479,961</u> |
| 19       |          | TOTAL O & M EXPENSES         |                       | 45,095,030        | 32,474,228        | 4,839,978        | 7,780,825        |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 45 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND    |
|----------|----------|----------------------------|-----------------------|---------------|-----------|-----------|-----------|
|          | (A)      | (B)                        | (C)                   | (D)           | (E)       | (F)       | (G)       |
|          |          |                            |                       | \$            | \$        | \$        | \$        |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7AVG                  | 4,136,779     | 2,510,855 | 601,414   | 1,024,509 |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12AVG                 | 654,102       | 503,473   | 59,709    | 90,920    |
| 3        | 408      | OTHER TAXES                | 12AVG                 | 0             | 0         | 0         | 0         |
| 4        |          | TOTAL TAXES OTHER THAN FIT |                       | 4,790,881     | 3,014,328 | 661,123   | 1,115,429 |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 46 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY        | DEMAND           |
|----------|----------|---|-----------------------|-------------------|-------------------|------------------|------------------|
|          | (A)      | (B)   | (C)                   | (D)               | (E)               | (F)              | (G)              |
|          |          |   |                       | \$                | \$                | \$               | \$               |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |                       | 5,380,519         | (1,444,597)       | 1,146,445        | 5,678,671        |
| 2        |          | LESS: RECONCILING ITEMS:                        |                       |                   |                   |                  |                  |
| 3        |          | IMPUTED INTEREST                                |                       | 6,688,725         | 3,100,705         | 919,747          | 2,668,272        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19AVG                 | 14,595,754        | 8,859,024         | 2,121,964        | 3,614,765        |
| 5        |          | BOOK DEPRECIATION                               |                       | <u>14,665,691</u> | <u>10,581,166</u> | <u>1,510,828</u> | <u>2,573,697</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |                       | (69,937)          | (1,722,142)       | 611,136          | 1,041,068        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12AVG                 | <u>(4,960)</u>    | <u>(3,818)</u>    | <u>(453)</u>     | <u>(689)</u>     |
| 8        |          | TOTAL RECONCILING ITEMS                         |                       | <u>6,613,828</u>  | <u>1,374,745</u>  | <u>1,530,430</u> | <u>3,708,651</u> |
| 9        |          | TAXABLE INCOME                                  |                       | (1,233,309)       | (2,819,342)       | (383,985)        | 1,970,020        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |                       | (73,999)          | (169,162)         | (23,039)         | 118,202          |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19AVG                 | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>         |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |                       | (73,999)          | (169,162)         | (23,039)         | 118,202          |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 47 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | CLASSIFICATION FACTOR | TOTAL COMPANY | CUSTOMER  | COMMODITY | DEMAND  |
|----------|----------|---|-----------------------|---------------|-----------|-----------|---------|
|          | (A)      | (B)                                     | (C)                   | (D)           | (E)       | (F)       | (G)     |
|          |          |   |                       | \$            | \$        | \$        | \$      |
| 1        |          | DEFERRED TAXES                          |                       |               |           |           |         |
| 2        |          | RECONCILIATION ITEMS:                   |                       |               |           |           |         |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19AVG                 | (17,008)      | (10,323)  | (2,473)   | (4,212) |
| 4        |          | TOTAL DEFERRED INCOME TAX               |                       | (17,008)      | (10,323)  | (2,473)   | (4,212) |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |                       | (91,007)      | (179,485) | (25,512)  | 113,990 |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 48 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | CLASSIFICATION FACTOR | TOTAL COMPANY     | CUSTOMER          | COMMODITY         | DEMAND            |
|----------|----------|--------------------------------------|-----------------------|-------------------|-------------------|-------------------|-------------------|
|          | (A)      | (B)                                  | (C)                   | (D)               | (E)               | (F)               | (G)               |
|          |          |                                      |                       | \$                | \$                | \$                | \$                |
| 1        |          | OPERATING REVENUE                    |                       | 92,682,167        | 45,398,449        | 29,819,555        | 17,464,163        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |                       | <u>87,301,647</u> | <u>46,843,046</u> | <u>28,673,110</u> | <u>11,785,492</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |                       | 5,380,519         | (1,444,597)       | 1,146,445         | 5,678,671         |
| 4        |          | LESS: RECONCILING ITEMS:             |                       |                   |                   |                   |                   |
| 5        |          | IMPUTED INTEREST                     |                       | 6,688,725         | 3,100,705         | 919,747           | 2,668,272         |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19AVG                 | 14,595,754        | 8,859,024         | 2,121,964         | 3,614,765         |
| 7        |          | BOOK DEPRECIATION                    |                       | <u>14,665,691</u> | <u>10,581,166</u> | <u>1,510,828</u>  | <u>2,573,697</u>  |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |                       | (69,937)          | (1,722,142)       | 611,136           | 1,041,068         |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12AVG                 | (4,960)           | <u>(3,818)</u>    | <u>(453)</u>      | <u>(689)</u>      |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |                       | <u>(73,999)</u>   | <u>(169,162)</u>  | <u>(23,039)</u>   | <u>118,202</u>    |
| 11       |          | TOTAL RECONCILING ITEMS              |                       | 6,539,829         | 1,205,583         | 1,507,391         | 3,826,853         |
| 12       |          | TAXABLE INCOME                       |                       | (1,159,310)       | (2,650,180)       | (360,946)         | 1,851,818         |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (901,061)         | (122,722)         | 629,618           |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19AVG                 | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>          |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |                       | (394,165)         | (901,061)         | (122,722)         | 629,618           |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 49 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | CLASSIFICATION FACTOR | TOTAL COMPANY   | CUSTOMER        | COMMODITY       | DEMAND          |
|----------|----------|-------------------------------------|-----------------------|-----------------|-----------------|-----------------|-----------------|
|          | (A)      | (B)                                 | (C)                   | (D)             | (E)             | (F)             | (G)             |
|          |          |                                     |                       | \$              | \$              | \$              | \$              |
| 1        |          | DEFERRED INCOME TAXES               |                       |                 |                 |                 |                 |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19AVG                 | 35,760          | 21,705          | 5,199           | 8,856           |
| 3        |          | OTHER TAX DEFERRALS                 |                       |                 |                 |                 |                 |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19AVG                 | <u>(54,526)</u> | <u>(33,095)</u> | <u>(7,927)</u>  | <u>(13,504)</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |                       | <u>(54,526)</u> | <u>(33,095)</u> | <u>(7,927)</u>  | <u>(13,504)</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |                       | <u>(90,286)</u> | <u>(54,800)</u> | <u>(13,126)</u> | <u>(22,360)</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |                       | (484,451)       | (955,861)       | (135,848)       | 607,258         |

CLASSIFICATION  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 50 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | CLASSIFICATION FACTOR | TOTAL COMPANY      | CUSTOMER           | COMMODITY         | DEMAND            |
|----------|-----------|-----------------------------------|-----------------------|--------------------|--------------------|-------------------|-------------------|
|          | (A)       | (B)                               | (C)                   | (D)                | (E)                | (F)               | (G)               |
|          |           |                                   |                       | \$                 | \$                 | \$                | \$                |
| 1        | 101 & 106 | GROSS PLANT [1]                   |                       | 437,889,787        | 265,781,137        | 63,661,423        | 108,447,228       |
|          |           | LESS:                             |                       |                    |                    |                   |                   |
| 2        | 108-111   | DEPRECIATION RESERVE [2]          |                       | <u>151,708,251</u> | <u>103,735,997</u> | <u>17,744,498</u> | <u>30,227,752</u> |
| 3        |           | NET PLANT                         |                       | 286,181,536        | 162,045,140        | 45,916,925        | 78,219,476        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX        | 19AVG                 | \$5,385,973        | 3,269,065          | 783,025           | 1,333,883         |
|          |           | LESS:                             |                       |                    |                    |                   |                   |
| 5        | 252.00    | CUSTOMER ADVANCES                 | 20                    | 0                  | 0                  | 0                 | 0                 |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT | 19AVG                 | 0                  | 0                  | 0                 | 0                 |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX        | 19AVG                 | 86,167,687         | 52,300,253         | 12,527,257        | 21,340,177        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX        | 19AVG                 | <u>0</u>           | <u>0</u>           | <u>0</u>          | <u>0</u>          |
| 9        |           | NET RATE BASE                     |                       | 205,399,822        | 113,013,952        | 34,172,693        | 58,213,182        |
| 10       |           | PLUS WORKING CAPITAL:             |                       |                    |                    |                   |                   |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF     |                       |                    |                    |                   |                   |
| 12       |           | O & M EXCLUDING GAS COST [3]      |                       | 5,636,879          | 4,059,279          | 604,997           | 972,603           |
| 13       | 151.00    | FUEL STOCK                        | 2                     | 0                  | 0                  | 0                 | 0                 |
| 14       | 154.00    | MATERIALS & SUPPLIES              | 7AVG                  | 82,011             | 49,777             | 11,923            | 20,311            |
| 15       | 165.00    | PREPAYMENTS                       | 13AVG                 | 469,518            | 327,945            | 49,295            | 92,277            |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS      | 2                     | <u>41,772,551</u>  | <u>0</u>           | <u>0</u>          | <u>41,772,551</u> |
| 17       |           | RATE BASE                         |                       | 253,360,781        | 117,450,953        | 34,838,908        | 101,070,924       |

REFERENCES: [1] PAGE 31, [2] PAGE 33,  
 [3] TOTAL O & M EXPENSE  
 LESS: COST OF GAS  
 O & M EXCL. GAS COST

|                   |            |                   |           |
|-------------------|------------|-------------------|-----------|
| 66,570,980        | 32,474,228 | 26,315,928        | 7,780,825 |
| <u>21,475,950</u> | <u>0</u>   | <u>21,475,950</u> | <u>0</u>  |
| 45,095,030        | 32,474,228 | 4,839,978         | 7,780,825 |

COLUMBIA GAS OF KENTUCKY, INC.

CLASSIFICATION FACTORS

CLASSIFICATION  
FORECASTED TEST YEAR - ORIGINAL FILING

FOR THE TWELVE MONTHS ENDED 12/31/2017

WITNESS: C. NOTESTONE

| LINE<br>NO. | DESCRIPTION<br>(A)                               | CLASSIFICATION<br>FACTOR<br>(B) | TOTAL          |                 |                  |               |
|-------------|--|---------------------------------|----------------|-----------------|------------------|---------------|
|             |  |                                 | COMPANY<br>(C) | CUSTOMER<br>(D) | COMMODITY<br>(E) | DEMAND<br>(F) |
| 1           | DEMAND DESIGN DAY                                | 1                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 2           | DESIGN DAY EXCL. INTERR DEMAND (MCF)             | 2                               | 100.000%       | 0.000%          | 0.000%           | 100.000%      |
| 3           | MINIMUM SYSTEM MAINS                             | 3                               | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 4           | COMMODITY THROUGHPUT                             | 4                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 5           | COMPOSITE OF 1 & 4 - DEMAND/COMMODITY            | 5                               | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 6           | CUSTOMER   | 6                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 7           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - C/D  | 7CD                             | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 8           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - D/C  | 7DC                             | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 9           | DIST. PLANT EXCL. ACCTS 375.70,375.71,387 - AVG  | 7AVG                            | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 10          | TOTAL PLANT ACCOUNT 385                          | 8                               | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 11          | GAS PURCHASE EXPENSE EX OFF SYST                 | 9                               | 100.000%       | 0.000%          | 100.000%         | 0.000%        |
| 12          | OTHER DIST. EXP - LABOR - C/D                    | 10CD                            | 100.000%       | 85.976%         | 1.091%           | 12.933%       |
| 13          | OTHER DIST. EXP - LABOR - D/C                    | 10DC                            | 100.000%       | 62.142%         | 19.475%          | 18.383%       |
| 14          | OTHER DIST. EXP - LABOR - AVG                    | 10AVG                           | 100.000%       | 74.059%         | 10.283%          | 15.658%       |
| 15          | OTHER DIST. EXP EXCL - M & E - C/D               | 11CD                            | 100.000%       | 78.028%         | 0.192%           | 21.780%       |
| 16          | OTHER DIST. EXP EXCL - M & E - D/C               | 11DC                            | 100.000%       | 37.888%         | 31.152%          | 30.960%       |
| 17          | OTHER DIST. EXP EXCL - M & E - AVG               | 11AVG                           | 100.000%       | 57.958%         | 15.672%          | 26.370%       |
| 18          | O & M EXCL A & G - LABOR - C/D                   | 12CD                            | 100.000%       | 87.551%         | 0.969%           | 11.481%       |
| 19          | O & M EXCL A & G - LABOR - D/C                   | 12DC                            | 100.000%       | 66.393%         | 17.288%          | 16.319%       |
| 20          | O & M EXCL A & G - LABOR - AVG                   | 12AVG                           | 100.000%       | 76.972%         | 9.128%           | 13.900%       |
| 21          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - C/D | 13CD                            | 100.000%       | 83.292%         | 0.129%           | 16.579%       |
| 22          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - D/C | 13DC                            | 100.000%       | 56.402%         | 20.869%          | 22.728%       |
| 23          | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E - AVG | 13AVG                           | 100.000%       | 69.847%         | 10.499%          | 19.654%       |
| 24          | ACCT 376/380 - MAINS/SERVICES - C/D              | 14CD                            | 100.000%       | 77.680%         | 0.000%           | 22.320%       |
| 25          | ACCT 376/380 - MAINS/SERVICES - D/C              | 14DC                            | 100.000%       | 36.547%         | 31.727%          | 31.727%       |
| 26          | ACCT 376/380 - MAINS/SERVICES - AVG              | 14AVG                           | 100.000%       | 57.113%         | 15.863%          | 27.023%       |
| 27          | DIRECT PLANT ACCT 380                            | 15                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 28          | DIRECT PLANT ACCTS 381                           | 16                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 29          | DIRECT PLANT ACCT 385                            | 17                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 30          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - C/D        | 18CD                            | 100.000%       | 64.825%         | 0.000%           | 35.175%       |
| 31          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - D/C        | 18DC                            | 100.000%       | 0.000%          | 50.000%          | 50.000%       |
| 32          | ACCOUNT 376 MAINS - COMPOSITE/PLANT - AVG        | 18AVG                           | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 33          | TOTAL PLANT - C/D                                | 19CD                            | 100.000%       | 79.545%         | 0.000%           | 20.455%       |
| 34          | TOTAL PLANT - D/C                                | 19DC                            | 100.000%       | 41.847%         | 29.076%          | 29.076%       |
| 35          | TOTAL PLANT - AVG                                | 19AVG                           | 100.000%       | 60.696%         | 14.538%          | 24.766%       |
| 36          | AVERAGE C/D & D/C                                | 20                              | 100.000%       | 32.413%         | 25.000%          | 42.588%       |
| 37          | UNCOLLECTIBLES                                   | 21                              | 100.000%       | 100.000%        | 0.000%           | 0.000%        |
| 38          | REVREQ   | 22                              | 100.000%       | 63.384%         | 11.818%          | 24.798%       |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML         | DS/IS            | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-------------------|-------------------|------------------|---------------|---------------|------------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)               | (E)               | (F)              | (G)           | (H)           | (I)              | (J)          | (K)          |
|          |          |  |              | \$                | \$                | \$               | \$            | \$            | \$               | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 45,398,446        | 29,313,652        | 12,096,475       | 14,627        | 305,353       | 3,668,339        | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>15,839,743</u> | <u>10,202,853</u> | <u>4,299,919</u> | <u>5,160</u>  | <u>(9)</u>    | <u>1,331,820</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 61,238,189        | 39,516,505        | 16,396,394       | 19,787        | 305,344       | 5,000,159        | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                 | 0                 | 0                | 0             | 0             | 0                | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 32,650,592        | 25,567,624        | 5,560,511        | 3,573         | 59,122        | 1,459,762        | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 11,354,493        | 8,858,023         | 1,833,698        | 1,260         | 17,038        | 644,474          | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 4,197,391         | 792,181           | 2,605,404        | 4,395         | 63,397        | 732,014          | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 760,317           | 130,885           | 481,617          | 815           | 11,901        | 135,098          | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>3,014,329</u>  | <u>2,245,282</u>  | <u>542,397</u>   | <u>467</u>    | <u>8,174</u>  | <u>218,009</u>   | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 51,977,122        | 37,593,995        | 11,023,627       | 10,510        | 159,632       | 3,189,357        | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 9,261,067         | 1,922,510         | 5,372,767        | 9,277         | 145,712       | 1,810,802        | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>3,100,706</u>  | <u>2,221,375</u>  | <u>568,871</u>   | <u>581</u>    | <u>12,144</u> | <u>297,735</u>   | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 6,160,361         | (298,865)         | 4,803,896        | 8,696         | 133,568       | 1,513,067        | 0            | 0            |
| 14       |          | RATE BASE                              |              | 117,450,953       | 84,142,977        | 21,548,139       | 22,004        | 459,994       | 11,277,857       | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>7.89%</b>      | <b>2.28%</b>      | <b>24.93%</b>    | <b>42.16%</b> | <b>31.68%</b> | <b>16.06%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00              | 0.27              | 2.96             | 5.01          | 3.77          | 1.91             | 0.00         | 0.00         |

CUSTOMER RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 53 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS           | DS-ML           | DS/IS           | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|---------------|-----------------|-----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)           | (H)             | (I)             | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$            | \$              | \$              | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 62,258,641       | 48,046,693       | 10,503,333     | 7,498         | 128,206         | 3,572,919       | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0             | 0               | 0               | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 32,661,953       | 25,662,602       | 5,494,895      | 3,436         | 57,149          | 1,443,871       | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 11,354,490       | 8,858,023        | 1,833,698      | 1,260         | 17,038          | 644,474         | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 4,529,384        | 3,567,365        | 688,174        | 397           | 5,768           | 267,680         | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 820,865          | 636,998          | 131,970        | 86            | 1,392           | 50,418          | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>3,014,329</u> | <u>2,245,282</u> | <u>542,397</u> | <u>467</u>    | <u>8,174</u>    | <u>218,009</u>  | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 52,381,021       | 40,970,270       | 8,691,134      | 5,646         | 89,521          | 2,624,452       | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 9,877,620        | 7,076,423        | 1,812,198      | 1,851         | 38,685          | 948,468         | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>3,100,706</u> | <u>2,221,375</u> | <u>568,871</u> | <u>581</u>    | <u>12,144</u>   | <u>297,735</u>  | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 6,776,914        | 4,855,048        | 1,243,327      | 1,270         | 26,541          | 650,733         | 0            | 0            |
| 12       |          | RATE BASE                              |              | 117,450,953      | 84,142,977       | 21,548,139     | 22,004        | 459,994         | 11,277,857      | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b>  | <b>8.41%</b>    | <b>8.41%</b>    | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00          | 1.00            | 1.00            | 0.00         | 0.00         |
| 15       |          | AVERAGE ANNUAL CUSTOMERS               |              | 135,979          | 121,915          | 13,977         | 2             | 6               | 79              | 0            | 0            |
| 16       |          | <b>MONTHLY CUSTOMER BASED COST [1]</b> |              | <b>38.15</b>     | <b>32.84</b>     | <b>62.62</b>   | <b>312.40</b> | <b>1,780.64</b> | <b>3,768.90</b> | <b>0.00</b>  | <b>0.00</b>  |

[1] LINE 1 / LINE 15 / 12 MONTHS.

CUSTOMER RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF PROFORMA ADJUSTMENTS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 54 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>CUSTOMER<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E)  | IUS<br>(F)     | DS-ML<br>(G)    | DS/IS<br>(H)    | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|--------------------------|-----------------------|------------------|----------------|-----------------|-----------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 16,860,192               | 18,733,041            | (1,593,142)      | (7,129)        | (177,147)       | (95,420)        | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                        | 0                     | 0                | 0              | 0               | 0               | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 155,675                  | 172,968               | (14,710)         | (66)           | (1,636)         | (881)           | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>32,051</u>            | <u>35,612</u>         | <u>(3,029)</u>   | <u>(14)</u>    | <u>(337)</u>    | <u>(181)</u>    | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 16,672,466               | 18,524,461            | (1,575,403)      | (7,049)        | (175,174)       | (94,358)        | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>1,000,348</u>         | <u>1,111,468</u>      | <u>(94,524)</u>  | <u>(423)</u>   | <u>(10,510)</u> | <u>(5,661)</u>  | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 15,672,118               | 17,412,993            | (1,480,879)      | (6,626)        | (164,664)       | (88,697)        | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>5,485,245</u>         | <u>6,094,548</u>      | <u>(518,308)</u> | <u>(2,319)</u> | <u>(57,632)</u> | <u>(31,044)</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 10,186,873               | 11,318,445            | (962,571)        | (4,307)        | (107,032)       | (57,653)        | 0               | 0               |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY CLASS - @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 55 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS           | DS-ML         | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|-------------------------------------|--------------|------------------|------------------|----------------|---------------|---------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)            | (G)           | (H)           | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$             | \$            | \$            | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 45,398,449       | 29,313,652       | 12,096,475     | 14,627        | 305,353       | 3,668,339      | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 0                | 0                | 0              | 0             | 0             | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 32,474,228       | 25,454,022       | 5,512,634      | 3,516         | 59,122        | 1,444,933      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 11,354,490       | 8,858,023        | 1,833,698      | 1,260         | 17,038        | 644,474        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (955,861)        | (2,527,183)      | 1,206,482      | 2,716         | 63,400        | 298,724        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (179,485)        | (474,470)        | 226,494        | 509           | 11,902        | 56,079         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>3,014,328</u> | <u>2,245,282</u> | <u>542,397</u> | <u>467</u>    | <u>8,174</u>  | <u>218,009</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 45,707,700       | 33,555,674       | 9,321,705      | 8,468         | 159,636       | 2,662,219      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | (309,251)        | (4,242,022)      | 2,774,770      | 6,159         | 145,717       | 1,006,120      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>3,100,705</u> | <u>2,221,375</u> | <u>568,871</u> | <u>581</u>    | <u>12,144</u> | <u>297,735</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | (3,409,956)      | (6,463,397)      | 2,205,899      | 5,578         | 133,573       | 708,385        | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 117,450,953      | 84,142,977       | 21,548,139     | 22,004        | 459,994       | 11,277,857     | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>-0.26%</b>    | <b>-5.04%</b>    | <b>12.88%</b>  | <b>27.99%</b> | <b>31.68%</b> | <b>8.92%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | 19.38            | (49.54)        | (107.65)      | (121.85)      | (34.31)        | 0.00         | 0.00         |

REFERENCES: [1] PAGE 62, [2] PAGE 70, [3] PAGE 61, [4] PAGE 75, [5] PAGE 73, [6] PAGE 71, [7] PAGE 74, [8] PAGE 76.

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS INTANGIBLE, PRODUCTION, & DIST. PLANT ALLOC.  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                             | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|----------------|------------|---------------|----------------|----------|----------|
|          | (A)      | (B)                                       | (C)          | (D)              | (E)              | (F)            | (G)        | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$             | \$         | \$            | \$             | \$       | \$       |
| 1        |          | INTANGIBLE PLANT                          |              |                  |                  |                |            |               |                |          |          |
| 2        | 301.00   | ORGANIZATION                              | 7CUST        | 316              | 235              | 55             | 0          | 1             | 25             | 0        | 0        |
| 3        | 303.00   | MISC. INTANGIBLE PLANT                    | 7CUST        | 45,126           | 33,616           | 7,818          | 7          | 127           | 3,559          | 0        | 0        |
| 4        | 303.10   | DIS SOFTWARE                              | 7CUST        | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 5        | 303.20   | FARA SOFTWARE                             | 7CUST        | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 6        | 303.30   | OTHER SOFTWARE                            | 7CUST        | <u>5,062,839</u> | <u>3,771,461</u> | <u>877,086</u> | <u>810</u> | <u>14,227</u> | <u>399,255</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL INTANGIBLE PLANT                    |              | 5,108,281        | 3,805,312        | 884,959        | 817        | 14,355        | 402,839        | 0        | 0        |
| 8        |          | PRODUCTION PLANT                          |              |                  |                  |                |            |               |                |          |          |
| 9        | 304.10   | LAND                                      | 2            | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 10       | 305.00   | STRUCTURES & IMPROVEMENTS                 | 2            | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 11       | 311.00   | LIQUEFIED PETROLEUM GAS EQUIP             | 2            | <u>0</u>         | <u>0</u>         | <u>0</u>       | <u>0</u>   | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | TOTAL PRODUCTION PLANT                    |              | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 13       |          | DISTRIBUTION PLANT                        |              |                  |                  |                |            |               |                |          |          |
| 14       | 374.10   | LAND - CITY GATE & M/L IND M&R            | 20           | 67               | 38               | 14             | 0          | 0             | 15             | 0        | 0        |
| 15       | 374.20   | LAND - OTHER DISTRIBUTION                 | 20           | 284,503          | 160,426          | 61,367         | 117        | 0             | 62,594         | 0        | 0        |
| 16       | 374.40   | LAND RIGHTS - OTHER DISTRIBUTION          | 20           | 214,346          | 120,865          | 46,234         | 88         | 0             | 47,158         | 0        | 0        |
| 17       | 374.50   | RIGHTS OF WAY                             | 20           | 884,806          | 498,924          | 190,853        | 363        | 0             | 194,666        | 0        | 0        |
| 18       | 375.20   | CITY GATE - MEAS & REG STRUCTURES         | 20           | 689              | 389              | 149            | 0          | 0             | 152            | 0        | 0        |
| 19       | 375.30   | STRUC & IMPROV-GENERAL M&R                | 20           | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 20       | 375.40   | STRUC & IMPROV-REGULATING                 | 20           | 705,518          | 397,827          | 152,180        | 289        | 0             | 155,221        | 0        | 0        |
| 21       | 375.40   | DIRECT STRUC & IMPROV-REGULATING          |              | 14,978           | 0                | 0              | 0          | 14,978        | 0              | 0        | 0        |
| 22       | 375.60   | STRUC & IMPROV-DIST. IND. M & R           | 8            | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 23       | 375.70   | STRUC & IMPROV-OTHER DIST. SYSTEM         | 7CUST        | 5,317,820        | 3,961,404        | 921,259        | 851        | 14,943        | 419,363        | 0        | 0        |
| 24       | 375.71   | STRUCT & IMPROV-OTHER DIST. SYSTEM-IMPROV | 7CUST        | 157,693          | 117,470          | 27,319         | 25         | 443           | 12,436         | 0        | 0        |
| 25       | 375.80   | STRUC & IMPROV-COMMUNICATION              | 20           | 0                | 0                | 0              | 0          | 0             | 0              | 0        | 0        |
| 26       | 376.00   | MAINS                                     | 20           | 71,729,139       | 40,446,627       | 15,471,975     | 29,409     | 0             | 15,781,128     | 0        | 0        |
| 27       | 376.00   | DIRECT MAINS                              |              | 3,786            | 0                | 0              | 0          | 3,786         | 0              | 0        | 0        |
| 28       | 378.10   | M & R GENERAL                             | 20           | 168,060          | 94,766           | 36,251         | 69         | 0             | 36,975         | 0        | 0        |
| 29       | 378.20   | M & R GENERAL - REGULATING                | 20           | 2,973,876        | 1,676,909        | 641,465        | 1,219      | 0             | 654,282        | 0        | 0        |
| 30       | 378.30   | M & R EQUIP - LOCAL GAS PURCHASES         | 20           | 14,729           | 8,305            | 3,177          | 6          | 0             | 3,241          | 0        | 0        |
| 31       | 379.10   | STA EQUIP - CITY                          | 20           | 82,620           | 46,588           | 17,821         | 34         | 0             | 18,177         | 0        | 0        |
| 32       | 380.00   | SERVICES                                  | 15           | 127,467,343      | 112,461,887      | 14,554,221     | 1,275      | 0             | 449,960        | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL CUSTOMER<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|---------------------------------------|---------------------|-----------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        | 380.00          | DIRECT SERVICES                       |                     | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 2        | 381.00          | METERS                                | 16                  | 22,789,579                  | 16,395,279                  | 6,292,659             | 2,963            | 0                  | 98,679             | 0                     | 0                     |
| 3        | 382.00          | METER INSTALLATIONS                   | 16                  | 9,462,175                   | 6,807,278                   | 2,612,696             | 1,230            | 0                  | 40,971             | 0                     | 0                     |
| 4        | 383.00          | HOUSE REGULATORS                      | 16                  | 5,770,311                   | 4,151,277                   | 1,593,298             | 750              | 0                  | 24,985             | 0                     | 0                     |
| 5        | 384.00          | HOUSE REG INSTALLATIONS               | 16                  | 2,257,522                   | 1,624,106                   | 623,347               | 293              | 0                  | 9,775              | 0                     | 0                     |
| 6        | 385.00          | IND M&R EQUIPMENT                     | 17                  | 2,697,547                   | 0                           | 700,742               | 782              | 0                  | 1,996,050          | 0                     | 0                     |
| 7        | 385.00          | DIRECT IND M&R EQUIPMENT              |                     | 677,829                     | 0                           | 0                     | 0                | 677,829            | 0                  | 0                     | 0                     |
| 8        | 387.20          | ODORIZATION                           | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 9        | 387.41          | TELEPHONE                             | 7CUST               | 446,583                     | 332,673                     | 77,366                | 71               | 1,255              | 35,218             | 0                     | 0                     |
| 10       | 387.42          | RADIO                                 | 7CUST               | 482,646                     | 359,537                     | 83,614                | 77               | 1,356              | 38,061             | 0                     | 0                     |
| 11       | 387.44          | OTHER COMMUNICATION                   | 7CUST               | 81,084                      | 60,402                      | 14,047                | 13               | 228                | 6,394              | 0                     | 0                     |
| 12       | 387.45          | TELEMETERING                          | 7CUST               | 2,294,053                   | 1,708,909                   | 397,422               | 367              | 6,446              | 180,909            | 0                     | 0                     |
| 13       | 387.46          | CIS                                   | 7CUST               | <u>68,977</u>               | <u>51,383</u>               | <u>11,950</u>         | <u>11</u>        | <u>194</u>         | <u>5,440</u>       | <u>0</u>              | <u>0</u>              |
| 14       |                 | TOTAL DISTRIBUTION PLANT              |                     | 257,048,279                 | 191,483,269                 | 44,531,426            | 40,302           | 721,458            | 20,271,850         | 0                     | 0                     |
| 15       |                 | GENERAL PLANT                         |                     |                             |                             |                       |                  |                    |                    |                       |                       |
| 16       | 391.10          | OFF FURN & EQUIP - UNSPEC             | 7CUST               | 446,284                     | 332,450                     | 77,314                | 71               | 1,254              | 35,194             | 0                     | 0                     |
| 17       | 391.11          | OFF FURN & EQUIP - DATA HAND          | 7CUST               | 11,421                      | 8,508                       | 1,979                 | 2                | 32                 | 901                | 0                     | 0                     |
| 18       | 391.12          | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST               | 763,337                     | 568,633                     | 132,241               | 122              | 2,145              | 60,197             | 0                     | 0                     |
| 19       | 392.20          | TR EQ - TRAILER > \$1,000             | 7CUST               | 58,133                      | 43,305                      | 10,071                | 9                | 163                | 4,584              | 0                     | 0                     |
| 20       | 392.21          | TR EQ - TRAILER < \$1,000             | 7CUST               | 14,847                      | 11,060                      | 2,572                 | 2                | 42                 | 1,171              | 0                     | 0                     |
| 21       | 394.10          | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST               | 14,713                      | 10,960                      | 2,549                 | 2                | 41                 | 1,160              | 0                     | 0                     |
| 22       | 394.13          | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 23       | 393.00          | STORES EQUIPMENT                      | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 24       | 394.20          | SHOP EQUIPMENT                        | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 25       | 394.30          | TOOLS & OTHER EQUIPMENT               | 7CUST               | 1,978,098                   | 1,473,545                   | 342,686               | 316              | 5,558              | 155,993            | 0                     | 0                     |
| 26       | 395.00          | LABORATORY EQUIPMENT                  | 7CUST               | 5,619                       | 4,186                       | 973                   | 1                | 16                 | 443                | 0                     | 0                     |
| 27       | 396.00          | POWER OP EQUIP-GEN TOOLS              | 7CUST               | 153,643                     | 114,453                     | 26,617                | 25               | 432                | 12,116             | 0                     | 0                     |
| 28       | 397.50          | COMMUNICATION EQUIP - TELEMETERING    | 7CUST               | 0                           | 0                           | 0                     | 0                | 0                  | 0                  | 0                     | 0                     |
| 29       | 398.00          | MISCELLANEOUS EQUIPMENT               | 7CUST               | <u>178,482</u>              | <u>132,957</u>              | <u>30,920</u>         | <u>29</u>        | <u>502</u>         | <u>14,075</u>      | <u>0</u>              | <u>0</u>              |
| 30       |                 | TOTAL GENERAL PLANT                   |                     | <u>3,624,577</u>            | <u>2,700,057</u>            | <u>627,922</u>        | <u>579</u>       | <u>10,185</u>      | <u>285,834</u>     | <u>0</u>              | <u>0</u>              |
| 31       |                 | TOTAL PLANT IN SERVICE (101 - 106)    |                     | 265,781,137                 | 197,988,638                 | 46,044,307            | 41,698           | 745,998            | 20,960,523         | 0                     | 0                     |



CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL   | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|------------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)              | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$               | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 6,025,045        | 4,334,538        | 1,663,635      | 783        | 0            | 26,088         | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 4,714,156        | 3,391,458        | 1,301,673      | 613        | 0            | 20,412         | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 1,568,587        | 1,128,473        | 433,118        | 204        | 0            | 6,792          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 1,780,729        | 1,281,092        | 491,695        | 231        | 0            | 7,711          | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 823,118          | 0                | 213,821        | 239        | 0            | 609,066        | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 133,766          | 0                | 0              | 0          | 133,766      | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | (36,364)         | (27,089)         | (6,300)        | (6)        | (102)        | (2,868)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 242,672          | 180,774          | 42,040         | 39         | 682          | 19,137         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 344,397          | 256,552          | 59,663         | 55         | 968          | 27,159         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 30,742           | 22,901           | 5,326          | 5          | 86           | 2,424          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 321,393          | 239,415          | 55,678         | 51         | 903          | 25,345         | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | <u>69,410</u>    | <u>51,706</u>    | <u>12,025</u>  | <u>11</u>  | <u>195</u>   | <u>5,474</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 100,202,772      | 78,169,649       | 16,136,955     | 11,763     | 146,387      | 5,738,023      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                  |                  |                |            |              |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | (20,180)         | (15,033)         | (3,496)        | (3)        | (57)         | (1,591)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | (6,892)          | (5,134)          | (1,194)        | (1)        | (19)         | (544)          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 455,300          | 339,167          | 78,876         | 73         | 1,279        | 35,905         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 16,409           | 12,224           | 2,843          | 3          | 46           | 1,294          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 3,829            | 2,852            | 663            | 1          | 11           | 302            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 9,162            | 6,825            | 1,587          | 1          | 26           | 723            | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 23,026           | 17,153           | 3,989          | 4          | 65           | 1,816          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 112              | 83               | 19             | 0          | 0            | 9              | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 809,079          | 602,707          | 140,165        | 129        | 2,274        | 63,804         | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 4,712            | 3,510            | 816            | 1          | 13           | 372            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 122,969          | 91,603           | 21,303         | 20         | 346          | 9,697          | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7CUST        | 0                | 0                | 0              | 0          | 0            | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | <u>7,341</u>     | <u>5,469</u>     | <u>1,272</u>   | <u>1</u>   | <u>21</u>    | <u>579</u>     | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>1,424,867</u> | <u>1,061,426</u> | <u>246,843</u> | <u>229</u> | <u>4,005</u> | <u>112,366</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 103,735,997      | 80,801,654       | 16,749,050     | 12,330     | 156,317      | 6,016,654      | 0        | 0        |



CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML  | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|-----------|-------|--------|---------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)       | (G)   | (H)    | (I)     | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$        | \$    | \$     | \$      | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 1,172,264      | 843,350        | 323,686   | 152   | 0      | 5,076   | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 230,831        | 166,064        | 63,737    | 30    | 0      | 999     | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 157,520        | 113,323        | 43,494    | 20    | 0      | 682     | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 22,800         | 16,403         | 6,296     | 3     | 0      | 99      | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 158,316        | 0              | 41,126    | 46    | 0      | 117,146 | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 13,065         | 0              | 0         | 0     | 13,065 | 0       | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7CUST        | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7CUST        | 16,701         | 12,441         | 2,893     | 3     | 47     | 1,317   | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7CUST        | 18,049         | 13,445         | 3,127     | 3     | 51     | 1,423   | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7CUST        | 3,030          | 2,257          | 525       | 0     | 9      | 239     | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7CUST        | 85,479         | 63,676         | 14,808    | 14    | 240    | 6,741   | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7CUST        | 2,578          | 1,920          | 447       | 0     | 7      | 203     | 0        | 0        |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 10,302,283     | 8,074,200      | 1,651,414 | 1,091 | 14,082 | 561,497 | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |           |       |        |         |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7CUST        | 22,191         | 16,531         | 3,844     | 4     | 62     | 1,750   | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7CUST        | 765            | 570            | 133       | 0     | 2      | 60      | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7CUST        | 153,802        | 114,572        | 26,645    | 25    | 432    | 12,129  | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7CUST        | 5,317          | 3,961          | 921       | 1     | 15     | 419     | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7CUST        | 1,362          | 1,015          | 236       | 0     | 4      | 107     | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7CUST        | 590            | 440            | 102       | 0     | 2      | 47      | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7CUST        | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7CUST        | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7CUST        | 0              | 0              | 0         | 0     | 0      | 0       | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7CUST        | 78,696         | 58,623         | 13,633    | 13    | 221    | 6,206   | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7CUST        | 284            | 212            | 49        | 0     | 1      | 22      | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7CUST        | 3,977          | 2,963          | 689       | 1     | 11     | 314     | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7CUST        | 11,899         | 8,864          | 2,061     | 2     | 33     | 938     | 0        | 0        |
| 28       |          | TOTAL GENERAL PLANT                   |              | 278,883        | 207,751        | 48,313    | 46    | 783    | 21,992  | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 11,354,490     | 8,858,023      | 1,833,698 | 1,260 | 17,038 | 644,474 | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER   | IUS    | DS-ML   | DS/IS     | NOT USED (J) | NOT USED (K) |
|----------|----------|------------------------------|--------------|----------------|----------------|------------|--------|---------|-----------|--------------|--------------|
|          | (A)      | (B)                          | (C)          | (D)            | (E)            | (F)        | (G)    | (H)     | (I)       | (J)          | (K)          |
|          |          |                              |              | \$             | \$             | \$         | \$     | \$      | \$        | \$           | \$           |
| 1        |          | OPERATING REVENUE            |              |                |                |            |        |         |           |              |              |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 22,747,863     | 22,747,863     | 0          | 0      | 0       | 0         | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES             |              | 7,236,911      | 0              | 7,236,911  | 0      | 0       | 0         | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES             |              | 565,779        | 0              | 551,317    | 14,462 | 0       | 0         | 0            | 0            |
| 5        |          | TOTAL SALES REVENUE          |              | 30,550,553     | 22,747,863     | 7,788,228  | 14,462 | 0       | 0         | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 301,708        | 193,658        | 87,322     | 158    | 1,581   | 18,989    | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 137,000        | 122,831        | 14,082     | 1      | 5       | 79        | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 13,822,188     | 5,723,008      | 4,146,505  | 0      | 303,744 | 3,648,931 | 0            | 0            |
| 9        | 495.00   | OTHER                        | 6            | 587,000        | 526,292        | 60,338     | 6      | 23      | 340       | 0            | 0            |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | 14,847,896     | 6,565,789      | 4,308,247  | 165    | 305,353 | 3,668,339 | 0            | 0            |
| 11       |          | TOTAL OPERATING REVENUE      |              | 45,398,449     | 29,313,652     | 12,096,475 | 14,627 | 305,353 | 3,668,339 | 0            | 0            |



CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS        | NOT USED (J) | NOT USED (K) |
|----------|----------|----------------------------|--------------|----------------|----------------|---------------|-----------|------------|--------------|--------------|--------------|
|          | (A)      | (B)                        | (C)          | (D)            | (E)            | (F)           | (G)       |            | (I)          | (J)          | (K)          |
|          |          |                            |              | \$             | \$             | \$            | \$        | \$         | \$           | \$           | \$           |
| 1        |          | DISTRIBUTION EXPENSES      |              |                |                |               |           |            |              |              |              |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10CUST       | 72,178         | 51,868         | 16,762        | 11        | 187        | 3,351        | 0            | 0            |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0              | 0              | 0             | 0         | 0          | 0            | 0            | 0            |
| 4        | 874      | MAINS & SERVICES           | 14CUST       | 986,084        | 756,938        | 148,632       | 148       | 20         | 80,346       | 0            | 0            |
| 5        | 875      | M & R - GENERAL            | 18CUST       | 26,691         | 15,050         | 5,757         | 11        | 1          | 5,872        | 0            | 0            |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 38,736         | 0              | 8,042         | 9         | 7,779      | 22,907       | 0            | 0            |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 1,279,637      | 920,596        | 353,333       | 166       | 0          | 5,541        | 0            | 0            |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 1,500,691      | 1,079,627      | 414,371       | 195       | 0          | 6,498        | 0            | 0            |
| 9        | 880      | OTHER                      | 10CUST       | 405,822        | 291,628        | 94,244        | 61        | 1,051      | 18,838       | 0            | 0            |
| 10       | 881      | RENTS                      | 10CUST       | <u>0</u>       | <u>0</u>       | <u>0</u>      | <u>0</u>  | <u>0</u>   | <u>0</u>     | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL OPERATION            |              | 4,309,839      | 3,115,707      | 1,041,141     | 601       | 9,038      | 143,353      | 0            | 0            |
| 12       |          | MAINTENANCE                |              |                |                |               |           |            |              |              |              |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10CUST       | 6,405          | 4,603          | 1,487         | 1         | 17         | 297          | 0            | 0            |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18CUST       | 813            | 458            | 175           | 0         | 0          | 179          | 0            | 0            |
| 15       | 887      | MAINS                      | 18CUST       | 300,254        | 169,298        | 64,762        | 123       | 15         | 66,056       | 0            | 0            |
| 16       | 889      | M & R - GENERAL            | 18CUST       | 44,922         | 25,329         | 9,689         | 18        | 2          | 9,883        | 0            | 0            |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 19,419         | 0              | 4,032         | 4         | 3,900      | 11,483       | 0            | 0            |
| 18       | 892      | SERVICES                   | 15           | 298,657        | 263,499        | 34,101        | 3         | 0          | 1,054        | 0            | 0            |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 26,851         | 19,317         | 7,414         | 3         | 0          | 116          | 0            | 0            |
| 20       | 894      | OTHER EQUIPMENT            | 10CUST       | <u>91,966</u>  | <u>66,088</u>  | <u>21,357</u> | <u>14</u> | <u>238</u> | <u>4,269</u> | <u>0</u>     | <u>0</u>     |
| 21       |          | TOTAL MAINTENANCE          |              | 789,287        | 548,592        | 143,017       | 166       | 4,172      | 93,337       | 0            | 0            |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED (J) | NOT USED (K) |
|----------|----------|----------------------------------|--------------|----------------|----------------|----------|----------|----------|----------|--------------|--------------|
|          | (A)      | (B)                              | (C)          | (D)            | (E)            | (F)      | (G)      | (H)      | (I)      | (J)          | (K)          |
|          |          |                                  |              | \$             | \$             | \$       | \$       | \$       | \$       | \$           | \$           |
| 1        |          | CUSTOMER ACCOUNTS                |              |                |                |          |          |          |          |              |              |
| 2        | 901      | SUPERVISION                      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 3        | 902      | METER READING                    | 6            | 165,331        | 148,232        | 16,994   | 2        | 7        | 96       | 0            | 0            |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6            | 692,556        | 620,932        | 71,188   | 7        | 28       | 402      | 0            | 0            |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21           | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 6        | 905      | MISC.                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 7        | 920      | SALARIES                         | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 9        | 931      | RENTS                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>       | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 857,887        | 769,164        | 88,182   | 9        | 35       | 498      | 0            | 0            |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |                |                |          |          |          |          |              |              |
| 13       | 907      | SUPERVISION                      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6            | 12,982         | 11,639         | 1,334    | 0        | 1        | 8        | 0            | 0            |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 16       | 910      | MISCELLANEOUS                    | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 17       | 920      | SALARIES                         | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 19       | 931      | RENTS                            | 6            | 0              | 0              | 0        | 0        | 0        | 0        | 0            | 0            |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>       | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u>     |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | 12,982         | 11,639         | 1,334    | 0        | 1        | 8        | 0            | 0            |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHETWELVEMONTHSENDED12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL CUSTOMER   | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML        | DS/IS         | NOT USED (J) | NOT USED (K) |
|----------|----------|---------------------------------|--------------|------------------|----------------|----------------|------------|--------------|---------------|--------------|--------------|
|          | (A)      | (B)                             | (C)          | (D)              | (E)            | (F)            | (G)        | (H)          | (I)           | (J)          | (K)          |
|          |          |                                 |              | \$               | \$             | \$             | \$         | \$           | \$            | \$           | \$           |
| 1        |          | SALES                           |              |                  |                |                |            |              |               |              |              |
| 2        | 911      | SUPERVISION                     | 6            | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 4        | 913      | ADVERTISING                     | 6            | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 5        | 916      | MISC.                           | 6            | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 6        |          | TOTAL SALES                     |              | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 5,969,995        | 4,445,102      | 1,273,674      | 776        | 13,246       | 237,196       | 0            | 0            |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                  |                |                |            |              |               |              |              |
| 9        | 920      | SALARIES                        | 12CUST       | 1,229,993        | 915,816        | 262,419        | 160        | 2,731        | 48,868        | 0            | 0            |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 12       | 923      | OUTSIDE SERVICES                | 12CUST       | 3,569            | 2,657          | 761            | 0          | 8            | 142           | 0            | 0            |
| 13       | 924      | PROPERTY INSURANCE              | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 14       | 925      | INJURIES AND DAMAGES            | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 18       | 930.20   | MISC. - GENERAL                 | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 19       | 931      | RENTS                           | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                  |                |                |            |              |               |              |              |
| 22       |          | FURNITURE & EQUIPMENT           | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12CUST       | 0                | 0              | 0              | 0          | 0            | 0             | 0            | 0            |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | <u>1,233,562</u> | <u>918,473</u> | <u>263,180</u> | <u>160</u> | <u>2,739</u> | <u>49,010</u> | <u>0</u>     | <u>0</u>     |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 7,203,557        | 5,363,575      | 1,536,854      | 936        | 15,985       | 286,206       | 0            | 0            |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT | ALLOC                      | TOTAL  |                |                |               |           |            |               |          |          |
|------|------|----------------------------|--------|----------------|----------------|---------------|-----------|------------|---------------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE              | FACTOR | CUSTOMER       | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML      | DS/IS         | NOT USED | NOT USED |
|      | (A)  | (B)                        | (C)    | (D)            | (E)            | (F)           | (G)       | (H)        | (I)           | (J)      | (K)      |
|      |      |                            |        | \$             | \$             | \$            | \$        | \$         | \$            | \$       | \$       |
| 1    |      | DISTRIBUTION EXPENSES      |        |                |                |               |           |            |               |          |          |
| 2    | 870  | SUPERVISION & ENGINEERING  | 11CUST | 454,082        | 327,239        | 85,617        | 82        | 1,385      | 39,759        | 0        | 0        |
| 3    | 871  | DISTRIBUTION LOAD DISPATCH | 4      | 0              | 0              | 0             | 0         | 0          | 0             | 0        | 0        |
| 4    | 874  | MAINS & SERVICES           | 14CUST | 2,740,110      | 2,103,363      | 413,017       | 411       | 55         | 223,264       | 0        | 0        |
| 5    | 875  | M & R - GENERAL            | 18CUST | 38,370         | 21,635         | 8,276         | 16        | 2          | 8,441         | 0        | 0        |
| 6    | 876  | M & R - INDUSTRIAL         | 8      | 29,602         | 0              | 6,146         | 7         | 5,944      | 17,505        | 0        | 0        |
| 7    | 878  | METERS & HOUSE REGULATORS  | 16     | 485,057        | 348,960        | 133,934       | 63        | 0          | 2,100         | 0        | 0        |
| 8    | 879  | CUSTOMER INSTALLATION      | 16     | 655,941        | 471,897        | 181,118       | 85        | 0          | 2,840         | 0        | 0        |
| 9    | 880  | OTHER                      | 11CUST | 702,151        | 506,012        | 132,391       | 126       | 2,142      | 61,480        | 0        | 0        |
| 10   | 881  | RENTS                      | 11CUST | <u>47,616</u>  | <u>34,315</u>  | <u>8,978</u>  | <u>9</u>  | <u>145</u> | <u>4,169</u>  | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL OPERATION            |        | 5,152,929      | 3,813,421      | 969,477       | 799       | 9,673      | 359,558       | 0        | 0        |
| 12   |      | MAINTENANCE                |        |                |                |               |           |            |               |          |          |
| 13   | 885  | SUPERVISION & ENGINEERING  | 11CUST | 1,490          | 1,074          | 281           | 0         | 5          | 130           | 0        | 0        |
| 14   | 886  | STRUCTURES & IMPROVEMENTS  | 18CUST | 81,627         | 46,025         | 17,606        | 33        | 4          | 17,958        | 0        | 0        |
| 15   | 887  | MAINS                      | 18CUST | 713,748        | 402,447        | 153,948       | 293       | 36         | 157,025       | 0        | 0        |
| 16   | 889  | M & R - GENERAL            | 18CUST | 46,913         | 26,452         | 10,119        | 19        | 2          | 10,321        | 0        | 0        |
| 17   | 890  | M & R - INDUSTRIAL         | 8      | 51,880         | 0              | 10,771        | 12        | 10,418     | 30,679        | 0        | 0        |
| 18   | 892  | SERVICES                   | 15     | 431,251        | 380,484        | 49,240        | 4         | 0          | 1,522         | 0        | 0        |
| 19   | 893  | METERS & HOUSE REGULATORS  | 16     | 118,176        | 85,018         | 32,631        | 15        | 0          | 512           | 0        | 0        |
| 20   | 894  | OTHER EQUIPMENT            | 11CUST | <u>115,668</u> | <u>83,357</u>  | <u>21,809</u> | <u>21</u> | <u>353</u> | <u>10,128</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL MAINTENANCE          |        | 1,560,753      | 1,024,857      | 296,405       | 397       | 10,818     | 228,275       | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT |                                  | ALLOC  | TOTAL     |                |          | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|------|------|----------------------------------|--------|-----------|----------------|----------|----------|----------|----------|----------|----------|
| NO.  | NO.  | ACCOUNT TITLE                    | FACTOR | CUSTOMER  | GS-RESIDENTIAL | GS-OTHER |          |          |          |          |          |
|      | (A)  | (B)                              | (C)    | (D)       | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|      |      |                                  |        | \$        | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1    |      | CUSTOMER ACCOUNTS                |        |           |                |          |          |          |          |          |          |
| 2    | 901  | SUPERVISION                      | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3    | 902  | METER READING                    | 6      | 399,502   | 358,186        | 41,065   | 4        | 16       | 232      | 0        | 0        |
| 4    | 903  | CUSTOMER RECORDS & COLLECTIONS   | 6      | 3,252,912 | 2,916,496      | 334,367  | 33       | 130      | 1,887    | 0        | 0        |
| 5    | 904  | UNCOLLECTIBLE ACCOUNTS           | 21     | 1,027,585 | 891,707        | 135,035  | 21       | 62       | 760      | 0        | 0        |
| 6    | 905  | MISC.                            | 6      | 1,073     | 962            | 110      | 0        | 0        | 1        | 0        | 0        |
| 7    | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8    | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 253       | 227            | 26       | 0        | 0        | 0        | 0        | 0        |
| 9    | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11   |      | TOTAL CUSTOMER ACCT.             |        | 4,681,325 | 4,167,578      | 510,603  | 58       | 208      | 2,880    | 0        | 0        |
| 12   |      | CUSTOMER SERVICE & INFORMATIONAL |        |           |                |          |          |          |          |          |          |
| 13   | 907  | SUPERVISION                      | 6      | (2,789)   | (2,501)        | (287)    | 0        | 0        | (2)      | 0        | 0        |
| 14   | 908  | CUSTOMER ASSISTANCE              | 6      | 1,198,971 | 1,074,973      | 123,242  | 12       | 48       | 695      | 0        | 0        |
| 15   | 909  | INFO. & INSTRUCTIONAL            | 6      | 65,932    | 59,113         | 6,777    | 1        | 3        | 38       | 0        | 0        |
| 16   | 910  | MISCELLANEOUS                    | 6      | 257,797   | 231,136        | 26,499   | 3        | 10       | 150      | 0        | 0        |
| 17   | 920  | SALARIES                         | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18   | 921  | OFFICE SUPPLIES AND EXPENSE      | 6      | 13,868    | 12,434         | 1,425    | 0        | 1        | 8        | 0        | 0        |
| 19   | 931  | RENTS                            | 6      | 0         | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20   | 935  | GENERAL PLANT MAINTENANCE        | 6      | <u>0</u>  | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21   |      | TOTAL CUSTOMER SERVICE & INFO.   |        | 1,533,779 | 1,375,155      | 157,656  | 16       | 62       | 889      | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE | ACCT                          | ALLOC  | TOTAL             |                  |                  |              |               |                |          |          | NOT USED | NOT USED |
|------|-------------------------------|--------|-------------------|------------------|------------------|--------------|---------------|----------------|----------|----------|----------|----------|
| NO.  | NO.                           | FACTOR | CUSTOMER          | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |          |          |
|      | (A)                           | (C)    | (D)               | (E)              | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |          |          |
|      |                               |        | \$                | \$               | \$               | \$           | \$            | \$             | \$       | \$       |          |          |
| 1    | SALES                         |        |                   |                  |                  |              |               |                |          |          |          |          |
| 2    | 911                           | 6      | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 3    | 912                           | 6      | 37,477            | 33,601           | 3,852            | 0            | 1             | 22             | 0        | 0        |          |          |
| 4    | 913                           | 6      | 138,706           | 124,361          | 14,258           | 1            | 6             | 80             | 0        | 0        |          |          |
| 5    | 916                           | 6      | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 6    | TOTAL SALES                   |        | <u>176,183</u>    | <u>157,962</u>   | <u>18,110</u>    | <u>1</u>     | <u>7</u>      | <u>102</u>     | <u>0</u> | <u>0</u> |          |          |
| 7    | TOTAL DISTRIBUTION EXPENSES   |        | 13,104,969        | 10,538,973       | 1,952,251        | 1,271        | 20,768        | 591,704        | 0        | 0        |          |          |
| 8    | ADMINISTRATIVE & GENERAL      |        |                   |                  |                  |              |               |                |          |          |          |          |
| 9    | 920                           | 13CUST | 2,069,785         | 1,653,344        | 311,420          | 207          | 3,539         | 101,275        | 0        | 0        |          |          |
| 10   | 921                           | 13CUST | 624,503           | 498,853          | 93,963           | 62           | 1,068         | 30,557         | 0        | 0        |          |          |
| 11   | 922                           | 13CUST | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 12   | 923                           | 13CUST | 5,496,831         | 4,390,869        | 827,053          | 550          | 9,400         | 268,960        | 0        | 0        |          |          |
| 13   | 924                           | 13CUST | 57,099            | 45,611           | 8,591            | 6            | 98            | 2,794          | 0        | 0        |          |          |
| 14   | 925                           | 12CUST | 729,152           | 542,905          | 155,565          | 95           | 1,619         | 28,969         | 0        | 0        |          |          |
| 15   | 926                           | 12CUST | 2,340,907         | 1,742,969        | 499,433          | 304          | 5,197         | 93,004         | 0        | 0        |          |          |
| 16   | 926                           |        | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 17   | 928                           | 13CUST | 138,131           | 110,339          | 20,783           | 14           | 236           | 6,759          | 0        | 0        |          |          |
| 18   | 928                           | 13CUST | 123,063           | 98,303           | 18,516           | 12           | 210           | 6,021          | 0        | 0        |          |          |
| 19   | 930.10                        | 13CUST | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 20   | 930.20                        | 13CUST | (43,391)          | (34,661)         | (6,529)          | (4)          | (74)          | (2,123)        | 0        | 0        |          |          |
| 21   | 931                           | 13CUST | 448,542           | 358,295          | 67,488           | 45           | 767           | 21,947         | 0        | 0        |          |          |
| 22   | 935.13                        | 13CUST | 91                | 73               | 14               | 0            | 0             | 4              | 0        | 0        |          |          |
| 23   | 935.23                        |        |                   |                  |                  |              |               |                |          |          |          |          |
| 24   | FURNITURE & EQUIPMENT         | 13CUST | 0                 | 0                | 0                | 0            | 0             | 0              | 0        | 0        |          |          |
| 25   | 932 MAINT.-MISCELLANEOUS      | 13CUST | <u>180,989</u>    | <u>144,574</u>   | <u>27,232</u>    | <u>18</u>    | <u>309</u>    | <u>8,856</u>   | <u>0</u> | <u>0</u> |          |          |
| 26   | TOTAL ADMIN & GENERAL - M & E |        | <u>12,165,702</u> | <u>9,551,474</u> | <u>2,023,529</u> | <u>1,309</u> | <u>22,369</u> | <u>567,023</u> | <u>0</u> | <u>0</u> |          |          |
| 27   | TOTAL O & M EXPENSE - M & E   |        | 25,270,671        | 20,090,447       | 3,975,780        | 2,580        | 43,137        | 1,158,727      | 0        | 0        |          |          |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.                     | ACCOUNT TITLE | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|------------------------------|---------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)                          | (B)           | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |                              |               |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        | LABOR                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 2        | PRODUCTION                   |               | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 3        | DISTRIBUTION - O&M OPERATION |               | PAGE 14      | 4,309,839         | 3,115,707         | 1,041,141        | 601          | 9,038         | 143,353          | 0        | 0        |
| 4        | DISTRIBUTION - O&M MAINT.    |               | PAGE 14      | 789,287           | 548,592           | 143,017          | 166          | 4,172         | 93,337           | 0        | 0        |
| 5        | CUSTOMER ACCOUNTS            |               | PAGE 15      | 857,887           | 769,164           | 88,182           | 9            | 35            | 498              | 0        | 0        |
| 6        | CUSTOMER SERVICE & INFOR.    |               | PAGE 15      | 12,982            | 11,639            | 1,334            | 0            | 1             | 8                | 0        | 0        |
| 7        | SALES                        |               | PAGE 16      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 8        | ADMINISTRATIVE & GENERAL     |               | PAGE 16      | <u>1,233,562</u>  | <u>918,473</u>    | <u>263,180</u>   | <u>160</u>   | <u>2,739</u>  | <u>49,010</u>    | <u>0</u> | <u>0</u> |
| 9        | TOTAL LABOR EXPENSE          |               |              | 7,203,557         | 5,363,575         | 1,536,854        | 936          | 15,985        | 286,206          | 0        | 0        |
| 10       | M & E                        |               |              |                   |                   |                  |              |               |                  |          |          |
| 11       | PRODUCTION                   |               | PAGE 13      | 0                 | 0                 | 0                | 0            | 0             | 0                | 0        | 0        |
| 12       | DISTRIBUTION - O&M OPERATION |               | PAGE 17      | 5,152,929         | 3,813,421         | 969,477          | 799          | 9,673         | 359,558          | 0        | 0        |
| 13       | DISTRIBUTION - O&M MAINT.    |               | PAGE 17      | 1,560,753         | 1,024,857         | 296,405          | 397          | 10,818        | 228,275          | 0        | 0        |
| 14       | CUSTOMER ACCOUNTS            |               | PAGE 18      | 4,681,325         | 4,167,578         | 510,603          | 58           | 208           | 2,880            | 0        | 0        |
| 15       | CUSTOMER SERVICE & INFOR.    |               | PAGE 18      | 1,533,779         | 1,375,155         | 157,656          | 16           | 62            | 889              | 0        | 0        |
| 16       | SALES                        |               | PAGE 19      | 176,183           | 157,962           | 18,110           | 1            | 7             | 102              | 0        | 0        |
| 17       | ADMINISTRATIVE & GENERAL     |               | PAGE 19      | <u>12,165,702</u> | <u>9,551,474</u>  | <u>2,023,529</u> | <u>1,309</u> | <u>22,369</u> | <u>567,023</u>   | <u>0</u> | <u>0</u> |
| 18       | TOTAL M & E EXPENSE          |               |              | <u>25,270,671</u> | <u>20,090,447</u> | <u>3,975,780</u> | <u>2,580</u> | <u>43,137</u> | <u>1,158,727</u> | <u>0</u> | <u>0</u> |
| 19       | TOTAL O & M EXPENSES         |               |              | 32,474,228        | 25,454,022        | 5,512,634        | 3,516        | 59,122        | 1,444,933        | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 71 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|----------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)            | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$             | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7CUST        | 2,510,855      | 1,870,411      | 434,981  | 402 | 7,056 | 198,006 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12CUST       | 503,473        | 374,871        | 107,416  | 65  | 1,118 | 20,003  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12CUST       | 0              | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 3,014,328      | 2,245,282      | 542,397  | 467 | 8,174 | 218,009 | 0        | 0        |

CUSTOMER RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
KENTUCKY STATE INCOME TAX  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML         | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|-------------------|------------------|------------------|--------------|---------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)               | (E)              | (F)              | (G)          | (H)           | (I)            | (J)      | (K)      |
|          |          |   |              | \$                | \$               | \$               | \$           | \$            | \$             | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | (1,444,597)       | (7,243,675)      | 4,207,746        | 9,384        | 221,019       | 1,360,923      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                   |                  |                  |              |               |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 3,100,705         | 2,221,375        | 568,871          | 581          | 12,144        | 297,735        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19CUST       | 8,859,024         | 6,599,353        | 1,534,737        | 1,417        | 24,894        | 698,623        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>10,581,166</u> | <u>8,281,951</u> | <u>1,699,727</u> | <u>1,137</u> | <u>14,865</u> | <u>583,489</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | (1,722,142)       | (1,682,598)      | (164,990)        | 280          | 10,029        | 115,134        | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12CUST       | <u>(3,818)</u>    | <u>(2,843)</u>   | <u>(815)</u>     | <u>0</u>     | <u>(8)</u>    | <u>(152)</u>   | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>1,374,745</u>  | <u>535,934</u>   | <u>403,066</u>   | <u>861</u>   | <u>22,165</u> | <u>412,717</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (2,819,342)       | (7,779,609)      | 3,804,680        | 8,523        | 198,854       | 948,206        | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (169,162)         | (466,780)        | 228,282          | 511          | 11,931        | 56,893         | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19CUST       | <u>0</u>          | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (169,162)         | (466,780)        | 228,282          | 511          | 11,931        | 56,893         | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL CUSTOMER | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML  | DS/IS  | NOT USED | NOT USED |
|----------|----------|---|--------------|----------------|----------------|----------|-----|--------|--------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)            | (E)            | (F)      | (G) | (H)    | (I)    | (J)      | (K)      |
|          |          |   |              | \$             | \$             | \$       | \$  | \$     | \$     | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                |                |          |     |        |        |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                |                |          |     |        |        |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19CUST       | (10,323)       | (7,690)        | (1,788)  | (2) | (29)   | (814)  | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (10,323)       | (7,690)        | (1,788)  | (2) | (29)   | (814)  | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (179,485)      | (474,470)      | 226,494  | 509 | 11,902 | 56,079 | 0        | 0        |

CUSTOMER RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 74 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL CUSTOMER    | GS-RESIDENTIAL    | GS-OTHER         | IUS          | DS-ML         | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|-------------------|------------------|--------------|---------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)               | (F)              | (G)          | (H)           | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$                | \$               | \$           | \$            | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 45,398,449        | 29,313,652        | 12,096,475       | 14,627       | 305,353       | 3,668,339        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>46,843,046</u> | <u>36,557,327</u> | <u>7,888,729</u> | <u>5,243</u> | <u>84,334</u> | <u>2,307,416</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | (1,444,597)       | (7,243,675)       | 4,207,746        | 9,384        | 221,019       | 1,360,923        | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                   |                  |              |               |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 3,100,705         | 2,221,375         | 568,871          | 581          | 12,144        | 297,735          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19CUST       | 8,859,024         | 6,599,353         | 1,534,737        | 1,417        | 24,894        | 698,623          | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>10,581,166</u> | <u>8,281,951</u>  | <u>1,699,727</u> | <u>1,137</u> | <u>14,865</u> | <u>583,489</u>   | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | (1,722,142)       | (1,682,598)       | (164,990)        | 280          | 10,029        | 115,134          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12CUST       | (3,818)           | (2,843)           | (815)            | 0            | (8)           | (152)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>(169,162)</u>  | <u>(466,780)</u>  | <u>228,282</u>   | <u>511</u>   | <u>11,931</u> | <u>56,893</u>    | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 1,205,583         | 69,154            | 631,348          | 1,372        | 34,096        | 469,610          | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | (2,650,180)       | (7,312,829)       | 3,576,398        | 8,012        | 186,923       | 891,313          | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (901,061)         | (2,486,361)       | 1,215,975        | 2,724        | 63,554        | 303,046          | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19CUST       | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>     | <u>0</u>      | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | (901,061)         | (2,486,361)       | 1,215,975        | 2,724        | 63,554        | 303,046          | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 75 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL CUSTOMER  | GS-RESIDENTIAL  | GS-OTHER       | IUS        | DS-ML        | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|------------|--------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)        | (H)          | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$         | \$           | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |            |              |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19CUST       | 21,705          | 16,169          | 3,760          | 3          | 61           | 1,712          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |            |              |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19CUST       | <u>(33,095)</u> | <u>(24,653)</u> | <u>(5,733)</u> | <u>(5)</u> | <u>(93)</u>  | <u>(2,610)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(33,095)</u> | <u>(24,653)</u> | <u>(5,733)</u> | <u>(5)</u> | <u>(93)</u>  | <u>(2,610)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(54,800)</u> | <u>(40,822)</u> | <u>(9,493)</u> | <u>(8)</u> | <u>(154)</u> | <u>(4,322)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (955,861)       | (2,527,183)     | 1,206,482      | 2,716      | 63,400       | 298,724        | 0        | 0        |

CUSTOMER RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 76 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL CUSTOMER     | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML          | DS/IS            | NOT USED | NOT USED |
|----------|-----------|---------------------------------------|--------------|--------------------|-------------------|-------------------|---------------|----------------|------------------|----------|----------|
|          | (A)       | (B)                                   | (C)          | (D)                | (E)               | (F)               | (G)           | (H)            | (I)              | (J)      | (K)      |
|          |           |                                       |              | \$                 | \$                | \$                | \$            | \$             | \$               | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                       |              | 265,781,137        | 197,988,638       | 46,044,307        | 41,698        | 745,998        | 20,960,523       | 0        | 0        |
|          |           | LESS:                                 |              |                    |                   |                   |               |                |                  |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]              |              | <u>103,735,997</u> | <u>80,801,654</u> | <u>16,749,050</u> | <u>12,330</u> | <u>156,317</u> | <u>6,016,654</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                             |              | 162,045,140        | 117,186,984       | 29,295,257        | 29,368        | 589,681        | 14,943,869       | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | 3,269,065          | 2,435,225         | 566,333           | 523           | 9,186          | 257,798          | 0        | 0        |
|          |           | LESS:                                 |              |                    |                   |                   |               |                |                  |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                     | 20           | 0                  | 0                 | 0                 | 0             | 0              | 0                | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT     | 19CUST       | 0                  | 0                 | 0                 | 0             | 0              | 0                | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | 52,300,253         | 38,960,027        | 9,060,496         | 8,368         | 146,964        | 4,124,398        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX            | 19CUST       | <u>0</u>           | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                         |              | 113,013,952        | 80,662,182        | 20,801,094        | 21,523        | 451,903        | 11,077,269       | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                 |              |                    |                   |                   |               |                |                  |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF         |              |                    |                   |                   |               |                |                  |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]          |              | 4,059,279          | 3,181,753         | 689,079           | 440           | 7,390          | 180,617          | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                            | 2            | 0                  | 0                 | 0                 | 0             | 0              | 0                | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                  | 7CUST        | 49,777             | 37,080            | 8,623             | 8             | 140            | 3,925            | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                           | 13CUST       | 327,945            | 261,962           | 49,343            | 33            | 561            | 16,046           | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS          | 2            | <u>0</u>           | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                             |              | 117,450,953        | 84,142,977        | 21,548,139        | 22,004        | 459,994        | 11,277,857       | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 57, [2] PAGE 59, |              |                    |                   |                   |               |                |                  |          |          |
|          |           | [3] TOTAL O & M EXPENSE               |              | 32,474,228         | 25,454,022        | 5,512,634         | 3,516         | 59,122         | 1,444,933        | 0        | 0        |
|          |           | LESS: COST OF GAS                     |              | <u>0</u>           | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>       | <u>0</u>         | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                  |              | 32,474,228         | 25,454,022        | 5,512,634         | 3,516         | 59,122         | 1,444,933        | 0        | 0        |

COLUMBIA GAS OF KENTUCKY, INC.

ATTACHMENT CEN-3

ALLOCATION FACTORS

PAGE 77 OF 129

CUSTOMER RELATED  
FORECASTED TEST YEAR - ORIGINAL FILING

FOR THE TWELVE MONTHS ENDED 12/31/2017

WITNESS: C. NOTESTONE

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOC FACTOR<br>(B) | TOTAL CUSTOMER<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|---------------------|-----------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                   | 100.000%              | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                   | 100.000%              | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                   | 100.000%              | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                   | 100.000%              | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                   | 100.000%              | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                   | 100.000%              | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7CUST               | 100.000%              | 74.493%               | 17.324%         | 0.016%     | 0.281%       | 7.886%       | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                   | 100.000%              | 0.000%                | 20.761%         | 0.023%     | 20.081%      | 59.135%      | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                   | 100.000%              | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10CUST              | 100.000%              | 71.861%               | 23.223%         | 0.015%     | 0.259%       | 4.642%       | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11CUST              | 100.000%              | 72.066%               | 18.855%         | 0.018%     | 0.305%       | 8.756%       | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12CUST              | 100.000%              | 74.457%               | 21.335%         | 0.013%     | 0.222%       | 3.973%       | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13CUST              | 100.000%              | 79.880%               | 15.046%         | 0.010%     | 0.171%       | 4.893%       | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14CUST              | 100.000%              | 76.762%               | 15.073%         | 0.015%     | 0.002%       | 8.148%       | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                  | 100.000%              | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                  | 100.000%              | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                  | 100.000%              | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18CUST              | 100.000%              | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19CUST              | 100.000%              | 74.493%               | 17.324%         | 0.016%     | 0.281%       | 7.886%       | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                  | 100.000%              | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                  | 100.000%              | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|--------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)          | (H)            | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$           | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 29,819,555       | 19,151,621       | 9,903,251      | 27,705       | 56,633         | 680,346        | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>2,997,594</u> | <u>1,946,646</u> | <u>797,718</u> | <u>993</u>   | <u>298</u>     | <u>251,939</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 32,817,149       | 21,098,267       | 10,700,969     | 28,698       | 56,931         | 932,285        | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 21,475,950       | 13,807,095       | 7,643,847      | 25,009       | 0              | 0              | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 4,873,353        | 2,754,398        | 1,135,606      | 2,428        | 212            | 980,709        | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 1,696,054        | 956,201          | 365,777        | 694          | 298            | 373,084        | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 839,380          | 760,667          | 350,614        | (103)        | 17,824         | (289,622)      | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 152,341          | 139,401          | 64,429         | (21)         | 3,346          | (54,814)       | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>661,123</u>   | <u>371,253</u>   | <u>142,737</u> | <u>272</u>   | <u>147</u>     | <u>146,714</u> | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 29,698,201       | 18,789,015       | 9,703,009      | 28,279       | 21,827         | 1,156,071      | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 3,118,948        | 2,309,252        | 997,960        | 419          | 35,104         | (223,786)      | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>919,747</u>   | <u>518,514</u>   | <u>198,638</u> | <u>378</u>   | <u>248</u>     | <u>201,969</u> | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 2,199,201        | 1,790,738        | 799,322        | 41           | 34,856         | (425,755)      | 0            | 0            |
| 14       |          | RATE BASE                              |              | 34,838,908       | 19,640,679       | 7,524,167      | 14,337       | 9,381          | 7,650,344      | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.95%</b>     | <b>11.76%</b>    | <b>13.26%</b>  | <b>2.92%</b> | <b>374.21%</b> | <b>-2.93%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00             | 1.40             | 1.58           | 0.35         | 44.50          | (0.35)         | 0.00         | 0.00         |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS          | DS-ML        | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|-----------------|----------------|----------------|--------------|--------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)             | (E)            | (F)            | (G)          | (H)          | (I)            | (J)          | (K)          |
|          |          |  |              | \$              | \$             | \$             | \$           | \$           | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 32,504,353      | 20,010,093     | 10,096,568     | 30,000       | 136          | 2,367,546      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 21,475,950      | 13,807,095     | 7,643,847      | 25,009       | 0            | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 4,869,869       | 2,742,282      | 1,128,876      | 2,442        | (420)        | 996,689        | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 1,696,059       | 956,201        | 365,777        | 694          | 298          | 373,084        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 737,612         | 406,643        | 153,980        | 321          | (654)        | 177,322        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 133,782         | 74,838         | 28,569         | 56           | (24)         | 30,343         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>661,123</u>  | <u>371,253</u> | <u>142,737</u> | <u>272</u>   | <u>147</u>   | <u>146,714</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 29,574,395      | 18,358,312     | 9,463,785      | 28,794       | (653)        | 1,724,152      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 2,929,958       | 1,651,781      | 632,782        | 1,207        | 789          | 643,394        | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>919,747</u>  | <u>518,514</u> | <u>198,638</u> | <u>378</u>   | <u>248</u>   | <u>201,969</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 2,010,211       | 1,133,267      | 434,144        | 829          | 541          | 441,425        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 34,838,908      | 19,640,679     | 7,524,167      | 14,337       | 9,381        | 7,650,344      | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>    | <b>8.41%</b>   | <b>8.41%</b>   | <b>8.42%</b> | <b>8.41%</b> | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00            | 1.00           | 1.00           | 1.00         | 1.00         | 1.00           | 0.00         | 0.00         |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DEVELOPMENT OF PROFORMA ADJUSTMENTS  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | DESCRIPTION<br>(A)                       | ALLOC FACTOR<br>(B) | Total<br>COMMODITY<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G)    | DS/IS<br>(H)   | NOT USED<br>(I) | NOT USED<br>(J) |
|----------|--|---------------------|---------------------------|-----------------------|-----------------|------------|-----------------|----------------|-----------------|-----------------|
| 1        | OPERATING REVENUE                        |                     | 2,684,798                 | 858,473               | 193,317         | 2,296      | (56,497)        | 1,687,200      | 0               | 0               |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                     | 0                         | 0                     | 0               | 0          | 0               | 0              | 0               | 0               |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                     | 24,789                    | 7,927                 | 1,785           | 21         | (522)           | 15,578         | 0               | 0               |
| 4        | LESS: PSC FEES @ 0.00190100              |                     | <u>5,103</u>              | <u>1,632</u>          | <u>367</u>      | <u>4</u>   | <u>(107)</u>    | <u>3,207</u>   | <u>0</u>        | <u>0</u>        |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                     | 2,654,906                 | 848,914               | 191,165         | 2,271      | (55,868)        | 1,668,415      | 0               | 0               |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                     | <u>159,294</u>            | <u>50,935</u>         | <u>11,470</u>   | <u>136</u> | <u>(3,352)</u>  | <u>100,105</u> | <u>0</u>        | <u>0</u>        |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                     | 2,495,612                 | 797,979               | 179,695         | 2,135      | (52,516)        | 1,568,310      | 0               | 0               |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                     | <u>873,460</u>            | <u>279,292</u>        | <u>62,893</u>   | <u>747</u> | <u>(18,381)</u> | <u>548,909</u> | <u>0</u>        | <u>0</u>        |
| 9        | OPERATING INCOME                         |                     | 1,622,152                 | 518,687               | 116,802         | 1,388      | (34,135)        | 1,019,401      | 0               | 0               |

COMMODITY RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY CLASS - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS           | DS-ML          | DS/IS          | NOT USED (J) | NOT USED (K) |
|----------|----------|-------------------------------------|--------------|-----------------|----------------|----------------|---------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)            | (F)            | (G)           | (H)            | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$              | \$             | \$             | \$            | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 29,819,555      | 19,151,621     | 9,903,251      | 27,705        | 56,633         | 680,346        | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 21,475,950      | 13,807,095     | 7,643,847      | 25,009        | 0              | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 4,839,978       | 2,732,723      | 1,126,724      | 2,417         | 209            | 977,904        | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 1,696,059       | 956,201        | 365,777        | 694           | 298            | 373,084        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | (135,848)       | 127,351        | 91,087         | (426)         | 17,727         | (371,587)      | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | (25,512)        | 23,903         | 17,099         | (80)          | 3,328          | (69,762)       | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>661,123</u>  | <u>371,253</u> | <u>142,737</u> | <u>272</u>    | <u>147</u>     | <u>146,714</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 28,511,750      | 18,018,526     | 9,387,270      | 27,886        | 21,709         | 1,056,353      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 1,307,805       | 1,133,095      | 515,981        | (181)         | 34,924         | (376,007)      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>919,747</u>  | <u>518,514</u> | <u>198,638</u> | <u>378</u>    | <u>248</u>     | <u>201,969</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | 388,058         | 614,581        | 317,343        | (559)         | 34,676         | (577,976)      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 34,838,908      | 19,640,679     | 7,524,167      | 14,337        | 9,381          | 7,650,344      | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>3.75%</b>    | <b>5.77%</b>   | <b>6.86%</b>   | <b>-1.26%</b> | <b>372.29%</b> | <b>-4.91%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00            | 1.54           | 1.83           | (0.34)        | 99.28          | (1.31)         | 0.00         | 0.00         |

REFERENCES: [1] PAGE 88, [2] PAGE 96, [3] PAGE 87, [4] PAGE 101, [5] PAGE 99, [6] PAGE 97, [7] PAGE 100, [8] PAGE 102.



COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|-----------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)             | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$              | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             | 7COMM        | 106,968         | 60,302         | 23,068         | 44         | 26         | 23,529         | 0        | 0        |
| 10       | 387.42   | RADIO                                 | 7COMM        | 115,606         | 65,172         | 24,930         | 47         | 28         | 25,429         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 19,422          | 10,949         | 4,188          | 8          | 5          | 4,272          | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          | 7COMM        | 549,485         | 309,767        | 118,496        | 225        | 132        | 120,865        | 0        | 0        |
| 13       | 387.46   | CIS                                   | 7COMM        | <u>16,522</u>   | <u>9,314</u>   | <u>3,563</u>   | <u>7</u>   | <u>4</u>   | <u>3,634</u>   | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 61,569,680      | 34,709,455     | 13,277,352     | 25,236     | 14,983     | 13,542,655     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                 |                |                |            |            |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | 106,896         | 60,262         | 23,052         | 44         | 26         | 23,513         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | 2,736           | 1,542          | 590            | 1          | 1          | 602            | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 182,839         | 103,074        | 39,429         | 75         | 44         | 40,217         | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 13,924          | 7,850          | 3,003          | 6          | 3          | 3,063          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 3,556           | 2,005          | 767            | 1          | 1          | 782            | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 3,524           | 1,987          | 760            | 1          | 1          | 775            | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 473,805         | 267,103        | 102,176        | 194        | 114        | 104,218        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 1,346           | 759            | 290            | 1          | 0          | 296            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 36,801          | 20,746         | 7,936          | 15         | 9          | 8,095          | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7COMM        | 0               | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>42,751</u>   | <u>24,100</u>  | <u>9,219</u>   | <u>18</u>  | <u>10</u>  | <u>9,404</u>   | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>868,178</u>  | <u>489,428</u> | <u>187,222</u> | <u>356</u> | <u>209</u> | <u>190,965</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 63,661,423      | 35,888,655     | 13,728,435     | 26,093     | 15,486     | 14,002,756     | 0        | 0        |



COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER      | IUS        | DS-ML     | DS/IS         | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|-----------------|----------------|---------------|------------|-----------|---------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)             | (E)            | (F)           | (G)        | (H)       | (I)           | (J)      | (K)      |
|          |          |                                       |              | \$              | \$             | \$            | \$         | \$        | \$            | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7COMM        | (8,710)         | (4,910)        | (1,878)       | (4)        | (2)       | (1,916)       | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7COMM        | 58,126          | 32,768         | 12,535        | 24         | 14        | 12,785        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7COMM        | 82,492          | 46,504         | 17,789        | 34         | 20        | 18,145        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 7,364           | 4,151          | 1,588         | 3          | 2         | 1,620         | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7COMM        | 76,982          | 43,398         | 16,601        | 32         | 18        | 16,933        | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7COMM        | <u>16,625</u>   | <u>9,372</u>   | <u>3,585</u>  | <u>7</u>   | <u>4</u>  | <u>3,657</u>  | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 16,898,201      | 9,526,799      | 3,644,271     | 6,928      | 3,114     | 3,717,091     | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                 |                |               |            |           |               |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | (4,834)         | (2,725)        | (1,042)       | (2)        | (1)       | (1,063)       | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | (1,651)         | (931)          | (356)         | (1)        | 0         | (363)         | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 109,056         | 61,479         | 23,518        | 45         | 26        | 23,988        | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 3,930           | 2,215          | 848           | 2          | 1         | 864           | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 917             | 517            | 198           | 0          | 0         | 202           | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 2,195           | 1,237          | 473           | 1          | 1         | 483           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 5,515           | 3,109          | 1,189         | 2          | 1         | 1,213         | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 27              | 15             | 6             | 0          | 0         | 6             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 193,795         | 109,250        | 41,792        | 79         | 47        | 42,627        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 1,129           | 636            | 243           | 0          | 0         | 248           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 29,454          | 16,604         | 6,352         | 12         | 7         | 6,479         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7COMM        | 0               | 0              | 0             | 0          | 0         | 0             | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>1,758</u>    | <u>991</u>     | <u>379</u>    | <u>1</u>   | <u>0</u>  | <u>387</u>    | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>341,291</u>  | <u>192,397</u> | <u>73,600</u> | <u>139</u> | <u>82</u> | <u>75,071</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 17,744,498      | 10,003,889     | 3,826,776     | 7,274      | 3,317     | 3,903,243     | 0        | 0        |



COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER   | IUS      | DS-ML    | DS/IS      | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|-----------------|----------------|------------|----------|----------|------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)             | (E)            | (F)        | (G)      | (H)      | (I)        | (J)      | (K)      |
|          |          |                                       |              | \$              | \$             | \$         | \$       | \$       | \$         | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7COMM        | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7COMM        | 4,000           | 2,255          | 863        | 2        | 1        | 880        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7COMM        | 4,323           | 2,437          | 932        | 2        | 1        | 951        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7COMM        | 726             | 409            | 157        | 0        | 0        | 160        | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7COMM        | 20,474          | 11,542         | 4,415      | 8        | 5        | 4,503      | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7COMM        | <u>618</u>      | <u>348</u>     | <u>133</u> | <u>0</u> | <u>0</u> | <u>136</u> | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 1,444,029       | 814,123        | 311,427    | 591      | 238      | 317,648    | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                 |                |            |          |          |            |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7COMM        | 5,315           | 2,996          | 1,146      | 2        | 1        | 1,169      | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7COMM        | 183             | 103            | 39         | 0        | 0        | 40         | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7COMM        | 36,839          | 20,768         | 7,944      | 15       | 9        | 8,103      | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7COMM        | 1,274           | 718            | 275        | 1        | 0        | 280        | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7COMM        | 326             | 184            | 70         | 0        | 0        | 72         | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7COMM        | 141             | 79             | 30         | 0        | 0        | 31         | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7COMM        | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7COMM        | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7COMM        | 0               | 0              | 0          | 0        | 0        | 0          | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7COMM        | 18,850          | 10,626         | 4,065      | 8        | 5        | 4,146      | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7COMM        | 68              | 38             | 15         | 0        | 0        | 15         | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7COMM        | 953             | 537            | 206        | 0        | 0        | 210        | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7COMM        | <u>2,850</u>    | <u>1,607</u>   | <u>615</u> | <u>1</u> | <u>1</u> | <u>627</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 66,799          | 37,656         | 14,405     | 27       | 16       | 14,693     | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 1,696,059       | 956,201        | 365,777    | 694      | 298      | 373,084    | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 88 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                  | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER  | IUS    | DS-ML  | DS/IS   | NOT USED (J) | NOT USED (K) |
|----------|----------|--|--------------|-----------------|----------------|-----------|--------|--------|---------|--------------|--------------|
|          | (A)      | (B)  | (C)          | (D)             | (E)            | (F)       | (G)    | (H)    | (I)     | (J)          | (K)          |
|          |          |  |              | \$              | \$             | \$        | \$     | \$     | \$      | \$           | \$           |
| 1        |          | OPERATING REVENUE                              |              |                 |                |           |        |        |         |              |              |
| 2        | 480.00   | RESIDENTIAL SALES                              |              | 18,048,453      | 18,048,453     | 0         | 0      | 0      | 0       | 0            | 0            |
| 3        | 481.10   | COMMERCIAL SALES                               |              | 8,452,078       | 0              | 8,452,078 | 0      | 0      | 0       | 0            | 0            |
| 4        | 481.20   | INDUSTRIAL SALES                               |              | 671,596         | 0              | 643,891   | 27,705 | 0      | 0       | 0            | 0            |
| 5        |          | TOTAL SALES REVENUE                            |              | 27,172,126      | 18,048,453     | 9,095,969 | 27,705 | 0      | 0       | 0            | 0            |
| 6        | 487.00   | FORFEITED DISCOUNTS                            |              | 70,271          | 36,108         | 34,163    | 0      | 0      | 0       | 0            | 0            |
| 7        | 488.00   | MISC. SERVICE REVENUE                          | 6            | 0               | 0              | 0         | 0      | 0      | 0       | 0            | 0            |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION - GS - Residential |              | 2,577,158       | 1,067,060      | 773,119   | 0      | 56,633 | 680,346 | 0            | 0            |
| 9        | 495.00   | OTHER  | 6            | 0               | 0              | 0         | 0      | 0      | 0       | 0            | 0            |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE                   |              | 2,647,429       | 1,103,168      | 807,282   | 0      | 56,633 | 680,346 | 0            | 0            |
| 11       |          | TOTAL OPERATING REVENUE                        |              | 29,819,555      | 19,151,621     | 9,903,251 | 27,705 | 56,633 | 680,346 | 0            | 0            |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 PRODUCTION EXPENSE ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL COMMODITY   | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|-------------------|-------------------|------------------|---------------|----------|----------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)               | (E)               | (F)              | (G)           | (H)      | (I)      | (J)      | (K)      |
|          |           |                                   |              | \$                | \$                | \$               | \$            | \$       | \$       | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |                   |                   |                  |               |          |          |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |                   |                   |                  |               |          |          |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |                   |                   |                  |               |          |          |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |              | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |                   |                   |                  |               |          |          |          |          |
| 16       | 803 - 806 |                                   |              |                   |                   |                  |               |          |          |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 21,475,950        | 13,807,095        | 7,643,847        | 25,009        | 0        | 0        | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9            | 0                 | 0                 | 0                | 0             | 0        | 0        | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9            | 341,557           | 219,590           | 121,570          | 396           | 0        | 0        | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | <u>21,817,507</u> | <u>14,026,685</u> | <u>7,765,417</u> | <u>25,405</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 21,817,507        | 14,026,685        | 7,765,417        | 25,405        | 0        | 0        | 0        | 0        |

COMMODITY RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DISTRIBUTION EXPENSE ALLOCATION - LABOR  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|-----------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)          | (G)      |          | (I)          | (J)      | (K)      |
|          |          |                            |              | \$              | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |              |          |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10COMM       | 10,022          | 5,407          | 2,189        | 4        | 1        | 2,422        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 66,644          | 22,273         | 16,093       | 32       | 0        | 28,246       | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 273,886         | 154,431        | 59,074       | 112      | 14       | 60,255       | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 20,587          | 11,608         | 4,440        | 8        | 1        | 4,529        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 10COMM       | 56,348          | 30,399         | 12,308       | 24       | 3        | 13,615       | 0        | 0        |
| 10       | 881      | RENTS                      | 10COMM       | <u>0</u>        | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 427,487         | 224,118        | 94,104       | 180      | 19       | 109,067      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |                 |                |              |          |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10COMM       | 889             | 480            | 194          | 0        | 0        | 215          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 627             | 354            | 135          | 0        | 0        | 138          | 0        | 0        |
| 15       | 887      | MAINS                      | 18COMM       | 231,589         | 130,581        | 49,951       | 95       | 12       | 50,950       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 34,649          | 19,537         | 7,473        | 14       | 2        | 7,623        | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10COMM       | <u>12,769</u>   | <u>6,889</u>   | <u>2,789</u> | <u>5</u> | <u>1</u> | <u>3,085</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 280,523         | 157,841        | 60,542       | 114      | 15       | 62,011       | 0        | 0        |



COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVEMONTHSENDED12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|-----------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)             | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                                 |              | \$              | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        |          | SALES                           |              |                 |                |          |     |       |         |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                     |              | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 708,010         | 381,959        | 154,646  | 294 | 34    | 171,078 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |                 |                |          |     |       |         |          |          |
| 9        | 920      | SALARIES                        | 12COMM       | 145,871         | 78,694         | 31,861   | 61  | 7     | 35,247  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12COMM       | 423             | 228            | 92       | 0   | 0     | 102     | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 19       | 931      | RENTS                           | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |                 |                |          |     |       |         |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | 146,294         | 78,922         | 31,953   | 61  | 7     | 35,349  | 0        | 0        |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 854,304         | 460,881        | 186,599  | 355 | 41    | 206,427 | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER     | IUS       | DS-ML    | DS/IS        | NOT USED (J) | NOT USED (K) |
|----------|----------|----------------------------|--------------|-----------------|----------------|--------------|-----------|----------|--------------|--------------|--------------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)          | (G)       | (H)      | (I)          | (J)          | (K)          |
|          |          |                            |              | \$              | \$             | \$           | \$        | \$       | \$           | \$           | \$           |
| 1        |          | DISTRIBUTION EXPENSES      |              |                 |                |              |           |          |              |              |              |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11COMM       | 122,787         | 68,887         | 26,523       | 50        | 6        | 27,320       | 0            | 0            |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 17,885          | 5,977          | 4,319        | 9         | 0        | 7,580        | 0            | 0            |
| 4        | 874      | MAINS & SERVICES           | 14COMM       | 761,069         | 429,129        | 164,155      | 312       | 38       | 167,435      | 0            | 0            |
| 5        | 875      | M & R - GENERAL            | 18COMM       | 29,595          | 16,687         | 6,383        | 12        | 1        | 6,511        | 0            | 0            |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 9        | 880      | OTHER                      | 11COMM       | 189,866         | 106,521        | 41,013       | 78        | 9        | 42,245       | 0            | 0            |
| 10       | 881      | RENTS                      | 11COMM       | <u>12,876</u>   | <u>7,224</u>   | <u>2,781</u> | <u>5</u>  | <u>1</u> | <u>2,865</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | TOTAL OPERATION            |              | 1,134,078       | 634,425        | 245,174      | 466       | 55       | 253,956      | 0            | 0            |
| 12       |          | MAINTENANCE                |              |                 |                |              |           |          |              |              |              |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11COMM       | 403             | 226            | 87           | 0         | 0        | 90           | 0            | 0            |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18COMM       | 62,960          | 35,500         | 13,580       | 26        | 3        | 13,851       | 0            | 0            |
| 15       | 887      | MAINS                      | 18COMM       | 550,519         | 310,410        | 118,741      | 226       | 28       | 121,114      | 0            | 0            |
| 16       | 889      | M & R - GENERAL            | 18COMM       | 36,184          | 20,402         | 7,805        | 15        | 2        | 7,960        | 0            | 0            |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 18       | 892      | SERVICES                   | 15           | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0               | 0              | 0            | 0         | 0        | 0            | 0            | 0            |
| 20       | 894      | OTHER EQUIPMENT            | 11COMM       | <u>31,277</u>   | <u>17,547</u>  | <u>6,756</u> | <u>13</u> | <u>2</u> | <u>6,959</u> | <u>0</u>     | <u>0</u>     |
| 21       |          | TOTAL MAINTENANCE          |              | 681,343         | 384,085        | 146,969      | 280       | 35       | 149,974      | 0            | 0            |



COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS   | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|--|--------------|-----------------|----------------|----------|-------|-------|---------|----------|----------|
|          | (A)      | (B)  | (C)          | (D)             | (E)            | (F)      | (G)   | (H)   | (I)     | (J)      | (K)      |
|          |          |  |              | \$              | \$             | \$       | \$    | \$    | \$      | \$       | \$       |
| 1        |          | SALES                                      |              |                 |                |          |       |       |         |          |          |
| 2        | 911      | SUPERVISION                                | 6            | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING                    | 6            | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                                | 6            | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 5        | 916      | MISC.                                      | 6            | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                                |              | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                |              | 1,815,421       | 1,018,510      | 392,143  | 746   | 90    | 403,930 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL                   |              |                 |                |          |       |       |         |          |          |
| 9        | 920      | SALARIES                                   | 13COMM       | 311,121         | 178,583        | 74,097   | 165   | 12    | 58,264  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                 | 13COMM       | 93,873          | 53,883         | 22,357   | 50    | 4     | 17,580  | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                 | 13COMM       | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                           | 13COMM       | 826,260         | 474,273        | 196,782  | 438   | 33    | 154,734 | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE                         | 13COMM       | 8,583           | 4,927          | 2,044    | 5     | 0     | 1,607   | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES                       | 12COMM       | 109,603         | 59,129         | 23,939   | 46    | 5     | 26,483  | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS               | 12COMM       | 351,875         | 189,830        | 76,857   | 148   | 18    | 85,024  | 0        | 0        |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |              | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 17       | 928      | REG COMMISSION EXP - GENERAL               | 13COMM       | 20,763          | 11,918         | 4,945    | 11    | 1     | 3,888   | 0        | 0        |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13COMM       | 18,498          | 10,618         | 4,405    | 10    | 1     | 3,464   | 0        | 0        |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV            | 13COMM       | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 20       | 930.20   | MISC. - GENERAL                            | 13COMM       | (6,522)         | (3,744)        | (1,553)  | (3)   | 0     | (1,221) | 0        | 0        |
| 21       | 931      | RENTS                                      | 13COMM       | 67,423          | 38,701         | 16,057   | 36    | 3     | 12,626  | 0        | 0        |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                | 13COMM       | 14              | 8              | 3        | 0     | 0     | 3       | 0        | 0        |
| 23       | 935.23   | MAINT. - GEN'L OFFICE                      |              |                 |                |          |       |       |         |          |          |
| 24       |          | FURNITURE & EQUIPMENT                      | 13COMM       | 0               | 0              | 0        | 0     | 0     | 0       | 0        | 0        |
| 25       | 932      | MAINT.-MISCELLANEOUS                       | 13COMM       | 27,205          | 15,616         | 6,479    | 14    | 1     | 5,095   | 0        | 0        |
| 26       |          | TOTAL ADMIN & GENERAL - M & E              |              | 1,828,696       | 1,033,742      | 426,412  | 920   | 78    | 367,547 | 0        | 0        |
| 27       |          | TOTAL O & M EXPENSE - M & E                |              | 3,985,674       | 2,271,842      | 940,125  | 2,062 | 168   | 771,477 | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|------------------|------------------|----------------|--------------|------------|----------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)              | (E)              | (F)            | (G)          | (H)        | (I)            | (J)      | (K)      |
|          |          |                              |              | \$               | \$               | \$             | \$           | \$         | \$             | \$       | \$       |
| 1        |          | LABOR                        |              |                  |                  |                |              |            |                |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 427,487          | 224,118          | 94,104         | 180          | 19         | 109,067        | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 280,523          | 157,841          | 60,542         | 114          | 15         | 62,011         | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>146,294</u>   | <u>78,922</u>    | <u>31,953</u>  | <u>61</u>    | <u>7</u>   | <u>35,349</u>  | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 854,304          | 460,881          | 186,599        | 355          | 41         | 206,427        | 0        | 0        |
| 10       |          | M & E                        |              |                  |                  |                |              |            |                |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 341,557          | 219,590          | 121,570        | 396          | 0          | 0              | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 1,134,078        | 634,425          | 245,174        | 466          | 55         | 253,956        | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 681,343          | 384,085          | 146,969        | 280          | 35         | 149,974        | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 0                | 0                | 0              | 0            | 0          | 0              | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>1,828,696</u> | <u>1,033,742</u> | <u>426,412</u> | <u>920</u>   | <u>78</u>  | <u>367,547</u> | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>3,985,674</u> | <u>2,271,842</u> | <u>940,125</u> | <u>2,062</u> | <u>168</u> | <u>771,477</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 4,839,978        | 2,732,723        | 1,126,724      | 2,417        | 209        | 977,904        | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 97 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|-----------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)             | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$              | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7COMM        | 601,414         | 339,041        | 129,695  | 247 | 144   | 132,287 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12COMM       | 59,709          | 32,212         | 13,042   | 25  | 3     | 14,427  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12COMM       | 0               | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 661,123         | 371,253        | 142,737  | 272 | 147   | 146,714 | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 98 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL COMMODITY  | GS-RESIDENTIAL | GS-OTHER       | IUS | DS-ML      | DS/IS      | NOT USED       | NOT USED |          |
|----------|----------|---|--------------|------------------|----------------|----------------|-----|------------|------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)            | (F)            | (G) | (H)        | (I)        | (J)            | (K)      |          |
|          |          |   |              | \$               | \$             | \$             | \$  | \$         | \$         | \$             | \$       |          |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 1,146,445        | 1,284,349      | 624,166        |     | (687)      | 55,979     | (817,356)      | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                |                |     |            |            |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 919,747          | 518,514        | 198,638        |     | 378        | 248        | 201,969        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19COMM       | 2,121,964        | 1,196,236      | 457,602        |     | 870        | 509        | 466,747        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>1,510,828</u> | <u>851,779</u> | <u>325,832</u> |     | <u>618</u> | <u>254</u> | <u>332,341</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | 611,136          | 344,457        | 131,770        |     | 252        | 255        | 134,406        | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12COMM       | <u>(453)</u>     | <u>(244)</u>   | <u>(99)</u>    |     | <u>0</u>   | <u>0</u>   | <u>(109)</u>   | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>1,530,430</u> | <u>862,727</u> | <u>330,309</u> |     | <u>630</u> | <u>503</u> | <u>336,266</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | (383,985)        | 421,622        | 293,857        |     | (1,317)    | 55,476     | (1,153,622)    | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | (23,039)         | 25,297         | 17,632         |     | (79)       | 3,329      | (69,218)       | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19COMM       | <u>0</u>         | <u>0</u>       | <u>0</u>       |     | <u>0</u>   | <u>0</u>   | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | (23,039)         | 25,297         | 17,632         |     | (79)       | 3,329      | (69,218)       | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 99 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER | IUS  | DS-ML | DS/IS    | NOT USED | NOT USED |
|----------|----------|---|--------------|-----------------|----------------|----------|------|-------|----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)             | (E)            | (F)      | (G)  | (H)   | (I)      | (J)      | (K)      |
|          |          |   |              | \$              | \$             | \$       | \$   | \$    | \$       | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |                 |                |          |      |       |          |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |                 |                |          |      |       |          |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19COMM       | (2,473)         | (1,394)        | (533)    | (1)  | (1)   | (544)    | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (2,473)         | (1,394)        | (533)    | (1)  | (1)   | (544)    | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | (25,512)        | 23,903         | 17,099   | (80) | 3,328 | (69,762) | 0        | 0        |

COMMODITY RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 100 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                 | ALLOC FACTOR<br>(C) | TOTAL COMMODITY<br>(D)<br>\$ | GS-RESIDENTIAL<br>(E)<br>\$ | GS-OTHER<br>(F)<br>\$ | IUS<br>(G)<br>\$ | DS-ML<br>(H)<br>\$ | DS/IS<br>(I)<br>\$ | NOT USED<br>(J)<br>\$ | NOT USED<br>(K)<br>\$ |
|----------|-----------------|--------------------------------------|---------------------|------------------------------|-----------------------------|-----------------------|------------------|--------------------|--------------------|-----------------------|-----------------------|
| 1        |                 | OPERATING REVENUE                    |                     | 29,819,555                   | 19,151,621                  | 9,903,251             | 27,705           | 56,633             | 680,346            | 0                     | 0                     |
| 2        |                 | LESS: EXPENSES OTHER THAN FIT        |                     | <u>28,673,110</u>            | <u>17,867,272</u>           | <u>9,279,085</u>      | <u>28,392</u>    | <u>654</u>         | <u>1,497,702</u>   | <u>0</u>              | <u>0</u>              |
| 3        |                 | OPERATING INCOME BEFORE TAXES        |                     | 1,146,445                    | 1,284,349                   | 624,166               | (687)            | 55,979             | (817,356)          | 0                     | 0                     |
| 4        |                 | LESS: RECONCILING ITEMS:             |                     |                              |                             |                       |                  |                    |                    |                       |                       |
| 5        |                 | IMPUTED INTEREST                     |                     | 919,747                      | 518,514                     | 198,638               | 378              | 248                | 201,969            | 0                     | 0                     |
| 6        |                 | EXCESS OF BOOK OVER TAX S/L          | 19COMM              | 2,121,964                    | 1,196,236                   | 457,602               | 870              | 509                | 466,747            | 0                     | 0                     |
| 7        |                 | BOOK DEPRECIATION                    |                     | <u>1,510,828</u>             | <u>851,779</u>              | <u>325,832</u>        | <u>618</u>       | <u>254</u>         | <u>332,341</u>     | <u>0</u>              | <u>0</u>              |
| 8        |                 | EXCESS OF BOOK OVER TAX DEPRECIATION |                     | 611,136                      | 344,457                     | 131,770               | 252              | 255                | 134,406            | 0                     | 0                     |
| 9        |                 | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12COMM              | (453)                        | (244)                       | (99)                  | 0                | 0                  | (109)              | 0                     | 0                     |
| 10       |                 | KENTUCKY STATE INCOME TAX DEDUCTION  |                     | <u>(23,039)</u>              | <u>25,297</u>               | <u>17,632</u>         | <u>(79)</u>      | <u>3,329</u>       | <u>(69,218)</u>    | <u>0</u>              | <u>0</u>              |
| 11       |                 | TOTAL RECONCILING ITEMS              |                     | 1,507,391                    | 888,024                     | 347,941               | 551              | 3,832              | 267,048            | 0                     | 0                     |
| 12       |                 | TAXABLE INCOME                       |                     | (360,946)                    | 396,325                     | 276,226               | (1,238)          | 52,147             | (1,084,404)        | 0                     | 0                     |
| 13       |                 | CURRENT FEDERAL INCOME TAX @ 35%     |                     | (122,722)                    | 134,751                     | 93,917                | (421)            | 17,730             | (368,699)          | 0                     | 0                     |
| 14       |                 | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19COMM              | <u>0</u>                     | <u>0</u>                    | <u>0</u>              | <u>0</u>         | <u>0</u>           | <u>0</u>           | <u>0</u>              | <u>0</u>              |
| 15       |                 | CURRENT FEDERAL INCOME TAX @ 35%     |                     | (122,722)                    | 134,751                     | 93,917                | (421)            | 17,730             | (368,699)          | 0                     | 0                     |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 101 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL COMMODITY | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                |                |            |            |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19COMM       | 5,199           | 2,931          | 1,121          | 2          | 1          | 1,144          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                |                |            |            |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19COMM       | <u>(7,927)</u>  | <u>(4,469)</u> | <u>(1,709)</u> | <u>(3)</u> | <u>(2)</u> | <u>(1,744)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(7,927)</u>  | <u>(4,469)</u> | <u>(1,709)</u> | <u>(3)</u> | <u>(2)</u> | <u>(1,744)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(13,126)</u> | <u>(7,400)</u> | <u>(2,830)</u> | <u>(5)</u> | <u>(3)</u> | <u>(2,888)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | (135,848)       | 127,351        | 91,087         | (426)      | 17,727     | (371,587)      | 0        | 0        |

COMMODITY RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 102 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL COMMODITY   | GS-RESIDENTIAL    | GS-OTHER         | IUS           | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|-----------|---------------------------------------|--------------|-------------------|-------------------|------------------|---------------|--------------|------------------|----------|----------|
|          | (A)       | (B)                                   | (C)          | (D)               | (E)               | (F)              | (G)           | (H)          | (I)              | (J)      | (K)      |
|          |           |                                       |              | \$                | \$                | \$               | \$            | \$           | \$               | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                       |              | 63,661,423        | 35,888,655        | 13,728,435       | 26,093        | 15,486       | 14,002,756       | 0        | 0        |
|          |           | LESS:                                 |              |                   |                   |                  |               |              |                  |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]              |              | <u>17,744,498</u> | <u>10,003,889</u> | <u>3,826,776</u> | <u>7,274</u>  | <u>3,317</u> | <u>3,903,243</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                             |              | 45,916,925        | 25,884,766        | 9,901,659        | 18,819        | 12,169       | 10,099,513       | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | 783,025           | 441,423           | 168,859          | 321           | 188          | 172,234          | 0        | 0        |
|          |           | LESS:                                 |              |                   |                   |                  |               |              |                  |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                     | 20           | 0                 | 0                 | 0                | 0             | 0            | 0                | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT     | 19COMM       | 0                 | 0                 | 0                | 0             | 0            | 0                | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | 12,527,257        | 7,062,116         | 2,701,503        | 5,136         | 3,007        | 2,755,495        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX            | 19COMM       | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                         |              | 34,172,693        | 19,264,073        | 7,369,015        | 14,004        | 9,350        | 7,516,252        | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                 |              |                   |                   |                  |               |              |                  |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF         |              |                   |                   |                  |               |              |                  |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]          |              | 604,997           | 341,590           | 140,841          | 302           | 26           | 122,238          | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                            | 2            | 0                 | 0                 | 0                | 0             | 0            | 0                | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                  | 7COMM        | 11,923            | 6,721             | 2,571            | 5             | 3            | 2,623            | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                           | 13COMM       | 49,295            | 28,295            | 11,740           | 26            | 2            | 9,231            | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS          | 2            | <u>0</u>          | <u>0</u>          | <u>0</u>         | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                             |              | 34,838,908        | 19,640,679        | 7,524,167        | 14,337        | 9,381        | 7,650,344        | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 83, [2] PAGE 85, |              |                   |                   |                  |               |              |                  |          |          |
|          |           | [3] TOTAL O & M EXPENSE               |              | 26,315,928        | 16,539,818        | 8,770,571        | 27,426        | 209          | 977,904          | 0        | 0        |
|          |           | LESS: COST OF GAS                     |              | <u>21,475,950</u> | <u>13,807,095</u> | <u>7,643,847</u> | <u>25,009</u> | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                  |              | 4,839,978         | 2,732,723         | 1,126,724        | 2,417         | 209          | 977,904          | 0        | 0        |

| LINE NO. | DESCRIPTION (A)                            | ALLOC FACTOR (B) | TOTAL COMMODITY (C) | GS-RESIDENTIAL (D) | GS-OTHER (E) | IUS (F) | DS-ML (G) | DS/IS (H) | NOT USED (I) | NOT USED (K) |
|----------|--|------------------|---------------------|--------------------|--------------|---------|-----------|-----------|--------------|--------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                | 100.000%            | 44.549%            | 28.650%      | 0.065%  | 0.000%    | 26.736%   | 0.000%       | 0.000%       |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                | 100.000%            | 60.941%            | 37.239%      | 0.089%  | 0.000%    | 1.731%    | 0.000%       | 0.000%       |
| 3        | MINIMUM SYSTEM MAINS                       | 3                | 100.000%            | 73.793%            | 16.741%      | 0.024%  | 0.000%    | 9.442%    | 0.000%       | 0.000%       |
| 4        | THROUGHPUT EXCL MLS                        | 4                | 100.000%            | 33.421%            | 24.147%      | 0.048%  | 0.000%    | 42.384%   | 0.000%       | 0.000%       |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                | 100.000%            | 38.984%            | 26.399%      | 0.057%  | 0.000%    | 34.560%   | 0.000%       | 0.000%       |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                | 100.000%            | 89.658%            | 10.279%      | 0.001%  | 0.004%    | 0.058%    | 0.000%       | 0.000%       |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7COMM            | 100.000%            | 56.374%            | 21.565%      | 0.041%  | 0.024%    | 21.996%   | 0.000%       | 0.000%       |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                | 100.000%            | 0.000%             | 100.000%     | 0.000%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                | 100.000%            | 64.291%            | 35.593%      | 0.116%  | 0.000%    | 0.000%    | 0.000%       | 0.000%       |
| 10       | OTHER DIST. EXP - LABOR                    | 10COMM           | 100.000%            | 53.948%            | 21.842%      | 0.042%  | 0.005%    | 24.163%   | 0.000%       | 0.000%       |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11COMM           | 100.000%            | 56.103%            | 21.601%      | 0.041%  | 0.005%    | 22.250%   | 0.000%       | 0.000%       |
| 12       | O & M EXCL A & G - LABOR                   | 12COMM           | 100.000%            | 53.948%            | 21.842%      | 0.042%  | 0.005%    | 24.163%   | 0.000%       | 0.000%       |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13COMM           | 100.000%            | 57.400%            | 23.816%      | 0.053%  | 0.004%    | 18.727%   | 0.000%       | 0.000%       |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14COMM           | 100.000%            | 56.385%            | 21.569%      | 0.041%  | 0.005%    | 22.000%   | 0.000%       | 0.000%       |
| 15       | DIRECT PLANT ACCT 380                      | 15               | 100.000%            | 88.228%            | 11.418%      | 0.001%  | 0.000%    | 0.353%    | 0.000%       | 0.000%       |
| 16       | DIRECT PLANT ACCTS 381                     | 16               | 100.000%            | 71.942%            | 27.612%      | 0.013%  | 0.000%    | 0.433%    | 0.000%       | 0.000%       |
| 17       | DIRECT PLANT ACCT 385                      | 17               | 100.000%            | 0.000%             | 25.977%      | 0.029%  | 0.000%    | 73.995%   | 0.000%       | 0.000%       |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18COMM           | 100.000%            | 56.385%            | 21.569%      | 0.041%  | 0.005%    | 22.000%   | 0.000%       | 0.000%       |
| 19       | TOTAL PLANT                                | 19COMM           | 100.000%            | 56.374%            | 21.565%      | 0.041%  | 0.024%    | 21.996%   | 0.000%       | 0.000%       |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20               | 100.000%            | 56.388%            | 21.570%      | 0.041%  | 0.000%    | 22.001%   | 0.000%       | 0.000%       |
| 21       | UNCOLLECTIBLES                             | 21               | 100.000%            | 86.777%            | 13.141%      | 0.002%  | 0.006%    | 0.074%    | 0.000%       | 0.000%       |

