

TAB 17

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Kimra H. Cole

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

In the matter of: )  
 )  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

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

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May 16, 2024

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COLUMBIA GAS OF KENTUCKY, INC.



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
)
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF ) Case No. 2024-00092
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

VERIFICATION OF KIMRA COLE

STATE OF OHIO )
)
COUNTY OF FRANKLIN )

Kimra Cole, President and Chief Operating Officer for Columbia Gas of Kentucky, Inc., being duly sworn, states that she has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

Kimra Cole
Kimra Cole

The foregoing Verification was signed, acknowledged and sworn to before me this 30th day of April, 2024, by Kimra Cole.

Notary Commission No. N/A
Commission expiration: N/A



John R Ryan III
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
147 03 R.C.

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

1       **I.       INTRODUCTION**

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

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

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

6       A:       I am employed by Columbia Gas of Kentucky, Inc. (“Columbia” or the  
7               “Company”) as its President and Chief Operating Officer. My responsibilities  
8               include the general operation of the natural gas distribution utility in 30  
9               Kentucky counties, and specifically, I am the corporate officer accountable for  
10              the leadership and overall operations and performance of Columbia.

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

12      A:       I graduated from the University of Kentucky, earning a Bachelor of Science  
13              Degree in Chemical Engineering in 1987. I joined Columbia as an Industrial  
14              Marketing Engineer in 1987. While holding this position, I also earned my  
15              Master of Business Administration at the University of Kentucky. I held  
16              various management roles of increasing responsibility over a 15-year  
17              period with Columbia. I left the company in 2002 with the title of Director  
18              of Sales, Marketing, Engineering and Operational Services. In 2007, I joined  
19              the Lexington Fayette Urban County Government in the role of

1 Commissioner of General Services where I had the responsibility for Parks  
2 and Recreation, Fleets, Facilities and other shared functions for the City of  
3 Lexington for a four-year term. My next position was with the Kentucky  
4 Public Service Commission as the Director of the Division of Engineering  
5 from 2011-2012. I then rejoined Columbia as the Operation Center  
6 Manager in 2012, and held that role until 2015 when I was promoted to  
7 Vice-President and General Manager. In 2017, I was promoted to the role  
8 of Vice-President of Distribution Operations for NiSource Corporate  
9 Services Company ("NCSC") overseeing the internal operations that  
10 included the Integration Center, the Operations Planning department,  
11 Damage Prevention, Operation Strategy and Support and GPS for  
12 NiSource's gas distribution companies. In 2019, I was promoted to my  
13 current position as President and Chief Operating Officer of Columbia.

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

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

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

17 A: Through my testimony, I will provide the Commission with an overview of  
18 this base rate filing, discuss the objectives that Columbia seeks to  
19 accomplish in this proceeding and discuss the Company's performance  
20 since the last base rate proceeding in 2021. I will also introduce Columbia's

1 other witnesses who provide detailed testimony and supporting  
 2 documentation for all revenues, expenses and rate base elements included  
 3 in this base rate filing.

4 **Q: What Filing Requirements will you be supporting?**

5 **A:** I will sponsor and support the following Filing Requirements:

<b>Filing Requirement</b>	<b>Description</b>
807 KAR 5:001 Section. 14(1)	Full name, mailing address, electronic mail address of the Applicant and shall contain fully the facts on which the application is based, with a request for the order, authorization, permission, or certificate desired and a reference to the particular law requiring or providing for the information.
807 KAR 5:001 Section 14(2) through (4)	If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of incorporation, attest that it is currently in good standing in the state in which it is incorporated.
807 KAR 5:001 Section 16(1)(b)(1)	Each application requesting a general adjustment of existing rates shall: (b) Include: 1. A statement of the reason the adjustment is required.
807 KAR 5:001 Section 16(1)(b)(2)	A certified copy of a certificate of assumed name as required by KRS 365.015 or a statement that a certificate is not necessary.
807 KAR 5:001 Section 16(2)	A utility with gross annual revenues greater than \$5,000,000 shall notify the commission in writing of its intent to file a rate application at least thirty (30) days, but not more than sixty (60) days, prior to filing its application.

<p>807 KAR 5:001 Section 16(6)(d)</p>	<p>After an application based on a forecasted test period is filed, there shall be no revisions to the forecast, except for the correction of mathematical errors, unless the revisions reflect statutory or regulatory enactments that could not, with reasonable diligence, have been included in the forecast on the date it was filed. There shall be no revisions filed within thirty (30) days of a scheduled hearing on the rate application.</p>
<p>807 KAR 5:001 Section 16(6)(e)</p>	<p>The commission may require the utility to prepare an alternative forecast based on a reasonable number of changes in the variables, assumptions, and other factors used as the basis for the utility's forecast.</p>
<p>807 KAR 5:001 Section 16(7)(a)</p>	<p>The written testimony of each witness the utility proposes to use to support its application, which shall include testimony from the utility's chief officer in charge of Kentucky operations on the existing programs to achieve improvements in efficiency and productivity, including an explanation of the purpose of the program.</p>
<p>807 KAR 5:001 Section 16(7)(e)</p>	<p>A statement of attestation signed by the utility's chief officer in charge of Kentucky operations, which shall provide: 1. That the forecast is reasonable, reliable, made in good faith, and that all basic assumptions used in the forecast have been identified and justified; 2. That the forecast contains the same assumptions and methodologies as used in the forecast prepared for use by management, or an identification and explanation for differences that exist, if applicable; and 3. That productivity and efficiency gains are included in the forecast.</p>

1 **Q: For each of the documents included within the Filing Requirements that**  
2 **you are supporting, were they prepared by you or someone working**  
3 **under your direction?**

4 A: Yes.

5 **Q: Please summarize the business of Columbia.**

6 A: Columbia is one of the six natural gas local distribution companies in the  
7 NiSource Inc. (“NiSource”) family of utility companies. Headquartered in  
8 Lexington, Kentucky, Columbia’s current operations resemble a long  
9 history of consolidations of other natural gas distribution companies. The  
10 result is a system of made up of various different types of pipe installed  
11 during different time period as discussed in the Direct Testimony of  
12 Witness Dave Roy. Columbia continues to invest in our communities  
13 through the employment of employees and contractors to serve  
14 approximately 138,000 customers across our service area. Through over  
15 2,636 miles of mains, it provides natural gas to residential, commercial and  
16 industrial customers in the counties and municipalities listed in the Tariff.  
17 Our infrastructure helps to fuel economic development and empower job  
18 creation throughout the communities we service.

19 NiSource, headquartered in Merrillville, Indiana, is an energy  
20 holding company whose subsidiaries provide gas and electricity

1 distribution services to approximately four million customers located  
2 within a corridor that runs from the Midwest to the Mid-Atlantic. NiSource  
3 is the successor to an Indiana corporation organized in 1987 under the name  
4 of NIPSCO Industries, Inc., which changed its name to NiSource Inc. on  
5 April 14, 1999. In connection with the acquisition of Columbia Energy  
6 Group on November 1, 2000, NiSource became a Delaware corporation  
7 registered under the Public Utility Holding Company Act of 1935, which  
8 has since been replaced by the Public Utility Holding Company Act of 2005.

9 NiSource remains subject to the jurisdiction of the Securities and  
10 Exchange Commission and is traded on the New York Stock Exchange with  
11 the symbol "NI". The NiSource gas distribution companies are: Northern  
12 Indiana Public Service Company ("NIPSCO"), Columbia; Columbia Gas of  
13 Maryland, Inc.; Columbia Gas of Ohio, Inc.; Columbia Gas of Pennsylvania,  
14 Inc.; and Columbia Gas of Virginia.

15 **Q: Please summarize Columbia's rate filing in this proceeding.**

16 A: Columbia seeks Commission approval to increase its base rates to recover  
17 the revenue requirement associated with the non-tracked capital  
18 investments Columbia has made, and will continue to invest, to improve  
19 the safety and reliability of Columbia's natural gas system, as well as  
20 Columbia's operations and maintenance ("O&M") expenditures.

1 **II. PROPOSED RATE INCREASE**

2 **Q: Will you please explain Columbia’s main objective by filing this case?**

3 A: Columbia is proposing an increase in its base rates for the fully forecasted  
4 test period of 2025. Columbia’s last base rate increase was requested in  
5 2021<sup>1</sup> (“2021 Rate Case”). Through this filing, Columbia seeks recovery of,  
6 and an opportunity to earn a fair rate of return on, the non-tracked capital  
7 investments being made in its distribution system which are necessary to  
8 provide safe and reliable natural gas distribution service to its customers.  
9 Columbia, its employees, and its contractors continue to provide essential  
10 services to our customers. In light of the substantial capital investment  
11 Columbia has made since the 2021 Rate Case, and the large capital  
12 investments that will be made through the end of 2025, Columbia is filing  
13 this base rate case to provide itself with a reasonable opportunity to recover  
14 its capital investment in its distribution system, safety enhancements and  
15 information technology (“IT”) infrastructure, as well as changes in its  
16 operating expenditures. Further, approval of this request will demonstrate  
17 to the investment community that the Commission continues to support the  
18 need for continued focus on pipeline safety matters, providing value to the

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<sup>1</sup> See *In the Matter of the Electronic Application of Columbia Gas of Kentucky for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; Issuance of a Certificate of Public Convenience and Necessity; and other Relief*, Case No. 2021-00183 (“2021 Rate Case”).



1 customers and communities that we serve, as well as, the need for  
2 reasonable and predictable earnings.

3 **Q: What is Columbia’s proposed rate increase in the case and what are some**  
4 **of the primary drivers for the increase?**

5 A: Based on Columbia’s current base rates and Columbia’s existing and  
6 planned capital and O&M programs, Columbia will experience a revenue  
7 deficiency of \$23,773,019, as detailed and supported in Direct Testimony of  
8 Columbia Witness Tamaleh Shaeffer. This revenue deficiency is driven  
9 primarily by substantial capital investments Columbia has made, and  
10 continues to make, in its system that are not otherwise recovered through  
11 operation of the Company’s Safety Modification and Replacement Program  
12 (“SMRP”) Rider. The Company has and will continue to make strategic  
13 investments to improve overall safety and risk reduction as we believe that  
14 natural gas is an essential energy resource contributing to the nation’s  
15 efforts to reduce greenhouse gas emissions and it remains a critical part of  
16 today’s diverse energy mix, as well as tomorrow’s.

17 Also, as detailed in the Direct Testimony of Columbia Witness Greg  
18 Skinner, Columbia has and will invest in information technology to replace  
19 outdated IT systems, enhance field work, and protect against cybersecurity  
20 threats.

1 **Q: Has Columbia considered the impact of a rate increase on customers?**

2 A: The Company realizes that rate increases will always have an impact on  
3 customers; however, since the 2021 Rate Case, we have made significant  
4 investments in the communities we serve. These capital investments have  
5 and will continue to improve our ability to provide safe and reliable service.  
6 We have also realized operational efficiencies that have offset the  
7 inflationary pressures on O&M expenditures passed along to customers.  
8 We have worked hard to realize these efficiencies and will continue to do  
9 so to improve our cost structure and capabilities while enhancing our  
10 commitment to safety, which is reflected in the proposed level of expense  
11 in the forecasted test year for this case.

12 Columbia estimates that the total bill of an average residential  
13 customer based upon 5.5 mcf/month will increase by \$7.28 per month. We  
14 continue to educate and provide support for customers struggling with  
15 their monthly utility payments, through the numerous assistance programs  
16 that are available. These include the LIHEAP Subsidy and LIHEAP Crisis  
17 programs; WinterCare program; and Columbia's own Home Energy  
18 Assistance Program, administered by the Community Action Council of  
19 Kentucky. We are reaching out to our customers to keep them aware of not  
20 only these traditional assistance options but also the CARES ACT utility

1 assistance programs such as Kentucky’s Healthy at Home. We also provide  
2 customer education and outreach on the additional assistance programs  
3 contained in the American Recovery Act as program processes and funding  
4 flow to Kentucky.

5 In addition to the safety and reliability benefits provided by the  
6 Company’s operations, the Company’s investments program benefit the  
7 local economies across Columbia’s service territory through the wages paid  
8 to the skilled labor necessary to complete the work, both company  
9 employees and our contracted workforce. This economic boost is  
10 especially important in many of the rural economically disadvantaged  
11 communities in which Columbia provides service.

12 **Q: Is there a reason that you are only addressing the non-tracked capital in**  
13 **this case?**

14 **A:** As explained in the Direct Testimony of Witnesses Judy Cooper and Jeffery  
15 Gore, rather than rolling capital tracker investments from the SMRP rider  
16 into rate base, as we have previously done, Columbia is requesting to  
17 maintain a separation between the SMRP rider and base rates. In the Order  
18 from the 2021 Rate Case, the Commission stated that “depicting the SMRP  
19 and its associated spending as a separate line item on customer bills allows

1 for transparency.”<sup>2</sup> Therefore, Columbia will request recovery of the SMRP  
2 investments utilizing the annual method established for that program in its  
3 tariff.

4 **Q: In summary, what is Columbia requesting in this case?**

5 A: Columbia is seeking a revenue increase of \$23,773,019, or 15.81%, in order  
6 to produce rates that are fair, just and reasonable for both Columbia and its  
7 customers. This requested revenue increase is necessary for Columbia to  
8 continue to provide safe and reliable service at the lowest reasonable price  
9 to its customers while also providing the opportunity to provide our  
10 shareholders with a reasonable rate of return to encourage further  
11 investments in the communities that we serve.

12 **III. CUSTOMER SERVICE**

13 **Q: What additional steps has Columbia taken since the 2021 Rate Case to**  
14 **improve the customer experience?**

15 A: Columbia has a continued focus on providing a simple and seamless  
16 experience for customers, and will continue its focus to work across all  
17 business lines to further strengthen and enhance relationships with its  
18 customers by proactively resolving their concerns and making it easier to

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<sup>2</sup> 2021 Rate Case, Order (Ky P.S.C. December 28, 2021) at 40.

1           conduct business with us. Examples of recent enhancements to improve  
2           customer interaction in include:

3           • Implementation of a paperless billing enrollment process, which allows  
4           a customer to choose to receive electronic billing via Columbia’s  
5           website, during the initial account registration, and over the phone;

6           • Launching a new billing and payment alert program that permits  
7           customers to receive reminders and payment confirmations via email or  
8           text message;

9           • Enhanced Columbia’s mobile app, including:

10           ○ Making emergency contact information available without  
11           requiring logging in;

12           ○ Adding additional account information to the app’s dashboard;

13           ○ Providing the ability to access 24 months of bill history on the  
14           app

15           ○ Making it easier to enroll in a payment plan via the app;

16           ○ Permitting customers to start, stop, or move service via the app

17           • Updated Columbia’s website with new features, including:

18           ○ Updates to the navigation portions of the website to guide  
19           customers towards information commonly requested;

20           ○ Improved user experiences for customers with disabilities;

- 1           ○ Simplification of the automatic payment enrollment process;
- 2           ○ Adding a search function;
- 3       • Implementation of an Interactive Voice Response (“IVR”) system
- 4       • Launched both live and automated chat features on Columbia’s website
- 5           and mobile app

6           Columbia is also requesting to eliminate its late payment penalty  
7 charged to residential customers. For more information, see the testimony  
8 of Witness Judy Cooper.

9           Columbia is dedicated to investing in the communities we serve, and  
10 to helping enhance quality of life for our customers, as well as our  
11 employees. It is important to ensure that individuals and families within  
12 the communities we serve have what they need to thrive. Each year, we  
13 provide funding to organizations that assist people in meeting their basic  
14 needs, such as food, clothing, and shelter. Since 2021, Columbia has  
15 contributed \$710,525.00 in support of the communities we serve through  
16 the NiSource Charitable Foundation. The NiSource Charitable Foundation  
17 is funded through shareholder dollars. The Company’s focus has been on  
18 impactful giving supporting basic needs and safety; Science, Technology,  
19 Engineering, Arts, and Math (“STEAM”); energy education; Diversity

1 Equity and Inclusion (“DEI”); environmental stewardship; and economic  
2 and workforce development in the communities we serve.

3 While safety is Columbia’s primary objective, customer satisfaction  
4 is critical to our success and is measured quarterly through J.D. Power and  
5 other research tools. From 2021-2023, Columbia's Overall J.D. Power  
6 Customer Satisfaction Index (CSI) has remained higher than participating  
7 industry peers, with scores ranging between 765 and 790. Although  
8 Columbia does not meet the required residential customer count to be  
9 automatically included in the J.D. Power industry survey, NiSource  
10 includes Columbia of Kentucky along with its other brands because we  
11 value the feedback this customer research tool provides. Based on its CSI  
12 scores, Columbia of Kentucky would have ranked #1 or #2 in the Midwest  
13 Midsize Segment each year between 2021-2023.

14 Finally, a priority for its customers and communities, Columbia  
15 continues its commitment to energy efficiency by providing a natural gas  
16 distribution system that is safe, reliable and environmentally responsible.  
17 NiSource has been included in the Dow Jones Sustainability Index since  
18 2014 in recognition of the company’s sustainable business practices and  
19 strategy as demonstrated by continued investment in reduction of methane  
20 and carbon dioxide emissions across the organization footprint.

1 **IV. REVENUE REQUIREMENT**

2 **Q: How did Columbia determine the revenue requirement for this case?**

3 A: As described in the Direct Testimony of Witness Tamaleh Shaeffer,  
4 Columbia reviewed its costs to serve its customers using a future test period  
5 (“FTP”) ending December 31, 2025, pro forma and adjusted for known and  
6 measurable changes. Columbia then compared the costs determined for the  
7 FTP to the revenues at present rates calculated for the FTP. This analysis  
8 produced a revenue deficiency, from which Columbia calculated the  
9 corresponding revenue requirement that Columbia will require to make up  
10 this deficiency, including a fair rate of return on the investment devoted to  
11 serving the public.

12 **Q: Why is the proposed rate increase necessary to address the revenue**  
13 **deficiency?**

14 A: Columbia’s current rates do not provide the opportunity for the Company  
15 to recover its costs to serve its customers, including a fair rate of return on  
16 the capital invested to provide distribution service to the public in the FTP.  
17 The proposed rates have been developed to address this deficiency.

18

19



1 **Q: Without the increase requested in this case, what rate of return will**  
2 **Columbia experience?**

3 A: Without the increase requested, Columbia's overall rate of return will drop  
4 to 4.59% in the FTP.

5 **Q: What overall rate of return and return on equity does Columbia propose**  
6 **in this case?**

7 A: As detailed in the Direct Testimony of Witness Vince Rea, the appropriate  
8 range for Columbia's return on common equity is between 10.55% and  
9 11.05%, and he recommends that the Commission should authorize an ROE  
10 of 10.80%. Vince Rea's recommended ROE is well-reasoned and supported  
11 by his testimony.

12 **Q: Using the requested ROE of 10.8%, what is Columbia's overall requested**  
13 **rate of return?**

14 A: As explained by Columbia Witness Vince Rea and as contained in Schedule  
15 J, Columbia's overall requested rate of return is 8.01%.

16 **V. DEVELOPMENT OF BUDGETS FOR COLUMBIA**

17 **Q: From a high-level, can you describe the budget process?**

18 A: Columbia's budget is generally divided into two different components: a  
19 capital budget and an O&M budget. The capital budgeting process is  
20 described in the Testimony of Witness Chrisley Scott. The O&M budget

1 specific to Columbia is described by Witness Craig Inscho. The  
2 development of the NCSC O&M budget allocated to Columbia is described  
3 by Witness Nicholas Bly. I have oversight over both capital and O&M for  
4 Columbia as well as overall profit and loss responsibility.

5 **Q: What role does Columbia’s leadership team serve in the capital allocation**  
6 **process?**

7 A: Columbia leadership is actively engaged in development and management  
8 of the state capital budget. Columbia’s utility capital planning process is a  
9 series of collaborative working sessions among the President, other  
10 members of the leadership team, as well as the Finance, Operations,  
11 Engineering & Planning Departments. The leadership team along with  
12 Operations, Engineering & Planning are primarily responsible for  
13 identifying the capital investment needs for public safety and reliability,  
14 compliance requirements, customer experience, and for identifying capital  
15 recommendations which are reviewed with Financial Planning. The output  
16 of the collaborative working sessions is used to develop a draft multi-year  
17 capital budget. This budget is then presented to NiSource executive  
18 management for presentation to the NiSource Board of Directors for review  
19 and approval or modification.

1 **Q: What is the involvement of Columbia personnel in the development**  
2 **review and allocation of the NCSC budget to Columbia?**

3 A: Columbia personnel are involved from both review and oversight  
4 capacities. My team and I are given the opportunity to review the NCSC  
5 costs included in the Columbia budget. NCSC personnel meet with  
6 Columbia leadership to facilitate that review, providing an opportunity to  
7 ask questions, gain clarity, and incorporate feedback prior to finalization of  
8 the budget.

9 **Q: Does Columbia leadership have an opportunity to review the budget**  
10 **comparison to actuals on a periodic basis?**

11 A: Yes, there is a monthly meeting designed to provide my team with the  
12 comparison of the monthly budget to actual expenditures, explain any  
13 variances, and answer any questions or concerns that Columbia has with  
14 the results.

15 **VII. INTRODUCTION OF WITNESSES**

16 **Q: Please introduce Columbia's witnesses and describe their testimony.**

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

- 1 • Jeffery Gore, Regulatory Manager for NiSource Corporate Services  
2 Company, will present the development of the rate base presented  
3 in this case;
- 4 • Judy M. Cooper, Columbia's Director of Regulatory Affairs, will  
5 address the details of Columbia's proposals that include tariff  
6 revisions;
- 7 • Don Ayers, Columbia's Vice President of Operations, will address  
8 Columbia's distribution system, including its DIMP plan and other  
9 safety and operational issues;
- 10 • John J. Spanos, President of Gannett-Fleming Valuation and Rate  
11 Consultants, LLC, will sponsor the depreciation study performed for  
12 Columbia in this proceeding;
- 13 • Vincent V. Rea, Managing Director of Regulatory Finance  
14 Associates, LLC, will present evidence regarding Columbia's cost of  
15 capital and recommend the appropriate rates of return for Columbia;
- 16 • Greg Skinner, Vice President of IT Utilities Systems for NiSource  
17 Corporate Services Company, will support Columbia's expenditures  
18 for improvement to its information technology systems;
- 19 • Ronald J. Amen, Managing Partner of Atrium Economics, will  
20 present Columbia's allocated cost of services studies, will address

- 1 Columbia's revenue allocations across the various rate classes,  
2 Columbia's proposed rate design, and typical bill comparisons;
- 3 • Kevin L. Johnson, Lead Regulatory Analyst for NiSource Corporate  
4 Services Company, will present the results of Columbia's Lead/Lag  
5 study;
  - 6 • Michael E. Girata, Manager of Demand Forecasting for NiSource  
7 Corporate Services Company, will explain the forecast methodology  
8 used to develop the forecasted customer count and usage for the  
9 forecasted test period;
  - 10 • Julie C. Wozniak, Manager of Regulatory Studies for NiSource  
11 Corporate Services Company, will support the development of  
12 revenues for both the base period and the forecasted test period;
  - 13 • Tamaleh L. Shaeffer, Rate Case Execution Manager for NiSource  
14 Corporate Services Company, will present the cost of service and  
15 revenue requirement, and will support the actuals for Columbia's  
16 O&M costs and methodology;
  - 17 • Craig Inscho, Financial Planning Manager for NiSource Corporate  
18 Services Company, will support Columbia's financial statements,  
19 including O&M budgets;

- 1           • Chrisley Scott, Director of the Capital Program and Support Services  
2           for NiSource Corporate Services Company, will outline the capital  
3           budgeting process;
- 4           • Nicholas R. Bly, Accounting Manager for NiSource Corporate  
5           Services Company, will outline the process by which NiSource  
6           Corporate Services Company develops its budget and the allocation  
7           of its costs to Columbia;
- 8           • Kristen King, Director of SEC Reporting, Technical Research and  
9           SOX Compliance for NiSource Corporate Services Company, will  
10          provide a background on the relationship between NiSource  
11          Corporate Services Company and Columbia and the allocation of  
12          actual costs to Columbia;
- 13          • Jennifer Harding, Vice President, Tax for NiSource Corporate  
14          Services Company, will provide testimony to support the level of  
15          federal and state income taxes.
- 16          • Elizabeth Owens, Director Compensation for NiSource Corporate  
17          Services Company, will provide support for employee  
18          compensation and benefits programs, including incentive  
19          compensation;

1           • David A. Roy, Vice President of Supply Chain for NiSource, and  
2           former Vice President of Operations and Construction for Columbia,  
3           will provide an overview of Columbia’s operating system and its  
4           efforts to improve safety through the replacement of priority pipe.

5 **Q: Has Columbia adopted any improvements in efficiency and productivity**  
6 **since the last rate case?**

7 A: Yes. Please refer to the Direct Testimony of Columbia Witness Donald  
8 Ayers, who discusses initiatives with the purpose of improving efficiency  
9 and productivity. These include Columbia's investment in its Field  
10 Mobility project, which will improve efficiency and productivity for field  
11 employees by enhancing connectivity to IT systems; improvements to  
12 Columbia's facility locating processes, which has enhanced efficiency;  
13 improvements to Columbia's meter change program, which has also driven  
14 efficiencies through a reduction of overtime; and other opportunities to  
15 create efficiencies through a reduction in overtime; and other opportunities  
16 to create efficiencies through a greater focus on the best use of internal and  
17 external resources.

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

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

TAB 18

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Jeffery Gore



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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)
COUNTY OF FRANKLIN )

Jeffery Gore, Regulatory Manager for NiSource Corporate Services Company, being duly sworn, states that he has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

[Signature]
Jeffery Gore

The foregoing Verification was signed, acknowledged and sworn to before me this 1st day of May, 2024, by Jeffery Gore.

[Signature]
Notary Commission No. NA
Commission expiration: NA



John R Ryan III
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

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

In the matter of: )  
)  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

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**PREPARED DIRECT TESTIMONY OF  
JEFFERY T. GORE  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

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**May 16, 2024**

**COLUMBIA GAS OF KENTUCKY, INC.**

**PREPARED DIRECT TESTIMONY OF JEFFERY T. GORE**

1       **I.       INTRODUCTION**

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

3       A:       My name is Jeffery T. Gore and my business address is 290 West  
4       Nationwide Boulevard, Columbus, Ohio, 43215.

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

6       A:       I am a Regulatory Manager for NiSource Corporate Services Company  
7       ("NCSC"). I am responsible for supporting the NiSource gas utilities in a  
8       variety of informational and rate filings, general rate case preparation and  
9       support, and other duties as assigned. At this time, my primary focus is on  
10      matters for Columbia Gas of Kentucky, Inc. ("Columbia" or the  
11      "Company") and Columbia Gas of Ohio, Inc.

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

13      A:       I graduated from The Ohio State University with a Bachelor of Science in  
14      Business Administration degree, double majoring in Accounting and  
15      Computer Science. Additionally, I have over 30 years work experience with  
16      the Columbia Gas Companies primarily within the Accounting and  
17      Regulatory departments. Within Accounting, my roles have varied from  
18      analyst and manager roles with Columbia distribution companies to  
19      Controller - NiSource Service Company & Asset Accounting. Between 2010

1 and 2015, I was a Regulatory Manager focusing on Columbia Gas of  
2 Massachusetts; Columbia Gas of Pennsylvania, Inc.; and Columbia Gas of  
3 Maryland, Inc. matters. I returned to the Regulatory department in the  
4 manager role in October 2018. In early 2021, my responsibilities were  
5 changed to include a focus on Columbia.

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

8 A: Yes, I have testified before the Kentucky Public Service Commission in Case  
9 No. 2021-00183 (“2021 Rate Case”) supporting the Rate Base Summary,  
10 Operating Income Summaries, Summary of Income Adjustments and other  
11 financial data. I have also provided written testimony in support of  
12 Columbia’s annual updates to its Safety Modification and Replacement  
13 Program (“SMRP”) Rider in Case Nos. 2022-00342 and 2024-00074.  
14 Additionally, I provided written direct and rebuttal testimony in Case No.  
15 2002-00145 regarding Other Employee Postretirement Benefit matters.

16 **II. PURPOSE & FILING REQUIREMENTS SPONSORED**

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

18 A: My testimony will support the development of the Rate Base Summary  
19 schedules used by Witness Shaeffer in the calculation of the revenue  
20 requirement. Within the Rate Base Summary, my testimony will support

1 the projected Net Plant activity and Other Working Capital Allowances.  
 2 The total Rate Base Summary will include Cash Working Capital and  
 3 Deferred Income Taxes and Investment Tax Credits supported by Witness  
 4 Johnson and Witness Harding, respectively.

5 My testimony will also address the treatment of the SMRP related  
 6 capital investments and the impact on the Rate Base requested in this filing  
 7 as well as a proposed changes in the SMRP tariff.

8 **Q: What Filing Requirements will you be supporting?**

9 **A:** I will sponsor and support the following Filing Requirements:

Filing Requirement	Description
807 KAR 5:001 Section 16(6)(a)	The financial data for the forecasted period shall be presented in the form of pro forma adjustments to the base period.
807 KAR 5:001 Section 16(6)(b)	Forecasted adjustments shall be limited to the twelve (12) months immediately following the suspension period.
807 KAR 5:001 Section 16(6)(c)	Capitalization and net investment rate base shall be based on a thirteen (13) month average for the forecasted period.
807 KAR 5:001 Section 16(6)(f)	The utility shall provide a reconciliation of the rate base and capital used to determine its revenue requirements.
807 KAR 5:001 Section 16(7)(c)	A complete description, which may be filed in written testimony form, of all factors used in preparing the

	utility's forecast period. All econometric models, variables, assumptions, escalation factors, contingency provisions, and changes in activity levels shall be quantified, explained, and properly supported.
807 KAR 5:001 Section 16(7)(h)	A financial forecast corresponding to each of the three (3) forecasted years included in the capital construction budget. The financial forecast shall be supported by the underlying assumptions made in projecting the results of operations.
807 KAR 5:001 Section 16(7)(h)(4)	Revenue Requirements necessary to support the forecasted rate of return.
807 KAR 5:001 Section 16(7)(h)(12)	Rate Base
807 KAR 5:001 16(7)(i)	The most recent Federal Energy Regulatory Commission or Federal Communications Commission audit reports
807 KAR 5:001 Section 16(8)(b)	A jurisdictional rate base summary for both the base period and the forecasted period with supporting schedules, which include detailed analyses of each component of the rate base.
807 KAR 5:001 Section 16(8)(k)	Comparative financial data and earnings measures for the ten (10) most recent calendar years, the base period, and the forecast period.

1 **Q: For each of the documents included within the Filing Requirements that**  
2 **you are supporting, were they prepared by you or someone working**  
3 **under your supervision, and did you review each of the documents**  
4 **included within the Filing Requirements that you are co-sponsoring?**

5 A: Yes.

6 **Q: What are the test periods in this proceeding?**

7 A: Columbia is requesting an adjustment in rates based on a forecasted test  
8 period (“FTP”). The FTP is the twelve months ended December 31, 2025.  
9 The Base Period (“BP”) period includes actual data for the period  
10 September 1, 2023, through February 28, 2024, and forecasted data for the  
11 period March 1, 2024, through August 31, 2024.

12 **Q: Is a thirteen-month average balance utilized for rate base in the FTP?**

13 A: Yes. Since Columbia is filing a forecast test period rate case, a thirteen-  
14 month average calculation was used to comply with Filing Requirement  
15 Section 16-(6)(c).

16 **III. PROPOSAL FOR TREATMENT OF SMRP INVESTMENTS**

17 **Q: What is SMRP?**

18 A: SMRP is a rider initiated to allow for a more aggressive replacement of gas  
19 distribution mains and services that are reaching the end of their useful life  
20 as well as safety enhancements as identified and proposed for the

1 company's Safety Management System program. This rider provides for  
2 recovery of these safety related investments outside a full base rate case to  
3 mitigate the need to file continual rate cases primarily related to recovery  
4 of these investments.