DEMAND RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY RATE SCHEDULE - @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|------------------|--------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)              | (G)          | (H)            | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$               | \$           | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 17,464,163       | 11,214,549       | 4,685,559        | 5,749        | 119,749        | 1,438,557      | 0            | 0            |
| 2        |          | PROPOSED INCREASE                      |              | <u>6,571,039</u> | <u>4,322,380</u> | <u>1,729,274</u> | <u>1,994</u> | <u>(287)</u>   | <u>517,677</u> | <u>0</u>     | <u>0</u>     |
| 3        |          | TOTAL PROPOSED REVENUES                |              | 24,035,201       | 15,536,929       | 6,414,833        | 7,743        | 119,462        | 1,956,234      | 0            | 0            |
| 4        |          | COST OF GAS                            |              | 0                | 0                | 0                | 0            | 0              | 0              | 0            | 0            |
| 5        |          | OPERATING & MAINTENANCE EXPENSE        |              | 7,853,986        | 4,435,517        | 1,698,118        | 3,214        | 386            | 1,716,751      | 0            | 0            |
| 6        |          | DEPRECIATION & AMORTIZATION            |              | 2,889,236        | 1,628,893        | 623,100          | 1,183        | 509            | 635,551        | 0            | 0            |
| 7        |          | FEDERAL INCOME TAX                     |              | 2,745,060        | 2,169,770        | 931,858          | 277          | 37,533         | (394,378)      | 0            | 0            |
| 8        |          | KENTUCKY STATE INCOME TAX              |              | 503,863          | 399,792          | 171,922          | 48           | 7,047          | (74,945)       | 0            | 0            |
| 9        |          | TAXES OTHER THAN INCOME                |              | <u>1,115,430</u> | <u>628,822</u>   | <u>240,547</u>   | <u>457</u>   | <u>251</u>     | <u>245,353</u> | <u>0</u>     | <u>0</u>     |
| 10       |          | TOTAL EXPENSES & TAXES                 |              | 15,107,575       | 9,262,794        | 3,665,545        | 5,179        | 45,725         | 2,128,332      | 0            | 0            |
| 11       |          | OPERATING INCOME                       |              | 8,927,626        | 6,274,135        | 2,749,289        | 2,564        | 73,737         | (172,098)      | 0            | 0            |
| 12       |          | INTEREST EXPENSE                       |              | <u>2,668,272</u> | <u>1,554,560</u> | <u>748,254</u>   | <u>1,623</u> | <u>422</u>     | <u>363,413</u> | <u>0</u>     | <u>0</u>     |
| 13       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 6,259,354        | 4,719,575        | 2,001,035        | 941          | 73,315         | (535,511)      | 0            | 0            |
| 14       |          | RATE BASE                              |              | 101,070,920      | 58,884,855       | 28,342,951       | 61,483       | 15,985         | 13,765,644     | 0            | 0            |
| 15       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.83%</b>     | <b>10.65%</b>    | <b>9.70%</b>     | <b>4.17%</b> | <b>461.27%</b> | <b>-1.25%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 16       |          | UNITIZED RETURN                        |              | 1.00             | 1.27             | 1.15             | 0.50         | 54.85          | (0.15)         | 0.00         | 0.00         |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE OF RETURN BY RATE SCHEDULE - @ AUTHORIZED RETURN  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                          | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML        | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|--|--------------|------------------|------------------|----------------|--------------|--------------|----------------|--------------|--------------|
|          | (A)      | (B)                                    | (C)          | (D)              | (E)              | (F)            | (G)          | (H)          | (I)            | (J)          | (K)          |
|          |          |  |              | \$               | \$               | \$             | \$           | \$           | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES                         |              | 23,327,549       | 13,349,035       | 5,809,656      | 12,058       | (355)        | 4,157,154      | 0            | 0            |
| 2        |          | COST OF GAS                            |              | 0                | 0                | 0              | 0            | 0            | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE        |              | 7,846,107        | 4,411,156        | 1,691,380      | 3,262        | (948)        | 1,741,257      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION            |              | 2,889,238        | 1,628,893        | 623,100        | 1,183        | 509          | 635,551        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX                     |              | 2,514,834        | 1,457,968        | 734,971        | 1,681        | (1,448)      | 321,662        | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX              |              | 461,877          | 269,980          | 136,016        | 304          | (62)         | 55,640         | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME                |              | <u>1,115,430</u> | <u>628,822</u>   | <u>240,547</u> | <u>457</u>   | <u>251</u>   | <u>245,353</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES                 |              | 14,827,486       | 8,396,819        | 3,426,014      | 6,887        | (1,699)      | 2,999,463      | 0            | 0            |
| 9        |          | OPERATING INCOME                       |              | 8,500,064        | 4,952,216        | 2,383,642      | 5,171        | 1,343        | 1,157,691      | 0            | 0            |
| 10       |          | INTEREST EXPENSE                       |              | <u>2,668,272</u> | <u>1,554,560</u> | <u>748,254</u> | <u>1,623</u> | <u>422</u>   | <u>363,413</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY     |              | 5,831,792        | 3,397,656        | 1,635,388      | 3,548        | 921          | 794,278        | 0            | 0            |
| 12       |          | RATE BASE                              |              | 101,070,920      | 58,884,855       | 28,342,951     | 61,483       | 15,985       | 13,765,644     | 0            | 0            |
| 13       |          | RATE OF RETURN AUTHORIZED ON RATE BASE |              | <b>8.41%</b>     | <b>8.41%</b>     | <b>8.41%</b>   | <b>8.41%</b> | <b>8.40%</b> | <b>8.41%</b>   | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                        |              | 1.00             | 1.00             | 1.00           | 1.00         | 1.00         | 1.00           | 0.00         | 0.00         |

DEMAND RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF PROFORMA ADJUSTMENTS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | DESCRIPTION (A)                          | ALLOC FACTOR (B) | Total DEMAND (C) | GS-RESIDENTIAL (D) | GS-OTHER (E)   | IUS (F)      | DS-ML (G)       | DS/IS (H)      | NOT USED (I) | NOT USED (J) |
|----------|--|------------------|------------------|--------------------|----------------|--------------|-----------------|----------------|--------------|--------------|
| 1        | OPERATING REVENUE                        |                  | 5,863,387        | 2,134,486          | 1,124,097      | 6,309        | (120,104)       | 2,718,597      | 0            | 0            |
| 2        | LESS: GAS COST @ CITY GATE CHANGE        |                  | 0                | 0                  | 0              | 0            | 0               | 0              | 0            | 0            |
| 3        | LESS: UNCOLLECTIBLES @ 0.00923329        |                  | 54,138           | 19,708             | 10,379         | 58           | (1,109)         | 25,102         | 0            | 0            |
| 4        | LESS: PSC FEES @ 0.00190100              |                  | <u>11,147</u>    | <u>4,058</u>       | <u>2,137</u>   | <u>12</u>    | <u>(228)</u>    | <u>5,168</u>   | <u>0</u>     | <u>0</u>     |
| 5        | TAXABLE INCOME FOR STATE INCOME TAX      |                  | 5,798,102        | 2,110,720          | 1,111,581      | 6,239        | (118,767)       | 2,688,327      | 0            | 0            |
| 6        | LESS: KENTUCKY STATE INCOME TAX @ 0.0600 |                  | <u>347,886</u>   | <u>126,643</u>     | <u>66,695</u>  | <u>374</u>   | <u>(7,126)</u>  | <u>161,300</u> | <u>0</u>     | <u>0</u>     |
| 7        | TAXABLE INCOME FOR FEDERAL INCOME TAX    |                  | 5,450,216        | 1,984,077          | 1,044,886      | 5,865        | (111,641)       | 2,527,027      | 0            | 0            |
| 8        | LESS: FEDERAL INCOME TAX @ 0.35000000    |                  | <u>1,907,575</u> | <u>694,427</u>     | <u>365,710</u> | <u>2,053</u> | <u>(39,074)</u> | <u>884,459</u> | <u>0</u>     | <u>0</u>     |
| 9        | OPERATING INCOME                         |                  | 3,542,641        | 1,289,650          | 679,176        | 3,812        | (72,567)        | 1,642,568      | 0            | 0            |

DEMAND RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
RATE OF RETURN BY CLASS - @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 107 OF 129  
WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML          | DS/IS          | NOT USED     | NOT USED     |
|----------|----------|-------------------------------------|--------------|------------------|------------------|----------------|--------------|----------------|----------------|--------------|--------------|
|          | (A)      | (B)                                 | (C)          | (D)              | (E)              | (F)            | (G)          | (H)            | (I)            | (J)          | (K)          |
|          |          |                                     |              | \$               | \$               | \$             | \$           | \$             | \$             | \$           | \$           |
| 1        |          | TOTAL REVENUES [1]                  |              | 17,464,163       | 11,214,549       | 4,685,559      | 5,749        | 119,749        | 1,438,557      | 0            | 0            |
| 2        |          | COST OF GAS                         |              | 0                | 0                | 0              | 0            | 0              | 0              | 0            | 0            |
| 3        |          | OPERATING & MAINTENANCE EXPENSE [2] |              | 7,780,824        | 4,387,390        | 1,678,864      | 3,192        | 389            | 1,710,987      | 0            | 0            |
| 4        |          | DEPRECIATION & AMORTIZATION [3]     |              | 2,889,238        | 1,628,893        | 623,100        | 1,183        | 509            | 635,551        | 0            | 0            |
| 5        |          | FEDERAL INCOME TAX [4]              |              | 607,258          | 763,541          | 369,261        | (372)        | 37,626         | (562,797)      | 0            | 0            |
| 6        |          | KENTUCKY STATE INCOME TAX [5]       |              | 113,990          | 143,337          | 69,321         | (70)         | 7,064          | (105,660)      | 0            | 0            |
| 7        |          | TAXES OTHER THAN INCOME [6]         |              | <u>1,115,430</u> | <u>628,822</u>   | <u>240,547</u> | <u>457</u>   | <u>251</u>     | <u>245,353</u> | <u>0</u>     | <u>0</u>     |
| 8        |          | TOTAL EXPENSES & TAXES              |              | 12,506,739       | 7,551,983        | 2,981,093      | 4,390        | 45,838         | 1,923,434      | 0            | 0            |
| 9        |          | OPERATING INCOME                    |              | 4,957,424        | 3,662,566        | 1,704,466      | 1,359        | 73,910         | (484,877)      | 0            | 0            |
| 10       |          | INTEREST EXPENSE [7]                |              | <u>2,668,272</u> | <u>1,554,560</u> | <u>748,254</u> | <u>1,623</u> | <u>422</u>     | <u>363,413</u> | <u>0</u>     | <u>0</u>     |
| 11       |          | INCOME AVAILABLE FOR COMMON EQUITY  |              | 2,289,152        | 2,108,006        | 956,212        | (264)        | 73,488         | (848,290)      | 0            | 0            |
| 12       |          | RATE BASE [8]                       |              | 101,070,920      | 58,884,855       | 28,342,951     | 61,483       | 15,985         | 13,765,644     | 0            | 0            |
| 13       |          | RATE OF RETURN EARNED ON RATE BASE  |              | <b>4.90%</b>     | <b>6.22%</b>     | <b>6.01%</b>   | <b>2.21%</b> | <b>462.36%</b> | <b>-3.52%</b>  | <b>0.00%</b> | <b>0.00%</b> |
| 14       |          | UNITIZED RETURN                     |              | 1.00             | 1.27             | 1.23           | 0.45         | 94.36          | (0.72)         | 0.00         | 0.00         |

REFERENCES: [1] PAGE 114, [2] PAGE 122, [3] PAGE 113, [4] PAGE 127, [5] PAGE 125, [6] PAGE 123, [7] PAGE 126, [8] PAGE 128.



DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|------------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)              | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$               | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 380.00   | DIRECT SERVICES                       |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 381.00   | METERS                                | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 382.00   | METER INSTALLATIONS                   | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 383.00   | HOUSE REGULATORS                      | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | IND M&R EQUIPMENT                     | 17           | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 8        | 387.20   | ODORIZATION                           | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 9        | 387.41   | TELEPHONE                             | 7DEM         | 182,220          | 102,725        | 39,296         | 75         | 44         | 40,081         | 0        | 0        |
| 10       | 387.42   | RADIO                                 | 7DEM         | 196,935          | 111,020        | 42,469         | 81         | 47         | 43,318         | 0        | 0        |
| 11       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 33,084           | 18,651         | 7,135          | 14         | 8          | 7,277          | 0        | 0        |
| 12       | 387.45   | TELEMETERING                          | 7DEM         | 936,047          | 527,687        | 201,859        | 384        | 225        | 205,893        | 0        | 0        |
| 13       | 387.46   | CIS                                   | 7DEM         | <u>28,145</u>    | <u>15,866</u>  | <u>6,069</u>   | <u>12</u>  | <u>7</u>   | <u>6,191</u>   | <u>0</u> | <u>0</u> |
| 14       |          | TOTAL DISTRIBUTION PLANT              |              | 104,883,941      | 59,127,548     | 22,617,967     | 42,994     | 25,523     | 23,069,910     | 0        | 0        |
| 15       |          | GENERAL PLANT                         |              |                  |                |                |            |            |                |          |          |
| 16       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 182,098          | 102,656        | 39,269         | 75         | 44         | 40,054         | 0        | 0        |
| 17       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 4,659            | 2,626          | 1,005          | 2          | 1          | 1,025          | 0        | 0        |
| 18       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 311,465          | 175,585        | 67,167         | 128        | 75         | 68,510         | 0        | 0        |
| 19       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 23,721           | 13,372         | 5,115          | 10         | 6          | 5,218          | 0        | 0        |
| 20       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 6,059            | 3,416          | 1,307          | 2          | 1          | 1,333          | 0        | 0        |
| 21       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 6,004            | 3,385          | 1,295          | 2          | 1          | 1,321          | 0        | 0        |
| 22       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 24       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 25       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 807,127          | 455,010        | 174,057        | 331        | 194        | 177,536        | 0        | 0        |
| 26       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 2,293            | 1,293          | 494            | 1          | 1          | 504            | 0        | 0        |
| 27       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 62,691           | 35,341         | 13,519         | 26         | 15         | 13,790         | 0        | 0        |
| 28       | 397.50   | COMMUNICATION EQUIP - TELEMETERING    | 7DEM         | 0                | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 29       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>72,827</u>    | <u>41,055</u>  | <u>15,705</u>  | <u>30</u>  | <u>17</u>  | <u>16,019</u>  | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL GENERAL PLANT                   |              | <u>1,478,944</u> | <u>833,739</u> | <u>318,933</u> | <u>607</u> | <u>355</u> | <u>325,310</u> | <u>0</u> | <u>0</u> |
| 31       |          | TOTAL PLANT IN SERVICE (101 - 106)    |              | 108,447,227      | 61,136,314     | 23,386,389     | 44,456     | 26,378     | 23,853,691     | 0        | 0        |



DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION RESERVE ALLOC  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND   | GS-RESIDENTIAL | GS-OTHER       | IUS        | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|----------------|----------------|----------------|------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)            | (E)            | (F)            | (G)        | (H)        | (I)            | (J)      | (K)      |
|          |          |                                       |              | \$             | \$             | \$             | \$         | \$         | \$             | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)            | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | (14,838)       | (8,365)        | (3,200)        | (6)        | (4)        | (3,264)        | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 99,018         | 55,820         | 21,353         | 41         | 24         | 21,780         | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 140,525        | 79,220         | 30,304         | 58         | 34         | 30,910         | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 12,544         | 7,072          | 2,705          | 5          | 3          | 2,759          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 131,138        | 73,928         | 28,280         | 54         | 31         | 28,845         | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | <u>28,322</u>  | <u>15,966</u>  | <u>6,108</u>   | <u>12</u>  | <u>7</u>   | <u>6,230</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 28,786,083     | 16,228,900     | 6,208,015      | 11,801     | 5,303      | 6,332,064      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |                |                |                |            |            |                |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | (8,233)        | (4,641)        | (1,775)        | (3)        | (2)        | (1,811)        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | (2,812)        | (1,585)        | (606)          | (1)        | (1)        | (619)          | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 185,777        | 104,730        | 40,063         | 76         | 45         | 40,864         | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 6,696          | 3,775          | 1,444          | 3          | 2          | 1,473          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 1,563          | 881            | 337            | 1          | 0          | 344            | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 3,738          | 2,107          | 806            | 2          | 1          | 822            | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 9,396          | 5,297          | 2,026          | 4          | 2          | 2,067          | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 46             | 26             | 10             | 0          | 0          | 10             | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 330,131        | 186,108        | 71,193         | 135        | 79         | 72,616         | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 1,923          | 1,084          | 415            | 1          | 0          | 423            | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 50,175         | 28,286         | 10,820         | 21         | 12         | 11,036         | 0        | 0        |
| 27       |          | RETIREMENT WORK IN PROGRESS           | 7DEM         | 0              | 0              | 0              | 0          | 0          | 0              | 0        | 0        |
| 28       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>2,995</u>   | <u>1,688</u>   | <u>646</u>     | <u>1</u>   | <u>1</u>   | <u>659</u>     | <u>0</u> | <u>0</u> |
| 29       |          | TOTAL GENERAL PLANT                   |              | <u>581,395</u> | <u>327,756</u> | <u>125,379</u> | <u>240</u> | <u>139</u> | <u>127,884</u> | <u>0</u> | <u>0</u> |
| 30       |          | TOTAL PLANT RESERVE                   |              | 30,227,756     | 17,041,629     | 6,518,913      | 12,394     | 5,649      | 6,649,175      | 0        | 0        |



DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 GROSS DISTRIBUTION & GENERAL PLANT DEPRECIATION EXPENSE  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                         | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|---------------------------------------|--------------|--------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                                   | (C)          | (D)          | (E)            | (F)          | (G)      | (H)      | (I)          | (J)      | (K)      |
|          |          |                                       |              | \$           | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        | 381.00   | METERS                                | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 2        | 382.00   | METER INSTALLATIONS                   | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 3        | 383.00   | HOUSE REGULATORS                      | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 4        | 384.00   | HOUSE REG INSTALLATIONS               | 16           | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 5        | 385.00   | IND M&R EQUIPMENT                     | 17           | (0)          | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 6        | 385.00   | DIRECT IND M&R EQUIPMENT              |              | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 387.20   | ODORIZATION                           | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 387.41   | TELEPHONE                             | 7DEM         | 6,815        | 3,842          | 1,470        | 3        | 2        | 1,499        | 0        | 0        |
| 9        | 387.42   | RADIO                                 | 7DEM         | 7,364        | 4,151          | 1,588        | 3        | 2        | 1,620        | 0        | 0        |
| 10       | 387.44   | OTHER COMMUNICATION                   | 7DEM         | 1,236        | 697            | 267          | 1        | 0        | 272          | 0        | 0        |
| 11       | 387.45   | TELEMETERING                          | 7DEM         | 34,879       | 19,663         | 7,522        | 14       | 8        | 7,672        | 0        | 0        |
| 12       | 387.46   | CIS                                   | 7DEM         | <u>1,052</u> | <u>593</u>     | <u>227</u>   | <u>0</u> | <u>0</u> | <u>231</u>   | <u>0</u> | <u>0</u> |
| 13       |          | TOTAL DISTRIBUTION PLANT              |              | 2,459,904    | 1,386,861      | 530,514      | 1,007    | 406      | 541,114      | 0        | 0        |
| 14       |          | GENERAL PLANT                         |              |              |                |              |          |          |              |          |          |
| 15       | 391.10   | OFF FURN & EQUIP - UNSPEC             | 7DEM         | 9,055        | 5,105          | 1,953        | 4        | 2        | 1,992        | 0        | 0        |
| 16       | 391.11   | OFF FURN & EQUIP - DATA HAND          | 7DEM         | 312          | 176            | 67           | 0        | 0        | 69           | 0        | 0        |
| 17       | 391.12   | OFF FURN & EQUIP - INFO SYSTEM        | 7DEM         | 62,756       | 35,378         | 13,533       | 26       | 15       | 13,804       | 0        | 0        |
| 18       | 392.20   | TR EQ - TRAILER > \$1,000             | 7DEM         | 2,169        | 1,223          | 468          | 1        | 1        | 477          | 0        | 0        |
| 19       | 392.21   | TR EQ - TRAILER < \$1,000             | 7DEM         | 556          | 313            | 120          | 0        | 0        | 122          | 0        | 0        |
| 20       | 394.10   | TOOLS,SHOP, & GAR EQ-GARAGE & SERV    | 7DEM         | 241          | 136            | 52           | 0        | 0        | 53           | 0        | 0        |
| 21       | 394.13   | TOOLS,SHOP, & GAR EQ-UND TANK CLEANUP | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 22       | 393.00   | STORES EQUIPMENT                      | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 23       | 394.20   | SHOP EQUIPMENT                        | 7DEM         | 0            | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 24       | 394.30   | TOOLS & OTHER EQUIPMENT               | 7DEM         | 32,111       | 18,102         | 6,925        | 13       | 8        | 7,063        | 0        | 0        |
| 25       | 395.00   | LABORATORY EQUIPMENT                  | 7DEM         | 116          | 65             | 25           | 0        | 0        | 26           | 0        | 0        |
| 26       | 396.00   | POWER OP EQUIP-GEN TOOLS              | 7DEM         | 1,622        | 914            | 350          | 1        | 0        | 357          | 0        | 0        |
| 27       | 398.00   | MISCELLANEOUS EQUIPMENT               | 7DEM         | <u>4,855</u> | <u>2,737</u>   | <u>1,047</u> | <u>2</u> | <u>1</u> | <u>1,068</u> | <u>0</u> | <u>0</u> |
| 28       |          | TOTAL GENERAL PLANT                   |              | 113,793      | 64,149         | 24,540       | 47       | 27       | 25,031       | 0        | 0        |
| 29       |          | TOTAL DEPRECIATION EXPENSE            |              | 2,889,238    | 1,628,893      | 623,100      | 1,183    | 509      | 635,551      | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATING REVENUE @ CURRENT RATES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 114 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML   | DS/IS     | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|--------------|----------------|-----------|-------|---------|-----------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)          | (E)            | (F)       | (G)   | (H)     | (I)       | (J)      | (K)      |
|          |          |                              |              | \$           | \$             | \$        | \$    | \$      | \$        | \$       | \$       |
| 1        |          | OPERATING REVENUE            |              |              |                |           |       |         |           |          |          |
| 2        | 480.00   | RESIDENTIAL SALES            |              | 8,899,746    | 8,899,746      | 0         | 0     | 0       | 0         | 0        | 0        |
| 3        | 481.10   | COMMERCIAL SALES             |              | 2,831,328    | 0              | 2,831,328 | 0     | 0       | 0         | 0        | 0        |
| 4        | 481.20   | INDUSTRIAL SALES             |              | 221,351      | 0              | 215,694   | 5,658 | 0       | 0         | 0        | 0        |
| 5        |          | TOTAL SALES REVENUE          |              | 11,952,425   | 8,899,746      | 3,047,022 | 5,658 | 0       | 0         | 0        | 0        |
| 6        | 487.00   | FORFEITED DISCOUNTS          |              | 104,021      | 75,766         | 16,281    | 91    | 913     | 10,970    | 0        | 0        |
| 7        | 488.00   | MISC. SERVICE REVENUE        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 8        | 489.00   | REVENUE FROM TRANSPORTATION  |              | 5,407,716    | 2,239,037      | 1,622,256 | 0     | 118,836 | 1,427,587 | 0        | 0        |
| 9        | 495.00   | OTHER                        | 6            | 0            | 0              | 0         | 0     | 0       | 0         | 0        | 0        |
| 10       |          | TOTAL OTHER GAS DEPT REVENUE |              | 5,511,737    | 2,314,803      | 1,638,537 | 91    | 119,749 | 1,438,557 | 0        | 0        |
| 11       |          | TOTAL OPERATING REVENUE      |              | 17,464,163   | 11,214,549     | 4,685,559 | 5,749 | 119,749 | 1,438,557 | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 PRODUCTION EXPENSE ALLOCATION  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                     | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|-----------|-----------------------------------|--------------|--------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)       | (B)                               | (C)          | (D)          | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |           |                                   |              | \$           | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |           | OPERATING EXPENSES                |              |              |                |          |          |          |          |          |          |
| 2        |           | PRODUCTION EXPENSES - OPERATION   |              |              |                |          |          |          |          |          |          |
| 3        | 717       | LIQUE PETRO GAS EXP - LABOR       | 2            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 4        | 717       | LIQUE PETRO GAS EXP - M&E         | 2            | 2,139        | 1,304          | 797      | 2        | 0        | 37       | 0        | 0        |
| 5        | 723       | LIQUIFIED PETROLEUM GAS PROCESS   | 2            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 728       | LIQUIFIED PETROLEUM GAS           | 2            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 7        |           | TOTAL OPERATION                   |              | 2,139        | 1,304          | 797      | 2        | 0        | 37       | 0        | 0        |
| 8        |           | PRODUCTION EXPENSES - MAINTENANCE |              |              |                |          |          |          |          |          |          |
| 9        | 741       | STRUCTURES & IMPROV - LABOR       | 2            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 741       | STRUCTURES & IMPROV - M&E         | 2            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 11       | 742       | PRODUCTION EQUIPMENT - LABOR      | 2            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 12       | 742       | PRODUCTION EQUIPMENT - M&E        | 2            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 13       |           | TOTAL MAINTENANCE                 |              | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 14       |           | TOTAL MANUFACTURED GAS            |              | 2,139        | 1,304          | 797      | 2        | 0        | 37       | 0        | 0        |
| 15       |           | OTHER GAS SUPPLIES EXPENSE        |              |              |                |          |          |          |          |          |          |
| 16       | 803 - 806 |                                   |              |              |                |          |          |          |          |          |          |
| 17       | & 808     | COST OF GAS @ CITY GATE           |              | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 807       | OTHER PURCHASED GAS - LABOR       | 9            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 807       | OTHER PURCHASED GAS - M & E       | 9            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 812       | GAS USED IN OPERATIONS            | 9            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |           | TOTAL OTHER GAS SUPPLIES EXP      |              | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 22       |           | TOTAL PRODUCTION EXPENSE          |              | 2,139        | 1,304          | 797      | 2        | 0        | 37       | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - LABOR  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER     | IUS      | DS-ML    | DS/IS        | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|--------------|----------|----------|--------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)          | (G)      |          | (I)          | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$           | \$       | \$       | \$           | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |              |          |          |              |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 10DEM        | 15,261        | 8,605          | 3,292        | 6        | 1        | 3,357        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 466,566       | 263,073        | 100,634      | 191      | 23       | 102,645      | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 35,069        | 19,774         | 7,564        | 14       | 2        | 7,715        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 9        | 880      | OTHER                      | 10DEM        | 85,802        | 48,379         | 18,507       | 35       | 4        | 18,876       | 0        | 0        |
| 10       | 881      | RENTS                      | 10DEM        | <u>0</u>      | <u>0</u>       | <u>0</u>     | <u>0</u> | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 602,698       | 339,831        | 129,997      | 246      | 30       | 132,593      | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |              |          |          |              |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 10DEM        | 1,355         | 764            | 292          | 1        | 0        | 298          | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 1,069         | 603            | 231          | 0        | 0        | 235          | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 394,511       | 222,445        | 85,092       | 162      | 20       | 86,792       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 59,023        | 33,280         | 12,731       | 24       | 3        | 12,985       | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0            | 0        | 0        | 0            | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 10DEM        | <u>19,445</u> | <u>10,964</u>  | <u>4,194</u> | <u>8</u> | <u>1</u> | <u>4,278</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 475,403       | 268,056        | 102,540      | 195      | 24       | 104,588      | 0        | 0        |



DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION AND A&G EXPENSE ALLOCATION - LABOR  
 FORTHE TWELVEMONTHSENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                   | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|---------------------------------|--------------|--------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                             | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                                 |              | \$           | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        |          | SALES                           |              |              |                |          |     |       |         |          |          |
| 2        | 911      | SUPERVISION                     | 6            | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING         | 6            | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        | 913      | ADVERTISING                     | 6            | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 5        | 916      | MISC.                           | 6            | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 6        |          | TOTAL SALES                     |              | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES     |              | 1,078,101    | 607,887        | 232,537  | 441 | 54    | 237,181 | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL        |              |              |                |          |     |       |         |          |          |
| 9        | 920      | SALARIES                        | 12DEM        | 222,120      | 125,242        | 47,909   | 91  | 11    | 48,866  | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES      | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED      | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                | 12DEM        | 644          | 363            | 139      | 0   | 0     | 142     | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE              | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES            | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS    | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 16       | 928      | REG COMMISSION EXP - GENERAL    | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 17       | 930.10   | MISC. - INSTITUT & GOODWILL ADV | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 18       | 930.20   | MISC. - GENERAL                 | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 19       | 931      | RENTS                           | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 20       | 935.13   | MAINT. STRUCTURES & IMPROV.     | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 21       | 935.23   | MAINT. - GEN'L OFFICE           |              |              |                |          |     |       |         |          |          |
| 22       |          | FURNITURE & EQUIPMENT           | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 23       | 932      | MAINT.-MISCELLANEOUS            | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 24       |          | TOTAL ADMIN & GENERAL - LABOR   |              | 222,764      | 125,605        | 48,048   | 91  | 11    | 49,008  | 0        | 0        |
| 25       |          | TOTAL O & M EXPENSE - LABOR     |              | 1,300,865    | 733,492        | 280,585  | 532 | 65    | 286,189 | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND  | GS-RESIDENTIAL | GS-OTHER      | IUS       | DS-ML    | DS/IS         | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|---------------|----------------|---------------|-----------|----------|---------------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)           | (E)            | (F)           | (G)       | (H)      | (I)           | (J)      | (K)      |
|          |          |                            |              | \$            | \$             | \$            | \$        | \$       | \$            | \$       | \$       |
| 1        |          | DISTRIBUTION EXPENSES      |              |               |                |               |           |          |               |          |          |
| 2        | 870      | SUPERVISION & ENGINEERING  | 11DEM        | 206,601       | 116,492        | 44,562        | 85        | 10       | 45,452        | 0        | 0        |
| 3        | 871      | DISTRIBUTION LOAD DISPATCH | 4            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 4        | 874      | MAINS & SERVICES           | 14DEM        | 1,296,481     | 731,021        | 279,638       | 532       | 65       | 285,226       | 0        | 0        |
| 5        | 875      | M & R - GENERAL            | 18DEM        | 50,414        | 28,426         | 10,874        | 21        | 3        | 11,091        | 0        | 0        |
| 6        | 876      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 7        | 878      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 8        | 879      | CUSTOMER INSTALLATION      | 16           | (0)           | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 9        | 880      | OTHER                      | 11DEM        | 319,470       | 180,133        | 68,906        | 131       | 16       | 70,283        | 0        | 0        |
| 10       | 881      | RENTS                      | 11DEM        | <u>21,665</u> | <u>12,216</u>  | <u>4,673</u>  | <u>9</u>  | <u>1</u> | <u>4,766</u>  | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL OPERATION            |              | 1,894,631     | 1,068,288      | 408,653       | 778       | 95       | 416,818       | 0        | 0        |
| 12       |          | MAINTENANCE                |              |               |                |               |           |          |               |          |          |
| 13       | 885      | SUPERVISION & ENGINEERING  | 11DEM        | 678           | 382            | 146           | 0         | 0        | 149           | 0        | 0        |
| 14       | 886      | STRUCTURES & IMPROVEMENTS  | 18DEM        | 107,251       | 60,474         | 23,133        | 44        | 5        | 23,595        | 0        | 0        |
| 15       | 887      | MAINS                      | 18DEM        | 937,809       | 528,784        | 202,276       | 385       | 47       | 206,318       | 0        | 0        |
| 16       | 889      | M & R - GENERAL            | 18DEM        | 61,639        | 34,755         | 13,295        | 25        | 3        | 13,561        | 0        | 0        |
| 17       | 890      | M & R - INDUSTRIAL         | 8            | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 18       | 892      | SERVICES                   | 15           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 19       | 893      | METERS & HOUSE REGULATORS  | 16           | 0             | 0              | 0             | 0         | 0        | 0             | 0        | 0        |
| 20       | 894      | OTHER EQUIPMENT            | 11DEM        | <u>52,628</u> | <u>29,674</u>  | <u>11,351</u> | <u>22</u> | <u>3</u> | <u>11,578</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL MAINTENANCE          |              | 1,160,005     | 654,069        | 250,201       | 476       | 58       | 255,201       | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                    | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS      | DS-ML    | DS/IS    | NOT USED | NOT USED |
|----------|----------|----------------------------------|--------------|--------------|----------------|----------|----------|----------|----------|----------|----------|
|          | (A)      | (B)                              | (C)          | (D)          | (E)            | (F)      | (G)      | (H)      | (I)      | (J)      | (K)      |
|          |          |                                  |              | \$           | \$             | \$       | \$       | \$       | \$       | \$       | \$       |
| 1        |          | CUSTOMER ACCOUNTS                |              |              |                |          |          |          |          |          |          |
| 2        | 901      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 3        | 902      | METER READING                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 4        | 903      | CUSTOMER RECORDS & COLLECTIONS   | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 5        | 904      | UNCOLLECTIBLE ACCOUNTS           | 21           | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 6        | 905      | MISC.                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 7        | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 8        | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 9        | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 10       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL CUSTOMER ACCT.             |              | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 12       |          | CUSTOMER SERVICE & INFORMATIONAL |              |              |                |          |          |          |          |          |          |
| 13       | 907      | SUPERVISION                      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 14       | 908      | CUSTOMER ASSISTANCE              | 6            | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 15       | 909      | INFO. & INSTRUCTIONAL            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 16       | 910      | MISCELLANEOUS                    | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 17       | 920      | SALARIES                         | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 18       | 921      | OFFICE SUPPLIES AND EXPENSE      | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 19       | 931      | RENTS                            | 6            | 0            | 0              | 0        | 0        | 0        | 0        | 0        | 0        |
| 20       | 935      | GENERAL PLANT MAINTENANCE        | 6            | <u>0</u>     | <u>0</u>       | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 21       |          | TOTAL CUSTOMER SERVICE & INFO.   |              | (0)          | 0              | 0        | 0        | 0        | 0        | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 DISTRIBUTION EXPENSE ALLOCATION - M & E  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                              | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER  | IUS   | DS-ML | DS/IS     | NOT USED | NOT USED |
|----------|----------|--|--------------|--------------|----------------|-----------|-------|-------|-----------|----------|----------|
|          | (A)      | (B)  | (C)          | (D)          | (E)            | (F)       | (G)   | (H)   | (I)       | (J)      | (K)      |
|          |          |  |              | \$           | \$             | \$        | \$    | \$    | \$        | \$       | \$       |
| 1        |          | SALES                                      |              |              |                |           |       |       |           |          |          |
| 2        | 911      | SUPERVISION                                | 6            | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 3        | 912      | DEMONSTRATION & SELLING                    | 6            | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 4        | 913      | ADVERTISING                                | 6            | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 5        | 916      | MISC.                                      | 6            | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 6        |          | TOTAL SALES                                |              | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 7        |          | TOTAL DISTRIBUTION EXPENSES                |              | 3,054,636    | 1,722,357      | 658,854   | 1,254 | 153   | 672,019   | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL                   |              |              |                |           |       |       |           |          |          |
| 9        | 920      | SALARIES                                   | 13DEM        | 582,396      | 328,401        | 125,681   | 239   | 29    | 128,046   | 0        | 0        |
| 10       | 921      | OFFICE SUPPLIES & EXPENSES                 | 13DEM        | 175,722      | 99,086         | 37,921    | 72    | 9     | 38,634    | 0        | 0        |
| 11       | 922      | ADMIN. EXPENSES TRANSFERED                 | 13DEM        | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 12       | 923      | OUTSIDE SERVICES                           | 13DEM        | 1,546,698    | 872,152        | 333,777   | 634   | 77    | 340,057   | 0        | 0        |
| 13       | 924      | PROPERTY INSURANCE                         | 13DEM        | 16,066       | 9,059          | 3,467     | 7     | 1     | 3,532     | 0        | 0        |
| 14       | 925      | INJURIES AND DAMAGES                       | 12DEM        | 205,168      | 115,684        | 44,253    | 84    | 10    | 45,137    | 0        | 0        |
| 15       | 926      | EMPLOYEE PENSIONS & BENEFITS               | 12DEM        | 658,685      | 371,399        | 142,072   | 270   | 33    | 144,911   | 0        | 0        |
| 16       | 926      | DIRECT EMPLOYEE PENSIONS & BENEFITS        |              | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 17       | 928      | REG COMMISSION EXP - GENERAL               | 13DEM        | 38,868       | 21,917         | 8,388     | 16    | 2     | 8,546     | 0        | 0        |
| 18       | 928      | REGULATORY COMMISSION EXP - PSC @ 0.001901 | 13DEM        | 34,628       | 19,526         | 7,473     | 14    | 2     | 7,613     | 0        | 0        |
| 19       | 930.10   | MISC. - INSTITUT & GOODWILL ADV            | 13DEM        | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 20       | 930.20   | MISC. - GENERAL                            | 13DEM        | (12,210)     | (6,885)        | (2,635)   | (5)   | (1)   | (2,685)   | 0        | 0        |
| 21       | 931      | RENTS                                      | 13DEM        | 126,210      | 71,167         | 27,236    | 52    | 6     | 27,749    | 0        | 0        |
| 22       | 935.13   | MAINT. STRUCTURES & IMPROV.                | 13DEM        | 25           | 14             | 5         | 0     | 0     | 5         | 0        | 0        |
| 23       | 935.23   | MAINT. - GEN'L OFFICE                      |              |              |                |           |       |       |           |          |          |
| 24       |          | FURNITURE & EQUIPMENT                      | 13DEM        | 0            | 0              | 0         | 0     | 0     | 0         | 0        | 0        |
| 25       | 932      | MAINT.-MISCELLANEOUS                       | 13DEM        | 50,927       | 28,717         | 10,990    | 21    | 3     | 11,197    | 0        | 0        |
| 26       |          | TOTAL ADMIN & GENERAL - M & E              |              | 3,423,183    | 1,930,237      | 738,628   | 1,404 | 171   | 752,742   | 0        | 0        |
| 27       |          | TOTAL O & M EXPENSE - M & E                |              | 6,479,958    | 3,653,898      | 1,398,279 | 2,660 | 324   | 1,424,798 | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 OPERATION & MAINTENANCE EXPENSE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 122 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML      | DS/IS            | NOT USED | NOT USED |
|----------|----------|------------------------------|--------------|------------------|------------------|------------------|--------------|------------|------------------|----------|----------|
|          | (A)      | (B)                          | (C)          | (D)              | (E)              | (F)              | (G)          | (H)        | (I)              | (J)      | (K)      |
|          |          |                              |              | \$               | \$               | \$               | \$           | \$         | \$               | \$       | \$       |
| 1        |          | LABOR                        |              |                  |                  |                  |              |            |                  |          |          |
| 2        |          | PRODUCTION                   | PAGE 13      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 3        |          | DISTRIBUTION - O&M OPERATION | PAGE 14      | 602,698          | 339,831          | 129,997          | 246          | 30         | 132,593          | 0        | 0        |
| 4        |          | DISTRIBUTION - O&M MAINT.    | PAGE 14      | 475,403          | 268,056          | 102,540          | 195          | 24         | 104,588          | 0        | 0        |
| 5        |          | CUSTOMER ACCOUNTS            | PAGE 15      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 6        |          | CUSTOMER SERVICE & INFOR.    | PAGE 15      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 7        |          | SALES                        | PAGE 16      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 8        |          | ADMINISTRATIVE & GENERAL     | PAGE 16      | <u>222,764</u>   | <u>125,605</u>   | <u>48,048</u>    | <u>91</u>    | <u>11</u>  | <u>49,008</u>    | <u>0</u> | <u>0</u> |
| 9        |          | TOTAL LABOR EXPENSE          |              | 1,300,865        | 733,492          | 280,585          | 532          | 65         | 286,189          | 0        | 0        |
| 10       |          | M & E                        |              |                  |                  |                  |              |            |                  |          |          |
| 11       |          | PRODUCTION                   | PAGE 13      | 2,139            | 1,304            | 797              | 2            | 0          | 37               | 0        | 0        |
| 12       |          | DISTRIBUTION - O&M OPERATION | PAGE 17      | 1,894,631        | 1,068,288        | 408,653          | 778          | 95         | 416,818          | 0        | 0        |
| 13       |          | DISTRIBUTION - O&M MAINT.    | PAGE 17      | 1,160,005        | 654,069          | 250,201          | 476          | 58         | 255,201          | 0        | 0        |
| 14       |          | CUSTOMER ACCOUNTS            | PAGE 18      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 15       |          | CUSTOMER SERVICE & INFOR.    | PAGE 18      | (0)              | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 16       |          | SALES                        | PAGE 19      | 0                | 0                | 0                | 0            | 0          | 0                | 0        | 0        |
| 17       |          | ADMINISTRATIVE & GENERAL     | PAGE 19      | <u>3,423,183</u> | <u>1,930,237</u> | <u>738,628</u>   | <u>1,404</u> | <u>171</u> | <u>752,742</u>   | <u>0</u> | <u>0</u> |
| 18       |          | TOTAL M & E EXPENSE          |              | <u>6,479,958</u> | <u>3,653,898</u> | <u>1,398,279</u> | <u>2,660</u> | <u>324</u> | <u>1,424,798</u> | <u>0</u> | <u>0</u> |
| 19       |          | TOTAL O & M EXPENSES         |              | 7,780,824        | 4,387,390        | 1,678,864        | 3,192        | 389        | 1,710,987        | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 TAXES OTHER THAN INCOME  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 123 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE              | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS | DS-ML | DS/IS   | NOT USED | NOT USED |
|----------|----------|----------------------------|--------------|--------------|----------------|----------|-----|-------|---------|----------|----------|
|          | (A)      | (B)                        | (C)          | (D)          | (E)            | (F)      | (G) | (H)   | (I)     | (J)      | (K)      |
|          |          |                            |              | \$           | \$             | \$       | \$  | \$    | \$      | \$       | \$       |
| 1        | 408      | TAXES BASED ON PROPERTY    | 7DEM         | 1,024,510    | 577,557        | 220,936  | 420 | 246   | 225,351 | 0        | 0        |
| 2        | 408      | TAXES BASED ON PAYROLL     | 12DEM        | 90,920       | 51,265         | 19,611   | 37  | 5     | 20,002  | 0        | 0        |
| 3        | 408      | OTHER TAXES                | 12DEM        | 0            | 0              | 0        | 0   | 0     | 0       | 0        | 0        |
| 4        |          | TOTAL TAXES OTHER THAN FIT |              | 1,115,430    | 628,822        | 240,547  | 457 | 251   | 245,353 | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                   | ALLOC FACTOR | TOTAL DEMAND     | GS-RESIDENTIAL   | GS-OTHER       | IUS          | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|---|--------------|------------------|------------------|----------------|--------------|------------|----------------|----------|----------|
|          | (A)      | (B)   | (C)          | (D)              | (E)              | (F)            | (G)          | (H)        | (I)            | (J)      | (K)      |
|          |          |   |              | \$               | \$               | \$             | \$           | \$         | \$             | \$       | \$       |
| 1        |          | OPERATING INCOME BEFORE TAXES (PAGE 24, LINE 3) |              | 5,678,671        | 4,569,444        | 2,143,048      | 917          | 118,600    | (1,153,334)    | 0        | 0        |
| 2        |          | LESS: RECONCILING ITEMS:                        |              |                  |                  |                |              |            |                |          |          |
| 3        |          | IMPUTED INTEREST                                |              | 2,668,272        | 1,554,560        | 748,254        | 1,623        | 422        | 363,413        | 0        | 0        |
| 4        |          | TAX ACCELERATED DEPRECIATION                    | 19DEM        | 3,614,766        | 2,037,788        | 779,524        | 1,482        | 868        | 795,104        | 0        | 0        |
| 5        |          | BOOK DEPRECIATION                               |              | <u>2,573,697</u> | <u>1,451,010</u> | <u>555,054</u> | <u>1,054</u> | <u>433</u> | <u>566,145</u> | <u>0</u> | <u>0</u> |
| 6        |          | EXCESS OF BOOK OVER TAX DEPRECIATION            |              | 1,041,069        | 586,778          | 224,470        | 428          | 435        | 228,959        | 0        | 0        |
| 7        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE                 | 12DEM        | (689)            | <u>(388)</u>     | <u>(149)</u>   | <u>0</u>     | <u>0</u>   | <u>(152)</u>   | <u>0</u> | <u>0</u> |
| 8        |          | TOTAL RECONCILING ITEMS                         |              | <u>3,708,652</u> | <u>2,140,950</u> | <u>972,575</u> | <u>2,051</u> | <u>857</u> | <u>592,220</u> | <u>0</u> | <u>0</u> |
| 9        |          | TAXABLE INCOME                                  |              | 1,970,019        | 2,428,494        | 1,170,473      | (1,134)      | 117,743    | (1,745,554)    | 0        | 0        |
| 10       |          | STATE INCOME TAX @ 6.00%                        |              | 118,202          | 145,711          | 70,229         | (68)         | 7,065      | (104,734)      | 0        | 0        |
| 11       |          | PLUS: FOREIGN TAX PAYMENTS                      | 19DEM        | 0                | <u>0</u>         | <u>0</u>       | <u>0</u>     | <u>0</u>   | <u>0</u>       | <u>0</u> | <u>0</u> |
| 12       |          | KENTUCKY STATE INCOME TAX - CURRENT             |              | 118,202          | 145,711          | 70,229         | (68)         | 7,065      | (104,734)      | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 KENTUCKY STATE INCOME TAX  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
 PAGE 125 OF 129  
 WITNESS: C. NOTESTONE

| LINE NO. | ACCT NO. | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND | GS-RESIDENTIAL | GS-OTHER | IUS  | DS-ML | DS/IS     | NOT USED | NOT USED |
|----------|----------|---|--------------|--------------|----------------|----------|------|-------|-----------|----------|----------|
|          | (A)      | (B)                                     | (C)          | (D)          | (E)            | (F)      | (G)  | (H)   | (I)       | (J)      | (K)      |
|          |          |   |              | \$           | \$             | \$       | \$   | \$    | \$        | \$       | \$       |
| 1        |          | DEFERRED TAXES                          |              |              |                |          |      |       |           |          |          |
| 2        |          | RECONCILIATION ITEMS:                   |              |              |                |          |      |       |           |          |          |
| 3        |          | AMORTIZATION OF EXCESS ADIT-STATE       | 19DEM        | (4,212)      | (2,374)        | (908)    | (2)  | (1)   | (926)     | 0        | 0        |
| 4        |          | TOTAL DEFERRED INCOME TAX               |              | (4,212)      | (2,374)        | (908)    | (2)  | (1)   | (926)     | 0        | 0        |
| 5        |          | TOTAL KENTUCKY STATE INCOME TAX EXPENSE |              | 113,990      | 143,337        | 69,321   | (70) | 7,064 | (105,660) | 0        | 0        |

DEMAND RELATED  
AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                        | ALLOC FACTOR | TOTAL DEMAND      | GS-RESIDENTIAL   | GS-OTHER         | IUS          | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|----------|--------------------------------------|--------------|-------------------|------------------|------------------|--------------|--------------|------------------|----------|----------|
|          | (A)      | (B)                                  | (C)          | (D)               | (E)              | (F)              | (G)          | (H)          | (I)              | (J)      | (K)      |
|          |          |                                      |              | \$                | \$               | \$               | \$           | \$           | \$               | \$       | \$       |
| 1        |          | OPERATING REVENUE                    |              | 17,464,163        | 11,214,549       | 4,685,559        | 5,749        | 119,749      | 1,438,557        | 0        | 0        |
| 2        |          | LESS: EXPENSES OTHER THAN FIT        |              | <u>11,785,491</u> | <u>6,645,105</u> | <u>2,542,511</u> | <u>4,832</u> | <u>1,149</u> | <u>2,591,891</u> | <u>0</u> | <u>0</u> |
| 3        |          | OPERATING INCOME BEFORE TAXES        |              | 5,678,671         | 4,569,444        | 2,143,048        | 917          | 118,600      | (1,153,334)      | 0        | 0        |
| 4        |          | LESS: RECONCILING ITEMS:             |              |                   |                  |                  |              |              |                  |          |          |
| 5        |          | IMPUTED INTEREST                     |              | 2,668,272         | 1,554,560        | 748,254          | 1,623        | 422          | 363,413          | 0        | 0        |
| 6        |          | EXCESS OF BOOK OVER TAX S/L          | 19DEM        | 3,614,766         | 2,037,788        | 779,524          | 1,482        | 868          | 795,104          | 0        | 0        |
| 7        |          | BOOK DEPRECIATION                    |              | <u>2,573,697</u>  | <u>1,451,010</u> | <u>555,054</u>   | <u>1,054</u> | <u>433</u>   | <u>566,145</u>   | <u>0</u> | <u>0</u> |
| 8        |          | EXCESS OF BOOK OVER TAX DEPRECIATION |              | 1,041,069         | 586,778          | 224,470          | 428          | 435          | 228,959          | 0        | 0        |
| 9        |          | NON DEDUCTIBLE EMPLOYEE EXPENSE      | 12DEM        | (689)             | (388)            | (149)            | 0            | 0            | (152)            | 0        | 0        |
| 10       |          | KENTUCKY STATE INCOME TAX DEDUCTION  |              | <u>118,202</u>    | <u>145,711</u>   | <u>70,229</u>    | <u>(68)</u>  | <u>7,065</u> | <u>(104,734)</u> | <u>0</u> | <u>0</u> |
| 11       |          | TOTAL RECONCILING ITEMS              |              | 3,826,854         | 2,286,661        | 1,042,804        | 1,983        | 7,922        | 487,486          | 0        | 0        |
| 12       |          | TAXABLE INCOME                       |              | 1,851,817         | 2,282,783        | 1,100,244        | (1,066)      | 110,678      | (1,640,820)      | 0        | 0        |
| 13       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 629,618           | 776,146          | 374,083          | (362)        | 37,631       | (557,879)        | 0        | 0        |
| 14       |          | PLUS: DIRECT ADJUSTMENT TO F.I.T.    | 19DEM        | <u>0</u>          | <u>0</u>         | <u>0</u>         | <u>0</u>     | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 15       |          | CURRENT FEDERAL INCOME TAX @ 35%     |              | 629,618           | 776,146          | 374,083          | (362)        | 37,631       | (557,879)        | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 FEDERAL INCOME TAXES  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO. | ACCOUNT TITLE                       | ALLOC FACTOR | TOTAL DEMAND    | GS-RESIDENTIAL  | GS-OTHER       | IUS         | DS-ML      | DS/IS          | NOT USED | NOT USED |
|----------|----------|-------------------------------------|--------------|-----------------|-----------------|----------------|-------------|------------|----------------|----------|----------|
|          | (A)      | (B)                                 | (C)          | (D)             | (E)             | (F)            | (G)         | (H)        | (I)            | (J)      | (K)      |
|          |          |                                     |              | \$              | \$              | \$             | \$          | \$         | \$             | \$       | \$       |
| 1        |          | DEFERRED INCOME TAXES               |              |                 |                 |                |             |            |                |          |          |
| 2        |          | LESS: AMORT. OF PRIOR YEARS ITC     | 19DEM        | 8,856           | 4,992           | 1,910          | 4           | 2          | 1,948          | 0        | 0        |
| 3        |          | OTHER TAX DEFERRALS                 |              |                 |                 |                |             |            |                |          |          |
| 4        |          | AMORTIZATION OF EXCESS ADIT-FEDERAL | 19DEM        | <u>(13,504)</u> | <u>(7,613)</u>  | <u>(2,912)</u> | <u>(6)</u>  | <u>(3)</u> | <u>(2,970)</u> | <u>0</u> | <u>0</u> |
| 5        |          | TOTAL OTHER TAX DEFERRALS           |              | <u>(13,504)</u> | <u>(7,613)</u>  | <u>(2,912)</u> | <u>(6)</u>  | <u>(3)</u> | <u>(2,970)</u> | <u>0</u> | <u>0</u> |
| 6        |          | TOTAL DEFERRED INCOME TAX           |              | <u>(22,360)</u> | <u>(12,605)</u> | <u>(4,822)</u> | <u>(10)</u> | <u>(5)</u> | <u>(4,918)</u> | <u>0</u> | <u>0</u> |
| 7        |          | TOTAL FEDERAL INCOME TAX            |              | 607,258         | 763,541         | 369,261        | (372)       | 37,626     | (562,797)      | 0        | 0        |

DEMAND RELATED  
 AVERAGE OF CUSTOMER-DEMAND & DEMAND-COMMODITY  
 FORECASTED TEST YEAR - ORIGINAL FILING

COLUMBIA GAS OF KENTUCKY, INC.  
 RATE BASE SUMMARY  
 FOR THE TWELVE MONTHS ENDED 12/31/2017

| LINE NO. | ACCT NO.  | ACCOUNT TITLE                           | ALLOC FACTOR | TOTAL DEMAND      | GS-RESIDENTIAL    | GS-OTHER          | IUS           | DS-ML        | DS/IS            | NOT USED | NOT USED |
|----------|-----------|---|--------------|-------------------|-------------------|-------------------|---------------|--------------|------------------|----------|----------|
|          | (A)       | (B)                                     | (C)          | (D)               | (E)               | (F)               | (G)           | (H)          | (I)              | (J)      | (K)      |
|          |           |   |              | \$                | \$                | \$                | \$            | \$           | \$               | \$       | \$       |
| 1        | 101 & 106 | GROSS PLANT [1]                         |              | 108,447,227       | 61,136,314        | 23,386,389        | 44,456        | 26,378       | 23,853,691       | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                  |          |          |
| 2        | 108-111   | DEPRECIATION RESERVE [2]                |              | <u>30,227,756</u> | <u>17,041,629</u> | <u>6,518,913</u>  | <u>12,394</u> | <u>5,649</u> | <u>6,649,175</u> | <u>0</u> | <u>0</u> |
| 3        |           | NET PLANT                               |              | 78,219,471        | 44,094,685        | 16,867,476        | 32,062        | 20,728       | 17,204,516       | 0        | 0        |
| 4        | 190.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 1,333,883         | 751,963           | 287,652           | 547           | 320          | 293,401          | 0        | 0        |
|          |           | LESS:                                   |              |                   |                   |                   |               |              |                  |          |          |
| 5        | 252.00    | CUSTOMER ADVANCES                       | 20           | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 6        | 255.00    | (1962 - 69) INVESTMENT TAX CREDIT       | 19DEM        | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 7        | 282.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | 21,340,177        | 12,030,311        | 4,602,009         | 8,749         | 5,122        | 4,693,985        | 0        | 0        |
| 8        | 283.00    | ACCUMULATED DEF INCOME TAX              | 19DEM        | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
| 9        |           | NET RATE BASE                           |              | 58,213,177        | 32,816,337        | 12,553,119        | 23,860        | 15,926       | 12,803,932       | 0        | 0        |
| 10       |           | PLUS WORKING CAPITAL:                   |              |                   |                   |                   |               |              |                  |          |          |
| 11       |           | CASH WORKING CAPITAL @ 1/8 OF           |              |                   |                   |                   |               |              |                  |          |          |
| 12       |           | O & M EXCLUDING GAS COST [3]            |              | 972,603           | 548,424           | 209,858           | 399           | 49           | 213,873          | 0        | 0        |
| 13       | 151.00    | FUEL STOCK                              | 2            | 0                 | 0                 | 0                 | 0             | 0            | 0                | 0        | 0        |
| 14       | 154.00    | MATERIALS & SUPPLIES                    | 7DEM         | 20,311            | 11,450            | 4,380             | 8             | 5            | 4,468            | 0        | 0        |
| 15       | 165.00    | PREPAYMENTS                             | 13DEM        | 92,278            | 52,034            | 19,914            | 38            | 5            | 20,288           | 0        | 0        |
| 16       | 164.00    | GAS STORED UNDERGROUND - FSS            | 2            | <u>41,772,551</u> | <u>25,456,610</u> | <u>15,555,680</u> | <u>37,178</u> | <u>0</u>     | <u>723,083</u>   | <u>0</u> | <u>0</u> |
| 17       |           | RATE BASE                               |              | 101,070,920       | 58,884,855        | 28,342,951        | 61,483        | 15,985       | 13,765,644       | 0        | 0        |
|          |           | REFERENCES: [1] PAGE 109, [2] PAGE 111, |              |                   |                   |                   |               |              |                  |          |          |
|          |           | [3] TOTAL O & M EXPENSE                 |              | 7,780,824         | 4,387,390         | 1,678,864         | 3,192         | 389          | 1,710,987        | 0        | 0        |
|          |           | LESS: COST OF GAS                       |              | <u>0</u>          | <u>0</u>          | <u>0</u>          | <u>0</u>      | <u>0</u>     | <u>0</u>         | <u>0</u> | <u>0</u> |
|          |           | O & M EXCL. GAS COST                    |              | 7,780,824         | 4,387,390         | 1,678,864         | 3,192         | 389          | 1,710,987        | 0        | 0        |

COLUMBIA GAS OF KENTUCKY, INC.  
ALLOCATION FACTORS  
FOR THE TWELVE MONTHS ENDED 12/31/2017

ATTACHMENT CEN-3  
PAGE 129 OF 129  
WITNESS: C. NOTESTONE

DEMAND RELATED  
FORECASTED TEST YEAR - ORIGINAL FILING

| LINE NO. | DESCRIPTION<br>(A)                         | ALLOC FACTOR<br>(B) | TOTAL DEMAND<br>(C) | GS-RESIDENTIAL<br>(D) | GS-OTHER<br>(E) | IUS<br>(F) | DS-ML<br>(G) | DS/IS<br>(H) | NOT USED<br>(I) | NOT USED<br>(K) |
|----------|--|---------------------|---------------------|-----------------------|-----------------|------------|--------------|--------------|-----------------|-----------------|
| 1        | DESIGN DAY EXCL. DS-ML                     | 1                   | 100.000%            | 44.549%               | 28.650%         | 0.065%     | 0.000%       | 26.736%      | 0.000%          | 0.000%          |
| 2        | DESIGN DAY EXCL. INTERR DEMAND (MCF)       | 2                   | 100.000%            | 60.941%               | 37.239%         | 0.089%     | 0.000%       | 1.731%       | 0.000%          | 0.000%          |
| 3        | MINIMUM SYSTEM MAINS                       | 3                   | 100.000%            | 73.793%               | 16.741%         | 0.024%     | 0.000%       | 9.442%       | 0.000%          | 0.000%          |
| 4        | THROUGHPUT EXCL MLS                        | 4                   | 100.000%            | 33.421%               | 24.147%         | 0.048%     | 0.000%       | 42.384%      | 0.000%          | 0.000%          |
| 5        | COMPOSIT OF ALLOC #1 & #4                  | 5                   | 100.000%            | 38.984%               | 26.399%         | 0.057%     | 0.000%       | 34.560%      | 0.000%          | 0.000%          |
| 6        | AVERAGE NO. OF CUSTOMERS                   | 6                   | 100.000%            | 89.658%               | 10.279%         | 0.001%     | 0.004%       | 0.058%       | 0.000%          | 0.000%          |
| 7        | DIST. PLANT EXCL. ACCTS 375.70,375.71,387  | 7DEM                | 100.000%            | 56.374%               | 21.565%         | 0.041%     | 0.024%       | 21.996%      | 0.000%          | 0.000%          |
| 8        | TOTAL PLANT ACCOUNT 385                    | 8                   | 100.000%            | 0.000%                | 100.000%        | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 9        | GAS PURCHASE EXPENSE EX OFF SYST           | 9                   | 100.000%            | 100.000%              | 0.000%          | 0.000%     | 0.000%       | 0.000%       | 0.000%          | 0.000%          |
| 10       | OTHER DIST. EXP - LABOR                    | 10DEM               | 100.000%            | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 11       | OTHER DIST. EXP EXCL - M & E               | 11DEM               | 100.000%            | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 12       | O & M EXCL A & G - LABOR                   | 12DEM               | 100.000%            | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 13       | O & M EXCL GAS PUR, UNCOL, AND A & G - M&E | 13DEM               | 100.000%            | 56.388%               | 21.580%         | 0.041%     | 0.005%       | 21.986%      | 0.000%          | 0.000%          |
| 14       | ACCT 376/380 - MAINS/SERVICES              | 14DEM               | 100.000%            | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 15       | DIRECT PLANT ACCT 380                      | 15                  | 100.000%            | 88.228%               | 11.418%         | 0.001%     | 0.000%       | 0.353%       | 0.000%          | 0.000%          |
| 16       | DIRECT PLANT ACCTS 381                     | 16                  | 100.000%            | 71.942%               | 27.612%         | 0.013%     | 0.000%       | 0.433%       | 0.000%          | 0.000%          |
| 17       | DIRECT PLANT ACCT 385                      | 17                  | 100.000%            | 0.000%                | 25.977%         | 0.029%     | 0.000%       | 73.995%      | 0.000%          | 0.000%          |
| 18       | ACCOUNT 376 MAINS - COMPOSITE/PLANT        | 18DEM               | 100.000%            | 56.385%               | 21.569%         | 0.041%     | 0.005%       | 22.000%      | 0.000%          | 0.000%          |
| 19       | TOTAL PLANT                                | 19DEM               | 100.000%            | 56.374%               | 21.565%         | 0.041%     | 0.024%       | 21.996%      | 0.000%          | 0.000%          |
| 20       | AVG DEM/COM #5 & CUS/DEM #3                | 20                  | 100.000%            | 56.388%               | 21.570%         | 0.041%     | 0.000%       | 22.001%      | 0.000%          | 0.000%          |
| 21       | UNCOLLECTIBLES                             | 21                  | 100.000%            | 86.777%               | 13.141%         | 0.002%     | 0.006%       | 0.074%       | 0.000%          | 0.000%          |

**COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF ALLOCATION FACTORS  
DEMAND / COMMODITY METHOD**

**Direct Assignment**

"Direct Assignment" refers to a specific identification and isolation of plant and/or expenses based on Company accounting records and incurred exclusively to serve a specific customer or group of customers. Instances of the use of direct assignments in the study can be identified by the omission of an allocation factor number and the use of the term "direct" immediately after the account number. The operative principal is to utilize direct assignment of plant and expenses wherever practicable and to allocate when accounting records do not indicate class categorization.

**Factor No. 1 - Design Day Excluding DS - ML**

The volumes contained in Factor No. 1 represent the total, non-interrupted tariff demand projected to occur at Columbia's design peak day. Factor No. 1 was combined and equally weighted with Factor No. 4 to produce composite Factor No. 5.

**Factor No. 2 - Design Day Excl. Interruptible Demand**

Factor No. 2 uses the same data as Factor No. 1 excluding interruptible demand.

**Factor No. 3 - 2" Mains Minimum System**

Factor No. 3 was used in the Customer/Demand Study. For a description of Factor No. 3 see Attachment CEN-5.

**Factor No. 4 - Throughput Excluding DS - ML**

Throughput volumes, including transportation, for the twelve months ending

December 31, 2017 were used to develop Factor No. 4. Factor No. 1 was combined and equally weighted with Factor No. 4 to produce composite Factor No. 5.

#### **Factor No. 5 - Composite of Factors No. 1 and No. 4**

Factor No. 1 was combined and equally weighted with Factor No. 4 to produce composite Factor No. 5. Factor No. 5 was used to allocate mains and mains related accounts.

#### **Factor No. 6 - Average Number of Customers**

Average customers for the twelve months ending December 31, 2017 were used to develop Factor No. 6.

#### **Factor No. 7 - Distribution Plant Excluding Other**

Factor No. 7 ratios were based on the spread of distribution plant dollars, excluding FERC 375.70, 375.71, and 387, to the customer groups resulting from the application of the various allocation factors to each gas plant account. The allocated dollars were aggregated and reduced to percentages to produce Factor No. 7.

#### **Factor No. 8 - Total Plant Account 385**

Factor No. 8 ratios were based on the spread of distribution plant Account 385 dollars that were directly assigned by rate schedule. The directly assigned dollars were aggregated and reduced to percentages to produce Factor No. 8.

#### **Factor No. 9 - Gas Purchased Expense**

Factor No. 9 was determined by calculating gas cost recovery by rate schedule for the test year. The resulting dollars make up the combined gas purchased expense on page 12 for the following gas purchased accounts:

Account 803 - Gas Field & Transportation Line Purchases

Account 804 - Natural Gas City Gas Purchases

Account 805 - Other Gas Purchases

Account 806 - Exchange Gas

Account 808 - Storage

**Factor No. 10 - Other Distribution Expense - Labor**

Factor No. 10 was based on the spread of dollars to the various classes of customers within the following distribution expense accounts:

**Page 13 - Distribution Expense Allocation - Labor**

Line 3 Account 871 - Distribution Load Dispatch

Line 4 Account 874 - Mains & Services

Line 5 Account 875 - M & R - General

Line 6 Account 876 - M & R - Industrial

Line 7 Account 878 - Meters & House Regulators

Line 8 Account 879 - Customer Installation

Line 14 Account 886 - Structures & Improvements

Line 15 Account 887 - Mains

Line 16 Account 889 - M & R - General

Line 17 Account 890 - M & R - Industrial

Line 18 Account 892 - Services

Line 19 Account 893 - Meters & House Regulators

**Factor No. 11 - Other Distribution Expense - Material and Expense**

Factor No. 11 was based on the spread of dollars to the various classes of customers within the following distribution expense accounts:

Page 16 - Distribution Expense Allocation - M & E

Line 3 Account 871 - Distribution Load Dispatch  
Line 4 Account 874 - Mains & Services  
Line 5 Account 875 - M & R - General  
Line 6 Account 876 - M & R - Industrial  
Line 7 Account 878 - Meters & House Regulators  
Line 8 Account 879 - Customer Installation  
Line 14 Account 886 - Structures & Improvements  
Line 15 Account 887 - Mains  
Line 16 Account 889 - M & R - General  
Line 17 Account 890 - M & R - Industrial  
Line 18 Account 892 - Services  
Line 19 Account 893 - Meters & House Regulators

**Factor No. 12 - Total Operation and Maintenance Excluding Administrative and General Expense – Labor**

Factor No. 12 was based on the spread of dollars to the various classes of customers within the following production, and distribution expense accounts:

Page 12 - Production Expense Allocation - Labor

Line 3 Account 717 – Liquefied Petroleum Gas Expense - Labor  
Line 9 Account 741 - Structures & Improvements - Labor  
Line 11 Account 742 - Production Equipment - Labor  
Line 18 Account 807 - Other Purchased Gas - Labor

Page 15 - Distribution Allocation - Labor

Line 7 Total Distribution Expenses

**Factor No. 13 - O&M Excluding Gas Purchase, Uncollectible Accounts and A&G - M&E**

Factor No. 13 was based on the spread of dollars to the various classes of customers within the following production, and distribution expense accounts:

**Page 12 - Production Expense Allocation**

Line 4 Account 717 – Liquefied Petroleum Gas Expense - M&E

Line 5 Account 723 - Liquefied Petroleum Gas Process - M&E

Line 6 Account 728 - Liquefied Petroleum Gas

Line 10 Account 741 - Structures & Improvements - M&E

Line 12 Account 742 - Production Equipment - M&E

Line 19 Account 807 - Other Purchase Gas - M&E

Line 20 Account 812 - Gas Used in Operations

**Page 18 - Distribution Expense Allocation - M&E**

Line 7 Total Distribution Expenses - M&E (excl. Acct. 904)

**Factor No. 14 - Accounts 376 Mains and 380 Services**

Factor No. 14 reflects the relationship based on the spread of dollars in Accounts 376 Mains and 380 Services among all customer classes resulting from the application of the appropriate account allocation factor. The allocated dollars in each account were aggregated and reduced to percentages to produce Factor No. 14.

**Factor No. 15 – Plant Account 380 Services**

Factor No. 15 reflects services (Account 380) assigned by rate schedule based on number of service lines under three inches and those service lines greater than three inches. Columbia's books and records maintain its service investment by size and kind. Based on per book data as of February 29, 2016, services were grouped by sizes under three inches and over three inches. An average unit cost was calculated for service lines under three inches and applied to the number of service lines under three inches by rate class. Likewise,

the same calculation was performed for service lines three inches or more by size, by rate class. The Account 380 services allocation factor is used to allocate Account 380 gross plant, depreciation reserve, depreciation expense and Account 892 services expense.

#### **Factor No. 16 – Plant Account 381 Meters**

Factor No. 16 is based on the identification of meters by rate class and by size of meter in Columbia's Distributive Information System ("DIS"), customer billing system and the average unit cost for each size of meter, as maintained in Columbia's books and records. From DIS, individually installed meters were summarized by rate schedule and by size as of February 29, 2016. The average cost for each size meter, as determined from Columbia's Plant Account Records, was applied to the number of meters for each rate class. The resulting meter investment by rate class was used to develop the percentages in Factor No. 16. The Account 381 Meter allocation factor is used to allocate plant Accounts 381, 381.10, 382, 383 and 384 for gross plant, depreciation reserve and depreciation expense along with O&M Accounts 878, 879 and 893.

#### **Factor No. 17 - Direct Plant Account 385 Industrial Measuring & Regulating Station Equipment**

Individual measuring stations were identified on Company's Distributive Information System (DIS) by station number by customer account. The investment for measuring stations was identified by station number from the Company's plant accounting records and matched with the station number resulting in a direct assignment of cost to the individual customer account. Customer costs were aggregated by the customer's rate class and reduced to percentages to produce Factor No. 17.

#### **Factor No. 18 - Account 376 Mains**

Factor No. 18 reflects the relationship based on the spread of dollars in Account 376

Mains among all customer classes that resulted from allocating the Mains using Factor 3 (Customer/Demand), composite Factor No. 5 (Demand/Commodity) or Factor 20 (Average) for classes that could not be directly assigned. The dollars were aggregated and reduced to percentages to produce Factor No. 18.

### **Factor No. 19 - Total Plant**

Factor No. 19 ratios were based on the spread of total plant dollars to the customer groups resulting from the application of the various allocation factors to each gas plant account. The allocated dollars were aggregated and reduced to percentages to produce Factor No. 19.

### **Factor No. 21 - Uncollectible Expense**

Factor No. 21 is based on residential, commercial and industrial net charge-offs per books for the twelve months ending February 29, 2016. Residential charge-offs were assigned to the GS residential rate class. Commercial and Industrial net charge-offs were allocated between the GS-Other, IUS, DS-ML and DS/IS rate classes based on average number of customers by rate class for the test year. The resulting allocated net charge-offs were used to determine the allocation factor by rate class. Allocation factor 21 was used to allocate Account 904 uncollectible accounts expense.

**COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF ALLOCATION FACTORS  
CUSTOMER / DEMAND METHOD**

**Factor No. 3 - 2" Mains Minimum System**

Factor No. 3 is a composite weighing between a minimum system investment that is allocated on a customer basis verses the remainder of the Mains Account that is allocated using design day volumes.

Plant records were used as the basis for the minimum system study. The concept is based on the assumption that in order for a customer to obtain service, mains of at least the most common, minimum size in the distribution system must be present. That portion of the Mains Account investment is considered customer-related and is computed by multiplying the total pipe quantity in the system by the cost per foot for the most prevalent size of mains, that being two inch. The cost of the minimum system, computed in that manner, is divided by the total cost of all mains to arrive at a Customer Component factor. The reciprocal of the Customer Component factor becomes the Demand Component factor and is used to allocate the remaining mains costs which are considered demand related and allocated using the appropriate design day factor. See page 2 for the development of the Customer and Demand component factors.

The final step in developing Factor No. 3 allowed for each of the component factors described above (number of customers and design day volumes), to be weighted by their respective ratios to the various customer classes (see page 3).

**Factor No. 3 - Allocation Development**

Assume that 2" pipe, the most common pipe size, is the minimum size system needed to provide service.

All calculations are based on Account 376 pipe data only (excludes valves, anodes, etc.)

|   |   |  |   |   |
|---|---|--|---|---|
| (2" pipe cost)<br>\$45,155,907                                | ÷ | (2" pipe quantity)<br>4,906,346 feet     | = | (2" pipe cost<br>per foot)<br>\$9.2036              |
| (2" cost<br>per foot)<br>\$9.2036                             | X | (total pipe quantity)<br>14,119,350 feet | = | (cost of<br>minimum system)<br>\$129,948,850        |
| (cost of minimum system)<br>\$129,948,850                     | ÷ | (total pipe cost)<br>\$200,461,723       | = | (customer component factor)<br><b><u>.64825</u></b> |
| 1.000 - .64825 = <b><u>.35175</u></b> demand component factor |   |  |   |   |

| <u>Line</u> | <u>Rate Class</u><br>(1) | <u>Customers</u><br>(2) | <u>Ratio</u><br>(3) | Customer<br>Component                | Design<br>Day        | Demand<br>Component | <u>Total</u><br>(8) = (4) + (7) |                                      |
|-------------|--------------------------|-------------------------|---------------------|--------------------------------------|----------------------|---------------------|---------------------------------|--------------------------------------|
|             |                          |                         |                     | <u>Factor</u><br>(4) = (3) * 64.825% | <u>Volume</u><br>(5) | <u>Ratio</u><br>(6) |                                 | <u>Factor</u><br>(7) = (6) * 35.175% |
| 1           | GS-Residential           | 121,915                 | 89.661%             | 58.123%                              | 137,300              | 44.549%             | 15.670%                         | <b>73.793%</b>                       |
| 2           | GS-Other                 | 13,977                  | 10.279%             | 6.663%                               | 88,300               | 28.650%             | 10.078%                         | <b>16.741%</b>                       |
| 3           | IUS                      | 2                       | 0.001%              | 0.001%                               | 200                  | 0.065%              | 0.023%                          | <b>0.024%</b>                        |
| 4           | DS/IS                    | 79                      | 0.058%              | 0.038%                               | 82,400               | 26.736%             | 9.404%                          | <b>9.442%</b>                        |
| 5           | Total Excl. DS-ML        | 135,973                 | 100.000%            | 64.825%                              | 308,200              | 100.000%            | 35.175%                         | <b>100.000%</b>                      |

**COLUMBIA GAS OF KENTUCKY, INC.  
DEVELOPMENT OF ALLOCATION FACTORS  
AVERAGE OF THE DEMAND / COMMODITY AND CUSTOMER / DEMAND STUDIES**

**Factor No. 20 - Average of Demand/Commodity Factor No. 5 and Customer/Demand**

**Factor No. 3**

Allocation Factor No. 5 in the Demand/Commodity Study and Factor No. 3 in the Customer/Demand Study were given equal weighting by adding them together and dividing by two to arrive at the average Factor No. 20. Factor No. 20 was used in the study that averaged the Demand/Commodity Study with the Customer/Demand Study.

**COLUMBIA GAS OF KENTUCKY, INC.  
FACTOR SELECTION AND RATIONALE  
DEMAND / COMMODITY STUDY**

**ALLOCATION STUDY - ATTACHMENT CEN-2**

**PRODUCTION EXPENSES – PAGE 12**

**Accounts 717 through 742**

Liquefied Petroleum Gas expenses are allocated using Factor No. 2 - Design Day Excluding Transportation (MCF) since Liquefied Petroleum Gas is part of Columbia's supply mix for its tariff sales customers.

**OPERATING EXPENSES - OTHER GAS SUPPLY EXPENSES - PAGE 19**

**Accounts 803, 804, 805, 806 and 808 (Cost of Gas at the City Gate)**

Natural Gas Purchased Expenses were directly assigned to match the amount of gas cost embedded in Operating Revenue by rate class.

**Accounts 807 and 812**

Other Gas Purchased Expenses and Gas Used in Company Operations were allocated using Factor No. 9 - Gas Purchased Expense, which was based on actual gas purchased expenses.

**DISTRIBUTION EXPENSES - LABOR - PAGE 13 AND M&E - PAGE 16****Accounts 870, 880, 881, 885 and 894**

General costs for supervision and engineering, rents and other items of the distribution function were allocated using Factor Nos. 10 (Labor) and 11 (M&E), the aggregate factors of all other distribution accounts, since these costs benefit customers in relation to the way all other distribution costs provide benefit.

**Account 871**

Distribution Load Dispatch expenses were allocated on Factor No. 4 - Throughput, since these are costs incurred monitoring and directing the flow of gas through the distribution system.

**Account 874**

Mains and Services Operation Expenses (a dual function account) were allocated on Factor No. 14 - Allocated Plant Investment of Mains and Services combined.

**Account 887**

Mains maintenance expense was allocated using Factor No. 18, which reflects the spread of Account 376 Mains dollars among all customer classes, since plant and expense functions are directly related.

**Accounts 875, 886 and 889**

Factor No. 18 was used to allocate expenses for distribution load dispatch, general measurement and regulator stations and related structures since these costs are incurred in direct association with mains.

**Accounts 876 and 890**

Expenses for Measurement and Regulator Station Equipment - Industrial were allocated using Factor No. 8 - Total Account 385 - since these costs were incurred in direct association with the stations in Account 385.

**Account 892**

Expenses for Services were allocated using Factor No. 15 which was based on a weighted customer factor as explained in Attachment CEN-4. The weighted customer factor is derived by an actual detailed examination of actual inventories of installed Services unique to CGV and represents virtually a direct assignment of costs to the various customer groups.

**Accounts 878, 879 and 893**

Meters & House Regulators Expenses and Customer Installations were allocated using Factor No. 16 which was based on an actual inventory of meters installed on customer premises as explained in Attachment CEN-4. This methodology represents virtually a direct assignment of costs to the various customer groups. Expenses for House Regulators and Customer Installations were allocated using Factor No. 16 since these costs are incurred in direct association with the meters.

**CUSTOMER ACCOUNTS, CUSTOMER SERVICE AND INFORMATIONAL AND SALES EXPENSES - LABOR - PAGES 14 AND 15 AND M&E - PAGES 17 AND 18**

**Accounts 901 - 903, 904, and 905 - 916, Distribution Expense Portion of Accounts 921, 931, and 935**

Meter Reading/Records/Collection/Customer Assistance, Uncollectibles and related costs were allocated on Factor No. 6 - Average Number of Customers. Costs incurred throughout the Customer Accounts function are, quite directly, related to the number of customers served.

**ADMINISTRATIVE AND GENERAL EXPENSES - LABOR - PAGE 15 AND M&E**  
**- PAGE 18****Accounts 920 through 935**

General Office expenses, and to a lesser degree, District and Local Office expenses in this function classification, plus company-wide expenses such as Injuries and Damages, Insurance, total Company Employee Benefits and Regulatory Commission Expense were all allocated using Factor No. 12 for Labor and Factor No. 13 for M&E - Total Operation & Maintenance Excluding Gas Purchased and Administrative and General Expenses. These costs are regarded as overheads to the entire company operation and, therefore, follow the allocation of the aggregate of all other previously allocated O&M costs. M&E for accounts 925 and 926 are allocated on Factor No. 12 instead of 13 because of direct cost causation of labor to these accounts.