5 **Q: How was SMRP treated in the 2021 Rate Case?**

6 A: The SMRP investment through the forecasted test year (calendar year 2022),  
7 along with all SMRP capital investments made since the previous rate case  
8 (calendar years 2018 - 2021), were included as part of the base rate request  
9 and the SMRP rider rate was set to zero (\$0). The SMRP was formerly  
10 known as the Acceleration Main Replacement Program ("AMRP"). The  
11 AMRP originated in Case No. 2009-00141 and contemplated that the  
12 investments would be included or "rolled-in" to base rates in future general  
13 rate case proceedings and the charge in the rider be re-set to zero. This was  
14 the procedure that Columbia followed in the 2021 Rate Case, as well as its  
15 other base rate cases since the AMRP originated, specifically Case No. 2013-  
16 00167 and Case No. 2016-00162.

17 **Q: Why is Columbia proposing to change the treatment of SMRP**  
18 **investments in this case?**

19 A: The Commission's Order in the 2021 Rate Case approved the roll-in of the  
20 SMRP into base rates. The Commission instructed Columbia to alter the



1 SMRP from a per meter charge to a volumetric charge moving forward,  
2 which Columbia has done. In addition, the Commission stated that having  
3 the SMRP Rider as a separate line item on the customers' bills is more  
4 transparent and if Columbia requests to roll the SMRP into base rates in its  
5 next general rate case, that Columbia would need to file testimony to  
6 support the roll in. Therefore, Columbia is proposing in this proceeding to  
7 change the approach it has taken previously as to SMRP. This change will  
8 keep the SMRP Rider as a separate line item on the customers' bills.

9 **Q: How are the SMRP investments made since the 2021 Rate Case being**  
10 **treated in this case?**

11 A: Columbia is *not* requesting that the 2023, 2024, and 2025 SMRP capital  
12 investments be moved into the base rates. Rather, the SMRP rider will  
13 continue to provide the mechanism for recovery of SMRP related capital  
14 investments from 2023 forward as follows:

- 15 • 2025 SMRP filing made in October 2024 for rates effective January 2025 will  
16 include the prior investments for 2023, 2024 and the forecasted 2025,
- 17 • 2026 SMRP filing made in October 2025 for rates effective January 2026 will  
18 include the prior investments for 2023, 2024, 2025 and the forecasted 2026.

19 Therefore, the majority of capital investments included within the 2025 and  
20 2026 SMRP riders will be historical investments that previously would have

1           been included in base rates. Columbia proposes this process to continue  
2           until at least the next base rate case, at which time it may be reevaluated.

3   **Q:   What will this proposed change to the SMRP mean for the future of the**  
4   **SMRP?**

5   A:   Each year, the rate for the SMRP will continue to grow as investments are  
6       added. Customers will have direct visibility into Columbia's accumulated  
7       expenditures under the SMRP as it becomes a larger portion of bills rather  
8       than seeing shifts in these costs being recovered via base rates as periodic  
9       rate cases are filed.

10 **Q:   Does the Company have any requested changes to the SMRP revenue**  
11 **requirement calculation resulting from the decision to not roll these**  
12 **investments into base rates?**

13 A:   Yes. The Company proposes to include an uncollectible expense factor in  
14       the SMRP revenue requirement. The requested uncollectible expense  
15       within this case's revenue requirement is based on base rate revenues  
16       exclusive of SMRP revenue. Therefore, the base rates will not include  
17       uncollectible expense for future SMRP billings. It is therefore appropriate  
18       to include the uncollectible factor in the SMRP revenue requirement  
19       calculation. Columbia Witness Cooper is supporting the SMRP tariff  
20       change reflecting the inclusion of the last approved uncollectible factor in

1 the SMRP revenue requirement.

2 **Q: Does the Company have any other considerations regarding the SMRP**  
3 **revenue requirement calculation resulting from the decision to not roll**  
4 **these investments into base rates?**

5 A: Yes. Recent Commission Orders have ordered a lower return on equity for  
6 riders than approved for base rates.<sup>1</sup> Additionally, as a part of the  
7 settlement of 2021 Rate Case, Columbia agreed to a lower return on equity  
8 for the SMRP rider than what was approved for base rates.

9 With the proposal to not roll in SMRP adjustments, the SMRP rider  
10 will no longer only capture cost recovery on investments between rate  
11 cases. The rider will also provide for recovery of historic investments. For  
12 example, using the first investment year past the FTP in this base rate case,  
13 Columbia will file an SMRP in October 2025 for recovery of 2023, 2024, 2025  
14 and 2026 SMRP capital investments. With the revenue requirement  
15 including the 13- month average of 2026 investments, most of the rate base  
16 in the revenue requirement calculation will be for years up to and including  
17 the FTP in the current rate case. Therefore, Columbia Witness Rea proposes

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<sup>1</sup> See, *In the Matter of Electronic Application of Kentucky Power Company for (1) A General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief*, Case No. 2020-00174, Order (Ky. P.S.C. Jan. 13, 2021); *In the Matter of Electronic Application of Atmos Energy Corporation for an Adjustment of Rates*, Case No. 2021-00214, Order (Ky. P.S.C. May 19, 2022).

1 a return on equity for SMRP that is the same as provided for in the base rate  
2 recovery. For more detailed information on the return on equity for SMRP  
3 please see the direct testimony of Columbia Witnesses Judy Cooper and  
4 Vincent Rea.

5 **Q: How will the Company's rate base information be presented to facilitate**  
6 **the exclusion of SMRP investments in the calculation of rate base?**

7 A: The plant related inputs and depreciation expense will be provided from  
8 January 1, 2023 to December 31, 2025 for SMRP related investments, non-  
9 SMRP related investments and total company investments. The non-SMRP  
10 plant balances and associated expense will be used in the calculation of  
11 Filed For Rate Base ("FFRB"). The SMRP related investments and  
12 associated depreciation expense are provided for a complete picture of the  
13 total company activity but are not included in the rate base utilized within  
14 the revenue requirement calculation.

15 **IV. RATE BASE WORKPAPERS**

16 **Q: What workpapers did you develop and utilize to develop the Rate Base**  
17 **proposed in this case?**

18 A: I have included and support Workpapers as follows:

- 19 • WPB 2.1A Plant in Service by Gas Plant Account,  
20 • WPB 2.1B Summary of Actual & Forecasted Plant, Accumulated

- 1 Depreciation Reserve and Depreciation Expense,
- 2 • WPB 2.1C Detail of Actuals & Forecasted Plant, Accumulated
- 3 Depreciation Reserve and Depreciation Expense,
- 4 • WPB 2.1D SMRP Plant Details,
- 5 • WPB 2.1E Summary of Intangible Plant Activity,
- 6 • WPB 2.1F Depreciation by Gas Plant Account,
- 7 • WPB-3.1 Accumulated Depreciation and Amortization,
- 8 • WPB-5.1 Materials and Supplies,
- 9 • WPB-5.3 Gas Storage.

10 These workpapers provide information at the lowest level provided in this  
11 filing and are the primary inputs to the development of the Rate Base  
12 proposed in this case. Specifically, WPB- 2.1.C and WPB-2.1.B provide the  
13 most detailed view of plant related rate base inputs and WPB 5.1 and 5.3  
14 provide the most detailed view of inputs to the Other Working Capital  
15 Allowances included in Rate Base.

16 **Q: Please describe the plant details in WPB-2.1.C.**

17 A: This workpaper details the roll-forward of Plant activity by Gas Plant  
18 account from January 1, 2023, to December 31, 2025. All data from January  
19 1, 2023, to February 29, 2024, reflects actual plant activity and the remaining  
20 months reflect projected activity.

1           To facilitate reporting the plant activity for the Total Company as  
2 well as the subsets of SMRP and FFRB plant activities, the SMRP related  
3 activity is detailed at the end of each calendar month's summary. As a  
4 result, the five Gas Plant accounts (Mains 376, M&R Stations 378.2, Services  
5 380, Meter Installations 382, and House Regulators 383) are detailed twice  
6 in the monthly summaries, the first line indicating the non-SMRP activity  
7 and the second line indicating the SMRP activity.

8           The March 2024 through December 2025 plant additions and  
9 retirements reflect projected activity based on Columbia's capital budget.  
10 Columbia Witness Scott's testimony provides support of the overall capital  
11 budget, except for intangible plant activity which is addressed in Section V  
12 of this testimony. The retirements were projected based on a 3-year historic  
13 view of activity by gas plant account.

14           The forecasted monthly reserve for accumulated depreciation  
15 balances were calculated utilizing current depreciation rates through  
16 December 31, 2024, and depreciation rates as supported in the testimony of  
17 Columbia Witness Spanos for the FTP. In addition to the proposed  
18 depreciation rates, the FTP also includes the recommended Reserve  
19 Amortization Adjustments that are supported by Columbia Witness  
20 Spanos. The intangible reserve activity and balances will be addressed in

1 Section V of this testimony.

2 **Q: Please describe the plant details in WPB-2.1.B.**

3 A: This workpaper summaries the monthly plant activity from WPB-2.1.C into  
4 calendar month summaries from January 2023 through December 2025.

5 Additionally, the information is summarized into the following categories:

- 6 • Page 1 – reflects the FFRB plant activity,
- 7 • Page 2 – reflect the SMRP plant activity,
- 8 • Page 3 – reflects the Total Company plant activity.

9 **Q: Please describe the information in the remaining WPB-2.1 workpapers.**

10 A: These workpapers reflect the following:

- 11 • WPB-2.1.A – provides the FFRB related monthly gross plant balances by  
12 Gas Plant account for input into the Allocated Cost of Service calculation  
13 based on detail in WPB2.1.C,
- 14 • WPB-2.1.D – provides detail information regarding the 5 gas plant  
15 accounts that are reported within FFRB and SMRP plant activity,
- 16 • WPB-2.1.E – provides information regarding the Intangible Plant activity  
17 to be addressed in Section V of this testimony,
- 18 • WPB-2.1.F – provides the FFRB depreciation and amortization expense for  
19 input into the Allocated Cost of Service calculation.
- 20 • WPB-3.1 Accumulated Depreciation and Amortization – provides monthly  
21 balances by Gas Plant Account – the FTP data is an input into the Allocated

- 1 Cost of Service,
- 2 • WPB-5.1 Materials and Supplies – provides the actual and projected
- 3 balances for this rate base input,
- 4 • WPB-5.3 Gas Storage – provides actual and projected balances for this rate
- 5 base input.

6 **V. SCHEDULE B – RATE BASE SUMMARY [807 KAR 5:001 Section 16-(8)(b)]**

7 **Q: What information is provided with Schedule B?**

8 A: Schedule B provides a summary and support for the calculation of Rate

9 Base for test periods in this proceeding.

10 **Q: What Rate Base Schedules are you are supporting?**

11 A: I support the following Schedules:

- 12 • B-1 Rate Base Summary,
- 13 • B-2 Plant in Service by Major Grouping,
- 14 • B-2.1 Plant in Service by Accounts and Subaccounts,
- 15 • B-2.2 Proposed Adjustments to Plant in Service,
- 16 • B-2.3 Gross Additions, Retirements and Transfers,
- 17 • B-2.4 Property Merged or Acquired,
- 18 • B-2.5 Leased Property,
- 19 • B-2.6 Property Held for Future Use Included in Rate Base,
- 20 • B-2.7 Property Excluded from Rate Base,
- 21 • B-3 Accumulated Depreciation and Amortization,



- 1 • B-3.1 Adjustments to Accumulated Depreciation and Amortization,
- 2 • B-4 Construction Work in Progress,
- 3 • B-5 Allowance for Working Capital,
- 4 • B-5.1 Working Capital Components,
- 5 • B-7 Jurisdictional Percentage.

6 **Q: What Rate Base Schedules are supported by other Columbia witnesses?**

7 A: Columbia Witness Harding will be supporting Schedule B-6 Deferred  
8 Credits and Accumulated Deferred Income Taxes and Schedule B-6.1  
9 Accumulated Deferred Income Taxes Normalization Adjustment.  
10 Columbia Witness Johnson will be supporting Schedule B-5.2 Cash  
11 Working Capital.

12 **Q: Please describe the rate base information presented in Schedule B-1, Rate**  
13 **Base Summary.**

14 A: The information shown on Schedule B-1 provides the jurisdictional rate  
15 base summary proposed in this proceeding. As the Company is proposing  
16 to exclude SMRP related investments from base rate recovery, the  
17 information is presented allowing parties to identify the Total Company  
18 rate base and the SMRP related rate base. The FFRB reflects the Total  
19 Company rate base less the SMRP related rate base and is the basis for the  
20 revenue requirement utilized in Schedule A, Financial Summary.

1 FTP Rate Base was developed using thirteen-month average  
2 balances of forecasted plant-in-service, reserve for accumulated  
3 depreciation and amortization, accumulated deferred income taxes and  
4 deferred credits, and working capital items from December 31, 2024,  
5 through December 31, 2025, unless noted otherwise. Other than the  
6 exclusion of SMRP rate base, this is consistent with the methodology used  
7 by Columbia – and accepted by the Commission - to develop rate base in  
8 the 2021 Rate Case.

9 The detailed development of the plant related rate base input is  
10 provided in the WBP-2.1 workpapers. Additional Schedule B-1 sources  
11 include:

- 12 • Line 6 – Witness Johnson proposed a \$0 (zero) Cash Working Capital  
13 Allowance.
- 14 • Line 7 -reflects the 13-month average balances for Materials and  
15 Supplies (WPB-5.1) and Gas Storage (WPB-5.3).
- 16 • Line 8 – reflects the ADIT balances as supported by Witness  
17 Harding. Line 8b includes ADIT balances associated with the Lead  
18 Lag Adjustment. Line 8c reverses the Lead Lag ADIT balances due  
19 to the \$0 Lead Lag claim proposed by Witness Johnson.

20

1 **Q: Please describe the Gross Plant information presented in Schedules B-2,**  
2 **B-2.1, B-2.2, B-2.3, B-2.4, B-2.5, B-2.6 and B-2.7.**

3 A: These Schedules relate to the Gross Plant rate base balances include the  
4 following:

- 5 • Schedule B-2 - provides a summary of the FFRB gross plant balances  
6 by major property grouping,
- 7 • Schedule B-2.1 - provides a summary of the FFRB gross plant  
8 balances by Gas Plant account,
- 9 • Schedule B-2.2 – details that other than the removal of the SMRP  
10 related plant activity there are no adjustments to plant activity,
- 11 • Schedule B-2.3 – details the additions and retirement by Gas Plant  
12 Account,
- 13 • Schedule B-2.4 – details no adjustments were made of merged or  
14 acquired property,
- 15 • Schedule B-2.5 – details that no capital lease plant accounts were  
16 included in the Schedules,
- 17 • Schedule B-2.6 details that no property held for future use was  
18 included in the Schedules,
- 19 • Schedule B-2.7 details that other than the removal of SMRP  
20 investments, no other adjustments were made in the Schedules.

1 **Q: Please describe the remaining B Schedules you are supporting.**

2 A: The remaining B Schedule supported within this testimony include:

- 3 • Schedule B-3.1 – provides Accumulated Depreciation &  
4 Amortization by Gas Plant account for the BP and FTY,
- 5 • Schedule B-4 – identifies that no Construction Work in Progress is  
6 included in the proposed Rate Base,
- 7 • Schedule B-5 – details the Cash Working Capital/Lead Lag as well  
8 the Other Working Capital items,
- 9 • Schedule B-5.1 – details the Other Working Capital Items as  
10 supported in WPB-5.1 and WPB-5,
- 11 • Schedule B-7 – details that all data is 100% jurisdictional.

12 **Q: How was the Allowance for Working Capital calculated in Schedule B-5?**

13 A: The Working Capital Components were developed using a thirteen-month  
14 average of month end balances for Materials and Supplies and Storage as  
15 detailed in WPB-5.1 and WPB-5.3, respectively. Please refer to Columbia  
16 Witness Johnson’s testimony for support of the Cash Working Capital.

17 **Q: Did Columbia include customer advances for construction as a reduction**  
18 **to rate base?**

19 A: Yes. Since January 2000, a credit is made to gas plant-in-service in  
20 recognition of customer advances. Accordingly, a reduction to rate base has

1           been included for post-1999 customer advances by including net plant-in-  
2           service per books. Prior to January 2000, a credit for customer advances was  
3           included in Account 252. As of February 28, 2021, the balance in Account  
4           252 is zero. The budgeted capital expenditures supported by Columbia  
5           Witness Scott are also net of projected customer advances. Therefore, the  
6           plant-in-service claimed in this proceeding reflects deductions related to  
7           customer advances.

8   **Q:   Please explain Schedule B-7.**

9   A:   This schedule identifies the allocation factors used to determine the  
10       jurisdictional percentage of gas plant costs applicable to the calculation of  
11       the gas rate increase requested in this proceeding. Columbia does not have  
12       any non-jurisdictional gas customers within its service territory. Therefore,  
13       this schedule shows that 100 percent of Columbia’s costs are jurisdictional  
14       in nature and are appropriate to include for recovery in this proceeding.

15   **VI.   INTANGIBLE PLANT ASSETS**

16   **Q:   What are the Company’s intangible assets?**

17   A:   The primary Intangible Assets reflect Information Technology (“IT”)  
18       related investments. Additionally, the Company includes some  
19       Contributions in Aid of Constructions.

20

1 **Q: Do you have any details on Intangible Assets activity included in the**  
2 **WPB-2.1.C?**

3 A: Refer to Attachment JTG-1 which provides details on the various Intangible  
4 investments. The information is presented as follow:

- 5 • Summary – provides the 2024 and 2025 monthly additions,  
6 retirements and amortization expenses for all Intangible assets.
- 7 • General Plant – details the Contribution in Aid amount recorded in  
8 Intangible Plant. The monthly amortization is calculated as the sum  
9 of all the individual amortizations.
- 10 • Miscellaneous Software – details the on-premise software and other  
11 IT investments. Similarly, the amortization is calculated as the sum  
12 of the individual amortizations.
- 13 • Cloud Software – details the off-premise software investments with  
14 similar amortization calculations.

15 The Summary worksheet in Attachment is the source of the information  
16 included in WPB-2.1.E and utilized in WPB-2.1.C. The calculation of  
17 amortization expense and retirements are done on an individual project  
18 basis.

19 **Q: Please describe the General Intangible projected plant activity.**

20 A: There are no projected additions to this group. The projected plant activity

1 reflects the continued amortization of existing investments. In May 2025,  
2 The Contribution in Aid detailed in Line 2 will be fully amortized. As a  
3 result, the amortization expense discontinues for the remainder of the FTP  
4 and the investment is projected to retire.

5 **Q: Please describe the Miscellaneous Software projected plant activity.**

6 A: The investments in Lines 2 – 182 will fully amortize before December 2025.  
7 Once these investments are fully amortized, the monthly amortization  
8 expense is discontinued in the worksheet and the retirement is projected.

9 The projected additions are detailed in Lines 388 – 418. The monthly  
10 technology additions are separated into 3 categories:

- 11 • Technology Other Than Work and Asset Management (“WAM”)  
12 Program<sup>2</sup>– reflects planned investments in a variety of areas, none of  
13 which are significant in nature,
- 14 • Field Mobility – reflects in safety components installed in company  
15 vehicles,
- 16 • WAM Program – reflects an investment in a new Work Management  
17 System as supported by Witness Skinner.

18 **Q: Please describe the Cloud Software projected plant activity.**

19 A: There investments in Lines 2 – 27 will fully amortize before December 2025.

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<sup>2</sup> For a description of the “WAM” Program, please see the Direct Testimony of Gregory Skinner.

1           Once these investments are fully amortized, the monthly amortization  
2           expense is discontinued in the worksheet and the retirement is projected.

3           The projected additions are detailed in Lines 62 - 91. The monthly  
4           technology additions are separated into 2 categories:

- 5           • Technology Other Than WAM Program – reflects planned  
6           investments in a variety of areas, none of which are significant in  
7           nature,
- 8           • WAM Program – reflects an investment in a new Work Management  
9           System as supported by Witness Skinner.

10   **Q: Can you provide further description of how the WAM investment is**  
11   **proposed in this case?**

12   A: Yes. The WAM program is a multi-year investment with capital spend  
13   incurred as follows:

- 14           • Prior to 2024 - \$1,450,479
- 15           • 2024 spend - \$2,174,352
- 16           • 2025 spend - \$1,481,196

17           The capital spend is recorded in Construction Work in Progress (“CWIP” -  
18           Account 107). The WAM program investments remain in CWIP until the  
19           investment is used and useful. At that time, these investment dollars will  
20           move from CWIP into Plant in service as in the FTP as detailed in



1 Attachment JTG-1, Summary Lines 9 and 12. The amortization of the  
2 investment amounts will begin at time of the transfer to Plant in service.

3 **Q: Do you have any other Intangible Asset items that may need further**  
4 **clarification?**

5 A: Yes. There are two items of note:

- 6 • Field Mobility investment – This investment was approved in early 2024  
7 after the projected capital budget was developed. This was done in  
8 response to front line field feedback, as addressed by Columbia Witness  
9 Skinner. Therefore, this investment is incremental to the capital budget.
- 10 • IVR Refinement and Enhancements – This Miscellaneous Software  
11 investment (Attachment JTG-1, Misc Software, Lines 257 & 258) was  
12 placed into service in error. The investment is not yet used and useful.  
13 The Intangible Asset Gross Plant and Accumulated Amortization  
14 amounts as of February 2024 have been reversed. Therefore, this  
15 investment is not included in the FTP within the rate base calculation,  
16 or the depreciation expense included in the revenue requirement.

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1 **VII. SUPPLEMENTAL SUPPORT FOR PLANT INCLUDED IN RATE BASE**

2 **Q: How do the Plant additions included in WPB-2.1.B compare to the capital**  
3 **budget provided in 807 KAR 5:001 Section 16-(7)(b) Capital Construction**  
4 **Budget?**

5 A: Please refer to Attachment JTG-2 which provides a comparison of the 2024  
6 and 2025 capital budget to the Plant Additions in the workpaper WPB2-1.B.  
7 The 2024 Plant Additions are lower than the Capital Spend reflecting the  
8 following items:

- 9 • 2024 capital spend related to the WAM program that goes into  
10 service in 2025,
- 11 • 2024 spend for the Field Mobility project recently approved that  
12 was not in the original capital budget,
- 13 • The reversal of the IVR Refinement and Enhancement project not  
14 included in the original capital budget.

15 The 2025 Plant Additions are higher than Capital Spending reflecting the  
16 following items:

- 17 • 2024 and prior year spend related to the WAM project that goes into  
18 service in 2025,
- 19 • Projected change in CWIP not otherwise identified reflecting spend  
20 that will go into service in 2025.

- 1 Q: **Does this complete your Prepared Direct Testimony?**
- 2 A: Yes, however, I reserve the right to file rebuttal testimony.

# Attachment JTG-1

**Columbia Gas of Kentucky  
Summary of Intangible Plant Activity 2024-2025**

Line No.	Gas Plant Account	Amortization Months	January	February	March	April	May	June	July	August	September	October	November	December	Total	
<b>1 Additions - 2024 (January and February Actuals)</b>																
2	WAM program	303.30	180	-	-	-	-	-	-	-	-	-	-	-	-	
3	Technology other than WAM program	303.30	60	40,225.48	42,429.28	126,243.24	184,077.00	79,811.00	574,250.00	1,089,068.00	138,184.00	12,791.00	197,898.00	730,728.00	721,090.00	3,936,795.00
4	Total Misc Software Additions	303.30		40,225.48	42,429.28	126,243.24	184,077.00	79,811.00	574,250.00	1,089,068.00	138,184.00	12,791.00	197,898.00	730,728.00	721,090.00	3,936,795.00
<b>5 WAM program</b>																
6	Technology other than WAM program	303.99	till Jan 32	-	-	-	-	-	-	-	-	-	-	-	-	
7	Total Cloud Software Additions	303.99	60	30,384.30	3,396.66	10,618.26	4,906.17	6,258.02	51,358.47	5,415.64	10,835.12	1,002.97	15,517.31	57,296.85	19,175.78	216,165.53
<b>8 Additions - 2025</b>																
9	WAM program	303.30	180	99,764.67	-	-	2,227,920.42	47,451.18	27,436.62	23,263.34	23,263.34	23,263.34	-	-	2,495,626.25	
10	Technology other than WAM program	303.30	60	202,087.00	99,476.00	138,481.00	48,625.00	62,024.00	1,142,145.00	284,874.00	107,388.00	9,940.00	153,793.00	567,873.00	190,053.00	3,006,759.00
11	Total Misc Software Additions	303.30		301,851.67	99,476.00	138,481.00	2,276,545.42	109,475.18	1,169,581.62	308,137.34	130,651.34	33,203.34	177,056.34	567,873.00	190,053.00	5,502,385.25
<b>12 WAM program</b>																
13	Technology other than WAM program	303.99	till Jan 32	146,817.59	-	-	2,088,787.33	102,828.47	6,561.68	2,087.20	2,136.01	2,066.12	259,116.42	-	2,610,400.83	
14	Total Cloud Software Additions	303.99	60	12,751.61	6,276.86	8,738.10	3,068.24	3,913.67	11,129.04	3,386.85	6,776.11	627.24	9,704.28	35,832.55	11,992.23	114,196.79
<b>15 Retirements - 2024 (January and February Actuals)</b>																
16	Intangible Plant General	303.00		-	-	-	-	-	-	-	-	-	-	-	-	
17	Intangible Plant Misc Software	303.30		365,404.53	17,430.86	4,260.66	1,759,024.90	29,287.24	208,391.26	384,711.06	42,648.62	11,181.70	40,480.84	328,263.84	149,532.32	3,340,617.83
18	Intangible Plant Cloud Software	303.99		30,037.06	16,750.91	-	-	86.21	14,359.44	27,374.64	-	-	79.48	161,353.98	-	250,041.72
19	Total Retirements 2024	303.00		395,441.59	34,181.77	4,260.66	1,759,024.90	29,373.45	222,750.70	412,085.70	42,648.62	11,181.70	40,560.32	489,617.82	149,532.32	3,590,659.55
<b>20 Retirements - 2025</b>																
21	Intangible Plant General	303.00		-	-	-	-	-	15,187.61	-	-	-	-	-	15,187.61	
22	Intangible Plant Misc Software	303.30		270,166.99	35,698.90	84,261.43	16,342.54	211,510.36	48,469.32	110,228.53	54,486.85	144,955.91	33,306.92	42,616.78	116,937.47	1,168,982.00
23	Intangible Plant Cloud Software	303.99		23,782.54	53,945.76	-	8,519.78	7,455.12	-	9,526.10	32,787.81	-	7,246.56	-	4,442.02	147,705.69
24	Total Retirements 2024	303.00		293,949.53	89,644.66	84,261.43	24,862.32	218,965.48	63,656.93	119,754.63	87,274.66	144,955.91	40,553.48	42,616.78	121,379.49	1,331,875.30
<b>25 Amortization Expense - 2024 (January and February Actuals)</b>																
26	Intangible Plant General	303.00		267.60	267.60	267.60	267.60	267.60	267.60	267.60	267.60	267.60	267.60	267.60	267.60	3,211.17
27	Intangible Plant Misc Software	303.30		206,031.19	207,717.51	137,859.57	194,438.81	194,653.59	195,156.60	205,452.51	215,219.88	216,036.93	214,543.06	218,317.46	227,150.31	2,432,577.43
28	Intangible Plant Cloud Software	303.99		34,758.99	34,708.97	34,797.46	34,926.83	35,018.21	35,227.42	35,193.62	35,329.04	35,427.69	35,563.96	33,387.01	33,826.08	418,165.27
29	Total Amortization Expense 2024	303.00		241,057.78	242,694.08	172,924.62	229,633.23	229,939.40	230,651.61	240,913.73	250,816.52	251,732.22	250,374.62	251,972.07	261,243.99	2,853,953.87
<b>30 Amortization Expense - 2025</b>																
31	Intangible Plant General	303.00		267.60	267.60	267.60	267.60	246.50	225.41	225.41	225.41	225.41	225.41	225.41	206.82	2,876.18
32	Intangible Plant Misc Software	303.30		229,484.71	231,264.13	232,399.22	238,232.90	243,224.06	251,835.54	262,245.08	263,962.94	263,574.76	264,410.64	269,133.65	273,314.33	3,023,081.96
33	Intangible Plant Cloud Software	303.99		34,304.59	34,877.24	34,931.37	47,633.13	61,000.44	61,722.61	61,544.93	61,382.61	61,411.02	63,154.86	65,201.92	65,185.30	652,350.00
34	Total Amortization Expense 2025	303.00		264,056.89	266,408.97	267,598.18	286,133.63	304,471.00	313,783.56	324,015.42	325,570.96	325,211.19	327,790.91	334,560.98	338,706.45	3,678,308.14











**Columbia Gas of Kentucky  
General Plant**

<u>Line No.</u>	<u>Description</u>	<u>Gas Plant Account</u> (1)	<u>Plant Balance</u> (2)	<u>Initial Life</u> (3)	<u>Remaining Post Life as of 12/31/2022</u> (4)	<u>Retirement Month</u>	<u>Reserve Balance 12/31/2022</u> (5)	<u>1/31/2025 Monthly Amortization</u>	<u>2/28/2025 Monthly Amortization</u>	<u>3/31/2025 Monthly Amortization</u>	<u>4/30/2025 Monthly Amortization</u>	<u>5/31/2025 Monthly Amortization</u>	<u>6/30/2025 Monthly Amortization</u>
1	<u>Intangible Plant - General</u>												
2	CIAC - Pay Tco To Install Tap & Inlet : Park Three : May	303.00	15,188	360	29	06-2025	13,985	42	42	42	42	21	
3	CIAC - Install Measurement Station : Southern H : Par	303.00	13,384	360	36	01-2026	12,065	37	37	37	37	37	37
4	CIAC - Install Odorizer On Line 'B' : Kenova Com : Cat	303.00	45,776	360	72	01-2029	36,684	127	127	127	127	127	127
5	CIAC	303.00	21,987	360	149	06-2035	12,917	61	61	61	61	61	61
6	Subtotal - 303.00	303.00					75,651.31	267.60	267.60	267.60	267.60	246.50	225.41