**OPERATING REVENUE @ CURRENT RATES - PAGE 11****Accounts 488, 493 and 495**

Bad check charges, rents and other charges were allocated using Factor No. 6 -

Average Number of Customers since costs incurred throughout these accounts are directly related to the customers served.

### **TAXES OTHER THAN INCOME - PAGE 20**

Property taxes are directly related to tangible property and, accordingly, have been allocated based on Factor No. 7 - Distribution Plant excluding Other due to a direct relationship with Plant in Service. Federal Unemployment Insurance, State Unemployment Insurance and F.I.C.A. (payroll based taxes) are all labor-related and, accordingly, have been allocated based on Factor No. 12 - Total Operation and Maintenance Excluding Administrative and General - Labor.

### **FEDERAL AND STATE INCOME TAX - PAGES 21 THROUGH 24**

Non-Deductible Employee Expense are A&G labor expenses that are deductions to Federal Income Taxes and, therefore, are allocated on allocation factor No. 12 - Other Distribution expense - Labor.

Excess Book Depreciation over Tax Depreciation were allocated using Factor No. 19 since they are directly associated with the costs of virtually all Plant in Service accounts. In calculating the Federal and State income taxes for each rate class, the effective Federal and State income tax rates were used. The effective rates were developed on the total Company's taxable income divided by Columbia's income tax expense. By using the effective rate, the impact of the graduated Federal and State tax rate schedules is assigned to each rate class.

### **RATE BASE SUMMARY - PAGE 25**

**Accounts 190, 255, 282 and 283**

Accumulated deferred income taxes were allocated using Factor No. 19 - Total Plant, because of their direct relationship to plant investment.

**Accounts 252 and 154**

Customer advances and materials & supplies were allocated using Factor No. 7 - Distribution Plant Excluding Other, due to their direct relationship with all distribution gas plant accounts excluding Intangible and General Plant.

**Accounts 151 and 164**

Fuel stock and Gas Stored Underground were allocated based on Factor No. 2 - Excluding Interruptible demand (MCF) since these volumes supply all but interruptible demand customers for design day.

**DEPRECIATION AND AMORTIZATION EXPENSE - PAGE 9 and 10**

Depreciation and amortization expense was allocated by Gas Plant Account on the same allocations as the Gross Original Cost, unless otherwise directly assigned.

**GROSS INTANGIBLE & DISTRIBUTION PLANT - GENERAL LEDGERS 101, 106 AND 107 – PAGES 5 and 6****INTANGIBLE PLANT****Accounts 301, 302 and 303**

Intangible plant was allocated on the basis of Distribution plant excluding Accounts 375.70, 375.71 and 387, Factor No. 7, due to its indirect relationship with all other plant.

**PRODUCTION PLANT****Accounts 304 through 311**

Production Plant was allocated using Factor No. 2 - Design Day Excluding Interruptible Demand (Mcf) since the function of the plant's gas volumes are to supplement a supply mix that benefits tariff customers.

**DISTRIBUTION PLANT****Accounts 374, 375 (except 375.60, 375.70 and 375.71), 376, 378 and 379**

Land, Land Rights, Mains and Measuring and Regulating Equipment, not directly assigned, were allocated using composite Factor No. 5, since the customers' benefits from these investments are equally related to their annual throughput requirements (Factor No. 4) and design day capacity needs (Factor No. 1).

**Account 375.60**

Structures for Large customers, not directly assigned, were allocated using Factor No. 8 since these structures house measuring and regulating stations serving Large Commercial and Industrial customers only.

**Accounts 375.70 and 375.71**

Other distribution structures and improvements were allocated using Factor No. 7, due to their direct relationship with all other gas plant accounts.

**Account 380**

Services were allocated using Factor No. 15 which was based on a weighted customer factor as explained in Attachment CEN-4. The factor is derived by an actual detailed examination of actual inventories of installed Services and represents virtually a direct assignment of costs to the various customer groups.

**Account 381, 382, 383 and 384**

Meters and Meter Installations, House Regulators and House Regulator Installations were allocated using Factor No. 16 which was based on an actual inventory of meters installed on customer premises as explained in Attachment CEN-4. This methodology represents virtually a direct assignment of costs to the various customer groups. Accounts 382, 383, and 384 were allocated using Factor No. 16 since these costs are incurred in direct association with the meters.

**Account 385**

Industrial measuring and regulating stations were allocated using Factor No. 17 which was based on a review of company records as explained in Attachment CEN-4. Measuring stations were segregated by rate class. This methodology represents virtually a direct assignment of costs to the various rate classes.

**Accounts 387 through 398**

Other Equipment and General Plant investments were allocated on the basis of total Distribution Plant excluding Other Equipment, Factor No. 7, due to the indirect relationship with all other gas plant.

**RESERVE FOR DEPRECIATION – PAGES 7 AND 8**

Depreciation Reserve was calculated on an account by account basis using the same allocation factors that were used to allocate all gross plant accounts.

**COLUMBIA GAS OF KENTUCKY, INC.  
FACTOR SELECTION AND RATIONALE  
CUSTOMER / DEMAND STUDY**

**ALLOCATION STUDY - ATTACHMENT CEN-1**

**GROSS INTANGIBLE & DISTRIBUTION PLANT - GENERAL LEDGERS 101, 106 AND  
107 - PAGE 5**

**DISTRIBUTION PLANT**

**Accounts 374, 375 (except 375.60, 375.70 & 375.71), 376, 378, 379 and 387.20**

Land, Land Rights, Mains and Measuring and Regulating Equipment, not directly assigned, were allocated using Factor No. 3. Factor No. 3 was developed from Account 376 - Mains and is a composite, equal weighing between a minimum system investment that is allocated on a customer basis verses the remainder of the mains account that is allocated using design day volumes. Factor No. 3 is based on the concept that a large portion of the Mains must be in place just to connect the customers to the gas supply and is customer related. The remainder of the piping system was designed to handle peaking requirements and is demand-related.

**RESERVE FOR DEPRECIATION – PAGE 7**

Factor No. 3 was used to calculate the depreciation reserve on the same accounts that it was used to allocate gross plant.

**COLUMBIA GAS OF KENTUCKY, INC.  
FACTOR SELECTION AND RATIONALE  
AVERAGE OF DEMAND / COMMODITY AND CUSTOMER / DEMAND STUDIES**

**ALLOCATION STUDY - ATTACHMENT CEN-1**

**GROSS INTANGIBLE & DISTRIBUTION PLANT - GENERAL LEDGERS 101, 106 AND  
107 - PAGE 5**

**DISTRIBUTION PLANT**

**Accounts 374, 375 (except 375.60, 375.70 & 375.71), 376, 378, 379, and 387.20**

Land, Land Rights, Mains and Measuring and Regulating Equipment, not directly assigned, were allocated using Factor No. 20. Allocation factors developed for Factor No. 5 in the Demand/Commodity Study and Factor No. 3 in the Customer/Demand Study were equally weighted to arrive at Factor No. 20. Factor No. 20 was used in the study that averaged the Demand/Commodity Study with the Customer/Demand Study.

**RESERVE FOR DEPRECIATION – PAGE 7**

Factor No. 20 was used to calculate the depreciation reserve on the same accounts that it was used to allocate gross plant.

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
JOHN J. SPANOS  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

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Attachments

ATTACHMENT JJS-1 – Qualification Statement

1                   **PREPARED DIRECT TESTIMONY OF JOHN J. SPANOS**

2   **I.     INTRODUCTION**

3   **Q.    Please state your name and address.**

4   A.    My name is John J. Spanos. My business address is 207 Senate Avenue,  
5        Camp Hill, Pennsylvania, 17011.

6   **Q.    Are you associated with any firm?**

7   A.    Yes. I am associated with the firm of Gannett Fleming Valuation and Rate  
8        Consultants, LLC (“Gannett Fleming”).

9   **Q.    How long have you been associated with Gannett Fleming?**

10  A.    I have been associated with the firm since my college graduation in June  
11        1986.

12  **Q.    What is your position with the firm?**

13  A.    I am a Senior Vice President.

14  **Q.    On whose behalf are you testifying in this case?**

15  A.    I am testifying on behalf of Columbia Gas of Kentucky, Inc. (“Columbia”  
16        or “Company”).

17

1 **Q. Please state your qualifications.**

2 A. I have 30 years of depreciation experience, which includes expert testimo-  
3 ny in over 200 cases before 40 regulatory commissions. The cases include  
4 depreciation studies in the electric, gas, water, wastewater and pipeline  
5 industries. Please refer to ATTACHMENT JJS-1 for additional information  
6 on my qualifications, which includes my leadership in the Society of De-  
7 preciation Professionals.

8 **II. PURPOSE OF TESTIMONY**

9 **Q. What is the purpose of your testimony?**

10 A. My testimony will support and explain the Depreciation Study performed  
11 for Columbia in accordance with the Filing Requirement 16-(7)(s) under  
12 807 KAR Section 5:001. The Depreciation Study sets forth the calculated  
13 annual depreciation accrual rates by account as of December 31, 2015.

14 **Q. Please summarize the results of your Depreciation Study.**

15 A. The depreciation rates as of December 31, 2015 appropriately reflect the  
16 rates at which the value of Columbia's assets has been consumed over  
17 their useful lives to date. These rates are based on the most commonly  
18 used methods and procedures for determining depreciation rates. The life  
19 and salvage parameters are based on widely used techniques and the de-

1           preciation rates are based on the equal life group procedure and remain-  
2           ing life method.

3   **Q.    Are the recommended depreciation accrual rates presented in your**  
4   **study reasonable and applicable to the plant in service as of December**  
5   **31, 2015?**

6   A.    Yes, they are. Based on the Depreciation Study, I am recommending de-  
7        preciation rates using the December 31, 2015 plant and reserve balances  
8        for approval.

9   **III.   DEPRECIATION STUDY**

10 **Q.    Please define the concept of depreciation.**

11 A.    Depreciation refers to the loss in service value not restored by current  
12        maintenance, incurred in connection with the consumption or prospective  
13        retirement of utility plant in the course of service from causes which can  
14        be reasonably anticipated or contemplated, against which Columbia is not  
15        protected by insurance. Among the causes to be given consideration are  
16        wear and tear, decay, action of the elements, inadequacy, obsolescence,  
17        changes in the art, changes in demand and the requirements of public au-  
18        thorities.

1 **Q. Was your Depreciation Study included as part of the application filed in**  
2 **this case?**

3 A. Yes, it is included as a report entitled "2015 Depreciation Study - Calculat-  
4 ed Annual Depreciation Accruals Related to Gas Plant as of December 31,  
5 2015." This report sets forth the results of my Depreciation Study for Co-  
6 lumbia.

7 **Q. Is the study a true and accurate copy of your Depreciation Study?**

8 A. Yes.

9 **Q. Was the Depreciation Study prepared under your direction and control?**

10 A. Yes.

11 **Q. In preparing the Depreciation Study, did you follow generally accepted**  
12 **practices in the field of depreciation valuation?**

13 A. Yes.

14 **Q. What is the purpose of the Depreciation Study?**

15 A. The purpose of my Deprecation Study was to estimate the annual depre-  
16 ciation accruals for Columbia's plant in service for financial and ratemak-  
17 ing purposes and to determine appropriate average service lives and net  
18 salvage percentages for each plant account.

1 **Q. Are the methods and procedures of this Depreciation Study consistent**  
2 **with Columbia's past practices?**

3 A. The methods of this study are the same as those utilized in the past by Co-  
4 lumbia, however the depreciation procedure has been changed in order to  
5 more appropriately match utilization of assets to their recovery. The rates  
6 determined in this Depreciation Study are based on the equal life group  
7 procedure and the remaining life method.

8 **Q. Please describe the contents of the Depreciation Study.**

9 A. The Depreciation Study is presented in nine parts: Part I, Introduction,  
10 presents the scope and basis for the Depreciation Study. Part II, Estimation  
11 of Survivor Curves, includes descriptions of the methodology of estimat-  
12 ing survivor curves. Parts III and IV set forth the analysis for determining  
13 service life and net salvage estimates. Part V, Calculation of Annual and  
14 Accrued Depreciation, includes the concepts of depreciation and amorti-  
15 zation using the remaining life. Part VI, Results of Study, presents a de-  
16 scription of the results of my analysis and a summary of the depreciation  
17 calculations. Parts VII, VIII and IX include graphs and tables that relate to  
18 the service life and net salvage analyses, and the detailed depreciation cal-  
19 culations by account.

1           Table 1 on pages VI-4 and VI-5 of the Depreciation Study presents  
2           the estimated survivor curve, the net salvage percent, the original cost as  
3           of December 31, 2015, the book reserve, and the calculated annual depre-  
4           ciation accrual and rate for each account or subaccount. The section be-  
5           ginning on page VII-2 presents the results of the retirement rate analyses  
6           prepared as the historical bases for the service life estimates. The section  
7           beginning on page VIII-2 presents the results of the salvage analysis. The  
8           section beginning on page IX-2 presents the depreciation calculations re-  
9           lated to surviving original cost as of December 31, 2015.

10 **Q.   Please explain how you performed your Depreciation Study.**

11 A.   I used the straight line remaining life method of depreciation, with the  
12       equal life group procedure. The annual depreciation is based on a method  
13       of depreciation accounting that seeks to distribute the unrecovered cost of  
14       fixed capital assets over the estimated remaining useful life of each unit,  
15       or group of assets, in a systematic and rational manner.

16           For General Plant Accounts 391.1, 391.11, 391.12, 394, 395 and 398, I  
17       used the straight line remaining life method of amortization.<sup>1</sup> The annual  
18       amortization is based on amortization accounting that distributes the un-

---

<sup>1</sup> The account numbers identified throughout my testimony represent those in effect as of December 31, 2015.

1 recovered cost of fixed capital assets over the remaining amortization pe-  
2 riod selected for each account and vintage.

3 **Q. How did you determine the recommended annual depreciation accrual**  
4 **rates?**

5 A. I did this in two phases. In the first phase, I estimated the service life and  
6 net salvage characteristics for each depreciable group, that is, each plant  
7 account or subaccount identified as having similar characteristics. In the  
8 second phase, I calculated the composite remaining lives and annual de-  
9 preciation accrual rates based on the service life and net salvage estimates  
10 determined in the first phase.

11 **Q. Please describe the first phase of the Depreciation Study, in which you**  
12 **estimated the service life and net salvage characteristics for each depre-**  
13 **ciable group.**

14 A. The service life and net salvage study consisted of compiling historical da-  
15 ta from records related to Columbia's plant; analyzing these data to obtain  
16 historical trends of survivor characteristics; obtaining supplementary in-  
17 formation from Columbia's management and operating personnel con-  
18 cerning practices and plans as they relate to plant operations; and inter-

1           preting the data and the estimates used by other gas utilities to form  
2           judgments of average service life and net salvage characteristics.

3   **Q.    What historical data did you analyze for the purpose of estimating ser-**  
4   **vice life characteristics?**

5   A.    I analyzed Columbia's accounting entries that record plant transactions  
6           during the period 1939 through 2015, to the extent available. The transac-  
7           tions I analyzed included additions, retirements, transfers, sales, and the  
8           related balances. Columbia's records included surviving dollar value by  
9           year installed for each plant account as of December 31, 2015.

10 **Q.    What method did you use to analyze these service life data?**

11 A.    I used the retirement rate method for most plant accounts. This is the most  
12           appropriate method when retirement data covering a long period of time  
13           is available, because this method determines the average rates of retire-  
14           ment actually experienced by Columbia during the period of time covered  
15           by the Depreciation Study.

16 **Q.    Please describe how you used the retirement rate method to analyze Co-**  
17 **lumbia's service life data.**

18 A.    I applied the retirement rate analysis to each different group of property  
19           in the study. For each property group, I used the retirement rate data to

1 form a life table which, when plotted, shows an original survivor curve for  
2 that property group. Each original survivor curve represents the average  
3 survivor pattern experienced by the several vintage groups during the ex-  
4 perience band studied. The survivor patterns do not necessarily describe  
5 the life characteristics of the property group; therefore, interpretation of  
6 the original survivor curves is required in order to use them as valid con-  
7 siderations in estimating service life. The "Iowa-type survivor curves"  
8 were used to perform these interpretations.

9 **Q. What are "Iowa-type survivor curves" and how did you use such curves**  
10 **to estimate the service life characteristics for each property group?**

11 A. Iowa-type survivor curves are a widely-used group of survivor curves  
12 that contain the range of survivor characteristics usually experienced by  
13 utilities and other industrial companies. These curves were developed at  
14 the Iowa State College Engineering Experiment Station through an exten-  
15 sive process of observing and classifying the ages at which various types  
16 of property used by utilities and other industrial companies had been re-  
17 tired.

18 Iowa-type survivor curves are used to smooth and extrapolate orig-  
19 inal survivor curves determined by the retirement rate method. The Iowa  
20 curves and truncated Iowa curves were used in the Columbia Deprecia-

1 tion Study to describe the forecasted rates of retirement based on the ob-  
2 served rates of retirement and the outlook for future retirements. The es-  
3 timated survivor curve designations for each depreciable property group  
4 indicate the average service life, the family within the Iowa system to  
5 which the property group belongs, and the relative height of the mode.  
6 For example, the Iowa 70-R1.5 indicates an average service life of 70 years;  
7 a right-moded, or R, type curve (the mode occurs after average life for  
8 right-moded curves); and a moderate height, 1.5, for the mode (possible  
9 modes for R type curves range from 0.5 to 5).

10 **Q. Did you physically observe Columbia’s plant and equipment as part of**  
11 **your depreciation assignments?**

12 A. Yes. I made field reviews of Columbia’s property on March 18 and 19,  
13 2002, October 27 and 28, 2008 and February 4 and 5, 2013 to observe repre-  
14 sentative portions of plant. Field reviews are conducted to become famil-  
15 iar with Company operations and obtain an understanding of the function  
16 of the plant and information with respect to the reasons for past retire-  
17 ments and the expected future causes of retirements. This knowledge, as  
18 well as information from other discussions with Columbia management,  
19 was incorporated in the interpretation and extrapolation of the statistical  
20 analyses.

1 **Q. How did your experience in development of other depreciation studies**  
2 **affect your work in this case for Columbia?**

3 A. Because I customarily conduct field reviews for my depreciation studies, I  
4 have had the opportunity to visit scores of similar facilities and meet with  
5 operations personnel at many other companies. The knowledge I have ac-  
6 cumulated from those visits and meetings provides me with useful infor-  
7 mation to draw upon to confirm or challenge my numerical analyses con-  
8 cerning asset condition and remaining life estimates.

9 **Q. Please explain the concept of “net salvage.”**

10 A. Net salvage is a component of the service value of capital assets that is re-  
11 covered through depreciation rates. The service value of an asset is its  
12 original cost less its net salvage. Net salvage is the salvage value received  
13 for the asset upon retirement less the cost to retire the asset. When the cost  
14 to retire the asset exceeds the salvage value, the result is negative net sal-  
15 vage.

16 Because depreciation expense is the loss in service value of an asset  
17 during a defined period (*e.g.*, one year), it must include a ratable portion  
18 of both the original cost of the asset and the net salvage. That is, the net  
19 salvage related to an asset should be incorporated in the cost of service  
20 during the same period as its original cost, so that customers receiving

1 service from the asset pay rates that include a portion of both elements of  
2 the asset's service value, the original cost and the net salvage value. For  
3 example, the full service value of a \$500 regulator also includes \$100 of  
4 cost of removal and \$25 gross salvage, for a total service value of \$575.

5 **Q. Please describe how you estimated net salvage percentages.**

6 A. I estimated the net salvage percentages by incorporating Columbia's actual  
7 historical data for the period 1969 through 2015, and considered industry  
8 experience of net salvage estimates for other gas companies. The net sal-  
9 vage percentages in the Depreciation Study are based on a combination of  
10 statistical analyses and informed judgment. The statistical analyses con-  
11 sider the cost of removal and gross salvage ratios to the associated retire-  
12 ments during the 47-year period. Trends of these data are also measured  
13 based on three-year moving averages and the most recent five-year indica-  
14 tions.

15 **Q. Please describe the second phase of the process that you used in the**  
16 **Depreciation Study in which you calculated composite remaining lives**  
17 **and annual depreciation accrual rates.**

18 A. After I estimated the service life and net salvage characteristics for each  
19 depreciable property group, I calculated the annual depreciation accrual

1 rates for each group using the straight line remaining life method, and us-  
2 ing remaining lives weighted consistent with the equal life group proce-  
3 dure. The calculation of annual depreciation accrual rates were developed  
4 as of December 31, 2015.

5 **Q. Please describe the straight line remaining life method of depreciation.**

6 A. The straight line remaining life method of depreciation allocates the origi-  
7 nal cost of the property, less accumulated depreciation, less future net sal-  
8 vage, in equal amounts to each year of remaining service life.

9 **Q. What are the most commonly utilized depreciation procedures?**

10 A. The average service life and equal life group procedures are the most  
11 widely utilized depreciation procedures used by utility companies across  
12 the United States and Canada. Each procedure is briefly described on pag-  
13 es V-3 and V-4 of the Depreciation Study. The procedures represent  
14 straight line depreciation and meet the requirement of systematic and ra-  
15 tional recovery.

16 **Q. Have you reviewed the results of both procedures?**

17 A. Yes. I have conducted depreciation calculations using both the average  
18 service life and equal life group procedures. The average service life pro-  
19 cedure is most commonly utilized in Kentucky as it balances full recovery

1 based on the average life which establishes a smoother recovery pattern as  
2 compared to the more precise equal life group procedure.

3 **Q. Please describe the equal life group procedure.**

4 A. The equal life group procedure is a method for determining the remaining  
5 life annual accrual for each vintage property group. Under this procedure,  
6 the future book accruals (original cost less book reserve) for each vintage  
7 are divided by the composite remaining life for the surviving original cost  
8 of that vintage. The vintage composite remaining life is derived by sum-  
9 ming the original cost less the calculated reserve for each equal life group  
10 and dividing by the sum of the whole life annual accruals. This procedure  
11 is the most accurate for matching recovery of the asset to consumption or  
12 utilization of the asset.

13 **Q. Please describe amortization accounting in contrast to depreciation ac-  
14 counting.**

15 A. Amortization accounting is used for accounts with a large number of  
16 units, but small asset values. In amortization accounting, units of property  
17 are capitalized in the same manner as they are in depreciation accounting.  
18 However, depreciation accounting is difficult for these types of assets be-  
19 cause depreciation accounting requires periodic inventories to properly

1 reflect plant in service. Consequently, amortization accounting is used for  
2 these types of assets, such that retirements are recorded when a vintage is  
3 fully amortized rather than as the units are removed from service. That is,  
4 there is no dispersion of retirement in amortization accounting. All units  
5 are retired when the age of the vintage reaches the amortization period.  
6 Each plant account or group of assets is assigned a fixed period that repre-  
7 sents an anticipated life during which the asset will render full benefit. For  
8 example, in amortization accounting, assets that have a 20-year amortiza-  
9 tion period will be fully recovered after 20 years of service and taken off  
10 Columbia's books at that time, but not necessarily removed from service.  
11 In contrast, assets that are taken out of service before 20 years remain on  
12 the books until the amortization period for that vintage has expired.

13 **Q. Is amortization accounting being utilized for certain plant accounts?**

14 A. Yes. However, amortization accounting is only appropriate for certain  
15 General Plant accounts. These accounts are 391.1, 391.11, 391.12, 394, 395  
16 and 398, which represent slightly more than one percent of Columbia's  
17 depreciable plant.

1 **Q. Please use an example to illustrate how the annual depreciation accrual**  
2 **rate for a particular group of property is presented in your Depreciation**  
3 **Study.**

4 A. I will use Account 380.00, Services, as an example because it is one of the  
5 larger depreciable accounts and represents approximately 30 percent of  
6 depreciable plant. The retirement rate method was used to analyze the  
7 survivor characteristics of this property group. Aged plant accounting da-  
8 ta was compiled from 1939 through 2015 and analyzed in periods that best  
9 represent the overall service life of this property. The life tables for the  
10 1939-2015, 1976-2015 and 1996-2015 experience bands are presented on  
11 pages VII-45 through VII-50 of the Depreciation Study. The life tables dis-  
12 play the retirement and surviving ratios of the aged plant data exposed to  
13 retirement by age interval. For example, page VII-45 of the study shows  
14 \$506,786 retired at age 0.5 with \$124,578,714 exposed to retirement. Con-  
15 sequently, the retirement ratio is 0.0041 and the surviving ratio is 0.9959.  
16 These life tables, or original survivor curves, are plotted along with the es-  
17 timated smooth survivor curve, the 40-R1.5 on page VII-44 of the study.

18 The net salvage analyses for Account 380.00, Services, is presented on  
19 pages VIII-16 through VIII-18 of the Depreciation Study. The percentage is  
20 based on the result of annual gross salvage minus the cost to remove plant

1 assets as compared to the original cost of plant retired during the period  
2 1969 through 2015. This 47-year period experienced \$11,503,306 (\$73,097 -  
3 \$11,576,403) in negative net salvage for \$17,363,608 plant retired. The re-  
4 sult is negative net salvage of 66 percent ( $\$11,503,306/\$17,363,608$ ). Based  
5 on the overall negative 66 percent net salvage and the most recent five  
6 years of negative 70 percent, as well as industry ranges and Columbia's  
7 expectations, it was determined that negative 65 percent is the most ap-  
8 propriate estimate.

9 My calculation of the annual depreciation related to the original  
10 cost at December 31, 2015, of gas plant is presented on pages IX-23 and IX-  
11 24 of the study. The calculation is based on the 40-R1.5 survivor curve, 65  
12 percent negative net salvage, the attained age, and the allocated book re-  
13 serve. The tabulation sets forth the installation year, the original cost, cal-  
14 culated accrued depreciation, allocated book reserve, future accruals, re-  
15 maining life and annual accrual. These totals are brought forward to the  
16 table on page VI-4 of the Depreciation Study.

17 **Q. Was there separate life and net salvage analysis performed for the sub-**  
18 **accounts of Account 376, Mains?**

19 A. No, there was not. The historical data did not maintain a type pipe identi-  
20 fier, but historical balances were available by type pipe therefore, separate

1 life characteristics could not be accurately studied. Thus, one common  
2 service life and net salvage estimate for all mains. The common survivor  
3 curve and net salvage percent was applied to the surviving balance as of  
4 December 31, 2015 by subaccount.

5 **Q. Explain what was different at the subaccount level.**

6 A. A main replacement program has been established for bare steel and cast  
7 iron mains. The program is a 30-year program, starting at the beginning of  
8 2008, and at the end of the 30 years all bare steel and cast iron pipe will  
9 have been replaced. Therefore, the depreciation rates must be established  
10 to match capital recovery to life expectancy. In order to accomplish the  
11 appropriate matching principle, the surviving bare steel and cast iron in-  
12 vestment must be recovered by year-end 2037. Consequently, the annual  
13 depreciation rate for bare steel and cast iron in Account 376 has a trunca-  
14 tion date of December 2037. This is consistent with the current practices  
15 and depreciation rates.

16 **Q. Does this complete your Prepared Direct testimony?**

17 A. Yes, it does.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

|   |                     |
|---|---------------------|
| In the matter of adjustment of rates )<br>of Columbia Gas of Kentucky, Inc. ) | Case No. 2016-00162 |
|---|---------------------|

CERTIFICATE AND AFFIDAVIT

The Affiant, John J. Spanos, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
\_\_\_\_\_  
John J. Spanos

STATE OF PENNSYLVANIA

COUNTY OF CUMBERLAND

SUBSCRIBED AND SWORN to before me by John J. Spanos on this the 18th day of May, 2016.

  
\_\_\_\_\_  
Notary Public

My Commission expires: February 20, 2019

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Cheryl Ann Rutter, Notary Public  
East Pennsboro Twp., Cumberland County  
My Commission Expires Feb. 20, 2019  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

## JOHN SPANOS

### DEPRECIATION EXPERIENCE

**Q. Please state your name.**

A. My name is John J. Spanos.

**Q. What is your educational background?**

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

**Q. Do you belong to any professional societies?**

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

**Q. Do you hold any special certification as a depreciation expert?**

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008 and January 2013.

**Q. Please outline your experience in the field of depreciation.**

A. In June, 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June, 1986 through December, 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following companies in the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January, 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July, 1999, I was promoted to the position of Manager, Depreciation and Valuation Studies. In December, 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc. and in April 2012, I was promoted to my pre-

sent position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC). In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma

Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; Mid-American Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Northern Indiana Public Service Company; Tennessee-American

Water Company; Columbia Gas of Maryland; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Kansas Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation and Greater Missouri Operations. My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

**Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?**

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission (“FERC”); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service

Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission and the North Carolina Utilities Commission.

**Q. Have you had any additional education relating to utility plant depreciation?**

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.: "Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

**Q. Does this conclude your qualification statement?**

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

|     | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u> | <u>Client Utility</u>                        | <u>Subject</u>                 |
|-----|-------------|---------------------|-------------------|--|--------------------------------|
| 01. | 1998        | PA PUC              | R-00984375        | City of Bethlehem – Bureau of Water          | Original Cost and Depreciation |
| 02. | 1998        | PA PUC              | R-00984567        | City of Lancaster                            | Original Cost and Depreciation |
| 03. | 1999        | PA PUC              | R-00994605        | The York Water Company                       | Depreciation                   |
| 04. | 2000        | D.T.&E.             | DTE 00-105        | Massachusetts-American Water Company         | Depreciation                   |
| 05. | 2001        | PA PUC              | R-00016114        | City of Lancaster                            | Original Cost and Depreciation |
| 06. | 2001        | PA PUC              | R-00017236        | The York Water Company                       | Depreciation                   |
| 07. | 2001        | PA PUC              | R-00016339        | Pennsylvania-American Water Company          | Depreciation                   |
| 08. | 2001        | OH PUC              | 01-1228-GA-AIR    | Cinergy Corp – Cincinnati Gas & Elect Co.    | Depreciation                   |
| 09. | 2001        | KY PSC              | 2001-092          | Cinergy Corp – Union Light, Heat & Power Co. | Depreciation                   |
| 10. | 2002        | PA PUC              | R-00016750        | Philadelphia Suburban Water Company          | Depreciation                   |
| 11. | 2002        | KY PSC              | 2002-00145        | Columbia Gas of Kentucky                     | Depreciation                   |
| 12. | 2002        | NJ BPU              | GF02040245        | NUI Corporation/Elizabethtown Gas Co.        | Depreciation                   |
| 13. | 2002        | ID PUC              | IPC-E-03-7        | Idaho Power Company                          | Depreciation                   |
| 14. | 2003        | PA PUC              | R-0027975         | The York Water Company                       | Depreciation                   |
| 15. | 2003        | IN URC              | R-0027975         | Cinergy Corp – PSI Energy, Inc.              | Depreciation                   |
| 16. | 2003        | PA PUC              | R-00038304        | Pennsylvania-American Water Co.              | Depreciation                   |
| 17. | 2003        | MO PSC              | WR-2003-0500      | Missouri-American Water Co.                  | Depreciation                   |
| 18. | 2003        | FERC                | ER-03-1274-000    | NSTAR-Boston Edison Company                  | Depreciation                   |
| 19. | 2003        | NJ BPU              | BPU 03080683      | South Jersey Gas Company                     | Depreciation                   |
| 20. | 2003        | NV PUC              | 03-10001          | Nevada Power Company                         | Depreciation                   |
| 21. | 2003        | LA PSC              | U-27676           | CenterPoint Energy – Arkla                   | Depreciation                   |
| 22. | 2003        | PA PUC              | R-00038805        | Pennsylvania Suburban Water Company          | Depreciation                   |
| 23. | 2004        | AB En/Util Bd       | 1306821           | EPCOR Distribution, Inc.                     | Depreciation                   |
| 24. | 2004        | PA PUC              | R-00038168        | National Fuel Gas Distribution Corp (PA)     | Depreciation                   |
| 25. | 2004        | PA PUC              | R-00049255        | PPL Electric Utilities                       | Depreciation                   |
| 26. | 2004        | PA PUC              | R-00049165        | The York Water Company                       | Depreciation                   |
| 27. | 2004        | OK Corp Cm          | PUC 200400187     | CenterPoint Energy – Arkla                   | Depreciation                   |

|     | <u>Year</u> | <u>Jurisdiction</u>     | <u>Docket No.</u>  | <u>Client Utility</u>                               | <u>Subject</u> |
|-----|-------------|-------------------------|--------------------|---|----------------|
| 28. | 2004        | OH PUC                  | 04-680-EI-AIR      | Cinergy Corp. – Cincinnati Gas and Electric Company | Depreciation   |
| 29. | 2004        | RR Com of TX            | GUD#               | CenterPoint Energy – Entex Gas Services Div.        | Depreciation   |
| 30. | 2004        | NY PUC                  | 04-G-1047          | National Fuel Gas Distribution Gas (NY)             | Depreciation   |
| 31. | 2004        | AR PSC                  | 04-121-U           | CenterPoint Energy – Arkla                          | Depreciation   |
| 32. | 2005        | IL CC                   | 05-                | North Shore Gas Company                             | Depreciation   |
| 33. | 2005        | IL CC                   | 05-                | Peoples Gas Light and Coke Company                  | Depreciation   |
| 34. | 2005        | KY PSC                  | 2005-00042         | Union Light Heat & Power                            | Depreciation   |
| 35. | 2005        | IL CC                   | 05-0308            | MidAmerican Energy Company                          | Depreciation   |
| 36. | 2005        | MO PSC                  | GF-2005            | Laclede Gas Company                                 | Depreciation   |
| 37. | 2005        | KS CC                   | 05-WSEE-981-RTS    | Westar Energy                                       | Depreciation   |
| 38. | 2005        | RR Com of TX            | GUD #              | CenterPoint Energy – Entex Gas Services Div.        | Depreciation   |
| 39. | 2005        | FERC                    |                    | Cinergy Corporation                                 | Accounting     |
| 40. | 2005        | OK CC                   | PUD 200500151      | Oklahoma Gas and Electric Co.                       | Depreciation   |
| 41. | 2005        | MA Dept Tele-com & Ergy | DTE 05-85          | NSTAR   | Depreciation   |
| 42. | 2005        | NY PUC                  | 05-E-934/05-G-0935 | Central Hudson Gas & Electric Co.                   | Depreciation   |
| 43. | 2005        | AK Reg Com              | U-04-102           | Chugach Electric Association                        | Depreciation   |
| 44. | 2005        | CA PUC                  | A05-12-002         | Pacific Gas & Electric                              | Depreciation   |
| 45. | 2006        | PA PUC                  | R-00051030         | Aqua Pennsylvania, Inc.                             | Depreciation   |
| 46. | 2006        | PA PUC                  | R-00051178         | T.W. Phillips Gas and Oil Co.                       | Depreciation   |
| 47. | 2006        | NC Util Cm.             |                    | Pub. Service Co. of North Carolina                  | Depreciation   |
| 48. | 2006        | PA PUC                  | R-00051167         | City of Lancaster                                   | Depreciation   |
| 49. | 2006        | PA PUC                  | R00061346          | Duquesne Light Company                              | Depreciation   |
| 50. | 2006        | PA PUC                  | R-00061322         | The York Water Company                              | Depreciation   |
| 51. | 2006        | PA PUC                  | R-00051298         | PPL GAS Utilities                                   | Depreciation   |
| 52. | 2006        | PUC of TX               | 32093              | CenterPoint Energy – Houston Electric               | Depreciation   |
| 53. | 2006        | KY PSC                  | 2006-00172         | Duke Energy Kentucky                                | Depreciation   |
| 54. | 2006        | SC PSC                  |                    | SCANA   |                |
| 55. | 2006        | AK Reg Com              | U-06-6             | Municipal Light and Power                           | Depreciation   |
| 56. | 2006        | DE PSC                  | 06-284             | Delmarva Power and Light                            | Depreciation   |
| 57. | 2006        | IN URC                  | IURC43081          | Indiana American Water Company                      | Depreciation   |

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| 58. | 2006        | AK Reg Com          | U-06-134             | Chugach Electric Association               | Depreciation   |
| 59. | 2006        | MO PSC              | WR-2007-0216         | Missouri American Water Company            | Depreciation   |
| 60. | 2006        | FERC                | ISO82, ETC. AL       | TransAlaska Pipeline                       | Depreciation   |
| 61. | 2006        | PA PUC              | R-00061493           | National Fuel Gas Distribution Corp. (PA)  | Depreciation   |
| 62. | 2007        | NC Util Com.        | E-7 SUB 828          | Duke Energy Carolinas, LLC                 | Depreciation   |
| 63. | 2007        | OH PSC              | 08-709-EL-AIR        | Duke Energy Ohio Gas                       | Depreciation   |
| 64. | 2007        | PA PUC              | R-00072155           | PPL Electric Utilities Corporation         | Depreciation   |
| 65. | 2007        | KY PSC              | 2007-00143           | Kentucky American Water Company            | Depreciation   |
| 66. | 2007        | PA PUC              | R-00072229           | Pennsylvania American Water Company        | Depreciation   |
| 67. | 2007        | KY PSC              | 2007-0008            | NiSource – Columbia Gas of Kentucky        | Depreciation   |
| 68. | 2007        | NY PSC              | 07-G-0141            | National Fuel Gas Distribution Corp (NY)   | Depreciation   |
| 69. | 2008        | AK PSC              | U-08-004             | Anchorage Water & Wastewater Utility       | Depreciation   |
| 70. | 2008        | TN Reg Auth         | 08-00039             | Tennessee-American Water Company           | Depreciation   |
| 71. | 2008        | DE PSC              | 08-96                | Artesian Water Company                     | Depreciation   |
| 72. | 2008        | PA PUC              | R-2008-2023067       | The York Water Company                     | Depreciation   |
| 73. | 2008        | KS CC               | 08-WSEE1-RTS         | Westar Energy                              | Depreciation   |
| 74. | 2008        | IN URC              | 43526                | Northern Indiana Public Service Co.        | Depreciation   |
| 75. | 2008        | IN URC              | 43501                | Duke Energy Indiana                        | Depreciation   |
| 76. | 2008        | MD PSC              | 9159                 | NiSource – Columbia Gas of Maryland        | Depreciation   |
| 77. | 2008        | KY PSC              | 2008-000251          | Kentucky Utilities                         | Depreciation   |
| 78. | 2008        | KY PSC              | 2008-000252          | Louisville Gas & Electric                  | Depreciation   |
| 79. | 2008        | PA PUC              | 2008-20322689        | Pennsylvania American Water Co.-Wastewater | Depreciation   |
| 80. | 2008        | NY PSC              | 08-E887/08-00888     | Central Hudson                             | Depreciation   |
| 81. | 2008        | WV TC               | VE-080416/VG-8080417 | Avista Corporation                         | Depreciation   |
| 82. | 2008        | IL CC               | ICC-09-166           | Peoples Gas, Light and Coke Co.            | Depreciation   |
| 83. | 2009        | IL CC               | ICC-09-167           | North Shore Gas Company                    | Depreciation   |
| 84. | 2009        | DC PSC              | 1076                 | Potomac Electric Power Company             | Depreciation   |
| 85. | 2009        | KY PSC              | 2009-00141           | NiSource – Columbia Gas of Kentucky        | Depreciation   |
| 86. | 2009        | FERC                | ER08-1056-002        | Entergy Services                           | Depreciation   |
| 87. | 2009        | PA PUC              | R-2009-2097323       | Pennsylvania American Water Co.            | Depreciation   |
| 88. | 2009        | NC Util Cm          | E-7, Sub 090         | Duke Energy Carolinas, LLC                 | Depreciation   |
| 89. | 2009        | KY PSC              | 2009-00202           | Duke Energy Kentucky                       | Depreciation   |

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|------|-------------|---------------------|-------------------|--|----------------|
| 90.  | 2009        | VA St. CC           | PUE-2009-00059    | Aqua Virginia, Inc.                        | Depreciation   |
| 91.  | 2009        | PA PUC              | 2009-2132019      | Aqua Pennsylvania, Inc.                    | Depreciation   |
| 92.  | 2009        | MS PSC              | 09-               | Entergy Mississippi                        | Depreciation   |
| 93.  | 2009        | AK PSC              | 09-08-U           | Entergy Arkansas                           | Depreciation   |
| 94.  | 2009        | TX PUC              | 37744             | Entergy Texas                              | Depreciation   |
| 95.  | 2009        | TX PUC              | 37690             | El Paso Electric Company                   | Depreciation   |
| 96.  | 2009        | PA PUC              | R-2009-2106908    | The Borough of Hanover                     | Depreciation   |
| 97.  | 2009        | KS CC               | 10-KCPE-415-RTS   | Kansas City Power & Light                  | Depreciation   |
| 98.  | 2009        | PA PUC              | R-2009-           | United Water Pennsylvania                  | Depreciation   |
| 99.  | 2009        | OH PUC              |                   | Aqua Ohio Water Company                    | Depreciation   |
| 100. | 2009        | WI PSC              | 3270-DU-103       | Madison Gas & Electric Co.                 | Depreciation   |
| 101. | 2009        | MO PSC              | WR-2010           | Missouri American Water Co.                | Depreciation   |
| 102. | 2009        | AK Reg Cm           | U-09-097          | Chugach Electric Association               | Depreciation   |
| 103. | 2010        | IN URC              | 43969             | Northern Indiana Public Service Co.        | Depreciation   |
| 104. | 2010        | WI PSC              | 6690-DU-104       | Wisconsin Public Service Corp.             | Depreciation   |
| 105. | 2010        | PA PUC              | R-2010-2161694    | PPL Electric Utilities Corp.               | Depreciation   |
| 106. | 2010        | KY PSC              | 2010-00036        | Kentucky American Water Company            | Depreciation   |
| 107. | 2010        | PA PUC              | R-2009-2149262    | Columbia Gas of Pennsylvania               | Depreciation   |
| 108. | 2010        | MO PSC              | GR-2010-0171      | Laclede Gas Company                        | Depreciation   |
| 109. | 2010        | SC PSC              | 2009-489-E        | South Carolina Electric & Gas Co.          | Depreciation   |
| 110. | 2010        | NJ BD OF PU         | ER09080664        | Atlantic City Electric                     | Depreciation   |
| 111. | 2010        | VA St. CC           | PUE-2010-00001    | Virginia American Water Company            | Depreciation   |
| 112. | 2010        | PA PUC              | R-2010-2157140    | The York Water Company                     | Depreciation   |
| 113. | 2010        | MO PSC              | ER-2010-0356      | Greater Missouri Operations Co.            | Depreciation   |
| 114. | 2010        | MO PSC              | ER-2010-0355      | Kansas City Power and Light                | Depreciation   |
| 115. | 2010        | PA PUC              | R-2010-2167797    | T.W. Phillips Gas and Oil Co.              | Depreciation   |
| 116. | 2010        | PSC SC              | 2009-489-E        | SCANA – Electric                           | Depreciation   |
| 117. | 2010        | PA PUC              | R-2010-22010702   | Peoples Natural Gas, LLC                   | Depreciation   |
| 118. | 2010        | AK PSC              | 10-067-U          | Oklahoma Gas and Electric Co.              | Depreciation   |
| 119. | 2010        | IN URC              |                   | Northern Indiana Public Serv. Co. - NIFL   | Depreciation   |
| 120. | 2010        | IN URC              |                   | Northern Indiana Public Serv. Co. - Kokomo | Depreciation   |
| 121. | 2010        | PA PUC              | R-2010-2166212    | Pennsylvania American Water Co - WW        | Depreciation   |
| 122. | 2010        | NC Util Cn.         | W-218,SUB310      | Aqua North Carolina, Inc.                  | Depreciation   |

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| 123. | 2011        | OH PUC              | 11-4161-WS-AIR      | Ohio American Water Company           | Depreciation   |
| 124. | 2011        | MS PSC              | EC-123-0082-00      | Entergy Mississippi                   | Depreciation   |
| 125. | 2011        | CO PUC              | 11AL-387E           | Black Hills Colorado                  | Depreciation   |
| 126. | 2011        | PA PUC              | R-2010-2215623      | Columbia Gas of Pennsylvania          | Depreciation   |
| 127. | 2011        | PA PUC              | R-2010-2179103      | Lancaster, City of – Bureau of Water  | Depreciation   |
| 128. | 2011        | IN URC              | 43114 IGCC 4S       | Duke Energy Indiana                   | Depreciation   |
| 129. | 2011        | FERC                | IS11-146-000        | Enbridge Pipelines (Southern Lights)  | Depreciation   |
| 130. | 2011        | IL CC               | 11-0217             | MidAmerican Energy Corporation        | Depreciation   |
| 131. | 2011        | OK CC               | 201100087           | Oklahoma Gas & Electric Co.           | Depreciation   |
| 132. | 2011        | PA PUC              | 2011-2232243        | Pennsylvania American Water Company   | Depreciation   |
| 133. | 2011        | FERC                | 2011-2232243        | Carolina Gas Transmission             | Depreciation   |
| 134. | 2012        | WA UTC              | UE-120436/UG-120437 | Avista Corporation                    | Depreciation   |
| 135. | 2012        | AK Reg Cm           | U-12-009            | Chugach Electric Association          | Depreciation   |
| 136. | 2012        | MA PUC              | DPU 12-25           | Columbia Gas of Massachusetts         | Depreciation   |
| 137. | 2012        | TX PUC              | 40094               | El Paso Electric Company              | Depreciation   |
| 138. | 2012        | ID PUC              | IPC-E-12            | Idaho Power Company                   | Depreciation   |
| 139. | 2012        | PA PUC              | R-2012-2290597      | PPL Electric Utilities                | Depreciation   |
| 140. | 2012        | PA PUC              | R-2012-2311725      | Hanover, Borough of – Bureau of Water | Depreciation   |
| 141. | 2012        | KY PSC              | 2012-00222          | Louisville Gas and Electric Company   | Depreciation   |
| 142. | 2012        | KY PSC              | 2012-00221          | Kentucky Utilities Company            | Depreciation   |
| 143. | 2012        | PA PUC              | R-2012-2285985      | Peoples Natural Gas Company           | Depreciation   |
| 144. | 2012        | DC PSC              | Case 1087           | Potomac Electric Power Company        | Depreciation   |
| 145. | 2012        | OH PSC              | 12-1682-EL-AIR      | Duke Energy Ohio (Electric)           | Depreciation   |
| 146. | 2012        | OH PSC              | 12-1685-GA-AIR      | Duke Energy Ohio (Gas)                | Depreciation   |
| 147. | 2012        | PA PUC              | R-2012-2310366      | Lancaster, City of – Sewer Fund       | Depreciation   |
| 148. | 2012        | PA PUC              | R-2012-2321748      | Columbia Gas of Pennsylvania          | Depreciation   |
| 149. | 2012        | FERC                | ER-12-2681-000      | ITC Holdings                          | Depreciation   |
| 150. | 2012        | MO PSC              | ER-2012-0174        | Kansas City Power and Light           | Depreciation   |
| 151. | 2012        | MO PSC              | ER-2012-0175        | KCPL Greater Missouri Operations Co.  | Depreciation   |
| 152. | 2012        | MO PSC              | GO-2012-0363        | Laclede Gas Company                   | Depreciation   |
| 153. | 2012        | MN PUC              | G007,001/D-12-533   | Integrays – MN Energy Resource Group  | Depreciation   |
| 153. | 2012        | TX PUC              |                     | Aqua Texas                            | Depreciation   |
| 155. | 2012        | PA PUC              | 2012-2336379        | York Water Company                    | Depreciation   |

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>                  | <u>Client Utility</u>                       | <u>Subject</u> |
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| 156. | 2013        | NJ BPU              | ER12121071                         | PHI Service Co.– Atlantic City Electric     | Depreciation   |
| 157. | 2013        | KY PSC              | 2013-00167                         | Columbia Gas of Kentucky                    | Depreciation   |
| 158. | 2013        | VA St CC            | 2013-00020                         | Virginia Electric and Power Co.             | Depreciation   |
| 159. | 2013        | IA Util Bd          | 2013-0004                          | MidAmerican Energy Corporation              | Depreciation   |
| 160. | 2013        | PA PUC              | 2013-2355276                       | Pennsylvania American Water Co.             | Depreciation   |
| 161. | 2013        | NY PSC              | 13-E-0030, 13-G-0031,<br>13-S-0032 | Consolidated Edison of New York             | Depreciation   |
| 162. | 2013        | PA PUC              | 2013-2355886                       | Peoples TWP LLC                             | Depreciation   |
| 163. | 2013        | TN Reg Auth         | 12-0504                            | Tennessee American Water                    | Depreciation   |
| 164. | 2013        | ME PUC              | 2013-168                           | Central Maine Power Company                 | Depreciation   |
| 165. | 2013        | DC PSC              | Case 1103                          | PHI Service Co. – PEPCO                     | Depreciation   |
| 166. | 2013        | WY PSC              | 2003-ER-13                         | Cheyenne Light, Fuel and Power Co.          | Depreciation   |
| 167. | 2013        | FERC                | ER13- -0000                        | Kentucky Utilities                          | Depreciation   |
| 168. | 2013        | FERC                | ER13- -0000                        | MidAmerican Energy Company                  | Depreciation   |
| 169. | 2013        | FERC                | ER13- -0000                        | PPL Utilities                               | Depreciation   |
| 170. | 2013        | PA PUC              | R-2013-2372129                     | Duquesne Light Company                      | Depreciation   |
| 171. | 2013        | NJ BPU              | ER12111052                         | Jersey Central Power and Light Co.          | Depreciation   |
| 172. | 2013        | PA PUC              | R-2013-2390244                     | Bethlehem, City of – Bureau of Water        | Depreciation   |
| 173. | 2013        | OK CC               | UM 1679                            | Oklahoma, Public Service Company of         | Depreciation   |
| 174. | 2013        | IL CC               | 13-0500                            | Nicor Gas Company                           | Depreciation   |
| 175. | 2013        | WY PSC              | 20000-427-EA-13                    | PacifiCorp                                  | Depreciation   |
| 176. | 2013        | UT PSC              | 13-035-02                          | PacifiCorp                                  | Depreciation   |
| 177. | 2013        | OR PUC              | UM 1647                            | PacifiCorp                                  | Depreciation   |
| 178. | 2013        | PA PUC              | 2013-2350509                       | Dubois, City of                             | Depreciation   |
| 179. | 2014        | IL CC               | 14-0224                            | North Shore Gas Company                     | Depreciation   |
| 180. | 2014        | FERC                | ER14-                              | Duquesne Light Company                      | Depreciation   |
| 181. | 2014        | SD PUC              | EL14-026                           | Black Hills Power Company                   | Depreciation   |
| 182. | 2014        | WY PSC              | 20002-91-ER-14                     | Black Hills Power Company                   | Depreciation   |
| 183. | 2014        | PA PUC              | 2014-2428304                       | Hanover, Borough of – Municipal Water Works | Depreciation   |
| 184. | 2014        | PA PUC              | 2014-2406274                       | Columbia Gas of Pennsylvania                | Depreciation   |
| 185. | 2014        | IL CC               | 14-0225                            | Peoples Gas Light and Coke Company          | Depreciation   |
| 186. | 2014        | MO PSC              | ER-2014-0258                       | Ameren Missouri                             | Depreciation   |
| 187. | 2014        | KS CC               | 14-BHCG-502-RTS                    | Black Hills Service Company                 | Depreciation   |

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>           | <u>Client Utility</u>   | <u>Subject</u> |
|------|-------------|---------------------|-----------------------------|---|----------------|
| 188. | 2014        | KS CC               | 14-BHCG-502-RTS             | Black Hills Utility Holdings                                  | Depreciation   |
| 189. | 2014        | KS CC               | 14-BHCG-502-RTS             | Black Hills Kansas Gas  | Depreciation   |
| 190. | 2014        | PA PUC              | 2014-2418872                | Lancaster, City of – Bureau of Water                          | Depreciation   |
| 191. | 2014        | WV PSC              | 14-0701-E-D                 | First Energy – MonPower/PotomacEdison                         | Depreciation   |
| 192. | 2014        | VA St CC            | PUC-2014-00045              | Aqua Virginia   | Depreciation   |
| 193. | 2014        | VA St CC            | PUE-2013                    | Virginia American   | Depreciation   |
| 194. | 2014        | OK CC               | PUD201400229                | Oklahoma Gas and Electric                                     | Depreciation   |
| 195. | 2014        | OR PUC              | UM1679                      | Portland General Electric                                     | Depreciation   |
| 196. | 2014        | IN URC              | Cause No. 44576             | Indianapolis Power & Light                                    | Depreciation   |
| 197. | 2014        | MA DPU              | DPU. 14-150                 | NSTAR Gas   | Depreciation   |
| 198. | 2014        | CT PURA             | 14-05-06                    | Connecticut Light and Power                                   | Depreciation   |
| 199. | 2014        | MO PSC              | ER-2014-0370                | Kansas City Power & Light                                     | Depreciation   |
| 200. | 2014        | KY PSC              | 2014-00371                  | Kentucky Utilities Company                                    | Depreciation   |
| 201. | 2014        | KY PSC              | 2014-00372                  | Louisville Gas and Electric Company                           | Depreciation   |
| 202. | 2015        | PA PUC              | R-2015-2462723              | United Water Pennsylvania Inc.                                | Depreciation   |
| 203. | 2015        | PA PUC              | R-2015-2468056              | Columbia Gas of Pennsylvania                                  | Depreciation   |
| 204. | 2015        | NY PSC              | 15-E-0283/15-G-0284         | New York State Electric and Gas Corporation                   | Depreciation   |
| 205. | 2015        | NY PSC              | 15-E-0285/15-G-0286         | Rochester Gas and Electric Corporation                        | Depreciation   |
| 206. | 2015        | MO PSC              | WR-2015-0301/SR-2015-0302   | Missouri American Water Company                               | Depreciation   |
| 207. | 2015        | OK CC               | PUD 201500208               | Oklahoma, Public Service Company of                           | Depreciation   |
| 208. | 2015        | WV PSC              | 15-0676-W-42T               | West Virginia American Water Company                          | Depreciation   |
| 209. | 2015        | PA PUC              | 2015-2469275                | PPL Electric Utilities  | Depreciation   |
| 210. | 2015        | IN URC              | Cause No. 44688             | Northern Indiana Public Service Company                       | Depreciation   |
| 211. | 2015        | OH PSC              | 14-1929-EL-RDR              | First Energy-Ohio Edison/Cleveland Electric/<br>Toledo Edison | Depreciation   |
| 212. | 2015        | NM PRC              | 15-00127-UT                 | El Paso Electric  | Depreciation   |
| 213. | 2015        | TX PUC              | PUC-44941; SOAH 473-15-5257 | El Paso Electric  | Depreciation   |
| 214. | 2015        | WI PSC              | 3370-DU-104                 | Madison Gas and Electric Company                              | Depreciation   |
| 215. | 2015        | OK CC               | PUD 201500273               | Oklahoma Gas and Electric                                     | Depreciation   |

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
MELISSA J. BELL  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016** Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF MELISSA J. BELL**

1 **Q: Please state your name and business address.**

2 A: My name is Melissa J. Bell and my business address is 290 W. Nationwide  
3 Blvd., Columbus, Ohio 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am currently a Lead Regulatory Analyst for NiSource Corporate Services  
7 Company. My responsibilities include providing support for regulatory  
8 filings for several NiSource operating companies, including, but not  
9 limited to, Columbia Gas of Kentucky, Inc. ("Columbia"), Columbia Gas  
10 of Pennsylvania, Inc. ("CPA"), Columbia Gas of Ohio, Inc. ("COH"),  
11 Columbia Gas of Maryland, Inc. ("CMD") and Bay State Gas d/b/a  
12 Columbia Gas of Massachusetts ("CMA"). The types of filings include  
13 quarterly gas cost adjustments, annual uncollectible expense and  
14 percentage of income payment plan adjustments, as well as tariff updates.  
15 I also provide audit support, rate entry and verification, and other duties  
16 as assigned.

17

18 **Q: What is your educational background?**

1 A: I graduated from The Ohio State University with a Bachelor of Science  
2 Degree in Marketing in 1993. I have attended ratemaking workshops  
3 provided by the Southern Gas Association, Deloitte LLP, Financial  
4 Accounting Institute and Regulatory Research Associates.

5

6 **Q: What is your employment history?**

7 A: I began my career in the energy industry in 1996 when I joined COH as a  
8 Customer Service Representative, before moving to COH's New Business  
9 Team as a Project Expediter in 1997. In 1999, I left COH for a position at  
10 UtiliCorp Energy Solutions as a Commercial Account Executive, until the  
11 sale of UtiliCorp Energy Solutions to Exelon Energy in 2000. At that time, I  
12 joined CSC Energy Solutions as a Tariff Analyst until February 2003. In  
13 March 2003, I rejoined the NiSource/Columbia family of companies in the  
14 Gas Transportation Services ("GTS") Department as a GTS Analyst II,  
15 providing sales support to Major Account Representatives for Columbia,  
16 CMD and Columbia Gas of Virginia ("CGV"), as well as support to natu-  
17 ral gas suppliers and their customers. In December 2005, I accepted a posi-  
18 tion as a Senior Regulatory Analyst in the NiSource Corporate Service  
19 Company Regulatory Strategy and Support Department. I was promoted  
20 to my current position as Lead Regulatory Analyst in 2010.

1 **Q: Have you previously testified before any regulatory commissions?**

2 A: Yes. I testified before the Pennsylvania Public Utility Commission in a  
3 formal complaint proceeding during my tenure as a GTS analyst. I have  
4 also submitted direct testimony before the Pennsylvania Public Utility  
5 Commission, the Maryland Public Service Commission and the  
6 Massachusetts Department of Public Utilities.

7  
8 **Q: What is the purpose of your testimony in this proceeding?**

9 A: I am supporting the development of revenues for both the base period and  
10 forecasted test period as presented in Filing Requirement 16-(8)(m),  
11 Schedule M. I am also sponsoring the typical bill comparisons at current  
12 and proposed rates shown in Filing Requirement 16-(8)(n), Schedule N. I  
13 also co-sponsor Filing Requirements 16-(6)(a), 16-(6)(b), and 16-(8)(d).

14  
15 **Q: What are the test periods that you will be addressing in this testimony?**

16 A: I will be addressing the twelve month period ending August 31, 2016, as  
17 the base period, as well as the twelve months ending December 31, 2017,  
18 as the forecasted test period.

19

1 **Q: What process is undertaken to produce the number of bills used to cal-**  
2 **culate revenue in this case?**

3 A: The detail supporting number of bills used for the forecasted test period is  
4 found in Workpaper WPM-B (the workpapers have been filed as part of  
5 the Application). Forecasted active customer counts are first determined  
6 on a total company basis by customer class by type of service  
7 (sales/CHOICE/transportation) by month in Columbia's forecast support-  
8 ed by Columbia witness Gresham. Large customers individually forecast-  
9 ed by the Large Customer Relations ("LCR") group are identified sepa-  
10 rately from the total forecast. The remaining non-LCR customer counts in  
11 the forecast are then spread for each month of the test period by type of  
12 service by customer class by rate schedule based on the latest twelve  
13 months of historical experience ending February 29, 2016. Bill counts for  
14 the LCR customers are adjusted to reflect customers who are expected to  
15 either discontinue or add service during the forecasted period as shown in  
16 Workpaper WPB-D. The bills are accumulated based upon which rate  
17 schedule the customer was on at February 29, 2016.

18 Additionally, an adjustment is made to the number of forecasted  
19 bills to reflect final billed customers because the forecast is based on pro-  
20 jected active customers. In the months that a final bill is issued, the cus-

1           tomers are coded inactive and are not counted for the month even though  
2           they are billed a customer charge for their final month of service. Because  
3           Columbia does not forecast final bills, Columbia considers the historical  
4           final bill counts to be representative of what can be expected during the  
5           forecasted test period. As a result, final bills are added to the active bills  
6           used in the forecast to price customer charge revenue in this case. Fore-  
7           casted test period bills are then taken from WPM-B and used to price cus-  
8           tomer charge revenue at current rates in Schedule M-2.2 and proposed  
9           rates in Schedule M-2.3.

10                   The total customer counts for the base period are determined using  
11           six months of actual customer bills from September 2015 through Febru-  
12           ary 2016, and six months of forecasted bills through August 2016.

13

14   **Q:   What process is used to develop the throughput in Mcf used to calculate**  
15   **revenue in this case?**

16   A:   Workpaper WPM-C details the throughput in Mcf used to calculate reve-  
17   nue in this case. Similar to the methodology use to produce the number of  
18   bills, forecasted Mcf are first determined on a total company basis by cus-  
19   tomer class by type of service by month in Columbia’s forecast supported  
20   by Columbia witness Gresham. Forecasted throughput associated with

1 LCR customers is identified separately from the total forecast based upon  
2 the individual large customer forecast performed by the LCR group. The  
3 remaining non LCR throughput is then spread for each month of the fore-  
4 casted test period by type of service by customer class by rate schedule  
5 based on the latest twelve months of historical experience ending Febru-  
6 ary 29, 2016. Throughput is accumulated based upon which rate schedule  
7 the customers were on at February 29, 2016.

8 Adjustments resulting from LCR customers either discontinuing or  
9 adding service during the forecasted test period are show in Workpaper  
10 WPM-D. Additionally, Workpaper WPM-D reflects any anticipated signif-  
11 icant usage changes for LCR customers during the forecasted test period.  
12 Adjustment volumes in Workpaper WPM-D are then recorded in Work-  
13 paper WPM-C to arrive at the total adjusted volume forecast used to price  
14 revenue for the forecasted period.

15 The throughput for the base period is determined using six months  
16 of actual volumes from September 2015 through February 2016 and six  
17 months of forecasted volumes through August 2016.

18

19 **Q: How were the non-LCR commercial and industrial forecasted volumes**  
20 **in WPM-C split by rate block?**

1 A: The spread of non LCR commercial and industrial throughput is per-  
2 formed at the individual customer level by month based on historical ex-  
3 perience for the twelve months ended February 29, 2016. Each customer's  
4 forecasted monthly throughput is then split among the rate blocks per-  
5 taining to that customer's rate schedule and then accumulated by rate  
6 block and shown in Workpaper WPM-C.

7

8 **Q: How was the gas cost revenue calculated for the forecasted test period?**

9 A: Columbia's most recent Commission-approved gas cost recovery rate, ef-  
10 fective March 1, 2016, was applied to volumes (Mcf) for each month of the  
11 forecasted test period based on rate class. Calculations are shown on  
12 Workpaper WPM-A.

13

14 **Q: Please describe Schedule M.**

15 A: Schedule M summarizes total forecasted revenue by customer class by  
16 month at both current and proposed rates. Revenue at current rates is  
17 summarized from Schedule M-2.2 and revenue at proposed rates is sum-  
18 marized from Schedule M-2.3.

19

20 **Q: Please describe Schedule M-2.1.**

1 A: Schedule M-2.1 shows the comparison of revenue at current rates and rev-  
2 enue at proposed rates by rate classification. Columns B (Forecasted Bills),  
3 C (Forecasted Mcf), and D (Revenue at Current Rates) are recorded from  
4 Schedule M-2.2. Column G (Revenue at Proposed Rates) is recorded from  
5 Schedule M-2.3. Column E (D-2.4 Rate Making Adjustment) shows an ad-  
6 justment to the gas cost uncollectible revenue at current rates to reflect the  
7 revised charge-off percentage used in this case. The difference between  
8 revenue at proposed rates and revenue at current rates is shown in col-  
9 umn H with the corresponding percentage change shown in column I.

10

11 **Q: How was the forecasted test period revenue at current rates developed**  
12 **in Schedule M-2.2?**

13 A: Forecasted test period bills from Workpaper WPM-B and forecasted test  
14 period volumes from Workpaper WPM-C are recorded in Schedule M-2.2  
15 by month by rate class. Forecasted test period bills and volumes for each  
16 month for each rate class are then multiplied by the applicable current  
17 rates in column C to develop the forecasted test period revenue at current  
18 rates.

19 **Q: How was the forecasted test period revenue at proposed rates developed**  
20 **in Schedule M-2.3?**

1 A: Forecasted test period bills and volumes in Schedule M-2.3 are identical to  
2 Schedule M-2.2. Forecasted test period bills and volumes for each month  
3 for each rate class are then multiplied by the applicable proposed rates in  
4 column C. An adjustment is applied to Account 487 to reflect an expected  
5 increase in forfeited discounts attributable to the proposed rates. The re-  
6 sult is the forecasted test period revenue at proposed rates.

7

8 **Q: How was Schedule N (Typical Bill Comparison) developed?**

9 A: Monthly usage levels were selected in order to give a representative effect  
10 of the change in a typical monthly bill based on proposed rates as com-  
11 pared to current rates. Tariff sales rate schedules were compared with and  
12 without gas cost. Customer and commodity charges were compared for  
13 transportation rate schedules.

14

15 **Q: Does this complete your Prepared Direct testimony?**

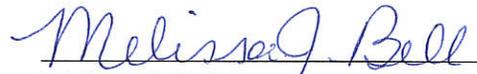
16 A: Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Melissa J. Bell, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
Melissa J. Bell

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Melissa J. Bell on this the 19<sup>th</sup> day of MARCH, 2017



CHERYLA. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
Notary Public

My Commission expires: MARCH 26, 2017

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
AUSTIN M. SCHAUER  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016**

Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF AUSTIN M. SCHAUER**

1 **Q: Please state your name and business address.**

2 A: My name is Austin M. Schauer and my business address is 290 W. Na-  
3 tionwide Blvd., Columbus, Ohio, 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am employed by NiSource Corporate Services Company ("NCSC") as  
7 Manager of Accounting, Special Studies. As Special Studies Manager, my  
8 principal responsibilities include assisting in overseeing the general books  
9 and records of NCSC. Additionally, I am responsible for overseeing other  
10 ad hoc accounting projects within the accounting department. In carrying  
11 out these duties, I am responsible for a number of activities, including:

12 (1) Overseeing the accounting system that identifies the costs for  
13 services that are subsequently billed to the operating companies  
14 within the NiSource Inc. ("NiSource") corporate organization  
15 ("NiSource affiliates" or "affiliates"); and,

16 (2) Certifying accounting data, providing testimony, and respond-  
17 ing to requests from regulatory and legislative bodies with regard  
18 to NCSC billing on behalf of NiSource affiliates.

19

1 **Q: What is your educational background?**

2 A. I received a Bachelor of Science degree in 2007 and a Master's Degree in  
3 Business Administration in 2008 from Ohio University in Athens, Ohio.

4  
5 **Q: What is your employment history?**

6 A: I was hired by NCSC in January 2009 as a Financial Analyst. In April 2011,  
7 I was promoted to Senior Financial Analyst and held various accounting  
8 positions. In November 2011, I was hired as a Pricing Analyst at Battelle  
9 Memorial Institute until I was rehired by NCSC in February 2013. In 2014,  
10 I was promoted to Lead Financial Analyst and held various accounting  
11 positions until I was promoted to Special Studies Accounting Manager in  
12 August 2015.

13  
14 **Q: Have you previously testified before any regulatory commissions?**

15 A: I have not previously testified before any regulatory commissions.

16  
17 **Q: What is the purpose of your testimony in this proceeding?**

18 A: The purpose of my testimony is to provide background about NCSC and  
19 the role it serves within NiSource. I also provide information pertaining to

1 the types of costs that have been billed to Columbia Gas of Kentucky, Inc.  
2 (“Columbia”). Additionally, I sponsor Filing Requirement 16-(7)(u).

3

4 **I. THE RELATIONSHIP BETWEEN NCSC AND COLUMBIA**

5 **Q: What is the structure and role of NCSC?**

6 A: NCSC is a subsidiary of NiSource and an affiliate of Columbia within the  
7 NiSource corporate organization. NCSC provides a range of services to  
8 the individual operating companies within NiSource, including Columbia,  
9 and also coordinates the allocation and billing of charges to the NiSource  
10 operating companies for services provided by both NCSC directly and by  
11 third-party vendors.

12

13 **Q: Please identify the individual corporate affiliates for which NCSC**  
14 **performs services.**

15 A: Please refer to ATTACHMENT AMS-1, which lists all affiliates for whom  
16 NCSC currently provides services.

17

18 **Q: How are costs billed to affiliates?**

19 A: There are two types of billings made to affiliates, including Columbia:  
20 (1) contract billing; and (2) convenience billing. Contract billings are

1 identified by billing pool and represent NCSC labor and expenses billed to  
2 the respective affiliate. Contract billed charges may be direct (billed  
3 directly to a single affiliate or affiliates) or allocated (split between or  
4 among several affiliates), depending on the nature of the expense.

5 Convenience billing reflects payments that are routinely made on  
6 behalf of affiliates on an ongoing basis, including employee benefits,  
7 corporate insurance, leasing, and external audit fees. Each affiliate is billed  
8 for its proportional share of the payments made in that respective month.  
9 As the name implies, convenience billing is intended as a convenience to  
10 vendors because it eliminates the need for a separate invoice to be  
11 generated for each affiliate entity receiving the same services. Therefore,  
12 NCSC makes the payment to the vendor and the charges for the services  
13 are recorded directly on the books of the affiliates.

14

15 **Q: Is contract billing rendered pursuant to an executed contract?**

16 A: Yes, NCSC has executed an individual Service Agreement with each  
17 affiliate, which designates the type of services to be performed and the  
18 method of calculating the charges for these services. Services rendered  
19 under the Service Agreement are provided at cost, including reasonable  
20 compensation for the use of capital. The Service Agreement is updated as

1 needed so that all affiliates that receive service from NCSC are generally  
2 subject to the same modifications. The 2015 Service Agreement between  
3 NCSC and Columbia is on file with the Commission and a copy of that  
4 agreement is attached hereto as ATTACHMENT AMS-2.

5

6 **Q: How does Columbia benefit from the services provided by NCSC?**

7 A: NCSC was established to provide centralized services to its affiliates. The  
8 rendering of services on a centralized basis enables the affiliates to realize  
9 benefits, including use of personnel and equipment, and the availability of  
10 personnel with specialized areas of expertise. Thus, NCSC offers  
11 Columbia, as well as the other individual distribution companies, access  
12 to the depth and experience that may not otherwise be available.

13

14 **Q: What are the services provided by NCSC?**

15 A: Please refer to ATTACHMENT AMS-2 Appendix A, Article 2 for a  
16 description of the services provided by NCSC.

17

18

19

1 **II. COST ASSIGNMENT TO COLUMBIA BY NCSC**

2 **Q: How does NCSC determine charges applicable to Columbia?**

3 A: NCSC was regulated by the SEC under the Public Utility Holding  
4 Company Act of 1935 until February 8, 2006, when the Public Utility  
5 Holding Company Act of 2005 (“PUHCA 2005”) became effective.  
6 PUHCA 2005 transferred regulatory jurisdiction over public utility  
7 holding companies from the SEC to the FERC. Pursuant to FERC Order  
8 No. 684 issued October 19, 2006, centralized service companies (like  
9 NCSC) must use a cost accumulation system, provided such system  
10 supports the allocation of expenses to the services performed and readily  
11 identifies the source of the expense and the basis for the allocation. In  
12 compliance with PUHCA 2005 and the FERC order, NCSC uses a billing  
13 pool system to collect costs that are applicable and billable to affiliates,  
14 including Columbia.

15 The billing system utilizes a 4-digit billing pool value, which is used  
16 to calculate and bill charges to its NiSource affiliates (known as “contract  
17 billing”). There are separate accounting chart fields such as work order,  
18 project, and activity used to track specific project costs and/or departmental  
19 labor.

20

1 **Q: Are all costs allocated to Columbia from NCSC?**

2 A: No. Costs are directly charged to a particular affiliate, including Columbia,  
3 whenever possible. Some charges necessarily involve more than one  
4 affiliate, and in that case, the billing pool details how expenses are allocated  
5 among participating affiliates.

6  
7 **Q: What controls are in place to ensure that an affiliate is consistently and**  
8 **appropriately billed?**

9 A: NCSC allocates costs for a particular billing pool in accordance with the  
10 bases of allocation that have been previously approved by the SEC, and filed  
11 annually with the FERC. A description of each of the bases of allocations are  
12 provided in the Service Agreement. NCSC currently updates the statistical  
13 data used in the approved allocation bases, at minimum, on an annual basis;  
14 and furthermore, prior to publishing the new allocation percentages, NCSC  
15 provides Columbia's leadership team the opportunity to review, discuss,  
16 and provide feedback. There are system controls in place that allow certain  
17 departments, or groups of departments, to only use billing pools that  
18 allocate to companies benefitting from the services being provided.  
19 Essentially, a department that supports only the operating affiliates would  
20 only be allowed to use billing pools that include the operating affiliates. If an

1 individual would attempt to use a different billing pool, the related  
2 accounting systems would prompt an immediate error and not allow data to  
3 be input. Additionally, Columbia's Internal Audit group conducts an annual  
4 review of cost allocation procedures and makes recommendations related to  
5 contract and convenience billing processing.

6

7 **Q: Has the FERC conducted an audit of NCSC, its billing system and**  
8 **allocation methodologies?**

9 A: Yes. NiSource Inc., including NCSC, underwent a FERC audit, Docket No.  
10 FA11-5-000, which covered the period January 1, 2009, through December  
11 31, 2010. The Final Audit Report was issued by the FERC on October 24,  
12 2012. As indicated in the Final Report, the Audit Staff reviewed and tested  
13 the supporting details for NCSC's cost allocation methods. They then  
14 sampled and selected supporting documents to ensure that NCSC's  
15 billings and accounting comply within the USOA (Uniform System of  
16 Accounts). FERC did not issue any adverse comments to NCSC related to  
17 its allocation methods.

18

19

1 **Q: What are the Bases of Allocation?**

2 A: NCSC allocates costs in accordance with the following Bases of Allocation  
3 that have been previously approved by the SEC, and filed annually with  
4 the FERC:

---

5 BASIS 1 - Gross Fixed Assets and Total Operating Expenses

6 BASIS 2 - Gross Fixed Assets

7 BASIS 3 - Number of Meters Serviced

8 BASIS 4 - Number of Accounts Payable Invoices Processed

9 BASIS 7 - Gross Depreciable Property & Total Operating Expenses

10 BASIS 8 - Gross Depreciable Property

11 BASIS 9 - Automotive Units

12 BASIS 10 - Number of Retail Customers

13 BASIS 11 - Number of Regular Employees

14 BASIS 13 - Fixed Allocation

15 BASIS 14 - Number of Transportation Customers

16 BASIS 15 - Number of Commercial Customers

17 BASIS 16 - Number of Residential Customers

18 BASIS 17 - Number of High Pressure Customers

19 BASIS 20 - Service Company Billing (Direct and Allocated) Costs

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1 A description of each Basis of Allocation is included in Filing Requirement

2 16-(7)(u).

3

4 **Q: Does this complete your Prepared Direct testimony?**

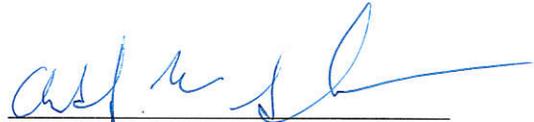
5 **A:** Yes, however, I reserve the right to file rebuttal testimony if necessary.

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Austin M. Schauer, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
Austin M. Schauer

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Austin M. Schauer on this the 19<sup>th</sup> day of MAY, 2016.