**Columbia Gas of Kentucky  
Misc Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
<u>No.</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
<u>Description</u>	(1)	(2)	(3)	(4)		(5)	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>
1												
2	Electronic File Transfer Upgrade	303.30	10,042	60.00	-	01-2023	10,042					
3	FDM Upgrade	303.30	8,957	60.00	-	01-2023	8,957					
4	IIB 10- Capital	303.30	5,895	60.00	-	01-2023	5,895					
5	Info Mgmt-Open Text Upgrade-Captial	303.30	11,640	60.00	-	01-2023	11,640					
6	MASTER TAP BUNDLE CAP	303.30	33,725	60.00	-	01-2023	33,725					
7	Microsoft License True Up	303.30	7,037	60.00	-	01-2023	7,037					
8	NiFast Update AOC Info Bundle	303.30	22,916	60.00	-	01-2023	22,916					
9	Interactive Voice Reading System	303.30	12,116	60.00	-	01-2023	12,116					
10	SCCC Pega Lic Impl Cap	303.30	28,830	60.00	-	01-2023	28,830					
11	Energy & Utilities Data Model- Capi	303.30	23,325	60.00	1.00	02-2023	23,131	194				
12	Printing Equip - Kern ADF Software	303.30	6,699	60.00	1.00	02-2023	6,643	56				
13	Printing Equip - Canon Prisma & BCC	303.30	14,183	60.00	1.00	02-2023	14,065	118				
14	MTC CCC Exception Processing	303.30	23,228	60.00	2.00	03-2023	22,647	387	194			
15	Consolidation-Citrix XenDesktop-Cap	303.30	7,697	60.00	3.00	04-2023	7,376	128	128	64		
16	Gas Source Cap Bundle	303.30	3,926	60.00	3.00	04-2023	3,762	65	65	33		
17	BMC 2018 Capital	303.30	1,764	60.00	8.00	09-2023	1,543.31	29.39	29.40	29.39	29.40	29.40
18	Storage Refresh 2018	303.30	9,899	60.00	8.00	09-2023	8,551	180	180	180	180	180
19	ZMU New Functionality	303.30	12,680	60.00	8.00	09-2023	10,843	245	245	245	245	245
20	2018 Web Enhancement Bundle	303.30	3,049	60.00	9.00	10-2023	2,617	51	51	51	51	51
21	Information Management SOA	303.30	51,161	60.00	9.00	10-2023	43,913	853	853	853	853	853
22	COCH New features PH2 Cap	303.30	10,370	60.00	10.00	11-2023	8,728	173	173	173	173	173
23	Customer Insights AS-1(CX)	303.30	22,525	60.00	10.00	11-2023	18,959	375	375	375	375	375
24	Security Identity Manager 2.0 C	303.30	17,071	60.00	10.00	11-2023	14,368	284	284	284	284	284
25	Truesight Capacity Optimization	303.30	17,189	60.00	10.00	11-2023	14,467	286	286	286	286	286
26	P2P Pcard Platform	303.30	6,457	60.00	11.00	12-2023	5,317	109	109	109	109	109
27	2018 PowerPlant Upgrade	303.30	73,846	60.00	11.00	12-2023	60,895	1,233	1,233	1,233	1,233	1,233
28	Treasury Project	303.30	426	60.00	11.00	12-2023	351	7	7	7	7	7
29	Upgrade Data Center Software	303.30	24,973	60.00	11.00	12-2023	20,092	465	465	465	465	465
30	Call Center Awareness DIS	303.30	22,640	60.00	12.00	01-2024	18,296	378	378	378	378	378
31	Customer Digital Roadmap LDC	303.30	237,465	60.00	12.00	01-2024	190,882	4,051	4,051	4,051	4,051	4,051
32	FiServ Next Implementation Project	303.30	31,275	60.00	12.00	01-2024	25,034	543	543	543	543	543
33	IT Infrastruc Enhanc/Stability Proj	303.30	9,926	60.00	12.00	01-2024	8,024	165	165	165	165	165
34	NiSource API Capital	303.30	11,815	60.00	12.00	01-2024	9,551	197	197	197	197	197
35	Secure Banking CAP 2017-2018 - DIS	303.30	2,778	60.00	12.00	01-2024	2,246	46	46	46	46	46
36	Windows 10 Upgrade- Capital	303.30	49,503	60.00	12.00	01-2024	39,959	830	830	830	830	830
37	WMS Enhancement	303.30	17,188	60.00	13.00	02-2024	13,612	286	286	286	286	286
38	PPM Project Capital ServiceNow Enha	303.30	243	60.00	13.00	02-2024	198	4	4	4	4	4
39	AP and WMS Auto Accruals in PS-RPA	303.30	1,697	60.00	14.00	03-2024	1,296	30	30	30	30	30
40	SMS Application Projects Capital	303.30	791	60.00	14.00	03-2024	615	13	13	13	13	13
41	AP and WMS Accruals in PS - RPA	303.30	1,772	60.00	14.00	03-2024	1,378	29	29	29	29	29
42	Automate MFE & TFE using RPA	303.30	2,092	60.00	15.00	04-2024	1,507	40	40	40	40	40
43	Customer Experience - Enhancements to Ventyx	303.30	17,673	60.00	15.00	04-2024	13,402	295	295	295	295	295
44	NAC 2017 - Capital	303.30	21,008	60.00	15.00	04-2024	15,931	350	350	350	350	350
45	NiFit Transformation	303.30	1,683,053	120.00	15.00	04-2024	1,479,729	14,022	14,022	14,022	14,022	14,022
46	Palo Alto Firewall	303.30	20,727	60.00	15.00	04-2024	15,675	348	348	348	348	348
47	VDI 2018 Capital	303.30	14,471	60.00	15.00	04-2024	10,961	242	242	242	242	242
48	Automate Green Roads using RPA	303.30	1,536	60.00	16.00	05-2024	1,122	27	27	27	27	27
49	Automate SLR Update using RPA	303.30	2,889	60.00	16.00	05-2024	2,103	51	51	51	51	51
50	Automation of Manual Entries in DIS	303.30	1,590	60.00	16.00	05-2024	1,180	27	27	27	27	27

**Columbia Gas of Kentucky  
Misc Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105	272	272	272	272	272	272
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257	96	96	96	96	96	96
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898	20	20	20	20	20	20
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779	67	67	67	67	67	67
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719	3,304	3,304	3,304	3,304	3,304	3,304
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804	18	18	18	18	18	18
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148	26	26	26	26	26	26
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573	61	61	61	61	61	61
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026	28	28	28	28	28	28
60	CMDB	303.30	89	60.00	18.00	07-2024	91	(0.07)	(0)	(0)	(0)	(0)	(0)
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863	4,185	4,185	4,185	4,185	4,185	4,185
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081	237	237	237	237	237	237
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334	1,968	1,968	1,968	1,968	1,968	1,968
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092	28	27	28	27	28	27
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457	11	11	11	11	11	11
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094	27	27	27	27	27	27
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509	591	591	591	591	591	591
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325	56	56	56	56	56	56
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600	40	40	40	40	40	40
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360	58	58	58	58	58	58
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667	71	71	71	71	71	71
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763	21	21	21	21	21	21
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746	18	18	18	18	18	18
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893	478	478	478	478	478	478
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470	63	63	63	63	63	63
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528	115	115	115	115	115	115
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193	5	5	5	5	5	5
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566	14	14	14	14	14	14
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847	185	185	185	185	185	185
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625	198	198	198	198	198	198
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256	111	111	111	111	111	111
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189	545	545	545	545	545	545
83	Cust New Business-Line Ext Agreemen	303.30	7,734	60.00	22.00	11-2024	4,386	156	156	156	156	156	156
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303	34	34	34	34	34	34
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923	24	24	24	24	24	24
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000	208	208	208	208	208	208
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457	1,450	1,450	1,450	1,450	1,450	1,450
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834	2,828	2,828	2,828	2,828	2,828	2,828
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216	87	87	87	87	87	87
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658	18	18	18	18	18	18
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149	342	342	342	342	342	342
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132	84	84	84	84	84	84
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814	103	103	103	103	103	103
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406	11	11	11	11	11	11
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359	162	162	162	162	162	162
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156	4	4	4	4	4	4
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422	561	710	710	710	710	710
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433	38	38	38	38	38	38
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453	679	679	679	679	679	679
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341	438	438	438	438	438	438
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348	116	116	116	116	116	116

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561	156	156	156	156	156	156
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947	53	53	53	53	53	53
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610	971	971	971	971	971	971
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915	107	107	107	107	107	107
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413	94	94	94	94	94	94
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117	140	140	140	140	140	140
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926	4,744	4,744	4,744	4,744	4,744	4,744
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757	158	158	158	158	158	158
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223	34	34	34	34	34	34
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537	15	15	15	15	15	15
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703	74	74	74	74	74	74
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247	7	7	7	7	7	7
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882	391	391	391	391	391	391
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)	(17)	(17)	(17)	(17)	(17)	(17)
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305	9	9	9	9	9	9
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599	17	17	17	17	17	17
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687	188	188	188	188	188	188
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472	246	246	246	246	246	246
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113	149	149	149	149	149	149
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281	330	330	330	330	330	330
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)	(2)	(2)	(2)	(2)	(2)	(2)
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276	143	143	143	143	143	143
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216	7	7	7	7	7	7
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325	444	444	444	444	444	444
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316	72	72	72	72	72	72
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955	38	38	38	38	38	38
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11	0	0	0	0	0	0
129	Integ Cntr: Property Restore Invoice	303.30	4,378	60.00	27.00	04-2025	2,394	75	75	75	75	75	75
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688	21	21	21	21	21	21
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113	174	174	174	174	174	174
132	Citrix Software Lincases	303.30	80	60.00	28.00	05-2025	62	1	1	1	1	1	1
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495	262	262	262	262	262	262
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510	305	305	305	305	305	305
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287	9	9	9	9	9	9
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897	2,653	2,653	2,653	2,653	2,653	2,653
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556	17	17	17	17	17	17
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524	47	47	47	47	47	47
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653	112	112	112	112	112	112
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928	130	130	130	130	130	130
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723	22	22	22	22	22	22
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527	509	509	509	509	509	509
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662	69	69	69	69	69	69
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245	8	8	8	8	8	8
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143	357	357	357	357	357	357
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104	121	121	121	121	121	121
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921	194	194	194	194	194	194
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460	15	15	15	15	15	15
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166	38	38	38	38	38	38
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793	26	26	26	26	26	26
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853	1,598	1,598	1,598	1,598	1,598	1,598
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382	111	111	111	111	111	111

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	29	29	29	29	29	29
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	166	166	166	166	166	166
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	13	13	13	13	13	13
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	720	720	720	720	720	720
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	1,704	1,704	1,704	1,704	1,704
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	98	98	98	98	98
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	557	557	557	557	557
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	14	14	14	14	14
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	60	60	60	60	60
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	447	447	447	447
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	8	8	8	8
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	54	54	54	54
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	49	49	49	49
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	263	263	263
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	70	70	70
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	286	286	286
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	20	20	20
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	51	51	51
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	20	20	20
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	37	37	37
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	11	11	11
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	5	5
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	37	37
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	19	19
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	22	22
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	17	17
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	10	10
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	1,756	1,756
181	TCS-IR-Secretariate	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	32	32
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	55	55
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	4	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	219
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	6
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	341
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	812
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	204
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	18
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	13
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	433	590	641	639	582	
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	122
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	257	258	257	258	257	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,435	6,435	6,435	6,435	6,443	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	10	9	10	9	10	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	504	672	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97



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Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
<u>No.</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
<u>Description</u>	(1)	(2)	(3)	12/31/2022	(4)	(5)	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,957	5,958	5,950	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,536	2,600	2,673	2,746	2,805
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	433	521	695	1,309	1,836
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025						2,209
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	305	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	3,043	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	405	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	90	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	7	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	60	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	442	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	0	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	167	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	38	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	4	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	12	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	0	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	9	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	346	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	137	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	93	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	1,289	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	544	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	697	798	699	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	103	127	158	183	202
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	824	889	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	2,868	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	13,547	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	124	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	174	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1,081	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	1	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	281	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	690	696	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	609	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	37	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	73	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	0	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	161	175	190	195	202
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	70	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	90	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	85	85	85	85	85
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	5	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	500	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	3,643	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	190	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	1,898	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	61	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	708	710	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	130	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	2,213	2,215	2,215	2,217	2,218

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	97	94	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	1,035	1,075	1,099	1,115	1,122	1,130
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	52	54	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	553	557	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	0	0	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	432	443	436	430	439	445
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	15	15	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	20	20	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	6	6	5	6	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	142	142	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	922	929	945	942	942	946
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	319	363	413	464	536	618
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	611	608	612	613	613	613
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	345	344	344	344	344	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	1,379	552	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	39	26	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	-	312	125	125	125	125
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	-	37	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	-	5,012	2,014	2,024	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	-	455	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	-	17	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	-	41	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	-	204	128	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	-	14,726	9,817	9,933	10,050	10,086
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	-	732	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	-	18	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	-	225	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	-	19	38	42	46	51
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	-	900	1,712	1,622	1,622	1,622
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	-	84	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	-	37	78	82	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	-	-	288	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	-	-	-	13	8	8
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	-	-	-	4,100	2,735	2,735
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	-	-	-	10,131	2,898	2,898
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	-	-	-	181	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	-	-	-	3,371	995	995
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	-	-	-	275	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	-	-	-	2,341	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	-	-	-	4,005	1,144	1,144
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	-	-	-	-	125	125
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	-	-	-	-	-	-
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	-	-	-	-	-	-
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	-	-	-	-	-	-
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	-	-	-	-	-	-
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	-	-	-	-	-	-
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	-	-	-	-	-	-
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	-	-	-	-	-	-
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	-	-	-	-	-	-
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	-	-	-	-	-	-
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	-	-	-	-	-	-

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
357	TCPA - Telephone Compliance Protection Act	303.30	14,212	60.00	60.00	Post 2025							
358	TCPA - Telephone Compliance Protection Act	303.30	188	60.00	60.00	Post 2025							
359	Migration of NS2 to SAP Rise	303.30	45,727	60.00	60.00	Post 2025							
360	Software Renewals - Infrastructure	303.30	9,920	60.00	60.00	Post 2025							
361	Cyber Security Test Lab & Red Team Implementation	303.30	5,997	60.00	60.00	Post 2025							
362	IT Patching 15 Days (Endpoints)	303.30	54,428	60.00	60.00	Post 2025							
363	QR Card Contractor Page & Offline Capabilities	303.30	2,563	60.00	60.00	Post 2025							
364	IAM Enhancements	303.30	42,608	60.00	60.00	Post 2025							
365	IR - Cognos Upgrade	303.30	9	60.00	60.00	Post 2025							
366	SailPoint IIQ – Application Account Approvals - Source of Record Phase 2	303.30	16,488	60.00	60.00	Post 2025							
367	NICE - Playback Portal	303.30	5,465	60.00	60.00	Post 2025							
368	CyberArk Upgrade - Verison 12.6.3	303.30	11,768	60.00	60.00	Post 2025							
369	2023 CDR E-Channels Agile Product Team	303.30	73,463	60.00	60.00	Post 2025							
370	2023 SEW E-Channels Agile Product Team	303.30	14,507	60.00	60.00	Post 2025							
371	2023 DIS E-Channels Agile Product Team	303.30	7,658	60.00	60.00	Post 2025							
372	IR - Demand Curve	303.30	186	60.00	60.00	Post 2025							
373	Notification Letters (Automation): Advising of Pending SL Abandonment	303.30	1,888	60.00	60.00	Post 2025							
374	2023 ServiceNow Agile Product Team	303.30	30,045	60.00	60.00	Post 2025							
375	Facilities Service Now Module	303.30	8,724	60.00	60.00	Post 2025							
376	Expand Tax Array for all DIS states	303.30	69,221	60.00	60.00	Post 2025							
377	2023 Mulesoft Agile Product Team	303.30	53,184	60.00	60.00	Post 2025							
378	Software Renewals - Security	303.30	17,753	60.00	60.00	Post 2025							
379	Software Renewals - Applications	303.30	17,353	60.00	60.00	Post 2025							
380	Software Renewals - Infrastructure	303.30	69,023	60.00	60.00	Post 2025							
381	Software Renewals - Applications	303.30	6,651	60.00	60.00	Post 2025							
382	SailPoint Upgrade v8.3p1	303.30	28,848	60.00	-	Post 2025							
383	2023 Service Desk Migration, Transf	303.30	22,351	60.00	-	Post 2025							
384	NES 2 Kubernetes Migration to MKE	303.30	1,899	60.00	-	Post 2025							
385	IAM Enhancements - SailPoint 2023	303.30	16,304	60.00	-	Post 2025							
386	IAM Enhancements 2023 CyberArk	303.30	12,225	60.00	-	Post 2025							
387	Tableau Site Consolidate and automate	303.30	5,239	60.00	-	Post 2025							
388	Technology other than WAM program (Projected)	303.30	483,585	60.00		Post 2025							
389	Technology other than WAM program (Projected)	303.30	184,077	60.00		Post 2025							
390	Technology other than WAM program (Projected)	303.30	79,811	60.00		Post 2025							
391	Technology other than WAM program (Projected)	303.30	574,250	60.00		Post 2025							
392	Technology other than WAM program (Projected)	303.30	69,068	60.00		Post 2025							
393	Field Mobbility	303.30	1,020,000	60.00		Post 2025							
394	Technology other than WAM program (Projected)	303.30	138,184	60.00		Post 2025							
395	Technology other than WAM program (Projected)	303.30	12,791	60.00		Post 2025							
396	Technology other than WAM program (Projected)	303.30	197,898	60.00		Post 2025							
397	Technology other than WAM program (Projected)	303.30	730,728	60.00		Post 2025							
398	Technology other than WAM program (Projected)	303.30	721,090	60.00		Post 2025							
399	Technology other than WAM program (Projected)	303.30	202,087	60.00		Post 2025							
400	WAM program (Projected)	303.30	99,765	180.00		Post 2025							
401	Technology other than WAM program (Projected)	303.30	99,476	60.00		Post 2025							
402	Technology other than WAM program (Projected)	303.30	138,481	60.00		Post 2025							
403	Technology other than WAM program (Projected)	303.30	48,625	60.00		Post 2025							
404	WAM program (Projected)	303.30	2,227,920	180.00		Post 2025							
405	Technology other than WAM program (Projected)	303.30	62,024	60.00		Post 2025							
406	WAM program (Projected)	303.30	47,451	180.00		Post 2025							
407	Technology other than WAM program (Projected)	303.30	1,142,145	60.00		Post 2025							

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<u>Line</u> <u>No.</u>	<u>Description</u>	<u>Gas Plant</u> <u>Account</u>	<u>Plant</u> <u>Balance</u>	<u>Initial</u> <u>Life</u>	<u>Remaining</u> <u>Post Life as of</u> <u>12/31/2022</u>	<u>Retirement</u> <u>Month</u>	<u>Reserve</u> <u>Balance</u> <u>12/31/2022</u>	<u>1/31/2023</u> <u>Monthly</u> <u>Amortization</u>	<u>2/28/2023</u> <u>Monthly</u> <u>Amortization</u>	<u>3/31/2023</u> <u>Monthly</u> <u>Amortization</u>	<u>4/30/2023</u> <u>Monthly</u> <u>Amortization</u>	<u>5/31/2023</u> <u>Monthly</u> <u>Amortization</u>	<u>6/30/2023</u> <u>Monthly</u> <u>Amortization</u>
		(1)	(2)	(3)	(4)		(5)						
408	WAM program (Projected)	303.30	27,437	180.00		Post 2025							
409	Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025							
410	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
411	Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025							
412	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
413	Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025							
414	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
415	Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025							
416	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
417	Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025							
418	Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							
419	SubTotal 303.30						4,923,795.23	165,141.20	187,523.86	179,964.49	180,942.35	206,452.98	191,924.34

**Columbia Gas of Kentucky  
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Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
<u>No. Description</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
	(1)	(2)	(3)	(4)		(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
1												
2	303.30	10,042	60.00	-	01-2023	10,042						
3	303.30	8,957	60.00	-	01-2023	8,957						
4	303.30	5,895	60.00	-	01-2023	5,895						
5	303.30	11,640	60.00	-	01-2023	11,640						
6	303.30	33,725	60.00	-	01-2023	33,725						
7	303.30	7,037	60.00	-	01-2023	7,037						
8	303.30	22,916	60.00	-	01-2023	22,916						
9	303.30	12,116	60.00	-	01-2023	12,116						
10	303.30	28,830	60.00	-	01-2023	28,830						
11	303.30	23,325	60.00	1.00	02-2023	23,131						
12	303.30	6,699	60.00	1.00	02-2023	6,643	-	-				
13	303.30	14,183	60.00	1.00	02-2023	14,065						
14	303.30	23,228	60.00	2.00	03-2023	22,647						
15	303.30	7,697	60.00	3.00	04-2023	7,376						
16	303.30	3,926	60.00	3.00	04-2023	3,762						
17	303.30	1,764	60.00	8.00	09-2023	1,543.31	29.39	14.70				
18	303.30	9,899	60.00	8.00	09-2023	8,551	180	90				
19	303.30	12,680	60.00	8.00	09-2023	10,843	245	123				
20	303.30	3,049	60.00	9.00	10-2023	2,617	51	51	25			
21	303.30	51,161	60.00	9.00	10-2023	43,913	853	853	426			
22	303.30	10,370	60.00	10.00	11-2023	8,728	173	173	173	86		
23	303.30	22,525	60.00	10.00	11-2023	18,959	375	375	375	188		
24	303.30	17,071	60.00	10.00	11-2023	14,368	284	284	284	142		
25	303.30	17,189	60.00	10.00	11-2023	14,467	286	286	286	143		
26	303.30	6,457	60.00	11.00	12-2023	5,317	109	109	109	109	54	
27	303.30	73,846	60.00	11.00	12-2023	60,895	1,233	1,233	1,233	1,233	617	
28	303.30	426	60.00	11.00	12-2023	351	7	7	7	7	4	
29	303.30	24,973	60.00	11.00	12-2023	20,092	465	465	465	465	232	
30	303.30	22,640	60.00	12.00	01-2024	18,296	378	378	378	378	378	189
31	303.30	237,465	60.00	12.00	01-2024	190,882	4,051	4,051	4,051	4,051	4,051	2,025
32	303.30	31,275	60.00	12.00	01-2024	25,034	543	543	543	543	543	271
33	303.30	9,926	60.00	12.00	01-2024	8,024	165	165	165	165	165	83
34	303.30	11,815	60.00	12.00	01-2024	9,551	197	197	197	197	197	98
35	303.30	2,778	60.00	12.00	01-2024	2,246	46	46	46	46	46	23
36	303.30	49,503	60.00	12.00	01-2024	39,959	830	830	830	830	830	415
37	303.30	17,188	60.00	13.00	02-2024	13,612	286	286	286	286	286	286
38	303.30	243	60.00	13.00	02-2024	198	4	4	4	4	4	4
39	303.30	1,697	60.00	14.00	03-2024	1,296	30	30	30	30	30	30
40	303.30	791	60.00	14.00	03-2024	615	13	13	13	13	13	13
41	303.30	1,772	60.00	14.00	03-2024	1,378	29	29	29	29	29	29
42	303.30	2,092	60.00	15.00	04-2024	1,507	40	40	40	40	40	40
43	303.30	17,673	60.00	15.00	04-2024	13,402	295	295	295	295	295	295
44	303.30	21,008	60.00	15.00	04-2024	15,931	350	350	350	350	350	350
45	303.30	1,683,053	120.00	15.00	04-2024	1,479,729	14,022	14,022	14,022	14,022	14,022	14,022
46	303.30	20,727	60.00	15.00	04-2024	15,675	348	348	348	348	348	348
47	303.30	14,471	60.00	15.00	04-2024	10,961	242	242	242	242	242	242
48	303.30	1,536	60.00	16.00	05-2024	1,122	27	27	27	27	27	27
49	303.30	2,889	60.00	16.00	05-2024	2,103	51	51	51	51	51	51
50	303.30	1,590	60.00	16.00	05-2024	1,180	27	27	27	27	27	27

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105	272	272	272	272	272	272
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257	96	96	96	96	96	96
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898	20	20	20	20	20	20
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779	67	67	67	67	67	67
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719	3,304	3,304	3,304	3,304	3,304	3,304
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804	18	18	18	18	18	18
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148	26	26	26	26	26	26
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573	61	61	61	61	61	61
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026	28	28	28	28	28	28
60	CMDB	303.30	89	60.00	18.00	07-2024	91	(0)	(0)	(0)	(0)	(0)	(0)
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863	4,185	4,185	4,185	4,185	4,185	4,185
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081	237	237	237	237	237	237
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334	1,968	1,968	1,968	1,968	1,968	1,968
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092	28	27	28	27	28	27
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457	11	11	11	11	11	11
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094	27	27	27	27	27	27
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509	591	591	591	591	591	591
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325	56	56	56	56	56	56
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600	40	40	40	40	40	40
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360	58	58	58	58	58	58
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667	71	71	71	71	71	71
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763	21	21	21	21	21	21
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746	18	18	18	18	18	18
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893	478	478	478	478	478	478
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470	63	63	63	63	63	63
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528	115	115	115	115	115	115
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193	5	5	5	5	5	5
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566	14	14	14	14	14	14
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847	185	185	185	185	185	185
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625	198	198	198	198	198	198
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256	111	111	111	111	111	111
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189	545	545	545	545	545	545
83	Cust New Business-Line Ext Agreeem	303.30	7,734	60.00	22.00	11-2024	4,386	156	156	156	156	156	156
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303	34	34	34	34	34	34
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923	24	24	24	24	24	24
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000	208	208	208	208	208	208
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457	1,450	1,450	1,450	1,450	1,450	1,450
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834	2,828	2,828	2,828	2,828	2,828	2,828
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216	87	87	87	87	87	87
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658	18	18	18	18	18	18
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149	342	342	342	342	342	342
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132	84	84	84	84	84	84
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814	103	103	103	103	103	103
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406	11	11	11	11	11	11
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359	162	162	162	162	162	162
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156	4	4	4	4	4	4
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422	710	710	710	710	747	1,016
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433	38	38	38	38	38	38
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453	679	679	679	679	679	679
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341	438	438	438	438	438	438
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348	116	116	116	116	116	116

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561	156	156	156	156	156	156
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947	53	53	53	53	53	53
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610	971	971	971	971	971	971
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915	107	107	107	107	107	107
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413	94	94	94	94	94	94
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117	140	140	140	140	140	140
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926	4,744	4,744	4,744	4,744	4,744	4,809
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757	158	158	158	158	158	158
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223	34	34	34	34	34	34
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537	15	15	15	15	15	15
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703	74	74	74	74	74	74
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247	7	7	7	7	7	7
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882	391	391	391	391	391	391
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)	(17)	(17)	(17)	(17)	(17)	(17)
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305	9	9	9	9	9	9
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599	17	17	17	17	17	17
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687	188	188	188	188	188	188
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472	246	246	246	246	246	246
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113	149	149	149	149	149	149
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281	330	330	330	330	330	330
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)	(2)	(2)	(2)	(2)	(2)	(2)
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276	143	143	143	143	143	143
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216	7	7	7	7	7	7
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325	444	444	444	444	444	444
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316	72	72	72	72	72	72
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955	38	38	38	38	38	38
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11	0	0	0	0	0	0
129	Integ Cntr: Property Restore Invoice	303.30	4,378	60.00	27.00	04-2025	2,394	75	75	75	75	75	75
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688	21	21	21	21	21	21
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113	174	174	174	174	174	174
132	Citrix Software Linceses	303.30	80	60.00	28.00	05-2025	62	1	1	1	1	1	1
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495	262	262	262	262	262	262
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510	305	305	305	305	305	305
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287	9	9	9	9	9	9
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897	2,653	2,653	2,653	2,653	2,653	2,653
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556	17	17	17	17	17	17
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524	47	47	47	47	47	47
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653	112	112	112	112	112	112
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928	130	130	130	130	130	130
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723	22	22	22	22	22	22
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527	509	509	509	509	509	509
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662	69	69	69	69	69	69
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245	8	8	8	8	8	8
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143	357	357	357	357	357	357
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104	121	121	121	121	121	121
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921	194	194	194	194	194	194
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460	15	15	15	15	15	15
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166	38	38	38	38	38	38
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793	26	26	26	26	26	26
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853	1,598	1,598	1,695	1,806	1,814	1,814
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382	111	111	111	111	111	111

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Misc Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	29	29	29	29	29	29
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	166	166	166	166	166	166
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	13	13	13	13	13	13
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	720	720	720	720	720	720
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	1,704	1,704	1,704	1,704	1,704
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	98	98	98	98	98
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	557	557	557	557	557
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	14	14	14	14	14
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	60	60	60	60	60
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	447	447	447	447
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	8	8	8	8
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	54	54	54	54
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	49	49	49	49
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	263	263	263
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	70	70	70
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	286	286	286
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	20	20	20
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	51	51	51
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	20	20	20
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	37	37	37
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	11	11	11
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	5	5
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	37	37
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	19	19
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	22	22
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	17	17
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	10	10
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	1,756	1,756
181	TCS-IR-Secretariate	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	32	32
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	55	55
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	8	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	219
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	6
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	341
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	812
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	204
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	18
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	13
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	582	582	582	582	582	582
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	122
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	257	258	257	258	257	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26



**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,450	6,450	6,450	6,450	6,450	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	10	9	10	9	10	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	760	760	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,936	5,936	5,936	5,936	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,808	2,808	2,808	2,808	2,808	2,808
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	2,853	4,101	5,172	5,485	5,827	7,424
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025							
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	298	298	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	3,043	3,043	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	405	405	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	90	90	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	7	7	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	60	60	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	442	442	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	0	0	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	163	163	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	38	38	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	4	4	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	12	12	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	0	0	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	9	9	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	346	346	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	137	137	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	93	93	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	1,289	1,289	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	544	544	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	597	597	597	597	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	210	217	223	232	235	234
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	955	955	955	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	2,868	2,868	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	13,606	13,606	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	124	124	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	174	174	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1,081	1,081	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	1	1	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	281	281	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	693	693	693	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	609	609	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	37	37	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	73	73	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	0	0	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	213	217	217	217	217	217
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	70	70	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	90	90	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	85	90	101	110	115	114
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	5	5	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	500	500	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	3,643	3,643	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	190	190	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	1,907	1,907	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	61	61	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	711	711	711	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	130	130	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	2,218	2,218	2,218	2,218	2,218	2,218

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	94	94	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	1,130	1,125	1,125	1,125	1,125	1,125
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	49	49	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	557	557	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	0	0	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	435	423	423	423	423	423
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	15	15	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	20	20	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	5	5	5	5	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	142	142	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	955	955	950	950	950	950
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	676	729	756	801	821	794
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	618	623	623	623	623	623
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	345	345	345	345	345	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	552	552	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	26	26	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	133	141	141	141	141	141
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	15	15	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	2,025	2,025	2,025	2,025	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	182	182	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	7	7	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	27	27	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	120	120	120	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	10,122	10,122	10,122	10,122	10,122	10,122
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	488	488	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	36	36	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	451	451	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	61	78	94	101	105	105
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	1,622	1,622	1,622	1,622	1,622	1,622
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	19	19	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	83	83	83	83	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	575	575	575	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	9	9	9	9	9	9
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	2,736	2,736	2,736	2,736	2,736	2,736
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	2,902	2,902	2,902	2,902	2,902	2,902
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	363	363	363	363	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	1,059	1,092	1,094	1,094	1,094	1,132
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	183	183	183	183	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	936	936	936	936	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	1,144	1,144	1,144	1,150	1,848	2,683
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	81	78	78	78	78	78
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	572	381	382	382	382	382
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	0	0	0	0	0	0
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	0	830	342	371	397	410
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	0	49	20	20	20	20
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	0	29	12	12	12	12
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	0	1,770	708	708	708	708
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	0	2,267	1,531	1,577	1,644	1,686
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	0	72	16	16	16	16
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	0	60	40	40	40	40
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	0	11,611	1,580	1,622	1,643	1,653

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
357	TCPA - Telephone Compliance Protection Act	303.30	14,212	60.00	60.00	Post 2025			351	235	236	237	237
358	TCPA - Telephone Compliance Protection Act	303.30	188	60.00	60.00	Post 2025		4	3	3	3	3	3
359	Migration of NS2 to SAP Rise	303.30	45,727	60.00	60.00	Post 2025		2,542	756	775	764	765	765
360	Software Renewals - Infrastructure	303.30	9,920	60.00	60.00	Post 2025		413	165	165	165	165	165
361	Cyber Security Test Lab & Red Team Implementation	303.30	5,997	60.00	60.00	Post 2025			50	100	100	100	100
362	IT Patching 15 Days (Endpoints)	303.30	54,428	60.00	60.00	Post 2025			436	896	914	907	907
363	QR Card Contractor Page & Offline Capabilities	303.30	2,563	60.00	60.00	Post 2025				64	43	43	43
364	IAM Enhancements	303.30	42,608	60.00	60.00	Post 2025						1,775	710
365	IR - Cognos Upgrade	303.30	9	60.00	60.00	Post 2025						0	0
366	SailPoint IIQ – Application Account Approvals - Source of Record Phase 2	303.30	16,488	60.00	60.00	Post 2025						687	275
367	NICE - Playback Portal	303.30	5,465	60.00	60.00	Post 2025						45	90
368	CyberArk Upgrade - Verison 12.6.3	303.30	11,768	60.00	60.00	Post 2025						490	196
369	2023 CDR E-Channels Agile Product Team	303.30	73,463	60.00	60.00	Post 2025							608
370	2023 SEW E-Channels Agile Product Team	303.30	14,507	60.00	60.00	Post 2025							121
371	2023 DIS E-Channels Agile Product Team	303.30	7,658	60.00	60.00	Post 2025							64
372	IR - Demand Curve	303.30	186	60.00	60.00	Post 2025							3
373	Notification Letters (Automation): Advising of Pending SL Abandonment	303.30	1,888	60.00	60.00	Post 2025							55
374	2023 ServiceNow Agile Product Team	303.30	30,045	60.00	60.00	Post 2025							250
375	Facilities Service Now Module	303.30	8,724	60.00	60.00	Post 2025							69
376	Expand Tax Array for all DIS states	303.30	69,221	60.00	60.00	Post 2025							576
377	2023 Mulesoft Agile Product Team	303.30	53,184	60.00	60.00	Post 2025							445
378	Software Renewals - Security	303.30	17,753	60.00	60.00	Post 2025							148
379	Software Renewals - Applications	303.30	17,353	60.00	60.00	Post 2025							145
380	Software Renewals - Infrastructure	303.30	69,023	60.00	60.00	Post 2025							575
381	Software Renewals - Applications	303.30	6,651	60.00	60.00	Post 2025							55
382	SailPoint Upgrade v8.3p1	303.30	28,848	60.00	-	Post 2025							
383	2023 Service Desk Migration, Transf	303.30	22,351	60.00	-	Post 2025							
384	NES 2 Kubernetes Migration to MKE	303.30	1,899	60.00	-	Post 2025							
385	IAM Enhancements - SailPoint 2023	303.30	16,304	60.00	-	Post 2025							
386	IAM Enhancements 2023 CyberArk	303.30	12,225	60.00	-	Post 2025							
387	Tableau Site Consolidate and automate	303.30	5,239	60.00	-	Post 2025							
388	Technology other than WAM program (Projected)	303.30	483,585	60.00		Post 2025							
389	Technology other than WAM program (Projected)	303.30	184,077	60.00		Post 2025							
390	Technology other than WAM program (Projected)	303.30	79,811	60.00		Post 2025							
391	Technology other than WAM program (Projected)	303.30	574,250	60.00		Post 2025							
392	Technology other than WAM program (Projected)	303.30	69,068	60.00		Post 2025							
393	Field Mobbility	303.30	1,020,000	60.00		Post 2025							
394	Technology other than WAM program (Projected)	303.30	138,184	60.00		Post 2025							
395	Technology other than WAM program (Projected)	303.30	12,791	60.00		Post 2025							
396	Technology other than WAM program (Projected)	303.30	197,898	60.00		Post 2025							
397	Technology other than WAM program (Projected)	303.30	730,728	60.00		Post 2025							
398	Technology other than WAM program (Projected)	303.30	721,090	60.00		Post 2025							
399	Technology other than WAM program (Projected)	303.30	202,087	60.00		Post 2025							
400	WAM program (Projected)	303.30	99,765	180.00		Post 2025							
401	Technology other than WAM program (Projected)	303.30	99,476	60.00		Post 2025							
402	Technology other than WAM program (Projected)	303.30	138,481	60.00		Post 2025							
403	Technology other than WAM program (Projected)	303.30	48,625	60.00		Post 2025							
404	WAM program (Projected)	303.30	2,227,920	180.00		Post 2025							
405	Technology other than WAM program (Projected)	303.30	62,024	60.00		Post 2025							
406	WAM program (Projected)	303.30	47,451	180.00		Post 2025							
407	Technology other than WAM program (Projected)	303.30	1,142,145	60.00		Post 2025							

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Line No. Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
				Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	12/31/2022	(4)	(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
408 WAM program (Projected)	303.30	27,437	180.00		Post 2025							
409 Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025							
410 WAM program (Projected)	303.30	23,263	180.00		Post 2025							
411 Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025							
412 WAM program (Projected)	303.30	23,263	180.00		Post 2025							
413 Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025							
414 WAM program (Projected)	303.30	23,263	180.00		Post 2025							
415 Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025							
416 WAM program (Projected)	303.30	23,263	180.00		Post 2025							
417 Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025							
418 Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							
419 SubTotal 303.30						4,923,795.23	193,296.36	214,238.91	200,681.25	200,881.55	203,627.92	203,838.65

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Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
<u>No. Description</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
				(4)		(5)						
1												
2	Electronic File Transfer Upgrade	303.30	10,042	60.00	-	01-2023	10,042					
3	FDM Upgrade	303.30	8,957	60.00	-	01-2023	8,957					
4	IIB 10- Capital	303.30	5,895	60.00	-	01-2023	5,895					
5	Info Mgmt-Open Text Upgrade-Captial	303.30	11,640	60.00	-	01-2023	11,640					
6	MASTER TAP BUNDLE CAP	303.30	33,725	60.00	-	01-2023	33,725					
7	Microsoft License True Up	303.30	7,037	60.00	-	01-2023	7,037					
8	NiFast Update AOC Info Bundle	303.30	22,916	60.00	-	01-2023	22,916					
9	Interactive Voice Reading System	303.30	12,116	60.00	-	01-2023	12,116					
10	SCCC Pega Lic Impl Cap	303.30	28,830	60.00	-	01-2023	28,830					
11	Energy & Utilities Data Model- Capi	303.30	23,325	60.00	1.00	02-2023	23,131					
12	Printing Equip - Kern ADF Software	303.30	6,699	60.00	1.00	02-2023	6,643					
13	Printing Equip - Canon Prisma & BCC	303.30	14,183	60.00	1.00	02-2023	14,065					
14	MTC CCC Exception Processing	303.30	23,228	60.00	2.00	03-2023	22,647					
15	Consolidation-Citrix XenDesktop-Cap	303.30	7,697	60.00	3.00	04-2023	7,376					
16	Gas Source Cap Bundle	303.30	3,926	60.00	3.00	04-2023	3,762					
17	BMC 2018 Capital	303.30	1,764	60.00	8.00	09-2023	1,543.31					
18	Storage Refresh 2018	303.30	9,899	60.00	8.00	09-2023	8,551					
19	ZMU New Functionality	303.30	12,680	60.00	8.00	09-2023	10,843					
20	2018 Web Enhancement Bundle	303.30	3,049	60.00	9.00	10-2023	2,617					
21	Information Management SOA	303.30	51,161	60.00	9.00	10-2023	43,913					
22	COCH New features PH2 Cap	303.30	10,370	60.00	10.00	11-2023	8,728					
23	Customer Insights AS-1(CX)	303.30	22,525	60.00	10.00	11-2023	18,959					
24	Security Identity Manager 2.0 C	303.30	17,071	60.00	10.00	11-2023	14,368					
25	Truesight Capacity Optimization	303.30	17,189	60.00	10.00	11-2023	14,467					
26	P2P Pcard Platform	303.30	6,457	60.00	11.00	12-2023	5,317					
27	2018 PowerPlant Upgrade	303.30	73,846	60.00	11.00	12-2023	60,895					
28	Treasury Project	303.30	426	60.00	11.00	12-2023	351					
29	Upgrade Data Center Software	303.30	24,973	60.00	11.00	12-2023	20,092					
30	Call Center Awareness DIS	303.30	22,640	60.00	12.00	01-2024	18,296					
31	Customer Digital Roadmap LDC	303.30	237,465	60.00	12.00	01-2024	190,882					
32	FiServ Next Implementation Project	303.30	31,275	60.00	12.00	01-2024	25,034					
33	IT Infrastruc Enhanc/Stability Proj	303.30	9,926	60.00	12.00	01-2024	8,024					
34	NiSource API Capital	303.30	11,815	60.00	12.00	01-2024	9,551					
35	Secure Banking CAP 2017-2018 - DIS	303.30	2,778	60.00	12.00	01-2024	2,246					
36	Windows 10 Upgrade- Capital	303.30	49,503	60.00	12.00	01-2024	39,959					
37	WMS Enhancement	303.30	17,188	60.00	13.00	02-2024	13,612	143				
38	PPM Project Capital ServiceNow Enha	303.30	243	60.00	13.00	02-2024	198	2				
39	AP and WMS Auto Accruals in PS-RPA	303.30	1,697	60.00	14.00	03-2024	1,296	30	15			
40	SMS Application Projects Capital	303.30	791	60.00	14.00	03-2024	615	13	7			
41	AP and WMS Accruals in PS - RPA	303.30	1,772	60.00	14.00	03-2024	1,378	29	15			
42	Automate MFE & TFE using RPA	303.30	2,092	60.00	15.00	04-2024	1,507	40	40	20		
43	Customer Experience - Enhancements to Ventyx	303.30	17,673	60.00	15.00	04-2024	13,402	295	295	147		
44	NAC 2017 - Capital	303.30	21,008	60.00	15.00	04-2024	15,931	350	350	175		
45	NiFit Transformation	303.30	1,683,053	120.00	15.00	04-2024	1,479,729	14,022	14,022	7,011		
46	Palo Alto Firewall	303.30	20,727	60.00	15.00	04-2024	15,675	348	348	174		
47	VDI 2018 Capital	303.30	14,471	60.00	15.00	04-2024	10,961	242	242	121		
48	Automate Green Roads using RPA	303.30	1,536	60.00	16.00	05-2024	1,122	27	27	27	13	
49	Automate SLR Update using RPA	303.30	2,889	60.00	16.00	05-2024	2,103	51	51	51	25	
50	Automation of Manual Entries in DIS	303.30	1,590	60.00	16.00	05-2024	1,180	27	27	27	13	

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105	272	272	272	136		
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257	96	96	96	48		
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898	20	20	20	10		
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779	67	67	67	67	33	
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719	3,304	3,304	3,304	3,304	1,652	
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804	18	18	18	18	9	
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148	26	26	26	26	13	
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573	61	61	61	61	31	
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026	28	28	28	28	28	14
60	CMDB	303.30	89	60.00	18.00	07-2024	91	(0.07)	(0.08)	(0.08)	(0.04)	(0.04)	(0)
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863	4,185	4,185	4,185	4,185	4,185	2,092
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081	237	237	237	237	237	119
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334	1,968	1,968	1,968	1,968	1,968	984
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092	28	27	27	27	27	27
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457	11	11	11	11	11	11
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094	27	27	27	27	27	27
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509	591	591	591	591	591	591
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325	56	56	56	56	56	56
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600	40	40	40	40	40	40
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360	58	58	58	58	58	58
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667	71	71	71	71	71	71
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763	21	21	21	21	21	21
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746	18	18	18	18	18	18
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893	478	478	478	478	478	478
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470	63	63	63	63	63	63
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528	115	115	115	115	115	115
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193	5	5	5	5	5	5
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566	14	14	14	14	14	14
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847	185	185	185	185	185	185
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625	198	198	198	198	198	198
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256	111	111	111	111	111	111
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189	545	545	545	545	545	545
83	Cust New Business-Line Ext Agreemen	303.30	7,734	60.00	22.00	11-2024	4,386	156	156	156	156	156	156
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303	34	34	34	34	34	34
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923	24	24	24	24	24	24
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000	208	208	208	208	208	208
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457	1,450	1,450	1,450	1,450	1,450	1,450
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834	2,828	2,828	2,828	2,828	2,828	2,828
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216	87	87	87	87	87	87
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658	18	18	18	18	18	18
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149	342	342	342	342	342	342
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132	84	84	84	84	84	84
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814	103	103	103	103	103	103
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406	11	11	11	11	11	11
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359	162	162	162	162	162	162
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156	4	4	4	4	4	4
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422	1,266	1,266	1,202	1,202	1,202	1,202
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433	38	38	38	38	38	38
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453	679	679	679	679	679	679
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341	438	438	438	438	438	438
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348	116	116	116	116	116	116

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
		Account	Balance	Life	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
		(1)	(2)	(3)	(4)		(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561	156	156	156	156	156	156
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947	53	53	53	53	53	53
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610	971	971	971	971	971	971
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915	107	107	107	107	107	107
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413	94	94	94	94	94	94
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117	140	140	140	140	140	140
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926	4,881	4,881	4,659	4,659	4,659	4,659
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757	158	158	158	158	158	158
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223	34	34	34	34	34	34
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537	15	15	15	15	15	15
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703	74	74	74	74	74	74
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247	7	7	7	7	7	7
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882	391	391	391	391	391	391
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)	(17)	(17)	(17)	(17)	(17)	(17)
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305	9	9	9	9	9	9
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599	17	17	17	17	17	17
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687	188	188	188	188	188	188
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472	246	246	246	246	246	246
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113	149	149	149	149	149	149
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281	330	330	330	330	330	330
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)	(2)	(2)	(2)	(2)	(2)	(2)
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276	143	143	143	143	143	143
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216	7	7	7	7	7	7
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325	444	444	444	444	444	444
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316	72	72	72	72	72	72
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955	38	38	38	38	38	38
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11	0	0	0	0	0	0
129	Integ Cntr: Property Restore Invoice	303.30	4,378	60.00	27.00	04-2025	2,394	75	75	75	75	75	75
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688	21	21	21	21	21	21
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113	174	174	174	174	174	174
132	Citrix Software Linceses	303.30	80	60.00	28.00	05-2025	62	1	1	1	1	1	1
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495	262	262	262	262	262	262
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510	305	305	305	305	305	305
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287	9	9	9	9	9	9
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897	2,653	2,653	2,653	2,653	2,653	2,653
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556	17	17	17	17	17	17
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524	47	47	47	47	47	47
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653	112	112	112	112	112	112
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928	130	130	130	130	130	130
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723	22	22	22	22	22	22
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527	509	509	509	509	509	509
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662	69	69	69	69	69	69
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245	8	8	8	8	8	8
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143	357	357	357	357	357	357
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104	121	121	121	121	121	121
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921	194	194	194	194	194	194
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460	15	15	15	15	15	15
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166	38	38	38	38	38	38
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793	26	26	26	26	26	26
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853	1,814	1,814	1,814	1,814	1,814	1,814
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382	111	111	111	111	111	111



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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	29	29	29	29	29	29
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	166	166	166	166	166	166
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	13	13	13	13	13	13
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	720	720	720	720	720	720
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	1,704	1,704	1,704	1,704	1,704
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	98	98	98	98	98
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	557	557	557	557	557
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	14	14	14	14	14
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	60	60	60	60	60
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	447	447	447	447
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	8	8	8	8
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	54	54	54	54
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	49	49	49	49
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	263	263	263
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	70	70	70
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	286	286	286
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	20	20	20
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	51	51	51
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	20	20	20
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	37	37	37
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	11	11	11
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	5	5
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	37	37
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	19	19
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	22	22
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	17	17
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	10	10
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	1,756	1,756
181	TCS-IR-Secretariate	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	32	32
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	55	55
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	8	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	219
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	6
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	341
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	812
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	204
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	18
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	13
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	582	582	582	582	582	582
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	122
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	257	258	258	258	258	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
					Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,450	6,450	6,450	6,450	6,450	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	10	9	9	9	9	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	760	760	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,936	5,936	5,936	5,936	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,808	2,808	2,808	2,808	2,808	2,808
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	8,926	8,919	0	0	0	0
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025		298		(58,910)			
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	3,043	3,043	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	405	405	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	90	90	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	7	7	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	60	60	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	442	442	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	0	0	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	163	163	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	38	38	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	4	4	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	12	12	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	0	0	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	9	9	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	346	346	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	137	137	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	93	93	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	1,289	1,289	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	544	544	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	597	597	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	236	236	597	597	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	955	955	236	236	236	236
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	2,868	2,868	955	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	13,606	13,606	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	124	124	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	174	174	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	1,081	1,081	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1	1	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	281	281	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	693	693	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	609	609	693	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	37	37	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	73	73	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	0	0	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	217	217	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	70	70	217	217	217	217
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	90	90	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	114	114	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	5	5	114	114	114	114
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	500	500	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	3,643	3,643	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	190	190	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	1,907	1,907	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	61	61	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	711	711	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	130	130	711	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	2,218	2,218	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	94	94	2,218	2,218	2,218	2,218

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	1,125	1,125	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	49	49	1,125	1,125	1,125	1,125
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	557	557	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	0	0	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	423	423	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	15	15	423	423	423	423
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	20	20	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	5	5	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	142	142	5	5	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	950	950	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	789	789	950	950	950	950
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	623	623	789	789	789	789
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	345	345	623	623	623	623
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	552	552	345	345	345	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	26	26	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	141	141	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	15	15	141	141	141	141
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	2,025	2,025	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	182	182	2,025	2,025	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	7	7	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	27	27	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	120	120	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	10,122	10,122	120	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	488	488	10,122	10,122	10,122	10,122
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	36	36	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	451	451	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	105	105	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	2,073	2,072	105	105	105	105
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	19	19	2,072	2,072	2,072	2,072
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	83	83	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	575	575	83	83	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	9	9	575	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	2,736	2,736	9	9	9	9
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	2,902	2,902	2,736	2,736	2,736	2,736
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	363	363	2,902	2,902	2,902	2,902
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	1,132	1,093	363	363	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	183	183	1,093	1,093	1,093	1,093
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	936	936	183	183	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	2,815	2,815	936	936	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	78	78	2,815	2,815	2,815	2,815
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	382	382	78	78	78	78
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	0	0	382	382	382	382
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	411	409	0	0	0	0
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	20	20	409	409	409	409
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	12	12	20	20	20	20
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	708	708	12	12	12	12
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	1,687	1,687	708	708	708	708
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	16	16	1,687	1,687	1,687	1,687
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	40	40	16	16	16	16
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	1,654	1,654	40	40	40	40
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	237	237	1,654	1,654	1,654	1,654

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
357	TCPA - Telephone Compliance Protection Act	303.30	14,212	60.00	60.00	Post 2025		3	3	237	237	237	237
358	TCPA - Telephone Compliance Protection Act	303.30	188	60.00	60.00	Post 2025		764	764	3	3	3	3
359	Migration of NS2 to SAP Rise	303.30	45,727	60.00	60.00	Post 2025		165	165	764	764	764	764
360	Software Renewals - Infrastructure	303.30	9,920	60.00	60.00	Post 2025		100	100	165	165	165	165
361	Cyber Security Test Lab & Red Team Implementation	303.30	5,997	60.00	60.00	Post 2025		908	908	100	100	100	100
362	IT Patching 15 Days (Endpoints)	303.30	54,428	60.00	60.00	Post 2025		43	43	908	908	908	908
363	QR Card Contractor Page & Offline Capabilities	303.30	2,563	60.00	60.00	Post 2025		710	710	43	43	43	43
364	IAM Enhancements	303.30	42,608	60.00	60.00	Post 2025		0	0	710	710	710	710
365	IR - Cognos Upgrade	303.30	9	60.00	60.00	Post 2025		275	275	0	0	0	0
366	SailPoint IIQ – Application Account Approvals - Source of Record Phase 2	303.30	16,488	60.00	60.00	Post 2025		91	91	275	275	275	275
367	NICE - Playback Portal	303.30	5,465	60.00	60.00	Post 2025		196	196	91	91	91	91
368	CyberArk Upgrade - Verison 12.6.3	303.30	11,768	60.00	60.00	Post 2025		1,220	1,224	196	196	196	196
369	2023 CDR E-Channels Agile Product Team	303.30	73,463	60.00	60.00	Post 2025		242	242	1,224	1,224	1,224	1,224
370	2023 SEW E-Channels Agile Product Team	303.30	14,507	60.00	60.00	Post 2025		127	128	242	242	242	242
371	2023 DIS E-Channels Agile Product Team	303.30	7,658	60.00	60.00	Post 2025		4	3	128	128	128	128
372	IR - Demand Curve	303.30	186	60.00	60.00	Post 2025		34	31	3	3	3	3
373	Notification Letters (Automation): Advising of Pending SL Abandonment	303.30	1,888	60.00	60.00	Post 2025		501	501	31	31	31	31
374	2023 ServiceNow Agile Product Team	303.30	30,045	60.00	60.00	Post 2025		138	142	501	501	501	501
375	Facilities Service Now Module	303.30	8,724	60.00	60.00	Post 2025		1,153	1,154	142	142	142	142
376	Expand Tax Array for all DIS states	303.30	69,221	60.00	60.00	Post 2025		883	881	1,154	1,154	1,154	1,154
377	2023 Mulesoft Agile Product Team	303.30	53,184	60.00	60.00	Post 2025		296	296	881	881	881	881
378	Software Renewals - Security	303.30	17,753	60.00	60.00	Post 2025		289	289	296	296	296	296
379	Software Renewals - Applications	303.30	17,353	60.00	60.00	Post 2025		1,150	1,150	289	289	289	289
380	Software Renewals - Infrastructure	303.30	69,023	60.00	60.00	Post 2025		111	111	1,150	1,150	1,150	1,150
381	Software Renewals - Applications	303.30	6,651	60.00	60.00	Post 2025			240	111	111	111	111
382	SailPoint Upgrade v8.3p1	303.30	28,848	60.00	-	Post 2025			186	481	481	481	481
383	2023 Service Desk Migration, Transf	303.30	22,351	60.00	-	Post 2025			79	373	373	373	373
384	NES 2 Kubernetes Migration to MKE	303.30	1,899	60.00	-	Post 2025			679	158	158	158	158
385	IAM Enhancements - SailPoint 2023	303.30	16,304	60.00	-	Post 2025			509	1,359	1,359	1,359	1,359
386	IAM Enhancements 2023 CyberArk	303.30	12,225	60.00	-	Post 2025			218	1,019	1,019	1,019	1,019
387	Tableau Site Consolidate and automate	303.30	5,239	60.00	-	Post 2025				437	437	437	437
388	Technology other than WAM program (Projected)	303.30	483,585	60.00		Post 2025				4,030	8,060	8,060	8,060
389	Technology other than WAM program (Projected)	303.30	184,077	60.00		Post 2025					1,534	3,068	3,068
390	Technology other than WAM program (Projected)	303.30	79,811	60.00		Post 2025						665	1,330
391	Technology other than WAM program (Projected)	303.30	574,250	60.00		Post 2025							4,785
392	Technology other than WAM program (Projected)	303.30	69,068	60.00		Post 2025							
393	Field Mobbility	303.30	1,020,000	60.00		Post 2025							
394	Technology other than WAM program (Projected)	303.30	138,184	60.00		Post 2025							
395	Technology other than WAM program (Projected)	303.30	12,791	60.00		Post 2025							
396	Technology other than WAM program (Projected)	303.30	197,898	60.00		Post 2025							
397	Technology other than WAM program (Projected)	303.30	730,728	60.00		Post 2025							
398	Technology other than WAM program (Projected)	303.30	721,090	60.00		Post 2025							
399	Technology other than WAM program (Projected)	303.30	202,087	60.00		Post 2025							
400	WAM program (Projected)	303.30	99,765	180.00		Post 2025							
401	Technology other than WAM program (Projected)	303.30	99,476	60.00		Post 2025							
402	Technology other than WAM program (Projected)	303.30	138,481	60.00		Post 2025							
403	Technology other than WAM program (Projected)	303.30	48,625	60.00		Post 2025							
404	WAM program (Projected)	303.30	2,227,920	180.00		Post 2025							
405	Technology other than WAM program (Projected)	303.30	62,024	60.00		Post 2025							
406	WAM program (Projected)	303.30	47,451	180.00		Post 2025							
407	Technology other than WAM program (Projected)	303.30	1,142,145	60.00		Post 2025							

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<u>Line</u> <u>No.</u>	<u>Description</u>	<u>Gas Plant</u> <u>Account</u>	<u>Plant</u> <u>Balance</u>	<u>Initial</u> <u>Life</u>	<u>Remaining</u> <u>Post Life as of</u> <u>12/31/2022</u>	<u>Retirement</u> <u>Month</u>	<u>Reserve</u> <u>Balance</u> <u>12/31/2022</u>	<u>1/31/2024</u> <u>Monthly</u> <u>Amortization</u>	<u>2/29/2024</u> <u>Monthly</u> <u>Amortization</u>	<u>3/31/2024</u> <u>Monthly</u> <u>Amortization</u>	<u>4/30/2024</u> <u>Monthly</u> <u>Amortization</u>	<u>5/31/2024</u> <u>Monthly</u> <u>Amortization</u>	<u>6/30/2024</u> <u>Monthly</u> <u>Amortization</u>
		(1)	(2)	(3)	(4)		(5)						
408	WAM program (Projected)	303.30	27,437	180.00		Post 2025							
409	Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025							
410	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
411	Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025							
412	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
413	Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025							
414	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
415	Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025							
416	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
417	Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025							
418	Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							
419	SubTotal 303.30						4,923,795.23	206,031.19	207,717.51	137,859.57	194,438.81	194,653.59	195,156.60



**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105						
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257						
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898						
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779						
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719						
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804						
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148						
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573						
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026						
60	CMDB	303.30	89	60.00	18.00	07-2024	91						
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863						
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081						
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334						
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092	14					
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457	6					
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094	13					
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509	295					
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325	28					
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600	40	20				
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360	58	29				
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667	71	35				
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763	21	10				
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746	18	9				
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893	478	478	239			
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470	63	63	31			
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528	115	115	57			
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193	5	5	2			
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566	14	14	7			
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847	185	185	185	92		
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625	198	198	198	99		
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256	111	111	111	55		
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189	545	545	545	272		
83	Cust New Business-Line Ext Agreemen	303.30	7,734	60.00	22.00	11-2024	4,386	156	156	156	78		
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303	34	34	34	17		
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923	24	24	24	12		
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000	208	208	208	104		
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457	1,450	1,450	1,450	725		
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834	2,828	2,828	2,828	1,414		
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216	87	87	87	43		
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658	18	18	18	18	9	
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149	342	342	342	342	171	
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132	84	84	84	84	42	
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814	103	103	103	103	51	
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406	11	11	11	11	5	
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359	162	162	162	162	81	
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156	4	4	4	4	2	
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422	1,202	1,202	1,202	1,202	1,147	
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433	38	38	38	38	19	
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453	679	679	679	679	339	
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341	438	438	438	438	219	
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348	116	116	116	116	58	



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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561	156	156	156	156	156	78
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947	53	53	53	53	53	27
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610	971	971	971	971	971	486
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915	107	107	107	107	107	54
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413	94	94	94	94	94	47
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117	140	140	140	140	140	70
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926	4,659	4,659	4,659	4,659	4,659	4,438
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757	158	158	158	158	158	79
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223	34	34	34	34	34	17
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537	15	15	15	15	15	7
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703	74	74	74	74	74	37
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247	7	7	7	7	7	7
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882	391	391	391	391	391	391
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)	(17)	(17)	(17)	(17)	(17)	(17)
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305	9	9	9	9	9	9
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599	17	17	17	17	17	17
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687	188	188	188	188	188	188
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472	246	246	246	246	246	246
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113	149	149	149	149	149	149
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281	330	330	330	330	330	330
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)	(2)	(2)	(2)	(2)	(2)	(2)
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276	143	143	143	143	143	143
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216	7	7	7	7	7	7
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325	444	444	444	444	444	444
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316	72	72	72	72	72	72
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955	38	38	38	38	38	38
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11	0	0	0	0	0	0
129	Integ Cntr: Property Restore Invoice	303.30	4,378	60.00	27.00	04-2025	2,394	75	75	75	75	75	75
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688	21	21	21	21	21	21
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113	174	174	174	174	174	174
132	Citrix Software Linceses	303.30	80	60.00	28.00	05-2025	62	1	1	1	1	1	1
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495	262	262	262	262	262	262
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510	305	305	305	305	305	305
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287	9	9	9	9	9	9
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897	2,653	2,653	2,653	2,653	2,653	2,653
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556	17	17	17	17	17	17
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524	47	47	47	47	47	47
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653	112	112	112	112	112	112
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928	130	130	130	130	130	130
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723	22	22	22	22	22	22
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527	509	509	509	509	509	509
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662	69	69	69	69	69	69
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245	8	8	8	8	8	8
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143	357	357	357	357	357	357
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104	121	121	121	121	121	121
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921	194	194	194	194	194	194
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460	15	15	15	15	15	15
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166	38	38	38	38	38	38
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793	26	26	26	26	26	26
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853	1,814	1,814	1,814	1,814	1,814	1,814
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382	111	111	111	111	111	111

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	29	29	29	29	29	29
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	166	166	166	166	166	166
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	13	13	13	13	13	13
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	720	720	720	720	720	720
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	1,704	1,704	1,704	1,704	1,704
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	98	98	98	98	98
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	557	557	557	557	557
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	14	14	14	14	14
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	60	60	60	60	60
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	447	447	447	447
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	8	8	8	8
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	54	54	54	54
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	49	49	49	49
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	263	263	263
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	70	70	70
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	286	286	286
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	20	20	20
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	51	51	51
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	20	20	20
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	37	37	37
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	11	11	11
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	5	5
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	37	37
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	19	19
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	22	22
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	17	17
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	10	10
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	1,756	1,756
181	TCS-IR-Secretriarte	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	32	32
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	55	55
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	8	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	219
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	6
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	341
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	812
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	204
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	18
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	13
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	582	582	582	582	582	582
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	122
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	258	258	258	258	258	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,450	6,450	6,450	6,450	6,450	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	9	9	9	9	9	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	760	760	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,936	5,936	5,936	5,936	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,808	2,808	2,808	2,808	2,808	2,808
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	0	0	0	0	0	0
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025							
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	298	298	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	3,043	3,043	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	405	405	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	90	90	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	7	7	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	60	60	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	442	442	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	0	0	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	163	163	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	38	38	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	4	4	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	12	12	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	0	0	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	9	9	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	346	346	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	137	137	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	93	93	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	1,289	1,289	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	544	544	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	597	597	597	597	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	236	236	236	236	236	236
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	955	955	955	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	2,868	2,868	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	13,606	13,606	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	124	124	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	174	174	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1,081	1,081	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	1	1	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	281	281	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	693	693	693	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	609	609	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	37	37	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	73	73	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	0	0	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	217	217	217	217	217	217
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	70	70	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	90	90	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	114	114	114	114	114	114
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	5	5	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	500	500	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	3,643	3,643	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	190	190	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	1,907	1,907	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	61	61	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	711	711	711	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	130	130	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	2,218	2,218	2,218	2,218	2,218	2,218

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	94	94	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	1,125	1,125	1,125	1,125	1,125	1,125
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	49	49	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	557	557	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	0	0	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	423	423	423	423	423	423
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	15	15	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	20	20	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	5	5	5	5	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	142	142	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	950	950	950	950	950	950
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	789	789	789	789	789	789
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	623	623	623	623	623	623
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	345	345	345	345	345	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	552	552	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	26	26	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	141	141	141	141	141	141
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	15	15	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	2,025	2,025	2,025	2,025	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	182	182	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	7	7	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	27	27	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	120	120	120	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	10,122	10,122	10,122	10,122	10,122	10,122
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	488	488	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	36	36	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	451	451	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	105	105	105	105	105	105
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	2,072	2,072	2,072	2,072	2,072	2,072
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	19	19	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	83	83	83	83	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	575	575	575	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	9	9	9	9	9	9
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	2,736	2,736	2,736	2,736	2,736	2,736
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	2,902	2,902	2,902	2,902	2,902	2,902
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	363	363	363	363	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	1,093	1,093	1,093	1,093	1,093	1,093
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	183	183	183	183	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	936	936	936	936	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	2,815	2,815	2,815	2,815	2,815	2,815
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	78	78	78	78	78	78
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	382	382	382	382	382	382
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	0	0	0	0	0	0
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	409	409	409	409	409	409
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	20	20	20	20	20	20
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	12	12	12	12	12	12
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	708	708	708	708	708	708
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	1,687	1,687	1,687	1,687	1,687	1,687
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	16	16	16	16	16	16
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	40	40	40	40	40	40
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	1,654	1,654	1,654	1,654	1,654	1,654