CHERYL A. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
Notary Public

My Commission expires: MARCH 26, 2017

**NiSource Corporate Services Company**

**List of Associate Billing Companies**

| Company Name   | Billing Company No. |
|--|---------------------|
| NiSource Insurance Corporation Limited               | 22                  |
| Energy USA-TPC Corp.                                 | 24                  |
| Columbia Gas of Kentucky, Inc.                       | 32                  |
| Columbia Gas of Ohio, Inc.                           | 34                  |
| Columbia Gas of Maryland, Inc.                       | 35                  |
| Columbia Gas of Pennsylvania, Inc.                   | 37                  |
| Columbia Gas of Virginia, Inc.                       | 38                  |
| NiSource Inc.  | 58                  |
| Northern Indiana Public Service Company              | 59                  |
| NiSource Development Company, Inc.                   | 60                  |
| NiSource Capital Markets, Inc.                       | 62                  |
| Energy USA, Inc. (IN)                                | 68                  |
| NiSource Retail Services, Inc.                       | 71                  |
| NiSource Finance Corp.                               | 75                  |
| NiSource Energy Technology, Inc.                     | 78                  |
| Columbia Gas of Massachusetts, Inc.                  | 80                  |
| * Columbia Pipeline Group Services                   | 82                  |
| Columbia of Ohio Receivables Corporation             | 93                  |
| Columbia Gas of Pennsylvania Receivables Corporation | 94                  |
| NIPSCO Accounts Receivables Corporation              | 95                  |

\* Services performed for Columbia Pipeline Group billed to Business Unit 82.

Service Agreement

BETWEEN

NISOURCE CORPORATE SERVICES COMPANY

AND

COLUMBIA GAS OF KENTUCKY, INC.

Dated January 1, 2015

(To Take Effect Pursuant to Article 3 Hereof)

## SERVICE AGREEMENT

This SERVICE AGREEMENT (the "Service Agreement" or "Agreement") is made and entered into effective the 1<sup>st</sup> day of January, 2015 by and between Columbia Gas of Kentucky, Inc., its subsidiaries, affiliates and associates ("Client", and together with other associate companies that have or may in the future execute this form of Service Agreement, the "Clients") and NiSource Corporate Services Company ("Company").

### WITNESSETH:

WHEREAS, each Company and Client is a direct or indirect wholly owned subsidiary of NiSource Inc., a Delaware corporation and a "holding company" as defined in the Public Utility Holding Company Act of 2005 ("Act") that is subject to regulations adopted by the Federal Energy Regulatory Commission ("FERC") pursuant to the Act;

WHEREAS, the Client is an affiliate of the Company; and

WHEREAS, the Company and Client agree to enter into this Service Agreement whereby the Client may seek certain services from the Company and the Company agrees to provide such services upon request and upon the Company's conclusion that it is able to perform such services. Further, the Client agrees to pay for the services as provided herein at cost; and

WHEREAS, the rendition of such services set forth in Article 2 of Appendix A on a centralized basis enables the Clients to realize economic and other benefits through (1) efficient use of personnel and equipment, (2) coordination of analysis and planning, and (3) availability of specialized personnel and equipment which the Clients cannot economically maintain on an individual basis.

NOW THEREFORE, in consideration of the premises and the mutual agreements herein contained, the parties to this Service Agreement covenant and agree as follows:

## ARTICLE 1

### SERVICES

1.1 The Company shall furnish to Client, as requested by Client, upon the terms and conditions hereinafter set forth, such of the services described in Section 2 of Appendix A hereto (the "Services"), at such times, for such periods and in such manner as Client may from time to time request and that the Company concludes it is able to perform. The Company shall also provide Client with such services, in addition to those services described in Appendix A hereto, as may be requested by Client and that the Company concludes it is able to perform. In supplying such services, the Company may arrange, where it deems appropriate in consultation with Client, for the services of such experts, consultants, advisers, and other persons with necessary qualifications as are required for or pertinent to the provision of such services ("Additional Services").

1.2 Client shall take from the Company such of the Services, and such Additional Services, whether or not now contemplated, as are requested from time to time by Client and that the Company concludes it is able to perform.

1.3 The cost of the Services described herein or contemplated to be performed hereunder shall be allocated to Client in accordance with Exhibit A, which is filed annually with the FERC. Client shall have the right from time to time to amend or alter any activity, project, program or work order provided that (i) Client pays and remunerates the Company the full cost for the services covered by the activity, project, program or work order, including therein any expense incurred by the Company as a direct result of such amendment or alteration of the activity, project, program or work order, and (ii) Client accepts that no amendment or alteration of an activity, project, program or work order shall release Client from liability for all costs already incurred by or contracted for by the Company pursuant to the activity, project, program or work order, regardless of whether the services associated with such costs have been completed.

1.4 The Company shall hire, train and maintain an experienced staff able to perform the Services, or shall obtain experience through third-party resources, as it shall determine in consultation with Client.

1.5 The Company routinely makes payments on behalf of affiliates on an ongoing basis, including payroll, employee benefits, corporate insurance, leasing, and external audit fees. Each affiliate receives on a monthly basis a Convenience Bill for its proportional share of the payments made in that respective month. As the name implies, convenience billing is intended as a convenience to vendors because it eliminates the need for a separate invoice to be generated for each affiliate entity receiving the same services. Therefore, the Company makes the payment to the vendor and the charges for the services are recorded directly on the books of the affiliate and not by the Company.

## ARTICLE 2

### COMPENSATION

2.1 As compensation for the Services to be rendered hereunder, Client shall compensate and pay to the Company all costs, reasonably identifiable and related to particular Services performed by the Company for or on Client's behalf. The methods for allocating the Company costs to Client, as well as to other associate companies, are set forth in Appendix A.

2.2 It is the intent of this Service Agreement that charges for Services shall be billed, to the extent reasonably possible, directly to the Client or Clients benefiting from such Service. Any amounts remaining after such direct billing shall be allocated using the methods identified in Appendix A. The methods of allocation of cost shall be subject to review annually, or more frequently if appropriate. Such methods of allocation of costs may be modified or changed by the Company without the necessity of an amendment to this Service Agreement; provided that, in each instance, all services rendered hereunder shall be at actual cost and include compensation for use of capital thereof, fairly and equitably allocated. The Company shall review with the

Client any proposed change in the methods of allocation of costs hereunder and the parties must agree to any such changes before they are implemented.

2.3 The Company shall make available monthly billing information to the Client that shall reflect all information necessary to identify the costs charged and Services rendered for that month. Client shall undertake a review of the charges and identify all questions or concerns regarding the charges reflected within a reasonable period of time. Client shall remit to the Company all charges billed to it within a period of time not exceeding 30 days of receipt of the monthly billing information.

2.4 Client agrees to provide the Company, from time to time, as requested such financial and statistical information as the Company may need to compute the charges payable by Client consistent with the method of allocation set forth on Appendix A.

2.5 It is the intent of this Service Agreement that the payment for services rendered by the Company to Client under this Service Agreement shall cover all the costs of its doing business including, but not limited to, salaries and wages, office supplies and expenses, outside services employed, insurance, injuries and damages, employee and retiree pensions and benefits, taxes, miscellaneous general expenses, rents, maintenance of structures and equipment, depreciation and amortization, and reasonable compensation for use of capital.

### **ARTICLE 3**

#### **TERM**

3.1 This Service Agreement shall become effective as of the date first written above, subject only to the receipt of any required regulatory approvals from the State Commissions and federal agencies as needed, and shall continue in force until terminated by the Company or Client, upon not less than one year's prior written notice to the other party. This Service Agreement shall also be subject to termination or modification at any time, without notice, if and to the extent performance under this Service Agreement may conflict with (1) the Act or with any rule, regulation or order of the FERC adopted before or after the date of this Service Agreement, or (2) any state or federal statute, or any rule, decision, or order of any state or federal regulatory agency having jurisdiction over one or more Clients. Further, this Service Agreement shall be terminated with respect to the Client immediately upon the Client ceasing to be an associate company of the Company. The parties' obligations under this Service Agreement which by their nature are intended to continue beyond the termination or expiration of this Service Agreement shall survive such termination or expiration.

### **ARTICLE 4**

#### **SERVICE REVIEW**

4.1 Upon request of the Client, the Company shall meet with the Client to review and assess the quality, costs, and/or allocations of the services being provided pursuant to this

Service Agreement. The Client shall also have the right to amend the scope of services as it determines to be necessary or desirable.

4.2 NiSource maintains an Internal Audit Department that will conduct periodic audits of the Company administration and accounting processes (“Audits”). The Audits will include examinations of Service Agreements, accounting systems, source documents, methods of allocation of costs and billings to ensure all Services are properly accounted for and billed to the appropriate Client. In addition, the Company’s policies, operating procedures and controls will be evaluated annually. Copies of the reports generated by the Company as part of the Audits will be provided to Client upon request.

## ARTICLE 5

### MISCELLANEOUS

5.1 All accounts and records of the Company shall be kept in accordance with the FERC’s Uniform System of Accounts (“USofA”) for centralized service companies .

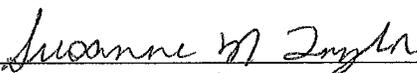
5.2 New direct or indirect subsidiaries of NiSource Inc., which may come into existence after the effective date of this Service Agreement, may become additional Clients of the Company and subject to a service agreement with the Company. The parties hereto shall make such changes in the scope and character of the services to be rendered and the method of allocating costs of such services as specified in Appendix A, subject to the requirements of Section 2.2, as may become necessary to achieve a fair and equitable allocation of the Company’s costs among all Clients including any new subsidiaries. The parties shall make similar changes if any Client ceases to be associated with the Company.

5.3 The Company shall permit Client reasonable access to its accounts and records including the basis and computation of allocations.

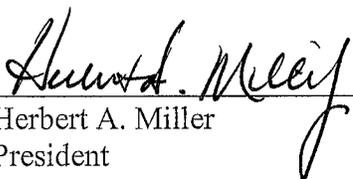
5.4 The Company and Client shall comply with the terms and conditions of all applicable contracts managed by the Company for the Client, individually, or for one or more Clients, collectively, including without limitation terms and conditions preserving the confidentiality and security of proprietary information of vendors.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date and year first above written.

NISOURCE CORPORATE SERVICES  
COMPANY

By:   
Name: Susanne M. Taylor  
Its: Controller

COLUMBIA GAS OF KENTUCKY, INC.

By:   
Name: Herbert A. Miller  
Its: President

## APPENDIX A

## NISOURCE CORPORATE SERVICES COMPANY

Services Available to Clients  
Methods of Charging Therefor and  
Miscellaneous Terms and Conditions of Service Agreement**ARTICLE 1****DEFINITIONS**

1 The term "Company" shall mean NiSource Corporate Services Company and its successors.

2 The term "Service Agreement" shall mean an agreement, of which this Appendix A constitutes a part, for the rendition of services by the Company.

3 The term "Client" shall mean any corporation to which services may be rendered by the Company under a Service Agreement.

**ARTICLE 2****DESCRIPTION OF SERVICES**

Descriptions of the expected services to be provided by the Company are detailed below. The descriptions are deemed to include services associated with, or related or similar to, the services contained in such descriptions. The details listed under each heading are intended to be illustrative rather than inclusive and are subject to modification from time to time in accordance with the state of the art and the needs of the Clients.

1 *Accounting and Statistical Services.* The Company will advise and assist the Clients in all aspects of accounting, including financial accounting, asset accounting, regulatory accounting, tax accounting, maintenance of books and records, safeguarding of assets, accounts payable, accounts receivable, reconciliations, accounting research, reporting, operations and maintenance analysis, payroll services, business applications support, and other related accounting functions. The Company will also provide services related to developing, analyzing and interpreting financial statements, directors' reports, regulatory reports, operating statistics and other financial reports. The Company will ensure compliance with generally accepted accounting principles and provide guidance on exposure drafts, financial accounting standards, and interpretations issued by the Financial Accounting Standards Board. The Company will advise and assist the Clients in the formulation of accounting practices and policies and will conduct special studies as may be requested by the Clients.

2 *Auditing Services.* The Company will conduct periodic audits of the general records of the Clients, will supervise the auditing of local and field office records of the Client, and will coordinate the audit programs of the Clients with those of the independent accountants

in the annual examination of their accounts. The Company will ensure compliance, monitor business risk, and coordinate internal control structure.

3 *Budget Services.* The Company will advise and assist the Clients in matters involving the preparation and development of forecasts, budgets and budgetary controls, and other financial planning activities.

4 *Business Services.* The Company will advise and assist the Clients in the preparation and use of educational and advertising materials; in the development of processes to increase residential, commercial and industrial customers, as well as maintenance of business in those areas; and providing information to customers regarding Clients' products and services.

5 *Corporate Services.* The Company will advise and assist the Clients in connection with corporate matters including corporate secretary services, business continuity planning, shareholder services, corporate records management, proceedings involving regulatory bodies, and other corporate matters.

6 *Customer Billing, Collection, and Contact Services.* The Company will render calculating, bill exception processing, back office processing, posting, printing, inserting, mailing and related services to Client associated with the preparation and issuance of customer bills, notices, inserts and similar mailings. The Company will provide cash processing, revenue recovery, account reconciliations and adjustments, and related services to Client associated with the collection of revenue and management of accounts receivable. The Company will provide customer contact and related services to Client, including alternative pricing services, customer contact center management, operation and administration; management of key customer relationships; communications associated with the commencement, transfer, maintenance and disconnection of service; sales of optional products and services; the receipt and processing of emergency calls; the handling of customer complaints; and responses to customer billing, credit, collection, order take and inquiry, outage, meter reading, retail choice and other inquiries.

7 *Depreciation Services.* The Company will advise and assist the Clients in matters pertaining to depreciation practices, including (1) the making of studies to determine the estimated service life of various types of plant, annual depreciation accrual rates, salvage experience, and trends in depreciation reserves indicated by such studies; (2) assistance in the organization and training of the depreciation departments of the Clients; and (3) dissemination to the Clients of information concerning current developments in depreciation practices.

8 *Economic Services.* The Company will advise and assist the Clients in matters involving economic research and planning and in the development of specific economic studies.

9 *Electronic Communications Services.* The Company will advise and assist the Clients in connection with the planning, installation and operation of radio networks, remote control and telemetering devices, microwave relay systems and all other applications of electronics to the fields of communication and control.

10 *Employee Services.* The Company will advise and assist the Clients in connection with organizational, leadership, and strategic development, employee relations matters, including recruitment, employee placement and retention, training, compensation, safety, labor relations

and health, welfare and employee benefits. The Company will also advise and assist the Clients in connection with temporary labor matters, including assessment, selection, contract negotiation, administration, service provider relationships, compliance, review and reporting.

11 *Engineering and Research Services.* The Company will advise and assist the Clients in connection with the engineering phases of all construction and operating matters, including estimates of costs of construction, preparation of plans and designs, engineering and supervision of the fabrication of natural gas facilities, standardization of engineering procedures, and supervision and inspection of construction. The Company will also conduct both basic and specific research in fields related to the operations of the Clients.

12 *Facility Services.* The Company will manage and effectively execute facility operations, facility maintenance, provide suitable space in its offices for the use of the Clients and their officers and employees, provide delivery services, security services, print services, and other facility services.

13 *Gas Dispatching Services.* The Company will advise and assist the Clients in the dispatching of the gas supplies available to the Clients, and in determining and effecting the most efficient routing and distribution of such supplies in the light of the respective needs therefor and the applicable laws and regulations of governmental bodies. If requested by the Clients, the Company will provide a central dispatcher or dispatchers to handle the routing and dispatching of gas.

14 *Information Services.* The Company will advise and assist the Clients in matters involving the furnishing of information to customers, employees, investors and other interested groups, and to the public generally, including the preparation of booklets, photographs, motion pictures and other means of presentation, and assistance to Clients in their advertising programs.

15 *Information Technology Services.* The Company will advise and assist Clients in matters involving information technology, including management, operations, control, monitoring, testing, evaluation, data access security, disaster recovery planning, technical research, and support services. The Company will also provide and assist the Client with application development, maintenance, modifications, upgrades and ongoing production support for a portfolio of systems and software that are used by the Clients. In addition, the Company will identify and resolve problems, ensure efficient use of software and hardware, and ensure that timely upgrades are made to meet the demands of the Clients. The Company will also maintain information concerning the disposition and location of Information Technology assets.

16 *Insurance Services.* The Company will advise and assist the Clients in general insurance matters, in obtaining policies, making inspections and settling claims.

17 *Land/Surveying Services.* The Company will provide land asset management, land contract management, and surveying services in connection with Clients' acquisition, leasing, maintenance, and disposal of interests in real property, including the maintenance of land records and the recording of instruments relating to such interests in real property, where necessary.

18 *Legal Services.* The Company will provide Clients with legal services (including legal services, as necessary or advisable, in connection with or in support of any of the other services provided hereunder), including, but not limited to, general corporate matters and internal corporate maintenance, contract drafting and negotiation, litigation, liability and risk assessment, financing, securities offerings, state and federal regulatory compliance, state and federal regulatory support and rule interpretation and advice, including, without limitation, interpretation and advice concerning the regulations or orders of the Securities and Exchange Commission, the Federal Energy Regulatory Commission, the Environmental Protection Agency, and the Pipeline and Hazardous Materials Safety Administration, bankruptcy and collection matters, employment and labor relations investigations, union contracting, Equal Employment Opportunity Commission issues, compliance with state and federal legislative requirements, and all other matters for which Clients require legal services.

19 *Officers.* Any Client may, with the consent of the Company, elect to any office of the Client any officer or employee of the Company whose compensation is paid, in whole or in part, by the Company. Services rendered to the Client by such person as an officer shall be billed by the Company to the Client and paid for as provided in Articles 3 and 4, and the Client shall not be required to pay any compensation directly to any such person.

20 *Operations Support and Planning Services.* The Company will advise and assist the Clients in connection with operations support and planning, including logistics, scheduling & dispatching; workforce planning; corrosion and leakage programs; estimates of gas requirements and gas availability; gas transmission, measurement, storage and distribution; construction requirements; construction management; operating standards and practices; regulatory and environmental compliance; pipeline safety and compliance; employee and system safety programs; sustainability; training; management of transportation and sales programs; negotiation of gas purchase and sale contracts; energy marketing and trading, including off-system sales and capacity release activities contemplated in a Client's revenue sharing mechanism; security services; measurement, regulation and conditioning equipment; meter testing, calibration and repair; hydraulic gas network modeling, facility mapping and GIS technologies; and other operating matters.

21 *Purchasing, Storage and Disposition Services.* The Company will render advice and assistance to the Clients in connection with supply chain activities, including the standardization, purchase, lease, license and acquisition of equipment, materials, supplies, services, software, intellectual property and other assets, as well as shipping, storage and disposition of same. The Company will also render advice and assistance to the Client in connection with the negotiation of the purchase, sale, acquisition or disposition of assets and services and the placing of purchase orders for the account of the Client.

22 *Regulatory Services.* The Company will advise and assist the Clients in all regulatory and rate matters, including the design and preparation of schedules and tariffs, the analysis of rate filings, the preparation and presentation of testimony and exhibits to regulatory authorities, and other regulatory activities.

23 *Tax Services.* The Company will advise and assist the Clients in tax matters, in the preparation of tax returns and in connection with proceedings relating to taxes.

24 *Transportation Services.* The Company will advise and assist the Clients in connection with the purchase, lease, operation and maintenance of motor vehicles and the operation of aircraft owned or leased by the Company or the Clients.

25 *Treasury Services.* The Company provides services such as risk management, cash management, long and short term financing for all Clients, investment of temporarily available cash, retirement of long term debt, investment management oversight of all benefits plans, and special economic studies as requested.

26 *Miscellaneous Services.* The Company will render to any Client such other services, not hereinabove described, , as from time to time the Company may be equipped to render and such Client may desire to have performed.

### ARTICLE 3

#### ALLOCATION METHODS

1 *Specific Direct Salary Charges to Clients.* To the extent that time spent by the officers and employees of the Company rendering services hereunder is related to services rendered to a specific Client, a direct salary charge, computed as provided in Article 4, shall be made to such Client.

2 *Apportioned Direct Salary Charges to Clients.* To the extent that the time spent by such officers and employees is related to services rendered to the Clients generally, or to any specified group of the Clients, a direct salary charge, computed as provided in Article 4, shall be made to the Clients generally, or to such specified group of the Clients, and allocated to each such Client using an allocation method as set forth on Exhibit A hereto.

3 *Direct Salary Charges for Services to the Company.* To the extent that time spent by any officer or employee of the Company is related to services rendered to the Company, a direct salary charge computed as provided in Article 4 shall be allocated among the Clients in the same proportions which the direct salary charges to such Clients made pursuant to Sections 1 and 2 of this Article III, for services of officers and employees, bear to the aggregate of such direct salary charges.

4 *Apportionment of Employee Benefits.* The employee benefit expenses that are related to direct salary charges made pursuant to sub-paragraphs (1), (2) and (3) of Article 3 shall be apportioned among the Clients, as applicable, in the proportions that the respective direct salary charges made pursuant to the rendering of such services to each such Client bear to the aggregate of such direct salary charges.

5 *Other Expenses.* All expenses, other than salaries and employee benefit expenses incurred by the Company in connection with services rendered to a specific Client shall be charged directly to such Client. All such expenses incurred by the Company in connection with services rendered to the Clients generally or to any specified group of Clients shall be apportioned in the manner set forth in Section 2 of this Article 3 for the apportionment of salary charges. All such expenses incurred by the Company in connection with services rendered to the

Company shall be apportioned in the manner set forth in Section 3 of this Article 3 for the apportionment of salary charges.

#### **ARTICLE 4**

##### **COMPUTATION OF SALARY CHARGES**

*Direct Salary Charges* The direct salary charge per hour which shall be made for the time of any officer or employee for services rendered in any calendar month shall be computed by dividing his total compensation for such month by the aggregate of (1) the number of scheduled working hours for which he was compensated, including hours paid for but not worked, and (2) hours worked in excess of his regular work schedule, whether or not compensated for.

*Exhibit A****DIRECT BILLING AND BASES OF ALLOCATION***

The Company will bill charges directly to a Client to the extent possible while any remaining costs are then allocated. When it is impractical or inappropriate to charge a Client directly, the Company allocates costs in accordance with the following Bases of Allocation which are filed annually with the FERC. The Company works cooperatively with department sponsors or project leaders through meetings and discussions to ensure costs are properly allocated to the Clients that will benefit from the service provided. Provided below are the Bases of Allocation for the Company, including a description of each basis and its numerator and denominator.

---

**BASIS 1****GROSS FIXED ASSETS AND TOTAL OPERATING EXPENSES**

- Fifty percent of the total charges will be allocated on the basis of the relation of the affiliate's gross fixed assets to the total gross fixed assets of all benefited affiliates; the remaining 50% will be allocated on the basis of the relation of the affiliate's total operating expenses to the total operating expenses of all benefited affiliates. All companies may be included in this allocation.

**BASIS 2****GROSS FIXED ASSETS**

- Charges will be allocated to each benefited affiliate on the basis of the relation of its total gross fixed assets to the sum of the total gross fixed assets of all benefited affiliates. All companies may be included in this allocation.

**BASIS 3****NUMBER OF METERS SERVICED**

- Charges will be allocated to each benefited affiliate on the basis of the relation of its number of meters serviced to the total number of all meters serviced of the benefited affiliates. This allocation may only be used by the following companies: Columbia Gas of Virginia, Columbia Gas of Kentucky, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Bay State Gas Company.

**BASIS 4**

NUMBER OF ACCOUNTS PAYABLE INVOICES PROCESSED

- Charges will be allocated to each benefited affiliate on the basis of the relation of its number of accounts payable invoices processed (interface invoices excluded) to the total number of all accounts payable invoices processed of the benefited affiliates. All companies may be included in this allocation.

**BASIS 7**

GROSS DEPRECIABLE PROPERTY AND TOTAL OPERATING EXPENSE

- Fifty percent of the total charges will be allocated on the basis of the relation of the affiliate's total operating expenses to the total of all the benefited affiliates' total operating expense; the remaining 50% will be allocated on the basis of the relation of the affiliate's gross depreciable property to the gross depreciable property of all benefited affiliates. All companies may be included in this allocation.

**BASIS 8**

GROSS DEPRECIABLE PROPERTY

- Charges will be allocated to each benefited affiliate on the basis of the relation of its total depreciable property to the sum of the total depreciable property of all benefited affiliates. All companies may be included in this allocation.

**BASIS 9**

AUTOMOBILE UNITS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its number of automobile units to the total number of all automobile units of the benefited affiliates. All companies may be included in this allocation.

**BASIS 10**

NUMBER OF RETAIL CUSTOMERS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its number of retail customers to the total number of all retail customers of the benefited affiliates. All companies may be included in this allocation.

**BASIS 11**

NUMBER OF REGULAR EMPLOYEES

- Charges will be allocated to each benefited affiliate on the basis of the relation of its number of regular employees to the total number of all regular employees of the benefited affiliates. All companies may be included in this allocation.

**BASIS 13**

FIXED ALLOCATION

- Charges will be allocated to each benefited affiliate on the basis of fixed percentages on an individual project basis. All companies may be included in this allocation.

**BASIS 14**

NUMBER OF TRANSPORTATION CUSTOMERS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its Transportation Customers to the total of all Transportation Customers of the benefited affiliates. This allocation is only used by the following companies: Columbia Gas of Virginia, Columbia Gas of Kentucky, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Bay State Gas Company.

**BASIS 15**

NUMBER OF COMMERCIAL CUSTOMERS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its Commercial Customers to the total of all Commercial Customers of the benefited affiliates. This allocation is only used by the following companies: Columbia Gas of Virginia, Columbia Gas of Kentucky, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Bay State Gas Company.

**BASIS 16**

NUMBER OF RESIDENTIAL CUSTOMERS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its Residential Customers to the total of all Residential Customers of the benefited affiliates. This allocation is only used by the following companies: Columbia Gas of Virginia, Columbia Gas of Kentucky, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Bay State Gas Company.

**BASIS 17**

## NUMBER OF HIGH PRESSURE CUSTOMERS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its High Pressure Customers to the total of all High Pressure Customers of the benefited affiliates. This allocation is only used by the following companies: Columbia Gas of Virginia, Columbia Gas of Kentucky, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Bay State Gas Company.

**BASIS 20**

## SERVICE COMPANY BILLING (DIRECT AND ALLOCATED) COSTS

- Charges will be allocated to each benefited affiliate on the basis of the relation of its Service Corporation billing costs, in total or by functional group (e.g. IT, Legal, HR, Finance, Audit), to the corresponding total of all Service Company billing costs, (i.e. in total or by functional group). The calculation of Basis 20 will include only those billings for services provided to all NiSource affiliates, excluding Business Unit specific shared service functions (i.e. functions that serve only one particular Business Unit). All companies may be included in this allocation.

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN AD- )  
JUSTMENT OF RATES )

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**PREPARED DIRECT TESTIMONY OF  
PANPILAS W. FISCHER  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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Brooke E. Wancheck,  
Assistant General Counsel  
Stephen B. Seiple, Assistant General Counsel  
Joseph M. Clark, Senior Counsel  
290 W. Nationwide Blvd.  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-5558  
E-mail: bleslie@nisource.com  
sseiple@nisource.com  
josephclark@nisource.com

Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502) 226-6383  
Email: attysmitty@aol.com

Lindsey W. Ingram III  
Stoll Keenon Ogden PLLC  
300 West Vine Street, Suite 2100  
Lexington, Kentucky 40507-1801  
Telephone: (859) 231-3982  
Fax: (859): 246-3672  
Email: l.ingram@skofirm.com

**May 27, 2016** Attorneys for Applicant  
**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF PANPILAS W. FISCHER**

1 **Q: Please state your name and business address.**

2 A: My name is Panpilas W. Fischer and my business address is 290 W. Nation-  
3 wide Blvd., Columbus, Ohio 43215.

4

5 **Q: What is your current position and what are your responsibilities?**

6 A: I am employed by NiSource Corporate Services Company, and my current  
7 position is the Tax Director of Corporate Income Tax. As Tax Director, my  
8 principal responsibilities include supervision and preparation of all of Co-  
9 lumbia Gas of Kentucky's ("Columbia") income tax activities including the  
10 booking of income tax accruals and deferred tax entries, the filing of income  
11 tax returns, tax research and planning and the preparation of income tax da-  
12 ta and related testimony for rate proceedings.

13

14 **Q: What is your educational background?**

15 A: I received a Bachelor of Business Administration in Accounting from The  
16 Ohio State University in 1987. I am a Certified Public Accountant and  
17 member of the Ohio Society of Certified Public Accountants.

18

1 **Q: Please describe your employment history?**

2 A: I began my career with KPMG as a Staff Auditor in 1987. I then joined the  
3 firm of Clark, Schaefer, Hackett and Co., CPA's as a Senior Accountant in  
4 1989 where I performed financial audits, reviews and compilations, and  
5 prepared and reviewed tax returns. In October 2000, I started working as a  
6 tax analyst for NiSource Corporate Services Company and in October  
7 2015, I assumed my current position.

8

9 **Q: Have you previously testified before any regulatory commissions?**

10 A: Yes, I have previously testified before the Kentucky Public Service Com-  
11 mission, the Public Utilities Commission of Ohio, the Public Service  
12 Commission of Maryland, and the Pennsylvania Public Utility Commis-  
13 sion and the Commonwealth of Virginia State Corporation Commission.

14

15 **Q: What is the purpose of your testimony in this proceeding?**

16 A: My testimony will address the calculation of the proper level of federal  
17 and state income taxes included in the cost of service. This calculation in-  
18 cludes the appropriate level of statutory tax adjustments for this proceed-  
19 ing, including depreciation, and the determination of deferred income  
20 taxes for rate purposes.

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**Q: What schedules are you responsible for in this proceeding?**

A: I am responsible for Schedules E-1, E-2 as filed under Filing Requirement 16-(8)(e) and B-6 as filed under Filing Requirement 16-(8)(b). I co-sponsor Filing Requirements 16-(6)(a) and 16-(6)(b). These schedules and the supporting work papers were prepared by me or under my direction, and the information set forth is true and correct, to the best of my knowledge and belief.

**Q: What federal income tax rates have been utilized for the test period?**

A: The Internal Revenue Code ("IRC") provides for a tax rate of 34% for corporations with taxable income up to \$10 million. The rate increases to 35% for taxable income over \$10 million. Beginning at \$15 million of taxable income the rate is 38% until taxable income reaches \$18.33 million. All taxable income over \$18.33 million is taxed at the 35% rate. The effect of the 38% rate is to phase out the 1% savings at the 34% rate for the first \$10 million of taxable income. Effectively, the tax rate is 35% for corporations with taxable income over \$18.33 million for all taxable income.

1 **Q: What rate was utilized for Kentucky income taxes?**

2 A: The rates utilized are the statutory tax rates based on taxable income and  
3 tax liability as follows:

4 4% of the first \$50,000 of taxable income

5 5% of the next \$50,000 of taxable income

6 6% of the taxable income in excess of \$100,000.

7

8 **Q: Please explain the income tax calculation shown on Schedule E-1.**

9 A: This schedule shows the computation of federal income taxes for the base  
10 period ending August 31, 2016, including the necessary adjustments to ar-  
11 rive at the pro forma amounts appropriate for inclusion in the customer  
12 cost of service for the calculation of income tax expense. The tax calcula-  
13 tion begins with net operating income before income taxes (Line 1). This  
14 amount is adjusted by interest, reconciling items detailed on Sheet 2 of  
15 Schedule E-1 and state income tax. The items on Sheet 2 reflect the differ-  
16 ence between income and expenses as properly reflected on the Colum-  
17 bia's regulated books, and income and expenses as required/allowed for  
18 reporting taxable income based on the IRC. These adjustments are com-  
19 monly referred to as "Schedule M" adjustments in reference to their re-  
20 porting position on the federal income tax return (Form 1120). The tax re-

1 turn differences can be mere timing differences between book and tax re-  
2 turn reporting or can be permanent differences in taxable income. Nor-  
3 mally, the tax expense effects of permanent differences are recorded cur-  
4 rently (flowed through) while timing differences are deferred (normal-  
5 ized) on the books until the timing differences are eliminated. Regulatory  
6 orders may, in certain instances, change the normal accounting for per-  
7 manent and timing tax adjustments.

8 The next step in the calculation is to apply the appropriate federal  
9 tax rates to the taxable income for return purposes (Line 9) to arrive at  
10 current year federal income taxes payable (Line 11).

11 Line 12 represents federal income tax expense items recorded in  
12 2015 related to prior year taxes. The books to return adjustments represent  
13 the difference between what was recorded at December 31, 2014 for cur-  
14 rent tax expense and the actual taxes per the filed tax. The direct adjust-  
15 ment related to the books to return reconciliation for the year 2014 is \$0  
16 because the 2014 books to return entry was recorded outside of the base  
17 period in June 2015. This item is normally pro forma adjusted to reflect a  
18 zero impact on 2015, but since the amount is zero in the base period no ad-  
19 justment is required. Line 14 represents the Net current Federal Income  
20 Taxes.

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**Q: Please explain the income tax schedule shown on Schedule E-1, Sheet 2.**

A: The schedule reflects estimated timing and flow through differences between the regulatory books and what will be allowed on the tax returns filed in 2014 and 2015.

**Q: Does the state income tax provision include a pass back of excess deferred income taxes as a result of reductions in the Kentucky state income tax rate?**

A: Yes. Included in Line 20 is an adjustment for the annual amortization. This benefit will occur over the remaining book life of the property in service at the time Kentucky state income tax rates were lowered. (The total amount of Columbia’s regulatory liability, including a tax gross up at the end of the base period, is \$2,254,391. This includes any prior year flow through as an asset.)

**Q: Are there any federal excess or deficient taxes included in rates?**

A: Yes. Columbia has a regulatory liability for federal excess taxes, including gross up, of \$210,361. The amortization is included in Line 17.

1 **Q: Are there any changes in taxes that are impacting Columbia's rate base?**

2 A: Yes. Similar to the treatment in Case No 2013-0067 included in deferred  
3 income taxes as a reduction to rate base in Schedule B-6, Sheet 2 is an ad-  
4 justment for the tax repairs deduction. Columbia received permission  
5 from the Internal Revenue Service ("IRS") in August, 2009 to change its  
6 definition of "unit of property" so that certain expenditures can be de-  
7 ducted for tax purposes as a repairs deduction rather than being capital-  
8 ized. Reflected as a decrease in rate base as part of sub account 2205 and  
9 4205 is a deferred tax liability of approximately \$11.5 million for the tax  
10 repairs deductions which represents the 13 month average balance in the  
11 forecasted test period.

12  
13 **Q: Are there any other changes in taxes impacting Columbia's rate base?**

14 A: Yes, also included as a reduction to rate base in Schedule B-6, Sheet 2 is an  
15 adjustment for Section 263A mixed service costs. In December, 2010 Co-  
16 lumbia received permission from the IRS to change its method of allocat-  
17 ing mixed service costs for tax purposes. Mixed service costs ("MSC") are  
18 general and administrative costs that are indirectly allocable (i.e. not ex-  
19 clusively attributable) to activities related to self-constructed assets and  
20 inventory property and must be partially capitalized rather than fully de-

1 ducted for book and tax purposes. The allocation methods differ for book  
2 and tax purposes. For tax purposes the reasonable allocation method is be-  
3 ing used which is adopted pursuant to Internal Revenue Service Industry  
4 Director's Directive 5 issued September 15, 2009, which provides guide-  
5 lines on the method transmission and distribution companies can use to  
6 allocate MSC for tax purposes. Reflected as a decrease in rate base as part  
7 of sub account 2205 and 4205 is a deferred tax liability of approximately  
8 \$6.6 million for MSC deductions which represents the 13 month average  
9 balance in the forecasted test period.

10 Columbia is normalizing these deductions for federal and state in-  
11 come taxes which result in a different book versus tax basis on property.  
12 This treatment is consistent with the last base rate case and with how oth-  
13 er book vs. tax timing differences on property related items are handled in  
14 rate base.

15

16 **Q: Please explain the inclusion of deferred taxes for the Federal Net Oper-**  
17 **ating Loss in rate base on Schedule B-6, Sheet 1.**

18 A: As a result of taking deductions for 50-100% bonus depreciation, Colum-  
19 bia has experienced net taxable losses for the years 2011 and 2014. The re-  
20 sult is that Columbia booked deferral taxes in those years for which it has

1 not received any cash. Columbia cannot reflect an increase in deferred  
2 taxes for tax depreciation deductions that have not been realized. To do so  
3 would violate the principles of the Normalization requirements under the  
4 Internal Revenue Code. Past IRS rulings addressing this issue have made  
5 it clear that companies cannot reduce rate base for benefits that have not  
6 been realized. Therefore, included as an increase to rate base is a deferred  
7 tax asset in the amount of \$1,258,107, which represents the 13 month aver-  
8 age balance of un-utilized net operating loss in the forecasted test period.  
9 This is similar to the treatment in the last base rate case.

10

11 **Q: Are there any adjustments to deferred taxes for the forecasted test peri-**  
12 **od on Schedule B-6, Sheet 1?**

13 A: Yes, similar to the last base rate case whenever there are estimated chang-  
14 es in the deferred taxes that occur in a future rate period, the Normaliza-  
15 tion requirements of the Internal Revenue Code require that the deferred  
16 taxes be reflected on a pro rata basis as provided under Reg. Section  
17 1.167(l)-1(h)(6)(ii). A future test period is defined as that portion of the test  
18 period after the effective date of the rate order. Under the pro rata basis,  
19 the change in the deferred taxes is determined by multiplying the change  
20 by a fraction of the number of days remaining in the period at the time

1           such change is to be accrued over the total number of days in the future  
2           period. Applying this calculation resulted in a decrease to deferred taxes  
3           of \$274,460.

4

5   **Q:   Does this complete your Prepared Direct testimony?**

6   **A:   Yes, however, I reserve the right to file rebuttal testimony if necessary.**

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the matter of: )  
)  
APPLICATION OF COLUMBIA GAS ) Case No. 2016-00162  
OF KENTUCKY, INC. FOR AN )  
ADJUSTMENT OF RATES )

CERTIFICATE AND AFFIDAVIT

The Affiant, Panpilas Fischer, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2016-00162, in the matter of adjustment of rates of Columbia Gas of Kentucky, Inc., and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

  
\_\_\_\_\_  
Panpilas Fischer

STATE OF OHIO

COUNTY OF FRANKLIN

SUBSCRIBED AND SWORN to before me by Panpilas Fischer on this the 23rd day of May, 2016.



CHERYLA. MacDONALD  
Notary Public, State of Ohio  
My Commission Expires  
March 26, 2017

  
\_\_\_\_\_  
Notary Public

My Commission expires: MARCH 26, 2017