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
357	TCPA - Telephone Compliance Protection Act	303.30	14,212	60.00	60.00	Post 2025		237	237	237	237	237	237
358	TCPA - Telephone Compliance Protection Act	303.30	188	60.00	60.00	Post 2025		3	3	3	3	3	3
359	Migration of NS2 to SAP Rise	303.30	45,727	60.00	60.00	Post 2025		764	764	764	764	764	764
360	Software Renewals - Infrastructure	303.30	9,920	60.00	60.00	Post 2025		165	165	165	165	165	165
361	Cyber Security Test Lab & Red Team Implementation	303.30	5,997	60.00	60.00	Post 2025		100	100	100	100	100	100
362	IT Patching 15 Days (Endpoints)	303.30	54,428	60.00	60.00	Post 2025		908	908	908	908	908	908
363	QR Card Contractor Page & Offline Capabilities	303.30	2,563	60.00	60.00	Post 2025		43	43	43	43	43	43
364	IAM Enhancements	303.30	42,608	60.00	60.00	Post 2025		710	710	710	710	710	710
365	IR - Cognos Upgrade	303.30	9	60.00	60.00	Post 2025		0	0	0	0	0	0
366	SailPoint IIQ – Application Account Approvals - Source of Record Phase 2	303.30	16,488	60.00	60.00	Post 2025		275	275	275	275	275	275
367	NICE - Playback Portal	303.30	5,465	60.00	60.00	Post 2025		91	91	91	91	91	91
368	CyberArk Upgrade - Verison 12.6.3	303.30	11,768	60.00	60.00	Post 2025		196	196	196	196	196	196
369	2023 CDR E-Channels Agile Product Team	303.30	73,463	60.00	60.00	Post 2025		1,224	1,224	1,224	1,224	1,224	1,224
370	2023 SEW E-Channels Agile Product Team	303.30	14,507	60.00	60.00	Post 2025		242	242	242	242	242	242
371	2023 DIS E-Channels Agile Product Team	303.30	7,658	60.00	60.00	Post 2025		128	128	128	128	128	128
372	IR - Demand Curve	303.30	186	60.00	60.00	Post 2025		3	3	3	3	3	3
373	Notification Letters (Automation): Advising of Pending SL Abandonment	303.30	1,888	60.00	60.00	Post 2025		31	31	31	31	31	31
374	2023 ServiceNow Agile Product Team	303.30	30,045	60.00	60.00	Post 2025		501	501	501	501	501	501
375	Facilities Service Now Module	303.30	8,724	60.00	60.00	Post 2025		142	142	142	142	142	142
376	Expand Tax Array for all DIS states	303.30	69,221	60.00	60.00	Post 2025		1,154	1,154	1,154	1,154	1,154	1,154
377	2023 Mulesoft Agile Product Team	303.30	53,184	60.00	60.00	Post 2025		881	881	881	881	881	881
378	Software Renewals - Security	303.30	17,753	60.00	60.00	Post 2025		296	296	296	296	296	296
379	Software Renewals - Applications	303.30	17,353	60.00	60.00	Post 2025		289	289	289	289	289	289
380	Software Renewals - Infrastructure	303.30	69,023	60.00	60.00	Post 2025		1,150	1,150	1,150	1,150	1,150	1,150
381	Software Renewals - Applications	303.30	6,651	60.00	60.00	Post 2025		111	111	111	111	111	111
382	SailPoint Upgrade v8.3p1	303.30	28,848	60.00	-	Post 2025		481	481	481	481	481	481
383	2023 Service Desk Migration, Transf	303.30	22,351	60.00	-	Post 2025		373	373	373	373	373	373
384	NES 2 Kubernetes Migration to MKE	303.30	1,899	60.00	-	Post 2025		158	158	158	158	158	158
385	IAM Enhancements - SailPoint 2023	303.30	16,304	60.00	-	Post 2025		1,359	1,359	1,359	1,359	1,359	1,359
386	IAM Enhancements 2023 CyberArk	303.30	12,225	60.00	-	Post 2025		1,019	1,019	1,019	1,019	1,019	1,019
387	Tableau Site Consolidate and automate	303.30	5,239	60.00	-	Post 2025		437	437	437	437	437	437
388	Technology other than WAM program (Projected)	303.30	483,585	60.00		Post 2025		8,060	8,060	8,060	8,060	8,060	8,060
389	Technology other than WAM program (Projected)	303.30	184,077	60.00		Post 2025		3,068	3,068	3,068	3,068	3,068	3,068
390	Technology other than WAM program (Projected)	303.30	79,811	60.00		Post 2025		1,330	1,330	1,330	1,330	1,330	1,330
391	Technology other than WAM program (Projected)	303.30	574,250	60.00		Post 2025		9,571	9,571	9,571	9,571	9,571	9,571
392	Technology other than WAM program (Projected)	303.30	69,068	60.00		Post 2025		576	1,151	1,151	1,151	1,151	1,151
393	Field Mobbility	303.30	1,020,000	60.00		Post 2025		8,500	17,000	17,000	17,000	17,000	17,000
394	Technology other than WAM program (Projected)	303.30	138,184	60.00		Post 2025			1,152	2,303	2,303	2,303	2,303
395	Technology other than WAM program (Projected)	303.30	12,791	60.00		Post 2025				107	213	213	213
396	Technology other than WAM program (Projected)	303.30	197,898	60.00		Post 2025					1,649	3,298	3,298
397	Technology other than WAM program (Projected)	303.30	730,728	60.00		Post 2025						6,089	12,179
398	Technology other than WAM program (Projected)	303.30	721,090	60.00		Post 2025							6,009
399	Technology other than WAM program (Projected)	303.30	202,087	60.00		Post 2025							
400	WAM program (Projected)	303.30	99,765	180.00		Post 2025							
401	Technology other than WAM program (Projected)	303.30	99,476	60.00		Post 2025							
402	Technology other than WAM program (Projected)	303.30	138,481	60.00		Post 2025							
403	Technology other than WAM program (Projected)	303.30	48,625	60.00		Post 2025							
404	WAM program (Projected)	303.30	2,227,920	180.00		Post 2025							
405	Technology other than WAM program (Projected)	303.30	62,024	60.00		Post 2025							
406	WAM program (Projected)	303.30	47,451	180.00		Post 2025							
407	Technology other than WAM program (Projected)	303.30	1,142,145	60.00		Post 2025							

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<u>Line No.</u>	<u>Description</u>	<u>Gas Plant Account</u>	<u>Plant Balance</u>	<u>Initial Life</u>	<u>Remaining Post Life as of 12/31/2022</u>	<u>Retirement Month</u>	<u>Reserve Balance 12/31/2022</u>	<u>7/31/2024 Monthly Amortization</u>	<u>8/31/2024 Monthly Amortization</u>	<u>9/30/2024 Monthly Amortization</u>	<u>10/31/2024 Monthly Amortization</u>	<u>11/30/2024 Monthly Amortization</u>	<u>12/31/2024 Monthly Amortization</u>
		(1)	(2)	(3)	(4)		(5)						
408	WAM program (Projected)	303.30	27,437	180.00		Post 2025							
409	Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025							
410	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
411	Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025							
412	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
413	Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025							
414	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
415	Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025							
416	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
417	Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025							
418	Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							
419	SubTotal 303.30						4,923,795.23	205,452.51	215,219.88	216,036.93	214,543.06	218,317.46	227,150.31

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Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
<u>No. Description</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
				(4)		(5)						
1												
2	303.30	10,042	60.00	-	01-2023	10,042						
3	303.30	8,957	60.00	-	01-2023	8,957						
4	303.30	5,895	60.00	-	01-2023	5,895						
5	303.30	11,640	60.00	-	01-2023	11,640						
6	303.30	33,725	60.00	-	01-2023	33,725						
7	303.30	7,037	60.00	-	01-2023	7,037						
8	303.30	22,916	60.00	-	01-2023	22,916						
9	303.30	12,116	60.00	-	01-2023	12,116						
10	303.30	28,830	60.00	-	01-2023	28,830						
11	303.30	23,325	60.00	1.00	02-2023	23,131						
12	303.30	6,699	60.00	1.00	02-2023	6,643						
13	303.30	14,183	60.00	1.00	02-2023	14,065						
14	303.30	23,228	60.00	2.00	03-2023	22,647						
15	303.30	7,697	60.00	3.00	04-2023	7,376						
16	303.30	3,926	60.00	3.00	04-2023	3,762						
17	303.30	1,764	60.00	8.00	09-2023	1,543.31						
18	303.30	9,899	60.00	8.00	09-2023	8,551						
19	303.30	12,680	60.00	8.00	09-2023	10,843						
20	303.30	3,049	60.00	9.00	10-2023	2,617						
21	303.30	51,161	60.00	9.00	10-2023	43,913						
22	303.30	10,370	60.00	10.00	11-2023	8,728						
23	303.30	22,525	60.00	10.00	11-2023	18,959						
24	303.30	17,071	60.00	10.00	11-2023	14,368						
25	303.30	17,189	60.00	10.00	11-2023	14,467						
26	303.30	6,457	60.00	11.00	12-2023	5,317						
27	303.30	73,846	60.00	11.00	12-2023	60,895						
28	303.30	426	60.00	11.00	12-2023	351						
29	303.30	24,973	60.00	11.00	12-2023	20,092						
30	303.30	22,640	60.00	12.00	01-2024	18,296						
31	303.30	237,465	60.00	12.00	01-2024	190,882						
32	303.30	31,275	60.00	12.00	01-2024	25,034						
33	303.30	9,926	60.00	12.00	01-2024	8,024						
34	303.30	11,815	60.00	12.00	01-2024	9,551						
35	303.30	2,778	60.00	12.00	01-2024	2,246						
36	303.30	49,503	60.00	12.00	01-2024	39,959						
37	303.30	17,188	60.00	13.00	02-2024	13,612						
38	303.30	243	60.00	13.00	02-2024	198						
39	303.30	1,697	60.00	14.00	03-2024	1,296						
40	303.30	791	60.00	14.00	03-2024	615						
41	303.30	1,772	60.00	14.00	03-2024	1,378						
42	303.30	2,092	60.00	15.00	04-2024	1,507						
43	303.30	17,673	60.00	15.00	04-2024	13,402						
44	303.30	21,008	60.00	15.00	04-2024	15,931						
45	303.30	1,683,053	120.00	15.00	04-2024	1,479,729						
46	303.30	20,727	60.00	15.00	04-2024	15,675						
47	303.30	14,471	60.00	15.00	04-2024	10,961						
48	303.30	1,536	60.00	16.00	05-2024	1,122						
49	303.30	2,889	60.00	16.00	05-2024	2,103						
50	303.30	1,590	60.00	16.00	05-2024	1,180						



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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105						
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257						
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898						
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779						
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719						
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804						
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148						
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573						
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026						
60	CMDB	303.30	89	60.00	18.00	07-2024	91						
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863						
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081						
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334						
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092						
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457						
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094						
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509						
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325						
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600						
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360						
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667						
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763						
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746						
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893						
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470						
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528						
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193						
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566						
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847						
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625						
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256						
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189						
83	Cust New Business-Line Ext Agreeemen	303.30	7,734	60.00	22.00	11-2024	4,386						
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303						
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923						
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000						
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457						
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834						
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216						
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658						
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149						
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132						
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814						
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406						
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359						
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156						
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422						
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433						
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453						
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341						
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348						

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561						
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947						
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610						
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915						
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413						
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117						
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926						
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757						
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223						
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537						
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703						
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247	3					
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882	195					
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)	(8)					
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305	4					
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599	9					
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687	94					
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472	246	123				
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113	149	75				
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281	330	165				
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)	(2)	(1)				
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276	143	72				
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216	7	4				
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325	444	222				
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316	72	36				
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955	38	19				
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11	0	0	0			
129	Integ Cntr: Property Restore Invoice	303.30	4,378	60.00	27.00	04-2025	2,394	75	75	37			
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688	21	21	10			
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113	174	174	87			
132	Citrix Software Licenses	303.30	80	60.00	28.00	05-2025	62	1	1	1	0		
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495	262	262	262	131		
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510	305	305	305	152		
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287	9	9	9	4		
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897	2,653	2,653	2,653	1,327		
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556	17	17	17	9		
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524	47	47	47	23		
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653	112	112	112	56		
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928	130	130	130	65		
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723	22	22	22	11		
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527	509	509	509	509	255	
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662	69	69	69	69	35	
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245	8	8	8	8	4	
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143	357	357	357	357	179	
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104	121	121	121	121	121	60
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921	194	194	194	194	194	97
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460	15	15	15	15	15	8
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166	38	38	38	38	38	19
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793	26	26	26	26	26	13
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853	1,814	1,814	1,814	1,814	1,814	907
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382	111	111	111	111	111	55

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	29	29	29	29	29	29
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	166	166	166	166	166	166
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	13	13	13	13	13	13
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	720	720	720	720	720	720
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	1,704	1,704	1,704	1,704	1,704
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	98	98	98	98	98
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	557	557	557	557	557
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	14	14	14	14	14
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	60	60	60	60	60
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	447	447	447	447
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	8	8	8	8
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	54	54	54	54
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	49	49	49	49
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	263	263	263
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	70	70	70
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	286	286	286
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	20	20	20
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	51	51	51
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	20	20	20
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	37	37	37
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	11	11	11
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	5	5
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	37	37
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	19	19
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	22	22
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	17	17
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	10	10
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	1,756	1,756
181	TCS-IR-Secretriarte	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	32	32
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	55	55
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	8	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	219
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	6
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	341
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	812
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	204
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	18
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	13
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	582	582	582	582	582	582
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	122
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	258	258	258	258	258	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
								Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,450	6,450	6,450	6,450	6,450	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	9	9	9	9	9	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	760	760	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,936	5,936	5,936	5,936	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,808	2,808	2,808	2,808	2,808	2,808
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	0	0	0	0	0	0
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025							
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	298	298	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	3,043	3,043	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	405	405	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	90	90	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	7	7	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	60	60	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	442	442	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	0	0	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	163	163	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	38	38	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	4	4	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	12	12	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	0	0	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	9	9	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	346	346	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	137	137	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	93	93	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	1,289	1,289	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	544	544	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	597	597	597	597	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	236	236	236	236	236	236
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	955	955	955	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	2,868	2,868	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	13,606	13,606	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	124	124	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	174	174	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1,081	1,081	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	1	1	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	281	281	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	693	693	693	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	609	609	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	37	37	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	73	73	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	0	0	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	217	217	217	217	217	217
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	70	70	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	90	90	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	114	114	114	114	114	114
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	5	5	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	500	500	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	3,643	3,643	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	190	190	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	1,907	1,907	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	61	61	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	711	711	711	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	130	130	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	2,218	2,218	2,218	2,218	2,218	2,218

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	94	94	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	1,125	1,125	1,125	1,125	1,125	1,125
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	49	49	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	557	557	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	0	0	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	423	423	423	423	423	423
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	15	15	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	20	20	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	5	5	5	5	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	142	142	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	950	950	950	950	950	950
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	789	789	789	789	789	789
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	623	623	623	623	623	623
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	345	345	345	345	345	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	552	552	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	26	26	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	141	141	141	141	141	141
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	15	15	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	2,025	2,025	2,025	2,025	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	182	182	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	7	7	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	27	27	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	120	120	120	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	10,122	10,122	10,122	10,122	10,122	10,122
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	488	488	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	36	36	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	451	451	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	105	105	105	105	105	105
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	2,072	2,072	2,072	2,072	2,072	2,072
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	19	19	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	83	83	83	83	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	575	575	575	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	9	9	9	9	9	9
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	2,736	2,736	2,736	2,736	2,736	2,736
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	2,902	2,902	2,902	2,902	2,902	2,902
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	363	363	363	363	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	1,093	1,093	1,093	1,093	1,093	1,093
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	183	183	183	183	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	936	936	936	936	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	2,815	2,815	2,815	2,815	2,815	2,815
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	78	78	78	78	78	78
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	382	382	382	382	382	382
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	0	0	0	0	0	0
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	409	409	409	409	409	409
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	20	20	20	20	20	20
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	12	12	12	12	12	12
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	708	708	708	708	708	708
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	1,687	1,687	1,687	1,687	1,687	1,687
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	16	16	16	16	16	16
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	40	40	40	40	40	40
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	1,654	1,654	1,654	1,654	1,654	1,654

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
357	TCPA - Telephone Compliance Protection Act	303.30	14,212	60.00	60.00	Post 2025		237	237	237	237	237	237
358	TCPA - Telephone Compliance Protection Act	303.30	188	60.00	60.00	Post 2025		3	3	3	3	3	3
359	Migration of NS2 to SAP Rise	303.30	45,727	60.00	60.00	Post 2025		764	764	764	764	764	764
360	Software Renewals - Infrastructure	303.30	9,920	60.00	60.00	Post 2025		165	165	165	165	165	165
361	Cyber Security Test Lab & Red Team Implementation	303.30	5,997	60.00	60.00	Post 2025		100	100	100	100	100	100
362	IT Patching 15 Days (Endpoints)	303.30	54,428	60.00	60.00	Post 2025		908	908	908	908	908	908
363	QR Card Contractor Page & Offline Capabilities	303.30	2,563	60.00	60.00	Post 2025		43	43	43	43	43	43
364	IAM Enhancements	303.30	42,608	60.00	60.00	Post 2025		710	710	710	710	710	710
365	IR - Cognos Upgrade	303.30	9	60.00	60.00	Post 2025		0	0	0	0	0	0
366	SailPoint IIQ – Application Account Approvals - Source of Record Phase 2	303.30	16,488	60.00	60.00	Post 2025		275	275	275	275	275	275
367	NICE - Playback Portal	303.30	5,465	60.00	60.00	Post 2025		91	91	91	91	91	91
368	CyberArk Upgrade - Verison 12.6.3	303.30	11,768	60.00	60.00	Post 2025		196	196	196	196	196	196
369	2023 CDR E-Channels Agile Product Team	303.30	73,463	60.00	60.00	Post 2025		1,224	1,224	1,224	1,224	1,224	1,224
370	2023 SEW E-Channels Agile Product Team	303.30	14,507	60.00	60.00	Post 2025		242	242	242	242	242	242
371	2023 DIS E-Channels Agile Product Team	303.30	7,658	60.00	60.00	Post 2025		128	128	128	128	128	128
372	IR - Demand Curve	303.30	186	60.00	60.00	Post 2025		3	3	3	3	3	3
373	Notification Letters (Automation): Advising of Pending SL Abandonment	303.30	1,888	60.00	60.00	Post 2025		31	31	31	31	31	31
374	2023 ServiceNow Agile Product Team	303.30	30,045	60.00	60.00	Post 2025		501	501	501	501	501	501
375	Facilities Service Now Module	303.30	8,724	60.00	60.00	Post 2025		142	142	142	142	142	142
376	Expand Tax Array for all DIS states	303.30	69,221	60.00	60.00	Post 2025		1,154	1,154	1,154	1,154	1,154	1,154
377	2023 Mulesoft Agile Product Team	303.30	53,184	60.00	60.00	Post 2025		881	881	881	881	881	881
378	Software Renewals - Security	303.30	17,753	60.00	60.00	Post 2025		296	296	296	296	296	296
379	Software Renewals - Applications	303.30	17,353	60.00	60.00	Post 2025		289	289	289	289	289	289
380	Software Renewals - Infrastructure	303.30	69,023	60.00	60.00	Post 2025		1,150	1,150	1,150	1,150	1,150	1,150
381	Software Renewals - Applications	303.30	6,651	60.00	60.00	Post 2025		111	111	111	111	111	111
382	SailPoint Upgrade v8.3p1	303.30	28,848	60.00	-	Post 2025		481	481	481	481	481	481
383	2023 Service Desk Migration, Transf	303.30	22,351	60.00	-	Post 2025		373	373	373	373	373	373
384	NES 2 Kubernetes Migration to MKE	303.30	1,899	60.00	-	Post 2025		158	158	158	158	158	158
385	IAM Enhancements - SailPoint 2023	303.30	16,304	60.00	-	Post 2025		1,359	1,359	1,359	1,359	1,359	1,359
386	IAM Enhancements 2023 CyberArk	303.30	12,225	60.00	-	Post 2025		1,019	1,019	1,019	1,019	1,019	1,019
387	Tableau Site Consolidate and automate	303.30	5,239	60.00	-	Post 2025		437	437	437	437	437	437
388	Technology other than WAM program (Projected)	303.30	483,585	60.00		Post 2025		8,060	8,060	8,060	8,060	8,060	8,060
389	Technology other than WAM program (Projected)	303.30	184,077	60.00		Post 2025		3,068	3,068	3,068	3,068	3,068	3,068
390	Technology other than WAM program (Projected)	303.30	79,811	60.00		Post 2025		1,330	1,330	1,330	1,330	1,330	1,330
391	Technology other than WAM program (Projected)	303.30	574,250	60.00		Post 2025		9,571	9,571	9,571	9,571	9,571	9,571
392	Technology other than WAM program (Projected)	303.30	69,068	60.00		Post 2025		1,151	1,151	1,151	1,151	1,151	1,151
393	Field Mobbility	303.30	1,020,000	60.00		Post 2025		17,000	17,000	17,000	17,000	17,000	17,000
394	Technology other than WAM program (Projected)	303.30	138,184	60.00		Post 2025		2,303	2,303	2,303	2,303	2,303	2,303
395	Technology other than WAM program (Projected)	303.30	12,791	60.00		Post 2025		213	213	213	213	213	213
396	Technology other than WAM program (Projected)	303.30	197,898	60.00		Post 2025		3,298	3,298	3,298	3,298	3,298	3,298
397	Technology other than WAM program (Projected)	303.30	730,728	60.00		Post 2025		12,179	12,179	12,179	12,179	12,179	12,179
398	Technology other than WAM program (Projected)	303.30	721,090	60.00		Post 2025		12,018	12,018	12,018	12,018	12,018	12,018
399	Technology other than WAM program (Projected)	303.30	202,087	60.00		Post 2025		1,684	3,368	3,368	3,368	3,368	3,368
400	WAM program (Projected)	303.30	99,765	180.00		Post 2025		277	554	554	554	554	554
401	Technology other than WAM program (Projected)	303.30	99,476	60.00		Post 2025			829	1,658	1,658	1,658	1,658
402	Technology other than WAM program (Projected)	303.30	138,481	60.00		Post 2025			1,154	2,308	2,308	2,308	2,308
403	Technology other than WAM program (Projected)	303.30	48,625	60.00		Post 2025				405	810	810	810
404	WAM program (Projected)	303.30	2,227,920	180.00		Post 2025				6,189	12,377	12,377	12,377
405	Technology other than WAM program (Projected)	303.30	62,024	60.00		Post 2025					517	1,034	1,034
406	WAM program (Projected)	303.30	47,451	180.00		Post 2025					132	264	264
407	Technology other than WAM program (Projected)	303.30	1,142,145	60.00		Post 2025							9,518

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<u>Line</u> <u>No.</u>	<u>Description</u>	<u>Gas Plant</u> <u>Account</u>	<u>Plant</u> <u>Balance</u>	<u>Initial</u> <u>Life</u>	<u>Remaining</u> <u>Post Life as of</u> <u>12/31/2022</u>	<u>Retirement</u> <u>Month</u>	<u>Reserve</u> <u>Balance</u> <u>12/31/2022</u>	<u>1/31/2025</u> <u>Monthly</u> <u>Amortization</u>	<u>2/28/2025</u> <u>Monthly</u> <u>Amortization</u>	<u>3/31/2025</u> <u>Monthly</u> <u>Amortization</u>	<u>4/30/2025</u> <u>Monthly</u> <u>Amortization</u>	<u>5/31/2025</u> <u>Monthly</u> <u>Amortization</u>	<u>6/30/2025</u> <u>Monthly</u> <u>Amortization</u>
		(1)	(2)	(3)	(4)		(5)						
408	WAM program (Projected)	303.30	27,437	180.00		Post 2025							
409	Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025							
410	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
411	Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025							
412	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
413	Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025							
414	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
415	Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025							
416	WAM program (Projected)	303.30	23,263	180.00		Post 2025							
417	Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025							
418	Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							
419	SubTotal 303.30						4,923,795.23	229,484.71	231,264.13	232,399.22	238,232.90	243,224.06	251,835.54

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Line No.	Description	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
		Account	Balance	Life	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
		(1)	(2)	(3)	(4)		(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
1	<u>Intangible Plant - Misc. Software</u>												
2	Electronic File Transfer Upgrade	303.30	10,042	60.00	-	01-2023	10,042						
3	FDM Upgrade	303.30	8,957	60.00	-	01-2023	8,957						
4	IIB 10- Capital	303.30	5,895	60.00	-	01-2023	5,895						
5	Info Mgmt-Open Text Upgrade-Captial	303.30	11,640	60.00	-	01-2023	11,640						
6	MASTER TAP BUNDLE CAP	303.30	33,725	60.00	-	01-2023	33,725						
7	Microsoft License True Up	303.30	7,037	60.00	-	01-2023	7,037						
8	NiFast Update AOC Info Bundle	303.30	22,916	60.00	-	01-2023	22,916						
9	Interactive Voice Reading System	303.30	12,116	60.00	-	01-2023	12,116						
10	SCCC Pega Lic Impl Cap	303.30	28,830	60.00	-	01-2023	28,830						
11	Energy & Utilities Data Model- Capi	303.30	23,325	60.00	1.00	02-2023	23,131						
12	Printing Equip - Kern ADF Software	303.30	6,699	60.00	1.00	02-2023	6,643						
13	Printing Equip - Canon Prisma & BCC	303.30	14,183	60.00	1.00	02-2023	14,065						
14	MTC CCC Exception Processing	303.30	23,228	60.00	2.00	03-2023	22,647						
15	Consolidation-Citrix XenDesktop-Cap	303.30	7,697	60.00	3.00	04-2023	7,376						
16	Gas Source Cap Bundle	303.30	3,926	60.00	3.00	04-2023	3,762						
17	BMC 2018 Capital	303.30	1,764	60.00	8.00	09-2023	1,543.31						
18	Storage Refresh 2018	303.30	9,899	60.00	8.00	09-2023	8,551						
19	ZMU New Functionality	303.30	12,680	60.00	8.00	09-2023	10,843						
20	2018 Web Enhancement Bundle	303.30	3,049	60.00	9.00	10-2023	2,617						
21	Information Management SOA	303.30	51,161	60.00	9.00	10-2023	43,913						
22	COCH New features PH2 Cap	303.30	10,370	60.00	10.00	11-2023	8,728						
23	Customer Insights AS-1(CX)	303.30	22,525	60.00	10.00	11-2023	18,959						
24	Security Identity Manager 2.0 C	303.30	17,071	60.00	10.00	11-2023	14,368						
25	Truesight Capacity Optimization	303.30	17,189	60.00	10.00	11-2023	14,467						
26	P2P Pcard Platform	303.30	6,457	60.00	11.00	12-2023	5,317						
27	2018 PowerPlant Upgrade	303.30	73,846	60.00	11.00	12-2023	60,895						
28	Treasury Project	303.30	426	60.00	11.00	12-2023	351						
29	Upgrade Data Center Software	303.30	24,973	60.00	11.00	12-2023	20,092						
30	Call Center Awareness DIS	303.30	22,640	60.00	12.00	01-2024	18,296						
31	Customer Digital Roadmap LDC	303.30	237,465	60.00	12.00	01-2024	190,882						
32	FiServ Next Implementation Project	303.30	31,275	60.00	12.00	01-2024	25,034						
33	IT Infrastruc Enhanc/Stability Proj	303.30	9,926	60.00	12.00	01-2024	8,024						
34	NiSource API Capital	303.30	11,815	60.00	12.00	01-2024	9,551						
35	Secure Banking CAP 2017-2018 - DIS	303.30	2,778	60.00	12.00	01-2024	2,246						
36	Windows 10 Upgrade- Capital	303.30	49,503	60.00	12.00	01-2024	39,959						
37	WMS Enhancement	303.30	17,188	60.00	13.00	02-2024	13,612						
38	PPM Project Capital ServiceNow Enha	303.30	243	60.00	13.00	02-2024	198						
39	AP and WMS Auto Accruals in PS-RPA	303.30	1,697	60.00	14.00	03-2024	1,296						
40	SMS Application Projects Capital	303.30	791	60.00	14.00	03-2024	615						
41	AP and WMS Accruals in PS - RPA	303.30	1,772	60.00	14.00	03-2024	1,378						
42	Automate MFE & TFE using RPA	303.30	2,092	60.00	15.00	04-2024	1,507						
43	Customer Experience - Enhancements to Ventyx	303.30	17,673	60.00	15.00	04-2024	13,402						
44	NAC 2017 - Capital	303.30	21,008	60.00	15.00	04-2024	15,931						
45	NiFit Transformation	303.30	1,683,053	120.00	15.00	04-2024	1,479,729						
46	Palo Alto Firewall	303.30	20,727	60.00	15.00	04-2024	15,675						
47	VDI 2018 Capital	303.30	14,471	60.00	15.00	04-2024	10,961						
48	Automate Green Roads using RPA	303.30	1,536	60.00	16.00	05-2024	1,122						
49	Automate SLR Update using RPA	303.30	2,889	60.00	16.00	05-2024	2,103						
50	Automation of Manual Entries in DIS	303.30	1,590	60.00	16.00	05-2024	1,180						

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
51	NiFast 2018 Improvement Bundle	303.30	16,322	60.00	16.00	05-2024	12,105						
52	Oracle PP Upgrade	303.30	5,738	60.00	16.00	05-2024	4,257						
53	Processing Daily Transmission Files	303.30	1,211	60.00	16.00	05-2024	898						
54	Automate GTS Contract Update by RPA	303.30	3,881	60.00	17.00	06-2024	2,779						
55	CDR-LDC Cap	303.30	198,238	60.00	17.00	06-2024	143,719						
56	Component Level Detail for GTS	303.30	1,108	60.00	17.00	06-2024	804						
57	DIS-NGD: Acct Receiv Recon/Aging	303.30	1,584	60.00	17.00	06-2024	1,148						
58	Property Owner Agreement using RPA	303.30	3,580	60.00	17.00	06-2024	2,573						
59	Automatic PNC Returns in DIS by RPA	303.30	1,524	60.00	18.00	07-2024	1,026						
60	CMDB	303.30	89	60.00	18.00	07-2024	91						
61	DPRM 2018	303.30	251,092	60.00	18.00	07-2024	177,863						
62	EDW Implementation Phase 1	303.30	14,232	60.00	18.00	07-2024	10,081						
63	Upgrade Current IVR AS-11S03	303.30	117,775	60.00	18.00	07-2024	83,334						
64	Auto FarmTap in WMS/WMSDOCS by RPA	303.30	1,601	60.00	19.00	08-2024	1,092						
65	Automate Cognos L3 reports by RPA	303.30	664	60.00	19.00	08-2024	457						
66	DataPower	303.30	1,588	60.00	19.00	08-2024	1,094						
67	DIS New Fucntionality	303.30	35,434	60.00	19.00	08-2024	24,509						
68	EDW Implementation Phase 1	303.30	3,362	60.00	19.00	08-2024	2,325						
69	201800778-CVT: Comp Level DIS	303.30	2,371	60.00	20.00	09-2024	1,600						
70	EDW Implementation Phase 1	303.30	3,497	60.00	20.00	09-2024	2,360						
71	GTS Volume/Rate Review using RPA	303.30	3,045	60.00	20.00	09-2024	1,667						
72	HR Drug Alcohol Random Screen	303.30	1,164	60.00	20.00	09-2024	763						
73	Operationalize SQL 2017	303.30	1,105	60.00	20.00	09-2024	746						
74	CVEFV SOFTWARE	303.30	28,698	60.00	21.00	10-2024	18,893						
75	Damage Prevention Reporting	303.30	3,752	60.00	21.00	10-2024	2,470						
76	EDW Implementation Phase 1	303.30	6,878	60.00	21.00	10-2024	4,528						
77	Low Pressure (LP) Subnet Expansion	303.30	293	60.00	21.00	10-2024	193						
78	Mobile Iron Test Environment Licen	303.30	860	60.00	21.00	10-2024	566						
79	Automate HR Action Form Submission	303.30	10,821	60.00	22.00	11-2024	6,847						
80	BCC Implementation Project	303.30	11,883	60.00	22.00	11-2024	7,625						
81	BOMGAR Tool	303.30	6,638	60.00	22.00	11-2024	4,256						
82	CIS/DIS credit function AS-6b-16 CX	303.30	31,897	60.00	22.00	11-2024	20,189						
83	Cust New Business-Line Ext Agreeemen	303.30	7,734	60.00	22.00	11-2024	4,386						
84	EDW Implementation Phase 1	303.30	2,030	60.00	22.00	11-2024	1,303						
85	GTS Rev Electronically to PeopleSof	303.30	1,438	60.00	22.00	11-2024	923						
86	LOCAL ADMIN RIGHTS REMOVAL OM	303.30	12,474	60.00	22.00	11-2024	8,000						
87	NICE Call Recording Upgrade Cap	303.30	86,634	60.00	22.00	11-2024	55,457						
88	Payment/Website Enhancements	303.30	151,635	60.00	22.00	11-2024	90,834						
89	TeamConnect upgrade CAP	303.30	5,081	60.00	22.00	11-2024	3,216						
90	Automate IT Security Privilege RPA	303.30	1,060	60.00	23.00	12-2024	658						
91	Deluxe Lockbox Provider Interfaces	303.30	19,839	60.00	23.00	12-2024	12,149						
92	EDW Implementation Phase 1	303.30	5,010	60.00	23.00	12-2024	3,132						
93	FCS Upgrade	303.30	6,123	60.00	23.00	12-2024	3,814						
94	HR Success Factors Image Upload	303.30	651	60.00	23.00	12-2024	406						
95	HR Timesheet Recon Automation	303.30	8,994	60.00	23.00	12-2024	5,359						
96	IT - DSW Reports Automation	303.30	251	60.00	23.00	12-2024	156						
97	Microsoft License	303.30	31,433	60.00	23.00	12-2024	9,422						
98	O365 - Office 365	303.30	2,287	60.00	23.00	12-2024	1,433						
99	P2P Core Platform	303.30	40,724	60.00	23.00	12-2024	25,453						
100	P2P NCS/Columbia Release Platform	303.30	26,203	60.00	23.00	12-2024	16,341						
101	P2P Services Platform	303.30	6,957	60.00	23.00	12-2024	4,348						

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
102	Automation of Regulatory - Billing	303.30	9,226	60.00	24.00	01-2025	5,561						
103	Control Local Admin Rights	303.30	3,198	60.00	24.00	01-2025	1,947						
104	Website Digital Messaging Enhancements	303.30	57,439	60.00	24.00	01-2025	34,610						
105	EDW Implementation Phase 1	303.30	6,436	60.00	24.00	01-2025	3,915						
106	Emergency Preparedness & Response IT	303.30	5,611	60.00	24.00	01-2025	3,413						
107	Gas Ops SLR Validation & Upload	303.30	7,396	60.00	24.00	01-2025	4,117						
108	Microsoft Software Upgrade 2020	303.30	164,043	60.00	24.00	01-2025	50,926						
109	New Cust. Id. upgrade for Experian	303.30	9,464	60.00	24.00	01-2025	5,757						
110	Ops - Yearly WMS Off Time JO Maint	303.30	2,026	60.00	24.00	01-2025	1,223						
111	Printing - Bar Code Changes Capital	303.30	883	60.00	24.00	01-2025	537						
112	Security-Remove Admin Rights Cap	303.30	4,443	60.00	24.00	01-2025	2,703						
113	Component Level Detail DIS, GMB-TCS	303.30	417	60.00	25.00	02-2025	247						
114	DIS Online&Memo Enhancements Bundle	303.30	23,459	60.00	25.00	02-2025	13,882						
115	EDW Implementation Phase 1	303.30	(1,010)	60.00	25.00	02-2025	(598)						
116	Retrieve & Download Invoices- Ariba	303.30	516	60.00	25.00	02-2025	305						
117	ServiceNow Continuation	303.30	1,016	60.00	25.00	02-2025	599						
118	Active Directory	303.30	11,301	60.00	25.00	02-2025	6,687						
119	24XX Software	303.30	14,735	60.00	26.00	03-2025	8,472						
120	500G ERTs for CG & Phase2 NIPSCO	303.30	8,915	60.00	26.00	03-2025	5,113						
121	Application Projects Capital	303.30	19,686	60.00	26.00	03-2025	11,281						
122	EDW Implementation Phase 1	303.30	(120)	60.00	26.00	03-2025	(69)						
123	GasSource Enhancement Bundle Cap	303.30	7,929	60.00	26.00	03-2025	4,276						
124	IT - LMS Overdue Training	303.30	397	60.00	26.00	03-2025	216						
125	Non-TCO Pipeline Diversification	303.30	26,639	60.00	26.00	03-2025	15,325						
126	Regulatory: Update Choice Rates DIS	303.30	4,153	60.00	26.00	03-2025	2,316						
127	Tax & Accounting - Ariba Check Req	303.30	1,928	60.00	26.00	03-2025	955						
128	EDW Implementation Phase 1	303.30	20	60.00	27.00	04-2025	11						
129	Integ Cntr: Property Restore Invoic	303.30	4,378	60.00	27.00	04-2025	2,394						
130	Oracle CRM Upgrade	303.30	1,233	60.00	27.00	04-2025	688						
131	Palo Alto Expansion - Firewalls	303.30	10,712	60.00	27.00	04-2025	6,113						
132	Citrix Software Linceses	303.30	80	60.00	28.00	05-2025	62						
133	DIS Address Standardization Needs	303.30	15,712	60.00	28.00	05-2025	8,495						
134	DIS Customer List Enhancements	303.30	17,896	60.00	28.00	05-2025	9,510						
135	DPRM/COE Damages Data Hub - Product	303.30	530	60.00	28.00	05-2025	287						
136	EASI to Workbrain	303.30	157,865	60.00	28.00	05-2025	84,897						
137	EDW Implementation Phase 1	303.30	1,026	60.00	28.00	05-2025	556						
138	Field Mobility - WMSDocs Pilot	303.30	2,814	60.00	28.00	05-2025	1,524						
139	Java Software	303.30	6,744	60.00	28.00	05-2025	3,653						
140	Software WO Improvements Project	303.30	7,509	60.00	28.00	05-2025	3,928						
141	Upgrade Oracle 19C	303.30	1,336	60.00	28.00	05-2025	723						
142	Adobe Enterprise Agreement	303.30	23,042	60.00	29.00	06-2025	8,527						
143	Automate 22 Rejects Cust Op by RPA	303.30	3,632	60.00	29.00	06-2025	1,662						
144	IAM Automation	303.30	466	60.00	29.00	06-2025	245						
145	Netskope CASB	303.30	21,329	60.00	29.00	06-2025	11,143						
146	CRISP Deployment	303.30	6,660	120.00	30.00	07-2025	3,104						
147	Endpoint Security Program	303.30	11,646	60.00	30.00	07-2025	5,921						
148	GMB Final Bill indicator	303.30	904	60.00	30.00	07-2025	460						
149	NAESB / EDI Pipeline Notifications	303.30	2,294	60.00	30.00	07-2025	1,166						
150	New Cust Payment Service Providers	303.30	1,559	60.00	30.00	07-2025	793						
151	Oracle Hyperion Enhancements	303.30	80,511	60.00	30.00	07-2025	28,853						
152	Oracle Hyperion Enhancements	303.30	6,654	60.00	30.00	07-2025	3,382						

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)	(5)							
153	Cust New Business-Multi Site PSID	303.30	1,712	60.00	31.00	08-2025	836	14					
154	Left Notice - Ventyx	303.30	9,950	60.00	31.00	08-2025	4,891	83					
155	Quest Software	303.30	765	60.00	31.00	08-2025	376	6					
156	Service Suite Enhancements	303.30	42,060	60.00	31.00	08-2025	20,100	360					
157	GIS System Upgrade	303.30	102,702	60.00	32.00	09-2025	49,025	1,704	852				
158	Meter Reading Bundle Capital	303.30	5,819	60.00	32.00	09-2025	2,739	98	49				
159	RPA - SMS Damage Prevention Utilisp	303.30	31,997	60.00	32.00	09-2025	14,440	557	279				
160	TCS-IR-Immix Cloud	303.30	837	60.00	32.00	09-2025	398	14	7				
161	WMS Exposure Form Enhancements for	303.30	3,601	60.00	32.00	09-2025	1,710	60	30				
162	GIS Software Upgrade	303.30	26,821	60.00	33.00	10-2025	12,294	447	447	223			
163	Install of 2 new software modules o	303.30	453	60.00	33.00	10-2025	208	8	8	4			
164	Regulatory: Update PGA Rates DIS	303.30	3,177	60.00	33.00	10-2025	1,425	54	54	27			
165	RPA - IC - Daily EPM Report	303.30	2,856	60.00	33.00	10-2025	1,274	49	49	24			
166	Annual CKY Choice Program Letter	303.30	15,492	60.00	34.00	11-2025	6,669	263	263	263	132		
167	Field Ops Specialist Process by RPA	303.30	4,194	60.00	34.00	11-2025	1,844	70	70	70	35		
168	PowerPlan Enhancements	303.30	14,707	60.00	34.00	11-2025	5,128	286	286	286	143		
169	RPA - Customer Ops - Returned Mail	303.30	1,204	60.00	34.00	11-2025	530	20	20	20	10		
170	RPA - Eng SMS Engineering Metric	303.30	2,943	60.00	34.00	11-2025	1,236	51	51	51	25		
171	TCS-IR-DocMinder	303.30	1,213	60.00	34.00	11-2025	536	20	20	20	10		
172	TCS-IR-Johnson Controls Metasys Ref	303.30	2,197	60.00	34.00	11-2025	970	37	37	37	18		
173	Non-Project Capital Software - Appl	303.30	668	60.00	34.00	11-2025	295	11	11	11	6		
174	eFTP Disaster Recovery Solution	303.30	318	60.00	35.00	12-2025	135	5	5	5	5	3	
175	RPA - Customer Ops - Credit on Fina	303.30	2,200	60.00	35.00	12-2025	935	37	37	37	37	18	
176	RPA - Customer Ops - Gas Measuremen	303.30	1,117	60.00	35.00	12-2025	474	19	19	19	19	9	
177	RPA - Gas Planning - Monthly Close	303.30	1,338	60.00	35.00	12-2025	567	22	22	22	22	11	
178	RPA - Integration Center Print Ki	303.30	935	60.00	35.00	12-2025	355	17	17	17	17	8	
179	RPA - Integration Center - Booking	303.30	500	60.00	35.00	12-2025	171	10	10	10	10	5	
180	SMS Service Line Mapping	303.30	105,307	60.00	35.00	12-2025	44,718	1,756	1,756	1,756	1,756	878	
181	TCS-IR-Secretariate	303.30	1,932	60.00	35.00	12-2025	821	32	32	32	32	16	
182	Upgrade OpenText	303.30	3,290	60.00	35.00	12-2025	1,398	55	55	55	55	27	
183	CX: CX Program	303.30	943	120.00	84.00	Post 2025	287	8	8	8	8	8	8
184	Field Mobility - Release 1	303.30	13,869	60.00	36.00	Post 2025	6,089	219	219	219	219	219	110
185	Field Mobility - Release 2	303.30	381	60.00	35.50	Post 2025	156	6	6	6	6	6	3
186	HMB 2020 DIS Enhancement Work	303.30	20,435	60.00	35.50	Post 2025	8,344	341	341	341	341	341	170
187	Integration Layer Program-Mulesoft	303.30	47,993	60.00	35.50	Post 2025	19,159	812	812	812	812	812	406
188	RPA - Integration Center - Complete	303.30	12,039	60.00	35.50	Post 2025	4,787	204	204	204	204	204	102
189	TCS-IR-OrgPublisher	303.30	1,064	60.00	35.50	Post 2025	434	18	18	18	18	18	9
190	Technology Roadmap - SharePoint Upg	303.30	798	60.00	35.50	Post 2025	326	13	13	13	13	13	7
191	Tableau Software	303.30	23,906	60.00	35.50	Post 2025	3,254	582	582	582	582	582	291
192	Non-Project Capital Software - Appl	303.30	7,264	60.00	35.50	Post 2025	2,920	122	122	122	122	122	61
193	Cross BU Enablement - Data Platform	303.30	254,229	60.00	36.50	Post 2025	99,290	4,245	4,245	4,245	4,245	4,245	4,245
194	Flowcal Software Enhancements	303.30	7,254	60.00	36.50	Post 2025	1,860	148	148	148	148	148	148
195	Non-Project Capital Software - Secu	303.30	512	60.00	36.50	Post 2025	621	(3)	(3)	(3)	(3)	(3)	(3)
196	BOW- Digital Messaging	303.30	5,405	60.00	36.50	Post 2025	2,118	90	90	90	90	90	90
197	Service Request Mgt. AS-10-S17c	303.30	700	60.00	36.50	Post 2025	274	12	12	12	12	12	12
198	Curb Value Urgent Fix to Completed	303.30	3,191	60.00	37.50	Post 2025	1,197	53	53	53	53	53	53
199	TM1 CPA Model Project Build - Capital	303.30	15,990	120.00	37.50	Post 2025	10,969	134	134	134	134	134	134
200	Paperless Billing- Email V	303.30	136	60.00	37.50	Post 2025	633	(13)	(13)	(13)	(13)	(13)	(13)
201	RPA - Ops IC - Create Monthly Keep	303.30	17,135	60.00	37.50	Post 2025	5,782	303	303	303	303	303	303
202	RPA - SMS-Damage Prevention Critica	303.30	13,589	60.00	37.50	Post 2025	3,933	258	258	258	258	258	258
203	Field Excellence Dashboards	303.30	1,588	60.00	37.50	Post 2025	596	26	26	26	26	26	26

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
		(1)	(2)	(3)	(4)	(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
					12/31/2022	12/31/2022							
204	Evergreen Framework	303.30	(7)	60.00	37.50	Post 2025	105	(3)	(3)	(3)	(3)	(3)	(3)
205	AKM -Data Mgt- Data Govern & Tools	303.30	80,492	60.00	38.50	Post 2025	28,838	1,342	1,342	1,342	1,342	1,342	1,342
206	DIMP Risk Tool - SMS Program	303.30	134,300	60.00	38.50	Post 2025	45,845	2,298	2,298	2,298	2,298	2,298	2,298
207	CCC Productivity & SLA NI	303.30	985	60.00	38.50	Post 2025	355	16	16	16	16	16	16
208	NetMotion	303.30	(127)	60.00	38.50	Post 2025	6	(3)	(3)	(3)	(3)	(3)	(3)
209	RPA - Cust Ops - PIP Credit on Fina	303.30	2,751	60.00	38.50	Post 2025	857	49	49	49	49	49	49
210	RPA - Ops IC - Execute Monthly Keep	303.30	17,919	60.00	38.50	Post 2025	5,642	319	319	319	319	319	319
211	AKM - Risk Data Readiness	303.30	89,767	60.00	39.50	Post 2025	30,494	1,501	1,501	1,501	1,501	1,501	1,501
212	AKM - UPDM Implementation Sandbox	303.30	119,915	60.00	39.50	Post 2025	40,944	1,999	1,999	1,999	1,999	1,999	1,999
213	Meter to Cash Analytics	303.30	266	60.00	39.50	Post 2025	427	(4)	(4)	(4)	(4)	(4)	(4)
214	Application Monitoring across the E	303.30	7,726	60.00	39.50	Post 2025	2,488	133	133	133	133	133	133
215	IAM Management Enhancement Cap	303.30	385,872	60.00	39.50	Post 2025	131,147	6,450	6,450	6,450	6,450	6,450	6,450
216	Integrated Refresh Commercial and C	303.30	1,541	60.00	39.50	Post 2025	527	26	26	26	26	26	26
217	Non-Project Capital Software - Infr	303.30	2,745	60.00	39.50	Post 2025	795	49	49	49	49	49	49
218	RPA - Cust Ops - Credit Delay Revie	303.30	1,620	60.00	39.50	Post 2025	528	28	28	28	28	28	28
219	RPA - Ops IC - Temperature Notifica	303.30	9,704	60.00	39.50	Post 2025	3,126	167	167	167	167	167	167
220	SMS Tableau Licenses	303.30	2,319	60.00	39.50	Post 2025	793	39	39	39	39	39	39
221	DevonWay Expansion	303.30	49,544	60.00	39.50	Post 2025	16,731	831	831	831	831	831	831
222	Western Union (WU) payment file tra	303.30	995	60.00	39.50	Post 2025	340	17	17	17	17	17	17
223	IBM Perpetual Software Licenses	303.30	288,574	60.00	39.50	Post 2025	97,138	4,846	4,846	4,846	4,846	4,846	4,846
224	Western Union (WU) payment file tra	303.30	2	60.00	39.50	Post 2025	1	0	0	0	0	0	0
225	RPA - Overtime Tracker	303.30	4,150	60.00	40.50	Post 2025	1,116	75	75	75	75	75	75
226	Meter to Cash Analytics-	303.30	499	60.00	40.50	Post 2025	162	8	8	8	8	8	8
227	Internally Developed Process IT	303.30	570	60.00	40.50	Post 2025	185	9	9	9	9	9	9
228	Indust Training Svcs - Oper Qualifi	303.30	134,298	60.00	41.50	Post 2025	41,364	2,239	2,239	2,239	2,239	2,239	2,239
229	Paperless Billing Host web	303.30	2,366	60.00	41.50	Post 2025	729	39	39	39	39	39	39
230	CX Digitization Call Defle	303.30	238,485	60.00	41.50	Post 2025	69,772	4,065	4,065	4,065	4,065	4,065	4,065
231	RPA - Emergency Response Time Calc	303.30	5,484	60.00	41.50	Post 2025	1,707	91	91	91	91	91	91
232	RPA - Integration Center - OUPS Loc	303.30	9,256	60.00	41.50	Post 2025	2,640	159	159	159	159	159	159
233	Increase Tableau Server Performance	303.30	389	60.00	41.50	Post 2025	121	6	6	6	6	6	6
234	Billing Automations RPA	303.30	34,763	60.00	41.50	Post 2025	10,551	583	583	583	583	583	583
235	Workday Implementation	303.30	21,300	60.00	41.50	Post 2025	4,626	402	402	402	402	402	402
236	Mulesoft Software Licenses	303.30	42,436	60.00	41.50	Post 2025	9,604	791	791	791	791	791	791
237	NICE Perpetual Software Licenses	303.30	36,836	60.00	41.50	Post 2025	5,649	760	760	760	760	760	760
238	Pandemic planning	303.30	7,267	60.00	42.50	Post 2025	1,967	125	125	125	125	125	125
239	RPA - Engineering Work Release	303.30	10,761	60.00	42.50	Post 2025	2,887	185	185	185	185	185	185
240	Vignette Replacement - Customer Digital Roadmap	303.30	126,876	60.00	42.50	Post 2025	36,975	2,115	2,115	2,115	2,115	2,115	2,115
241	MFA for Ping Landing Pages	303.30	1,234	60.00	43.50	Post 2025	289	22	22	22	22	22	22
242	Hyperion Planning Enhancements	303.30	(17)	60.00	43.50	Post 2025	(5)	(0)	(0)	(0)	(0)	(0)	(0)
243	Computer Software : 121000	303.30	66,384	60.00	43.50	Post 2025	18,256	1,106	1,106	1,106	1,106	1,106	1,106
244	Paperless Billing Ph 1 DIS	303.30	1,441	60.00	44.50	Post 2025	372	24	24	24	24	24	24
245	Paperless Billing Auto En	303.30	4,546	60.00	44.50	Post 2025	1,175	76	76	76	76	76	76
246	WMS Imprv to Allow More Capital	303.30	45,143	60.00	44.50	Post 2025	11,625	753	753	753	753	753	753
247	AKM - GIS Data Conflation	303.30	59,643	60.00	44.50	Post 2025	15,404	994	994	994	994	994	994
248	Contractors from ITS to EWN	303.30	2,178	60.00	44.50	Post 2025	680	34	34	34	34	34	34
249	Paperless Billing Ph 2 DIS	303.30	4,008	60.00	44.50	Post 2025	1,035	67	67	67	67	67	67
250	QR Card SOP Link	303.30	10,095	60.00	45.50	Post 2025	2,408	169	169	169	169	169	169
251	OQMS Application Suite	303.30	7,628	60.00	45.50	Post 2025	1,841	127	127	127	127	127	127
252	Microfocus Tool License	303.30	23,048	60.00	45.50	Post 2025	5,572	384	384	384	384	384	384
253	Scale Field Maps to Support All Fields- ESRI	303.30	5,402	60.00	46.50	Post 2025	1,208	90	90	90	90	90	90
254	Validation Tool: Energy Worldnet Operator Qualifications	303.30	5,819	60.00	46.50	Post 2025	1,307	97	97	97	97	97	97

**Columbia Gas of Kentucky  
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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)						
255	Light Tech Mobile App Dev	303.30	348,249	60.00	47.50	Post 2025	66,217	5,936	5,936	5,936	5,936	5,936	5,936
256	Light Tech Database Tables & Reports	303.30	161,211	60.00	47.50	Post 2025	28,542	2,808	2,808	2,808	2,808	2,808	2,808
257	IVR Refinement and Enhancements	303.30	357,342	60.00	47.50	Post 2025	3,202	0	0	0	0	0	0
258	IVR Refinement and Enhancements	303.30	(357,342)			Post 2025							
259	RPA: Turnback Job Request	303.30	17,561	60.00	47.50	Post 2025	3,389	298	298	298	298	298	298
260	Palo Alto Software Licenses	303.30	182,581	60.00	47.50	Post 2025	38,038	3,043	3,043	3,043	3,043	3,043	3,043
261	SMS Database Solution	303.30	24,219	60.00	47.50	Post 2025	4,994	405	405	405	405	405	405
262	VOIP: Upgrade SLC: Arena from TDM	303.30	5,372	60.00	47.50	Post 2025	1,119	90	90	90	90	90	90
263	RPA: Ariba SOX Testing for Supply Chain	303.30	410	60.00	47.50	Post 2025	86	7	7	7	7	7	7
264	SMS - SLM Project 2 (Automation)	303.30	3,619	60.00	47.50	Post 2025	754	60	60	60	60	60	60
265	Modification and Support of Firewall	303.30	26,548	60.00	47.50	Post 2025	5,531	442	442	442	442	442	442
266	Computer Software : 121000	303.30	7	60.00	47.50	Post 2025	2	0	0	0	0	0	0
267	Computer Software : 121000	303.30	9,865	60.00	47.50	Post 2025	2,140	163	163	163	163	163	163
268	Computer Software : 121000	303.30	2,279	60.00	47.50	Post 2025	475	38	38	38	38	38	38
269	Computer Software : 121000	303.30	262	60.00	47.50	Post 2025	55	4	4	4	4	4	4
270	Computer Software : 121000	303.30	705	60.00	47.50	Post 2025	147	12	12	12	12	12	12
271	Computer Software : 121000	303.30	24	60.00	47.50	Post 2025	5	0	0	0	0	0	0
272	Computer Software : 121000	303.30	566	60.00	47.50	Post 2025	118	9	9	9	9	9	9
273	Integration Platform Modernization	303.30	20,417	60.00	48.50	Post 2025	3,623	346	346	346	346	346	346
274	CCC Productivity, SLA, & Op	303.30	8,203	60.00	48.50	Post 2025	1,573	137	137	137	137	137	137
275	Computer Software : 121000	303.30	5,599	60.00	48.50	Post 2025	1,074	93	93	93	93	93	93
276	Identity & Access Management	303.30	77,347	60.00	48.50	Post 2025	14,822	1,289	1,289	1,289	1,289	1,289	1,289
277	SAP HANA Perpetual Software Licenses	303.30	31,311	60.00	48.50	Post 2025	4,933	544	544	544	544	544	544
278	SAP Perpetual Software Licenses	303.30	34,109	60.00	48.50	Post 2025	4,743	597	597	597	597	597	597
279	ACH Web Validation	303.30	11,872	60.00	49.50	Post 2025	720	236	236	236	236	236	236
280	CCC Productivity: SLA & Op	303.30	55,742	60.00	49.50	Post 2025	8,650	955	955	955	955	955	955
281	AKM II Data Enhancements	303.30	171,385	60.00	49.50	Post 2025	29,417	2,868	2,868	2,868	2,868	2,868	2,868
282	Contact Center Modernization	303.30	814,649	60.00	50.50	Post 2025	127,582	13,606	13,606	13,606	13,606	13,606	13,606
283	Aviator application upgrade	303.30	7,411	60.00	50.50	Post 2025	1,173	124	124	124	124	124	124
284	Computer Software : 121000	303.30	10,468	60.00	50.50	Post 2025	1,658	174	174	174	174	174	174
285	Planning and Budgeting Capital Phase 1 - Financial Insight	303.30	129,555	120.00	51.50	Post 2025	73,868	1,081	1,081	1,081	1,081	1,081	1,081
286	CDR Web Application (Sitefinity)	303.30	80	60.00	51.50	Post 2025	11	1	1	1	1	1	1
287	SAMPro enablement	303.30	16,755	60.00	51.50	Post 2025	2,259	281	281	281	281	281	281
288	SMS Data Enhancement Activities	303.30	39,915	60.00	51.50	Post 2025	4,215	693	693	693	693	693	693
289	Software Renewals - Applications	303.30	36,518	60.00	51.50	Post 2025	5,173	609	609	609	609	609	609
290	Computer Software : 121000	303.30	2,224	60.00	52.50	Post 2025	278	37	37	37	37	37	37
291	Computer Software : 121000	303.30	4,396	60.00	52.50	Post 2025	549	73	73	73	73	73	73
292	Computer Software : 121000	303.30	14	60.00	52.50	Post 2025	2	0	0	0	0	0	0
293	IAM: CyberArk	303.30	12,328	60.00	52.50	Post 2025	1,119	217	217	217	217	217	217
294	Computer Software : 121000	303.30	4,200	60.00	54.50	Post 2025	385	70	70	70	70	70	70
295	Gas Asset Numbering	303.30	5,399	60.00	54.50	Post 2025	495	90	90	90	90	90	90
296	SOP Completions	303.30	6,451	60.00	54.50	Post 2025	464	114	114	114	114	114	114
297	SMS Document Management System	303.30	326	60.00	55.50	Post 2025	24	5	5	5	5	5	5
298	Data Center Consolidation	303.30	29,909	60.00	55.50	Post 2025	2,159	500	500	500	500	500	500
299	AKM - GIS Enhancements	303.30	218,600	60.00	56.50	Post 2025	12,746	3,643	3,643	3,643	3,643	3,643	3,643
300	Federal Directive - Advance DNS	303.30	11,410	60.00	56.50	Post 2025	666	190	190	190	190	190	190
301	AKM II Measure & Regulation Risk	303.30	114,024	60.00	57.50	Post 2025	4,398	1,907	1,907	1,907	1,907	1,907	1,907
302	Concur Authentication Protocol	303.30	3,644	60.00	57.50	Post 2025	155	61	61	61	61	61	61
303	Emergency Preparedness & Response	303.30	42,642	60.00	57.50	Post 2025	1,764	711	711	711	711	711	711
304	CSF (Designer Software) Application	303.30	7,787	60.00	58.50	Post 2025	171	130	130	130	130	130	130
305	Computer Software : 121000	303.30	133,033	60.00	58.50	Post 2025	3,292	2,218	2,218	2,218	2,218	2,218	2,218

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Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
					Post Life as of 12/31/2022	Month	Balance 12/31/2022	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization	Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
306	CCMod Phase 2	303.30	5,616	60.00	58.50	Post 2025	105	94	94	94	94	94	94
307	Identify and Promote Least Privileged Access	303.30	67,139	60.00	58.50	Post 2025	1,511	1,125	1,125	1,125	1,125	1,125	1,125
308	Exterro Software Implementation	303.30	2,953	60.00	58.50	Post 2025	68	49	49	49	49	49	49
309	Add Transmission Identifier to Job Orders in WMS	303.30	33,387	60.00	59.50	Post 2025	274	557	557	557	557	557	557
310	2021 ServiceNow Agile Product Team	303.30	23	60.00	59.50	Post 2025	0	0	0	0	0	0	0
311	2022 ServiceNow Agile Product Team	303.30	25,493	60.00	59.50	Post 2025	212	423	423	423	423	423	423
312	Globalscape IR reclass project	303.30	895	60.00	59.50	Post 2025	7	15	15	15	15	15	15
313	Sitefinity IR reclass project	303.30	1,202	60.00	59.50	Post 2025	10	20	20	20	20	20	20
314	Tricentis - QTest	303.30	324	60.00	59.50	Post 2025	2	5	5	5	5	5	5
315	2022 SEW E-Channels Agile Product Team	303.30	8,542	60.00	59.50	Post 2025	71	142	142	142	142	142	142
316	2022 CDR E-Channels Agile Product Team	303.30	56,940	60.00	59.50	Post 2025	467	950	950	950	950	950	950
317	SMS Exception Reporting Data - Dev	303.30	44,935	60.00	59.50	Post 2025	146	789	789	789	789	789	789
318	2022 Mulesoft Agile Product Team	303.30	37,299	60.00	59.50	Post 2025	308	623	623	623	623	623	623
319	UiPath Application Upgrade	303.30	20,675	60.00	59.50	Post 2025	173	345	345	345	345	345	345
320	Asset Knowledge Management (AKM) Phase 2B	303.30	33,104	60.00	58.50	Post 2025	0	552	552	552	552	552	552
321	GIS Service Request Capital	303.30	1,556	60.00	59.50	Post 2025	-	26	26	26	26	26	26
322	2022 DIS E-Channels Agile Product Team	303.30	8,367	60.00	60.00	Post 2025	-	141	141	141	141	141	141
323	OQMS: EWN Integration Enhancements	303.30	894	60.00	60.00	Post 2025	-	15	15	15	15	15	15
324	Meter to Cash Analytics	303.30	121,450	60.00	60.00	Post 2025	-	2,025	2,025	2,025	2,025	2,025	2,025
325	Software Renewals - Applications	303.30	10,926	60.00	60.00	Post 2025	-	182	182	182	182	182	182
326	Workbrain License Purchase	303.30	408	60.00	60.00	Post 2025	-	7	7	7	7	7	7
327	GasSource IR reclass project- Phase 2	303.30	1,643	60.00	60.00	Post 2025	-	27	27	27	27	27	27
328	FCS Upgrade	303.30	7,255	60.00	60.00	Post 2025	-	120	120	120	120	120	120
329	Software Renewals - Infrastructure	303.30	606,260	60.00	60.00	Post 2025	-	10,122	10,122	10,122	10,122	10,122	10,122
330	Software Renewals - Applications	303.30	29,267	60.00	60.00	Post 2025	-	488	488	488	488	488	488
331	Site Owner Insight Dashboards	303.30	2,189	60.00	60.00	Post 2025	-	36	36	36	36	36	36
332	SailPoint IIQ – ServiceNow APM Integration	303.30	27,065	60.00	60.00	Post 2025	-	451	451	451	451	451	451
333	Overhead Capitalization NCS	303.30	5,925	60.00	60.00	Post 2025	-	105	105	105	105	105	105
334	Software Renewals - Applications	303.30	97,388	60.00	60.00	Post 2025	-	2,072	2,072	2,072	2,072	2,072	2,072
335	2022 TCO Rate Refund	303.30	1,117	60.00	60.00	Post 2025	-	19	19	19	19	19	19
336	Adding Spanish Queues and Routing to Contact Center	303.30	4,959	60.00	60.00	Post 2025	-	83	83	83	83	83	83
337	Tricentis - Tosca	303.30	34,490	60.00	60.00	Post 2025	-	575	575	575	575	575	575
338	Holman Change from FTP to SFTP	303.30	512	60.00	60.00	Post 2025	-	9	9	9	9	9	9
339	Mobile Mapping - Phase I	303.30	164,156	60.00	60.00	Post 2025	-	2,736	2,736	2,736	2,736	2,736	2,736
340	Gas SCADA Upgrade	303.30	174,084	60.00	60.00	Post 2025	-	2,902	2,902	2,902	2,902	2,902	2,902
341	2022 BOW: OH & KY OQMS Migration	303.30	21,804	60.00	60.00	Post 2025	-	363	363	363	363	363	363
342	Software Renewals - Applications	303.30	65,064	60.00	60.00	Post 2025	-	1,093	1,093	1,093	1,093	1,093	1,093
343	Software Renewals - Applications	303.30	10,981	60.00	60.00	Post 2025	-	183	183	183	183	183	183
344	Software Renewals - Applications	303.30	56,180	60.00	60.00	Post 2025	-	936	936	936	936	936	936
345	Software Renewals - Infrastructure	303.30	153,615	60.00	60.00	Post 2025	-	2,815	2,815	2,815	2,815	2,815	2,815
346	EMDCS Flow-Cal - Technology IR upgrade	303.30	4,707	60.00	60.00	Post 2025	-	78	78	78	78	78	78
347	IAM: SailPoint Application Onboarding	303.30	22,897	60.00	60.00	Post 2025	-	382	382	382	382	382	382
348	CKY SMRP Volumetric Rate Billing	303.30	0	60.00	60.00	Post 2025	-	0	0	0	0	0	0
349	DataStage Upgrade	303.30	24,242	60.00	60.00	Post 2025	-	409	409	409	409	409	409
350	New 2023 Time Entry Codes	303.30	1,171	60.00	60.00	Post 2025	-	20	20	20	20	20	20
351	Google Analytics 4 Upgrade	303.30	691	60.00	60.00	Post 2025	-	12	12	12	12	12	12
352	Move New Business Credit Card Payments	303.30	42,479	60.00	60.00	Post 2025	-	708	708	708	708	708	708
353	Always on VPN	303.30	100,639	60.00	60.00	Post 2025	-	1,687	1,687	1,687	1,687	1,687	1,687
354	MFA for Ping landing pages	303.30	961	60.00	60.00	Post 2025	-	16	16	16	16	16	16
355	OQMS Data Enhancements (Workday Learning)	303.30	2,384	60.00	60.00	Post 2025	-	40	40	40	40	40	40
356	Green Path Rider	303.30	98,315	60.00	60.00	Post 2025	-	1,654	1,654	1,654	1,654	1,654	1,654





**Columbia Gas of Kentucky  
Misc Software**

<u>Line No.</u>	<u>Description</u>	<u>Gas Plant Account</u>	<u>Plant Balance</u>	<u>Initial Life</u>	<u>Remaining Post Life as of 12/31/2022</u>	<u>Retirement Month</u>	<u>Reserve Balance 12/31/2022</u>	<u>7/31/2025 Monthly Amortization</u>	<u>8/31/2025 Monthly Amortization</u>	<u>9/30/2025 Monthly Amortization</u>	<u>10/31/2025 Monthly Amortization</u>	<u>11/30/2025 Monthly Amortization</u>	<u>12/31/2025 Monthly Amortization</u>	
		(1)	(2)	(3)	(4)		(5)							
408	WAM program (Projected)	303.30	27,437	180.00		Post 2025		152	152	152	152	152	152	
409	Technology other than WAM program (Projected)	303.30	284,874	60.00		Post 2025		2,374	4,748	4,748	4,748	4,748	4,748	
410	WAM program (Projected)	303.30	23,263	180.00		Post 2025		65	129	129	129	129	129	
411	Technology other than WAM program (Projected)	303.30	107,388	60.00		Post 2025			895	1,790	1,790	1,790	1,790	
412	WAM program (Projected)	303.30	23,263	180.00		Post 2025			65	129	129	129	129	
413	Technology other than WAM program (Projected)	303.30	9,940	60.00		Post 2025				83	166	166	166	
414	WAM program (Projected)	303.30	23,263	180.00		Post 2025				65	129	129	129	
415	Technology other than WAM program (Projected)	303.30	153,793	60.00		Post 2025					1,282	2,563	2,563	
416	WAM program (Projected)	303.30	23,263	180.00		Post 2025					65	129	129	
417	Technology other than WAM program (Projected)	303.30	567,873	60.00		Post 2025						4,732	9,465	
418	Technology other than WAM program (Projected)	303.30	190,053	60.00		Post 2025							1,584	
419	SubTotal 303.30							4,923,795.23	262,245.08	263,962.94	263,574.76	264,410.64	269,133.65	273,314.33

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023
<u>No.</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
				(4)		(5)						
1	<u>Intangible Plant - Cloud Software</u>											
2	303.99	23,961	44.00	8.00	09-2023	19,605	545	545	545	545	545	545
3	303.99	1,711	46.00	10.00	11-2023	1,339	37	37	37	37	37	37
4	303.99	26,532	46.00	10.00	11-2023	20,764	577	577	577	577	577	577
5	303.99	30,037	48.00	12.00	01-2024	22,528	626	626	626	626	626	626
6	303.99	16,751	49.00	13.00	02-2024	12,307	342	342	342	342	342	342
7	303.99	86	52.00	16.00	05-2024	60	2	2	2	2	2	2
8	303.99	14,359	53.00	17.00	06-2024	9,754	271	271	271	271	271	271
9	303.99	16,983	54.00	18.00	07-2024	11,322	315	314	315	314	314	315
10	303.99	10,392	54.00	18.00	07-2024	6,928	192	192	192	192	192	192
11	303.99	79	57.00	21.00	10-2024	50	1	1	1	1	1	1
12	303.99	56,252	58.00	22.00	11-2024	34,915	970	970	970	970	970	970
13	303.99	19,298	58.00	22.00	11-2024	11,978	333	333	333	333	333	333
14	303.99	64,660	58.00	22.00	11-2024	40,094	1,117	1,117	1,117	1,117	1,117	1,117
15	303.99	21,144	58.00	22.00	11-2024	13,124	365	365	365	365	365	365
16	303.99	19,989	60.00	24.00	01-2025	12,160	333	333	333	333	333	333
17	303.99	3,794	60.00	24.00	01-2025	2,308	63	63	63	63	63	63
18	303.99	53,946	60.00	25.00	02-2025	31,833	903	903	903	903	903	903
19	303.99	4,006	60.00	27.00	04-2025	2,237	67	67	67	67	67	67
20	303.99	4,514	60.00	27.00	04-2025	2,520	75	75	75	75	75	75
21	303.99	7,455	60.00	28.00	05-2025	4,038	124	124	124	124	124	124
22	303.99	9,526	60.00	30.00	07-2025	4,869	158	158	158	158	158	158
23	303.99	980	60.00	31.00	08-2025	452	17	17	17	17	17	17
24	303.99	31,627	60.00	31.00	08-2025	15,538	528	528	528	528	528	528
25	303.99	180	60.00	31.00	08-2025	89	3	3	3	3	3	3
26	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	121	121	121	121
27	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	74	74
28	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	458	458
29	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	298	298
30	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805	805
31	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700	700
32	303.99	82	60.00	39.50	Post 2025	60.51	0.55	0.55	0.55	0.55	0.55	0.56
33	303.99	351,849	60.00	41.50	Post 2025	101,775	5,753	5,753	5,753	5,753	5,753	5,753
34	303.99	420,397	60.00	41.50	Post 2025	124,531	7,122	7,122	7,123	7,123	7,123	7,122
35	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424	424
36	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671	3,671
37	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39	39
38	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122	122
39	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313	313
40	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225	225
41	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322	322
42	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61	61
43	303.99	41,900	60.00	57.50	Post 2025	1,664	691	700	700	700	700	700
44	303.99	25	60.00	57.50	Post 2025	1.05	0.42	0.42	0.42	0.42	0.42	0.42
45	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209	209
46	303.99	36,592	60.00	58.50	Post 2025	685	507	542	565	575	578	580
47	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45	45
48	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191	191
49	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432	432
50	303.99	31,616	60.00	59.50	Post 2025	251	521	553	562	550	536	530

**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2023 Monthly Amortization	2/28/2023 Monthly Amortization	3/31/2023 Monthly Amortization	4/30/2023 Monthly Amortization	5/31/2023 Monthly Amortization	6/30/2023 Monthly Amortization
		(1)	(2)	(3)	(4)		(5)						
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025			131.68	85	83	83	84
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		8.02	16	16	16	16	16
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		895.36	358	358	358	358	358
54	RPA	303.99	43,385	60.00	60.00	Post 2025			3,165	703	703	703	703
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025							
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025							
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025							
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025							
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025							
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025							
61	2023 BOW: HR & Ethics Case Manageme	303.99	26,678	60.00		Post 2025							
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025							
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025							
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025							
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025							
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025							
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025							
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025							
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025							
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025							
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025							
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025							
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025							
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025							
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025							
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025							
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025							
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025							
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025							
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025							
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025							
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025							
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025							
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025							
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025							
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025							
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025							
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025							
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025							
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025							
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025							
92	SubTotal 303.99						640,967.74	31,065.22	32,177.48	34,799.90	32,334.56	32,323.11	32,318.68

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023
No. Description	Account	Balance	Life	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	(4)		(5)	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
1	<u>Intangible Plant - Cloud Software</u>											
2	ServiceNow Phase2 Deferred Cloud	303.99	23,961	44.00	8.00	09-2023	19,605	545	545			
3	P2P Pcard Work Stream Def Cloud	303.99	1,711	46.00	10.00	11-2023	1,339	37	37	37		
4	Treasury Workstation Def Cloud	303.99	26,532	46.00	10.00	11-2023	20,764	577	577	577		
5	PPM Project Deferred ServiceNow	303.99	30,037	48.00	12.00	01-2024	22,528	626	626	626	626	626
6	TIMP Deferred	303.99	16,751	49.00	13.00	02-2024	12,307	342	342	342	342	342
7	P2P Sourcing & Contracts Def Cloud	303.99	86	52.00	16.00	05-2024	60	2	2	2	2	2
8	CMD BSN Deferred Cloud	303.99	14,359	53.00	17.00	06-2024	9,754	271	271	271	271	271
9	NICE PCI Deferred	303.99	16,983	54.00	18.00	07-2024	11,322	314	315	315	314	315
10	PPM Demand Mgmt Enhance - Def	303.99	10,392	54.00	18.00	07-2024	6,928	192	192	192	192	192
11	P2P Supplier Lifecycle Perform Def	303.99	79	57.00	21.00	10-2024	50	1	1	1	1	1
12	P2P Core Work Stream Def Cloud	303.99	56,252	58.00	22.00	11-2024	34,915	970	970	970	970	970
13	P2P Services Work Stream Def Cloud	303.99	19,298	58.00	22.00	11-2024	11,978	333	333	333	333	333
14	P2P NCS/CDC Release Platform Cloud	303.99	64,660	58.00	22.00	11-2024	40,094	1,117	1,117	1,117	1,117	1,117
15	Endpoint Security Program - Def	303.99	21,144	58.00	22.00	11-2024	13,124	365	365	365	365	365
16	Customer Digital Messaging Def	303.99	19,989	60.00	24.00	01-2025	12,160	333	333	333	333	333
17	Alteryx Designer Cloud Def	303.99	3,794	60.00	24.00	01-2025	2,308	63	63	63	63	63
18	ServiceNow Phase 2 Def Cloud	303.99	53,946	60.00	25.00	02-2025	31,833	903	903	903	903	903
19	Email Fraud Defense Enhance - Def	303.99	4,006	60.00	27.00	04-2025	2,237	67	67	67	67	67
20	Config Mgmt Compl Implement - Def	303.99	4,514	60.00	27.00	04-2025	2,520	75	75	75	75	75
21	Fortress Solution - Deferred Cloud	303.99	7,455	60.00	28.00	05-2025	4,038	124	124	124	124	124
22	CRISP Deployment - Def Cloud	303.99	9,526	60.00	30.00	07-2025	4,869	158	158	158	158	158
23	CASB, Prisma Saas & Cloud - Def	303.99	980	60.00	31.00	08-2025	452	17	17	17	17	17
24	Transmission Int Mgt Def Cloud	303.99	31,627	60.00	31.00	08-2025	15,538	528	528	528	528	528
25	Deferred Cloud - Webex	303.99	180	60.00	31.00	08-2025	89	3	3	3	3	3
26	Dynamic Signal Implementation Def	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	121	121	121
27	Greenroad Telematics Deferred O&M	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	74
28	ServiceNow Ongoing Development	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	458
29	Mulesoft Software Def Cloud	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	298
30	AKM Risk Model Tool Implement Def	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805
31	DevonWay Expansion Projects Cloud	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700
32	ServiceNow Upgrade - Digital Market	303.99	82	60.00	39.50	Post 2025	60.51	0.55	0.56	0.55	0.56	0.56
33	CX Digitization (Call Defle	303.99	351,849	60.00	41.50	Post 2025	101,775	5,912	6,077	6,077	6,077	6,077
34	Workday Implementation - Def	303.99	420,397	60.00	41.50	Post 2025	124,531	7,122	7,122	7,122	7,122	7,122
35	Operator Qualifications (OQ)	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424
36	Hyperion Planning Enhancements	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671
37	TCS Transitions Tools Implementation	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39
38	Risk Management Information Systems	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122
39	Service Now Ongoing Development	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313
40	IT Collaboration - O365	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225
41	Federal Directive - CrowdStrike	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322
42	Oracle RightNow CRM Upgrade	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61
43	AKM II Measure & Regulation Risk Mgmt	303.99	41,900	60.00	57.50	Post 2025	1,664	700	700	700	700	700
44	Emergency Preparedness & Response	303.99	25	60.00	57.50	Post 2025	1.05	0.42	0.42	0.42	0.42	0.42
45	Utilities - ESD - DevOps	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209
46	GRC Archer Implementation	303.99	36,592	60.00	58.50	Post 2025	685	580	582	583	583	583
47	Exterro Software Implementation	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45
48	Utilities - ESD - Tricentis	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191
49	2022 SEW E-Channels Agile Team	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432
50	Workday Product Support Team	303.99	31,616	60.00	59.50	Post 2025	251	527	525	525	525	525

**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2023 Monthly Amortization	8/31/2023 Monthly Amortization	9/30/2023 Monthly Amortization	10/31/2023 Monthly Amortization	11/30/2023 Monthly Amortization	12/31/2023 Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)							
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025		85	86	87	87	87	87	
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		16	16	16	16	16	16	
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		358	358	358	358	358	358	
54	RPA	303.99	43,385	60.00	60.00	Post 2025		703	703	703	863	1,038	884	
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025			3,679	1,059	1,074	1,086	1,092	
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025						264	541	
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025							285	
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025							410	
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025							1,184	
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025							127	
61	2023 BOW: HR & Ethics Case Manageme	303.99	26,678	60.00		Post 2025								
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025								
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025								
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025								
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025								
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025								
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025								
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025								
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025								
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025								
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025								
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025								
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025								
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025								
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025								
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025								
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025								
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025								
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025								
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025								
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025								
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025								
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025								
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025								
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025								
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025								
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025								
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025								
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025								
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025								
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025								
92	SubTotal 303.99							<u>640,967.74</u>	<u>32,477.97</u>	<u>36,321.54</u>	<u>33,158.41</u>	<u>33,333.41</u>	<u>33,170.98</u>	<u>35,306.15</u>

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2024	2/29/2024	3/31/2024	4/30/2024	5/31/2024	6/30/2024
<u>No. Description</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
				(4)		(5)						
1	<u>Intangible Plant - Cloud Software</u>											
2	ServiceNow Phase2 Deferred Cloud	303.99	23,961	44.00	8.00	09-2023	19,605					
3	P2P Pcard Work Stream Def Cloud	303.99	1,711	46.00	10.00	11-2023	1,339					
4	Treasury Workstation Def Cloud	303.99	26,532	46.00	10.00	11-2023	20,764					
5	PPM Project Deferred ServiceNow	303.99	30,037	48.00	12.00	01-2024	22,528					
6	TIMP Deferred	303.99	16,751	49.00	13.00	02-2024	12,307	342				
7	P2P Sourcing & Contracts Def Cloud	303.99	86	52.00	16.00	05-2024	60	2	2	2	2	
8	CMD BSN Deferred Cloud	303.99	14,359	53.00	17.00	06-2024	9,754	271	271	271	271	
9	NICE PCI Deferred	303.99	16,983	54.00	18.00	07-2024	11,322	315	314	314	314	314
10	PPM Demand Mgmt Enhance - Def	303.99	10,392	54.00	18.00	07-2024	6,928	192	192	192	192	192
11	P2P Supplier Lifecycle Perform Def	303.99	79	57.00	21.00	10-2024	50	1	1	1	1	1
12	P2P Core Work Stream Def Cloud	303.99	56,252	58.00	22.00	11-2024	34,915	970	970	970	970	970
13	P2P Services Work Stream Def Cloud	303.99	19,298	58.00	22.00	11-2024	11,978	333	333	333	333	333
14	P2P NCS/CDC Release Platform Cloud	303.99	64,660	58.00	22.00	11-2024	40,094	1,117	1,117	1,117	1,117	1,117
15	Endpoint Security Program - Def	303.99	21,144	58.00	22.00	11-2024	13,124	365	365	365	365	365
16	Customer Digital Messaging Def	303.99	19,989	60.00	24.00	01-2025	12,160	333	333	333	333	333
17	Alteryx Designer Cloud Def	303.99	3,794	60.00	24.00	01-2025	2,308	63	63	63	63	63
18	ServiceNow Phase 2 Def Cloud	303.99	53,946	60.00	25.00	02-2025	31,833	903	903	903	903	903
19	Email Fraud Defense Enhance - Def	303.99	4,006	60.00	27.00	04-2025	2,237	67	67	67	67	67
20	Config Mgmt Compl Implement - Def	303.99	4,514	60.00	27.00	04-2025	2,520	75	75	75	75	75
21	Fortress Solution - Deferred Cloud	303.99	7,455	60.00	28.00	05-2025	4,038	124	124	124	124	124
22	CRISP Deployment - Def Cloud	303.99	9,526	60.00	30.00	07-2025	4,869	158	158	158	158	158
23	CASB, Prisma Saas & Cloud - Def	303.99	980	60.00	31.00	08-2025	452	17	17	17	17	17
24	Transmission Int Mgt Def Cloud	303.99	31,627	60.00	31.00	08-2025	15,538	528	528	528	528	528
25	Deferred Cloud - Webex	303.99	180	60.00	31.00	08-2025	89	3	3	3	3	3
26	Dynamic Signal Implementation Def	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	121	121	121
27	Greenroad Telematics Deferred O&M	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	74
28	ServiceNow Ongoing Development	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	458
29	Mulesoft Software Def Cloud	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	298
30	AKM Risk Model Tool Implement Def	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805
31	DevonWay Expansion Projects Cloud	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700
32	ServiceNow Upgrade - Digital Market	303.99	82	60.00	39.50	Post 2025	60.51	1	0.56	0.56	0.56	0.56
33	CX Digitization (Call Defle	303.99	351,849	60.00	41.50	Post 2025	101,775	6,077	6,077	6,077	6,077	6,077
34	Workday Implementation - Def	303.99	420,397	60.00	41.50	Post 2025	124,531	7,122	7,127	7,127	7,127	7,127
35	Operator Qualifications (OQ)	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424
36	Hyperion Planning Enhancements	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671
37	TCS Transitions Tools Implementation	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39
38	Risk Management Information Systems	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122
39	Service Now Ongoing Development	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313
40	IT Collaboration - O365	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225
41	Federal Directive - CrowdStrike	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322
42	Oracle RightNow CRM Upgrade	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61
43	AKM II Measure & Regulation Risk Mgmt	303.99	41,900	60.00	57.50	Post 2025	1,664	700	700	700	700	700
44	Emergency Preparedness & Response	303.99	25	60.00	57.50	Post 2025	1.05	0	0.42	0.42	0.42	0.42
45	Utilities - ESD - DevOps	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209
46	GRC Archer Implementation	303.99	36,592	60.00	58.50	Post 2025	685	604	626	626	626	626
47	Exterro Software Implementation	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45
48	Utilities - ESD - Tricentis	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191
49	2022 SEW E-Channels Agile Team	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432
50	Workday Product Support Team	303.99	31,616	60.00	59.50	Post 2025	251	525	525	525	525	525

**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2024 Monthly Amortization	2/29/2024 Monthly Amortization	3/31/2024 Monthly Amortization	4/30/2024 Monthly Amortization	5/31/2024 Monthly Amortization	6/30/2024 Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)							
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025		87	87	87	87	87	87	
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		16	16	16	16	16	16	
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		358	358	358	358	358	358	
54	RPA	303.99	43,385	60.00	60.00	Post 2025		714	714	714	714	714	714	
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025		1,094	1,094	1,094	1,094	1,094	1,094	
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025		554	555	555	555	555	555	
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025		569	569	569	569	569	569	
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025		829	841	841	841	841	841	
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025		346	372	372	372	372	372	
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025		256	261	261	261	261	261	
61	2023 BOW: HR & Ethics Case Manageme	303.99	26,678	60.00		Post 2025		216	439	439	439	439	439	
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025				88	177	177	177	
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025					41	82	82	
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025						52	104	
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025							428	
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025								
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025								
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025								
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025								
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025								
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025								
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025								
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025								
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025								
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025								
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025								
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025								
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025								
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025								
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025								
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025								
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025								
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025								
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025								
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025								
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025								
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025								
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025								
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025								
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025								
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025								
92	SubTotal 303.99							<u>640,967.74</u>	<u>34,758.99</u>	<u>34,708.97</u>	<u>34,797.46</u>	<u>34,926.83</u>	<u>35,018.21</u>	<u>35,227.42</u>

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	7/31/2024	8/31/2024	9/30/2024	10/31/2024	11/30/2024	12/31/2024
No. Description	Account	Balance	Life	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
1	<u>Intangible Plant - Cloud Software</u>											
2	ServiceNow Phase2 Deferred Cloud	303.99	23,961	44.00	8.00	09-2023	19,605					
3	P2P Pcard Work Stream Def Cloud	303.99	1,711	46.00	10.00	11-2023	1,339					
4	Treasury Workstation Def Cloud	303.99	26,532	46.00	10.00	11-2023	20,764					
5	PPM Project Deferred ServiceNow	303.99	30,037	48.00	12.00	01-2024	22,528					
6	TIMP Deferred	303.99	16,751	49.00	13.00	02-2024	12,307					
7	P2P Sourcing & Contracts Def Cloud	303.99	86	52.00	16.00	05-2024	60					
8	CMD BSN Deferred Cloud	303.99	14,359	53.00	17.00	06-2024	9,754					
9	NICE PCI Deferred	303.99	16,983	54.00	18.00	07-2024	11,322					
10	PPM Demand Mgmt Enhance - Def	303.99	10,392	54.00	18.00	07-2024	6,928					
11	P2P Supplier Lifecycle Perform Def	303.99	79	57.00	21.00	10-2024	50	1	1	1		
12	P2P Core Work Stream Def Cloud	303.99	56,252	58.00	22.00	11-2024	34,915	970	970	970	970	
13	P2P Services Work Stream Def Cloud	303.99	19,298	58.00	22.00	11-2024	11,978	333	333	333	333	
14	P2P NCS/CDC Release Platform Cloud	303.99	64,660	58.00	22.00	11-2024	40,094	1,117	1,117	1,117	1,117	
15	Endpoint Security Program - Def	303.99	21,144	58.00	22.00	11-2024	13,124	365	365	365	365	
16	Customer Digital Messaging Def	303.99	19,989	60.00	24.00	01-2025	12,160	333	333	333	333	333
17	Alteryx Designer Cloud Def	303.99	3,794	60.00	24.00	01-2025	2,308	63	63	63	63	63
18	ServiceNow Phase 2 Def Cloud	303.99	53,946	60.00	25.00	02-2025	31,833	903	903	903	903	903
19	Email Fraud Defense Enhance - Def	303.99	4,006	60.00	27.00	04-2025	2,237	67	67	67	67	67
20	Config Mgmt Compl Implement - Def	303.99	4,514	60.00	27.00	04-2025	2,520	75	75	75	75	75
21	Fortress Solution - Deferred Cloud	303.99	7,455	60.00	28.00	05-2025	4,038	124	124	124	124	124
22	CRISP Deployment - Def Cloud	303.99	9,526	60.00	30.00	07-2025	4,869	158	158	158	158	158
23	CASB, Prisma Saas & Cloud - Def	303.99	980	60.00	31.00	08-2025	452	17	17	17	17	17
24	Transmission Int Mgt Def Cloud	303.99	31,627	60.00	31.00	08-2025	15,538	528	528	528	528	528
25	Deferred Cloud - Webex	303.99	180	60.00	31.00	08-2025	89	3	3	3	3	3
26	Dynamic Signal Implementation Def	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	121	121	121
27	Greenroad Telematics Deferred O&M	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	74
28	ServiceNow Ongoing Development	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	458
29	Mulesoft Software Def Cloud	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	298
30	AKM Risk Model Tool Implement Def	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805
31	DevonWay Expansion Projects Cloud	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700
32	ServiceNow Upgrade - Digital Market	303.99	82	60.00	39.50	Post 2025	60.51	0.56	0.56	0.56	0.56	0.56
33	CX Digitization (Call Defle	303.99	351,849	60.00	41.50	Post 2025	101,775	6,077	6,077	6,077	6,077	6,077
34	Workday Implementation - Def	303.99	420,397	60.00	41.50	Post 2025	124,531	7,127	7,127	7,127	7,127	7,127
35	Operator Qualifications (OQ)	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424
36	Hyperion Planning Enhancements	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671
37	TCS Transitions Tools Implementation	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39
38	Risk Management Information Systems	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122
39	Service Now Ongoing Development	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313
40	IT Collaboration - O365	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225
41	Federal Directive - CrowdStrike	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322
42	Oracle RightNow CRM Upgrade	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61
43	AKM II Measure & Regulation Risk Mgmt	303.99	41,900	60.00	57.50	Post 2025	1,664	700	700	700	700	700
44	Emergency Preparedness & Response	303.99	25	60.00	57.50	Post 2025	1.05	0.42	0.42	0.42	0.42	0.42
45	Utilities - ESD - DevOps	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209
46	GRC Archer Implementation	303.99	36,592	60.00	58.50	Post 2025	685	626	626	626	626	626
47	Exterro Software Implementation	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45
48	Utilities - ESD - Tricentis	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191
49	2022 SEW E-Channels Agile Team	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432
50	Workday Product Support Team	303.99	31,616	60.00	59.50	Post 2025	251	525	525	525	525	525



**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2024 Monthly Amortization	8/31/2024 Monthly Amortization	9/30/2024 Monthly Amortization	10/31/2024 Monthly Amortization	11/30/2024 Monthly Amortization	12/31/2024 Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)							
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025		87	87	87	87	87	87	
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		16	16	16	16	16	16	
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		358	358	358	358	358	358	
54	RPA	303.99	43,385	60.00	60.00	Post 2025		714	714	714	714	714	714	
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025		1,094	1,094	1,094	1,094	1,094	1,094	
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025		555	555	555	555	555	555	
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025		569	569	569	569	569	569	
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025		841	841	841	841	841	841	
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025		372	372	372	372	372	372	
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025		261	261	261	261	261	261	
61	2023 BOW: HR & Ethics Case Manageme	303.99	26,678	60.00		Post 2025		439	439	439	439	439	439	
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025		177	177	177	177	177	177	
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025		82	82	82	82	82	82	
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025		104	104	104	104	104	104	
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025		856	856	856	856	856	856	
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025		45	90	90	90	90	90	
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025			90	181	181	181	181	
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025				8	17	17	17	
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025					129	259	259	
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025						477	955	
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025							160	
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025								
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025								
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025								
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025								
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025								
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025								
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025								
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025								
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025								
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025								
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025								
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025								
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025								
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025								
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025								
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025								
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025								
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025								
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025								
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025								
92	SubTotal 303.99							<u>640,967.74</u>	<u>35,193.62</u>	<u>35,329.04</u>	<u>35,427.69</u>	<u>35,563.96</u>	<u>33,387.01</u>	<u>33,826.08</u>

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	1/31/2025	2/28/2025	3/31/2025	4/30/2025	5/31/2025	6/30/2025
<u>No.</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	<u>Post Life as of</u>	<u>Month</u>	<u>Balance</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>	<u>Monthly</u>
<u>Description</u>	(1)	(2)	(3)	(4)		(5)	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>	<u>Amortization</u>
1	<u>Intangible Plant - Cloud Software</u>											
2	ServiceNow Phase2 Deferred Cloud	303.99	23,961	44.00	8.00	09-2023	19,605					
3	P2P Pcard Work Stream Def Cloud	303.99	1,711	46.00	10.00	11-2023	1,339					
4	Treasury Workstation Def Cloud	303.99	26,532	46.00	10.00	11-2023	20,764					
5	PPM Project Deferred ServiceNow	303.99	30,037	48.00	12.00	01-2024	22,528					
6	TIMP Deferred	303.99	16,751	49.00	13.00	02-2024	12,307					
7	P2P Sourcing & Contracts Def Cloud	303.99	86	52.00	16.00	05-2024	60					
8	CMD BSN Deferred Cloud	303.99	14,359	53.00	17.00	06-2024	9,754					
9	NICE PCI Deferred	303.99	16,983	54.00	18.00	07-2024	11,322					
10	PPM Demand Mgmt Enhance - Def	303.99	10,392	54.00	18.00	07-2024	6,928					
11	P2P Supplier Lifecycle Perform Def	303.99	79	57.00	21.00	10-2024	50					
12	P2P Core Work Stream Def Cloud	303.99	56,252	58.00	22.00	11-2024	34,915					
13	P2P Services Work Stream Def Cloud	303.99	19,298	58.00	22.00	11-2024	11,978					
14	P2P NCS/CDC Release Platform Cloud	303.99	64,660	58.00	22.00	11-2024	40,094					
15	Endpoint Security Program - Def	303.99	21,144	58.00	22.00	11-2024	13,124					
16	Customer Digital Messaging Def	303.99	19,989	60.00	24.00	01-2025	12,160					
17	Alteryx Designer Cloud Def	303.99	3,794	60.00	24.00	01-2025	2,308					
18	ServiceNow Phase 2 Def Cloud	303.99	53,946	60.00	25.00	02-2025	31,833	450				
19	Email Fraud Defense Enhance - Def	303.99	4,006	60.00	27.00	04-2025	2,237	67	67	33		
20	Config Mgmt Compl Implement - Def	303.99	4,514	60.00	27.00	04-2025	2,520	75	75	38		
21	Fortress Solution - Deferred Cloud	303.99	7,455	60.00	28.00	05-2025	4,038	124	124	62		
22	CRISP Deployment - Def Cloud	303.99	9,526	60.00	30.00	07-2025	4,869	158	158	158	158	79
23	CASB, Prisma Saas & Cloud - Def	303.99	980	60.00	31.00	08-2025	452	17	17	17	17	17
24	Transmission Int Mgt Def Cloud	303.99	31,627	60.00	31.00	08-2025	15,538	528	528	528	528	528
25	Deferred Cloud - Webex	303.99	180	60.00	31.00	08-2025	89	3	3	3	3	3
26	Dynamic Signal Implementation Def	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	121	121	121
27	Greenroad Telematics Deferred O&M	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	74
28	ServiceNow Ongoing Development	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	458
29	Mulesoft Software Def Cloud	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	298
30	AKM Risk Model Tool Implement Def	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805
31	DevonWay Expansion Projects Cloud	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700
32	ServiceNow Upgrade - Digital Market	303.99	82	60.00	39.50	Post 2025	60.51	0.56	0.56	0.56	0.56	0.56
33	CX Digitization (Call Defle	303.99	351,849	60.00	41.50	Post 2025	101,775	6,077	6,077	6,077	6,077	6,077
34	Workday Implementation - Def	303.99	420,397	60.00	41.50	Post 2025	124,531	7,127	7,127	7,127	7,127	7,127
35	Operator Qualifications (OQ)	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424
36	Hyperion Planning Enhancements	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671
37	TCS Transitions Tools Implementation	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39
38	Risk Management Information Systems	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122
39	Service Now Ongoing Development	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313
40	IT Collaboration - O365	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225
41	Federal Directive - CrowdStrike	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322
42	Oracle RightNow CRM Upgrade	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61
43	AKM II Measure & Regulation Risk Mgmt	303.99	41,900	60.00	57.50	Post 2025	1,664	700	700	700	700	700
44	Emergency Preparedness & Response	303.99	25	60.00	57.50	Post 2025	1.05	0.42	0.42	0.42	0.42	0.42
45	Utilities - ESD - DevOps	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209
46	GRC Archer Implementation	303.99	36,592	60.00	58.50	Post 2025	685	626	626	626	626	626
47	Exterro Software Implementation	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45
48	Utilities - ESD - Tricentis	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191
49	2022 SEW E-Channels Agile Team	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432
50	Workday Product Support Team	303.99	31,616	60.00	59.50	Post 2025	251	525	525	525	525	525

**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	1/31/2025 Monthly Amortization	2/28/2025 Monthly Amortization	3/31/2025 Monthly Amortization	4/30/2025 Monthly Amortization	5/31/2025 Monthly Amortization	6/30/2025 Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)							
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025		87	87	87	87	87	87	
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		16	16	16	16	16	16	
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		358	358	358	358	358	358	
54	RPA	303.99	43,385	60.00	60.00	Post 2025		714	714	714	714	714	714	
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025		1,094	1,094	1,094	1,094	1,094	1,094	
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025		555	555	555	555	555	555	
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025		569	569	569	569	569	569	
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025		841	841	841	841	841	841	
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025		372	372	372	372	372	372	
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025		261	261	261	261	261	261	
61	2023 BOW: HR & Ethics Case Managememe	303.99	26,678	60.00		Post 2025		439	439	439	439	439	439	
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025		177	177	177	177	177	177	
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025		82	82	82	82	82	82	
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025		104	104	104	104	104	104	
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025		856	856	856	856	856	856	
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025		90	90	90	90	90	90	
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025		181	181	181	181	181	181	
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025		17	17	17	17	17	17	
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025		259	259	259	259	259	259	
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025		955	955	955	955	955	955	
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025		320	320	320	320	320	320	
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025		106	213	213	213	213	213	
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025		864	1,727	1,727	1,727	1,727	1,727	
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025			52	105	105	105	105	
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025				73	146	146	146	
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025				26		51	51	
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025					12,737	25,473	25,473	
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025						33	65	
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025						635	1,269	
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025							93	
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025							41	
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025								
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025								
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025								
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025								
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025								
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025								
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025								
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025								
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025								
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025								
92	SubTotal 303.99							640,967.74	34,304.59	34,877.24	34,931.37	47,633.13	61,000.44	61,722.61

**Columbia Gas of Kentucky  
Cloud Software**

Line	Gas Plant	Plant	Initial	Remaining	Retirement	Reserve	7/31/2025	8/31/2025	9/30/2025	10/31/2025	11/30/2025	12/31/2025
<u>No. Description</u>	<u>Account</u>	<u>Balance</u>	<u>Life</u>	Post Life as of	Month	Balance	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
	(1)	(2)	(3)	12/31/2022		12/31/2022	Amortization	Amortization	Amortization	Amortization	Amortization	Amortization
				(4)		(5)						
1	<u>Intangible Plant - Cloud Software</u>											
2	ServiceNow Phase2 Deferred Cloud	303.99	23,961	44.00	8.00	09-2023	19,605					
3	P2P Pcard Work Stream Def Cloud	303.99	1,711	46.00	10.00	11-2023	1,339					
4	Treasury Workstation Def Cloud	303.99	26,532	46.00	10.00	11-2023	20,764					
5	PPM Project Deferred ServiceNow	303.99	30,037	48.00	12.00	01-2024	22,528					
6	TIMP Deferred	303.99	16,751	49.00	13.00	02-2024	12,307					
7	P2P Sourcing & Contracts Def Cloud	303.99	86	52.00	16.00	05-2024	60					
8	CMD BSN Deferred Cloud	303.99	14,359	53.00	17.00	06-2024	9,754					
9	NICE PCI Deferred	303.99	16,983	54.00	18.00	07-2024	11,322					
10	PPM Demand Mgmt Enhance - Def	303.99	10,392	54.00	18.00	07-2024	6,928					
11	P2P Supplier Lifecycle Perform Def	303.99	79	57.00	21.00	10-2024	50					
12	P2P Core Work Stream Def Cloud	303.99	56,252	58.00	22.00	11-2024	34,915					
13	P2P Services Work Stream Def Cloud	303.99	19,298	58.00	22.00	11-2024	11,978					
14	P2P NCS/CDC Release Platform Cloud	303.99	64,660	58.00	22.00	11-2024	40,094					
15	Endpoint Security Program - Def	303.99	21,144	58.00	22.00	11-2024	13,124					
16	Customer Digital Messaging Def	303.99	19,989	60.00	24.00	01-2025	12,160					
17	Alteryx Designer Cloud Def	303.99	3,794	60.00	24.00	01-2025	2,308					
18	ServiceNow Phase 2 Def Cloud	303.99	53,946	60.00	25.00	02-2025	31,833					
19	Email Fraud Defense Enhance - Def	303.99	4,006	60.00	27.00	04-2025	2,237					
20	Config Mgmt Compl Implement - Def	303.99	4,514	60.00	27.00	04-2025	2,520					
21	Fortress Solution - Deferred Cloud	303.99	7,455	60.00	28.00	05-2025	4,038					
22	CRISP Deployment - Def Cloud	303.99	9,526	60.00	30.00	07-2025	4,869					
23	CASB, Prisma Saas & Cloud - Def	303.99	980	60.00	31.00	08-2025	452	9				
24	Transmission Int Mgt Def Cloud	303.99	31,627	60.00	31.00	08-2025	15,538	264				
25	Deferred Cloud - Webex	303.99	180	60.00	31.00	08-2025	89	2				
26	Dynamic Signal Implementation Def	303.99	7,247	60.00	33.00	10-2025	3,321	121	121	60		
27	Greenroad Telematics Deferred O&M	303.99	4,442	60.00	35.00	12-2025	1,880	74	74	74	74	37
28	ServiceNow Ongoing Development	303.99	26,619	60.00	35.50	Post 2025	10,361	458	458	458	458	229
29	Mulesoft Software Def Cloud	303.99	17,885	60.00	35.50	Post 2025	7,303	298	298	298	298	149
30	AKM Risk Model Tool Implement Def	303.99	48,087	60.00	38.50	Post 2025	17,104	805	805	805	805	805
31	DevonWay Expansion Projects Cloud	303.99	41,111	60.00	39.50	Post 2025	13,448	700	700	700	700	700
32	ServiceNow Upgrade - Digital Market	303.99	82	60.00	39.50	Post 2025	60.51	0.56	0.56	0.56	0.56	0.56
33	CX Digitization (Call Defle	303.99	351,849	60.00	41.50	Post 2025	101,775	6,077	6,077	6,077	6,077	6,077
34	Workday Implementation - Def	303.99	420,397	60.00	41.50	Post 2025	124,531	7,127	7,127	7,127	7,127	7,127
35	Operator Qualifications (OQ)	303.99	25,504	60.00	41.50	Post 2025	7,889	424	424	424	424	424
36	Hyperion Planning Enhancements	303.99	217,824	60.00	43.50	Post 2025	58,156	3,671	3,671	3,671	3,671	3,671
37	TCS Transitions Tools Implementation	303.99	2,368	60.00	45.50	Post 2025	573	39	39	39	39	39
38	Risk Management Information Systems	303.99	7,331	60.00	46.50	Post 2025	1,649	122	122	122	122	122
39	Service Now Ongoing Development	303.99	18,846	60.00	47.50	Post 2025	3,959	313	313	313	313	313
40	IT Collaboration - O365	303.99	12,457	60.00	47.50	Post 2025	1,759	225	225	225	225	225
41	Federal Directive - CrowdStrike	303.99	19,319	60.00	51.50	Post 2025	2,724	322	322	322	322	322
42	Oracle RightNow CRM Upgrade	303.99	3,628	60.00	53.50	Post 2025	377	61	61	61	61	61
43	AKM II Measure & Regulation Risk Mgmt	303.99	41,900	60.00	57.50	Post 2025	1,664	700	700	700	700	700
44	Emergency Preparedness & Response	303.99	25	60.00	57.50	Post 2025	1.05	0.42	0.42	0.42	0.42	0.42
45	Utilities - ESD - DevOps	303.99	12,512	60.00	58.50	Post 2025	307	209	209	209	209	209
46	GRC Archer Implementation	303.99	36,592	60.00	58.50	Post 2025	685	626	626	626	626	626
47	Exterro Software Implementation	303.99	2,680	60.00	58.50	Post 2025	67	45	45	45	45	45
48	Utilities - ESD - Tricentis	303.99	11,449	60.00	59.50	Post 2025	95	191	191	191	191	191
49	2022 SEW E-Channels Agile Team	303.99	25,897	60.00	59.50	Post 2025	216	432	432	432	432	432
50	Workday Product Support Team	303.99	31,616	60.00	59.50	Post 2025	251	525	525	525	525	525

**Columbia Gas of Kentucky  
Cloud Software**

Line No.	Description	Gas Plant Account	Plant Balance	Initial Life	Remaining Post Life as of 12/31/2022	Retirement Month	Reserve Balance 12/31/2022	7/31/2025 Monthly Amortization	8/31/2025 Monthly Amortization	9/30/2025 Monthly Amortization	10/31/2025 Monthly Amortization	11/30/2025 Monthly Amortization	12/31/2025 Monthly Amortization	
		(1)	(2)	(3)	(4)		(5)							
51	Data Lake Foundation Build	303.99	5,211	60.00	60.00	Post 2025		87	87	87	87	87	87	
52	IR Oracle CRM 22D Upgrade	303.99	986	60.00	60.00	Post 2025		16	16	16	16	16	16	
53	Meter to Cash Analytics	303.99	21,489	60.00	60.00	Post 2025		358	358	358	358	358	358	
54	RPA	303.99	43,385	60.00	60.00	Post 2025		714	714	714	714	714	714	
55	Workday Learning	303.99	65,342	60.00	60.00	Post 2025		1,094	1,094	1,094	1,094	1,094	1,094	
56	Spark Learn - OJT Application Replacement (JAWS (Job and Worksite Support)	303.99	33,253	60.00	60.00	Post 2025		555	555	555	555	555	555	
57	2023 SEW E-Channels Agile Product Team	303.99	34,160	60.00	60.00	Post 2025		569	569	569	569	569	569	
58	2023 Workday Agile Product Team	303.99	50,604	60.00	60.00	Post 2025		841	841	841	841	841	841	
59	RSA Archer TSA onboarding and enhancements 2023	303.99	23,186	60.00	60.00	Post 2025		372	372	372	372	372	372	
60	Supply Chain Agile Team	303.99	15,787	60.00	60.00	Post 2025		261	261	261	261	261	261	
61	2023 BOW: HR & Ethics Case Manageme	303.99	26,678	60.00		Post 2025		439	439	439	439	439	439	
62	Technology other than WAM program (Projected)	303.99	10,618	60.00		Post 2025		177	177	177	177	177	177	
63	Technology other than WAM program (Projected)	303.99	4,906	60.00		Post 2025		82	82	82	82	82	82	
64	Technology other than WAM program (Projected)	303.99	6,258	60.00		Post 2025		104	104	104	104	104	104	
65	Technology other than WAM program (Projected)	303.99	51,358	60.00		Post 2025		856	856	856	856	856	856	
66	Technology other than WAM program (Projected)	303.99	5,416	60.00		Post 2025		90	90	90	90	90	90	
67	Technology other than WAM program (Projected)	303.99	10,835	60.00		Post 2025		181	181	181	181	181	181	
68	Technology other than WAM program (Projected)	303.99	1,003	60.00		Post 2025		17	17	17	17	17	17	
69	Technology other than WAM program (Projected)	303.99	15,517	60.00		Post 2025		259	259	259	259	259	259	
70	Technology other than WAM program (Projected)	303.99	57,297	60.00		Post 2025		955	955	955	955	955	955	
71	Technology other than WAM program (Projected)	303.99	19,176	60.00		Post 2025		320	320	320	320	320	320	
72	Technology other than WAM program (Projected)	303.99	12,752	60.00		Post 2025		213	213	213	213	213	213	
73	WAM program (Projected)	303.99	146,818	85.00		Post 2025		1,727	1,727	1,727	1,727	1,727	1,727	
74	Technology other than WAM program (Projected)	303.99	6,277	60.00		Post 2025		105	105	105	105	105	105	
75	Technology other than WAM program (Projected)	303.99	8,738	60.00		Post 2025		146	146	146	146	146	146	
76	Technology other than WAM program (Projected)	303.99	3,068	60.00		Post 2025		51	51	51	51	51	51	
77	WAM program (Projected)	303.99	2,088,787	82.00		Post 2025		25,473	25,473	25,473	25,473	25,473	25,473	
78	Technology other than WAM program (Projected)	303.99	3,914	60.00		Post 2025		65	65	65	65	65	65	
79	WAM program (Projected)	303.99	102,828	81.00		Post 2025		1,269	1,269	1,269	1,269	1,269	1,269	
80	Technology other than WAM program (Projected)	303.99	11,129	60.00		Post 2025		185	185	185	185	185	185	
81	WAM program (Projected)	303.99	6,562	80.00		Post 2025		82	82	82	82	82	82	
82	Technology other than WAM program (Projected)	303.99	3,387	60.00		Post 2025		28	56	56	56	56	56	
83	WAM program (Projected)	303.99	2,087	79.00		Post 2025		13	26	26	26	26	26	
84	Technology other than WAM program (Projected)	303.99	6,776	60.00		Post 2025			56	113	113	113	113	
85	WAM program (Projected)	303.99	2,136	78.00		Post 2025			14	27	27	27	27	
86	Technology other than WAM program (Projected)	303.99	627	60.00		Post 2025				5	10	10	10	
87	WAM program (Projected)	303.99	2,066	77.00		Post 2025				13	27	27	27	
88	Technology other than WAM program (Projected)	303.99	9,704	60.00		Post 2025					81	162	162	
89	WAM program (Projected)	303.99	259,116	76.00		Post 2025					1,705	3,409	3,409	
90	Technology other than WAM program (Projected)	303.99	35,833	60.00		Post 2025						299	597	
91	Technology other than WAM program (Projected)	303.99	11,992	60.00		Post 2025							100	
92	SubTotal 303.99							640,967.74	61,544.93	61,382.61	61,411.02	63,154.86	65,201.92	65,185.30

# Attachment JTG-2

**Columbia Gas of Kentucky**  
**Total Company Plant Additions vs Approved Capital Budget**  
**\$ (Dollars)**

Line No.	2024	2025
1	Total Company Plant Additions -Per WPB 2-1.B	
2	2,567,083	3,808,631
3	3,462,413	2,543,317
4	5,968,967	4,223,867
5	4,141,296	7,951,219
6	6,053,972	6,958,347
7	5,202,888	5,210,143
8	5,418,277	4,990,112
9	4,206,718	3,803,616
10	6,300,056	6,096,593
11	7,257,583	6,496,481
12	5,843,871	5,740,762
13	9,242,122	10,841,455
14	<u>65,665,246</u>	<u>68,664,543</u>
15	Approved Capital Budget	65,168,385
16	<u>(1,511,705)</u>	<u>3,496,158</u>
17	Items causing Differences	
18	2024 WAM program Capital Spend - included in 2025 Additions	2,174,362
19	WAM program Capital Spend prior to 2024 - included in 2025 Additions	1,450,479
20	Field Mobility - Approved after Capital Budget	1,020,000
21	NiNext: IVR Refinement and Enhancements reversal	(357,343)
22	Projected Growth in December 2025 CWIP not otherwise identified	(128,683)
23	<u>(1,511,705)</u>	<u>3,496,158</u>

TAB 19

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Judy M. Cooper



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
)
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF ) Case No. 2024-00092
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

VERIFICATION OF JUDY COOPER

STATE OF OHIO )
)
COUNTY OF FRANKLIN )

Judy Cooper, Director of Regulatory Affairs for Columbia Gas of Kentucky, Inc., being duly sworn, states that she has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

Judy Cooper
Judy Cooper

The foregoing Verification was signed, acknowledged and sworn to before me this 30th day of April, 2024, by Judy Cooper.

Notary Commission No. N/A
Commission expiration: N/A



John R Ryan III
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

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

In the matter of: )  
 )  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

---

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

---

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May 16, 2024

Attorneys for Applicant  
COLUMBIA GAS OF KENTUCKY, INC.

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

1       **I.       INTRODUCTION**

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

3       A:       My name is Judy Cooper and my business address is 2001 Mercer Road,  
4               Lexington, Kentucky, 40511.

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 Kentucky, Inc.  
7               ("Columbia"). I am responsible for the management of Columbia's regulatory  
8               affairs, tariffs and filings with the Kentucky Public Service Commission  
9               ("Commission"), including quarterly Gas Cost Adjustments.

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

11      A:       I obtained a Bachelor of Science Degree in Accounting from the University  
12              of Kentucky and a Master's Degree in Business Administration from  
13              Xavier University. My professional experience began as an auditor at the  
14              Kentucky Public Service Commission and progressed in various analyst,  
15              policy, and management positions, ultimately rising to Director of Rates,  
16              Tariffs and Financial Analysis. Subsequently, I have been employed by  
17              Columbia in regulatory and government roles of increasing responsibility  
18              to that of my current position.

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

2 A. Yes, I have testified in more than a dozen cases before the Commission.

3 **Q. What is the purpose of your testimony?**

4 A. The purpose of my testimony is to support certain filing requirements  
5 prescribed by the Commission's regulations and the proposed  
6 modifications to Columbia's tariff pages. My testimony will provide a  
7 narrative description, and explanation of, the proposed tariff changes. The  
8 proposed revised tariff sheets are filed pursuant to 807 KAR 5:011.  
9 Specifically, I support the proposed revisions to Columbia's tariff pages for  
10 changes in base rates on all rate schedules; and the State Tax Adjustment  
11 Factor, Main Line Delivery Service Rate Schedule ("MLDS") customer  
12 charge rate blocks, Safety Modification and Replacement Program  
13 ("SMRP") Rider and Late Payment Penalty provisions of Columbia's  
14 General Terms, Conditions, Rules and Regulations. In addition, my  
15 testimony will address the requirement of KRS 278.2205 that requires the  
16 filing of a cost allocation manual for non-regulated activity. Finally, I will  
17 support Columbia's customer and public notices regarding this case.

18 **Q. What Filing Requirements will you be supporting?**

19 A. I will sponsor and support the following Filing Requirements:

<b>Filing Requirement</b>	<b>Description</b>
807 KAR 5:001 Section 16(1)(b)(3)	New or Revised tariff sheets, with an effective date not less than thirty (30) days from the date the application was filed.
807 KAR 5:001 Section 16(1)(b)(4)	New or Revised tariff sheets showing the proposed additions and striking over the proposed deletions.
807 KAR 5:001 Section 16(1)(b)5	A statement that notice has been given in compliance with Section 17 of this administrative regulation with a copy of the notice.
807 KAR 5:001 Section 16(2)	A utility with gross annual revenues greater than \$ 5,000,000 shall notify the commission in writing of its intent to file a rate application at least thirty (30) days, but not more than sixty (60) days, prior to filing its application.
807 KAR 5:001 Section 16(8)(l)	A narrative description and explanation of all proposed tariff changes.
807 KAR 5:001 Section 17(1)(a)	Upon filing an application for a general rate adjustment, a utility shall provide notice as established in this section. (1) Public postings (a) A utility shall post at its place of business a copy of the notice no later than the date the application is submitted to the commission.
807 KAR 5:001 Section 17(1)(b)	A utility that maintains a Web site shall, within five (5) business days of the date the application is submitted to the commission, post on its Web sties: 1. A copy of the public notice; and 2. A hyperlink to the location on the commission's

	Web site where the case documents are available.
807 KAR 5:001 Section 17(1)(c)	The information required in paragraph (a) and (b) of this subsection shall not be removed until the commission issues a final decision on the application.
807 KAR 5:001 Section 17(2)(b)	If a utility has more than twenty (20) customers, it shall provide notice by: 1. Including notice with customer bills mailed no later than the date the application is submitted to the commission; 2. Mailing a written notice to each customer no later than the date the application is submitted to the commission; 3. Publishing notice once a week for three (3) consecutive weeks in a prominent manner in a newspaper of general circulation in the utility's service area, the first publication to be made no later than the date the application is submitted to the commission; or 4. Publishing notice in a trace publication or newsletter delivered to all customers no later than the date the application is submitted to the commission.
807 KAR 5:001 Section 17(2)(c)	A utility that provides service in more than one (1) county may use a combination of the notice methods listed in paragraph (b) of this subsection.
807 KAR 5:001 Section 17(3)	Proof of Notice. A utility shall file with the commission no later than forty-five (45) days from the date the application was initially submitted to the commission:

	<p>(a) If notice is mailed to its customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, that notice was mailed to all customers, and the date of the mailing; (b) If notice is published in a newspaper of general circulation in the utility's service area, an affidavit from the publisher verifying the contents of the notice, that the notice was published, and the dates of the notice's publication; or (c) If notice is published in a trade publication or newsletter delivered to all customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, the mailing of the trade publication or newsletter, that notice was included in the publication or newsletter, and the date of mailing.</p>
<p>807 KAR 5:001 Section 17(4)</p>	<p>Notice content. Each notice issued in accordance with this section shall contain: (a) The proposed effective date and the date the proposed rates are expected to be filed with the commission; (b) The present rates and proposed rates for each customer classification to which the proposed rates will apply; (c) The amount of the change requested in both dollar amounts and percentage change for each customer classification to which the proposed rates will apply; (d) the</p>

	<p>amount of the average usage and the effect upon the average bill for each customer classification to which the proposed rates will apply...; (e) A statement that a person may examine this application at the offices of (utility name) located at (utility address); (f) A statement that a person may examine this application at the commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or through the commission's Web site at <a href="http://psc.ky.gov">http://psc.ky.gov</a>; (g) A statement that comments regarding the application may be submitted to the Public Service Commission through its Web site or by mail to Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602; (h) A statement that the rates contained in his notice are the rates proposed by (utility name) but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice; (i) A statement that a person may submit a timely written request for intervention to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request including the status and interest of the party; and (j) A statement that if the commission does not receive a written request for intervention within thirty (30)</p>
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	days of initial publication or mailing of the notice, the commission may take final action on the application.
807 KAR 5:001 Section 17(5)	Abbreviated form of notice. Upon written request, the commission may grant a utility permission to use an abbreviated form of published notice of the proposed rates, provided the notice includes a coupon that may be used to obtain all of the required information.
KRS 278.2205(6)	Cost allocation manual for nonregulated activity – (6) the CAM shall be filed as part of the initial filing requirement in a proceeding involving an application for an adjustment in rates pursuant to KRS 278.190.

1

2 **Q. For each of the documents included within the Filing Requirements that**  
3 **you are supporting, were they prepared by you or someone working**  
4 **under your supervision and did you review each of the documents**  
5 **included within the Filing Requirements that you are co-sponsoring?**

6 A. Yes.

7 **Q. What are the rate changes on Tariff Sheets 5, 6, 7, 11,12,14,15,22,31 38, 39,**  
8 **and 41?**

9 A. The changes on each of these pages are base rate changes. The changes are  
10 supported by the revenue requirement contained in the testimony of

1 Columbia Witness Shaeffer and the rate design contained in the testimony  
2 of Columbia Witness Amen. The Gas Cost Adjustment Commodity is  
3 revised to reflect the impact of the proposed change in uncollectible  
4 expense in the forecasted test period as described in the testimony of  
5 Columbia Witness Shaeffer. The proposed State Tax Factor Adjustment  
6 described by Columbia Witness Harding is also included on applicable  
7 pages.

8 **Q: What is the change to Tariff Sheet No. 7a?**

9 A: Tariff Sheet No. 7a was originally the Tax Act Adjustment Factor approved  
10 by the Commission in Case No. 2018-00041<sup>1</sup> for a Federal tax change. It  
11 was cancelled in Case No. 2021-00183 when the impacts of the Federal tax  
12 change were incorporated into base rates. Columbia proposes to restore  
13 Sheet No. 7a and re-establish it as the State Tax Adjustment Factor to be  
14 utilized to implement the effects of future changes in state taxes, as  
15 explained in the testimony of Columbia Witness Harding.

16 **Q: What is the rate of the proposed State Tax Adjustment Factor?**

17 A: The rate of the proposed factor is zero.

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<sup>1</sup> *In the Matter of the Electronic Investigation of the Impact of the Tax Cuts and Jobs Act on the Rates of Columbia Gas of Kentucky, Inc.*, Order (Ky PSC April 30, 2018).

1 **Q: How long will the rate of the proposed State Tax Adjustment Factor be**  
2 **zero?**

3 A: As described in the testimony of Columbia Witness Harding, centrally  
4 assessed property tax of public service corporations<sup>2</sup> in the Commonwealth  
5 recently changed significantly<sup>3</sup> but then was temporarily suspended by the  
6 General Assembly earlier this year.<sup>4</sup> The initial change significantly and  
7 unexpectedly increased Columbia’s property tax assessment. The action of  
8 the General Assembly temporarily reduces the expected property tax  
9 assessment and this change is reflected in the cost of service study included  
10 with Columbia’s Application. However, if the General Assembly does not  
11 act, Columbia will be taxed at a higher rate in the first year following the  
12 forecasted test period. If this, or some other state tax change occurs,  
13 Columbia would file an application with the Commission requesting an  
14 update to the proposed State Tax Adjustment Factor in order to accurately  
15 track its State tax expense. Columbia is not proposing to profit from this  
16 mechanism. It is merely seeking an opportunity to pass through actual tax  
17 costs that result from the activity or inactivity of the General Assembly.

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<sup>2</sup> Columbia is included in the definition of this term pursuant to KRS 136.120(1)(a)(5).

<sup>3</sup> See Direct Testimony of Jennifer Harding at pages 11-12.

<sup>4</sup> *Id.* at page 12.

1 **Q: Does the change to Tariff Sheet No. 7a impact other pages of Columbia's**  
2 **tariff?**

3 A: Yes, the provisions of Tariff Sheet Nos. 5, 6, 7, 12, 15, 22, 31, 39 and 41 are  
4 revised to include the State Tax Adjustment Factor on each rate schedule.

5 **Q. What is the change to Tariff Sheet No. 41?**

6 A. The Customer Charge is revised to show that the rate design proposed by  
7 Columbia Witness Amen has segmented Rate Schedule DS-ML customers  
8 into two rate blocks for the customer charge based upon the customer's  
9 Annual Transportation Volume. The annual consumption of customers  
10 served under this rate schedule is widely disparate. Segmenting the  
11 customer charge into two rate blocks based on the customer's Annual  
12 Transportation Volume allows the proposed increase to be reasonably  
13 allocated across the class as described in the testimony of Columbia  
14 Witness Amen.

15 **Q: What is the change to Tariff Sheet No. 58?**

16 A: The changes on Tariff Sheet No. 58 are to include uncollectible expense, not  
17 recovered in base rates, in the calculation of the SMRP revenue requirement  
18 and revise the sequencing of the items included in the calculation  
19 accordingly. The calculation would utilize the uncollectible expense factor  
20 determined in the Company's most recent base rate case.

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**Q: What is the proposed change in the SMRP rates on Tariff Sheet No. 58?**

A: There is no change proposed to the SMRP rates in this case.

The rates currently shown on Tariff Sheet No. 58 are those authorized by the Commission in Case No. 2022-00342<sup>5</sup> dated December 28, 2022. Columbia’s proposed 2024 SMRP rates were filed with the Commission on October 15, 2023 in Case No. 2023-00335.<sup>6</sup> The rates were suspended by the Commission and on December 27, 2023, in accordance with the Commission’s December 5, 2023 Order in Case No. 2023-00335 and KRS 278.190(2), Columbia placed its proposed rates in that case into effect, subject to refund.<sup>7</sup>

**Q: Does Columbia historically revise its SMRP rates as part of a base rate case?**

A: Yes. In Columbia’s past rate cases, SMRP invested capital has been “rolled-in” to base rates and the SMRP rate reset to zero.

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<sup>5</sup> *In the Matter of: Electronic Application of Columbia Gas of Kentucky, Inc. for Annual Adjustments to the Safety Modification and Replacement Program*, Case No. 2022-00342, Order, (Ky. P.S.C. Dec. 28, 2022).  
<sup>6</sup> *In the Matter of: Electronic Application of Columbia Gas of Kentucky, Inc. for its Annual Safety Modification and Replacement Program Filing*, Case No. 2023-00335, Notice, filed December 27, 2023.  
<sup>7</sup> These rates were included in End Note 4 of Columbia’s Customer Notice pursuant to KAR 807 5:001 Section 17.

1 **Q: Why has Columbia changed its proposal regarding SMRP rates in this**  
2 **case?**

3 A: Columbia has changed its proposed treatment of SMRP investments in  
4 accordance with its understanding from the Order in its last rate case<sup>8</sup> of  
5 the Commission’s intention that the SMRP investments should be  
6 maintained separately and not rolled-in to base rates in future cases.

7 **Q: What changes has the Commission made regarding the treatment of**  
8 **SMRP investments and the calculation of the rate in the SMRP Rider?**

9 A: In November 2021, the Commission ordered that the valuation of SMRP  
10 investments be changed in the revenue requirement calculation from  
11 ending net plant balance to a 13-month average valuation. Subsequently,  
12 in 2023, the Commission changed post-rate case treatment of SMRP  
13 investments that were previously included as forecasted investments in the  
14 rate case and were, by that time, actual historical investments.<sup>9</sup> This was an  
15 unexpected change from past Commission Orders that had allowed the full  
16 valuation of SMRP investments following a rate case to be included in the  
17 SMRP revenue requirement calculation for recovery. Further, the

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<sup>8</sup> *In the Matter of Electronic Application of Columbia Gas of Kentucky, Inc., for an Adjustment of Rates, Approval of Depreciation Study, Approval of Tariff Revisions, Issuance of a Certificate of Public Convenience and Necessity and Other Relief*, Case No. 2021-00183, Order (Ky PSC Dec. 28, 2021).

<sup>9</sup> *In the Matter of the Electronic Application of Columbia Gas of Kentucky, Inc. for Annual Adjustments to the Safety Modification and Replacement Program*, Case No. 2022-00342, Order (Ky PSC Dec. 28, 2022).

1 Commission ordered Columbia to change the SMRP Rider rates from fixed  
2 to volumetric rates.<sup>10</sup> This was also an unanticipated change to Columbia.

3 **Q: Has Columbia implemented the changes that you describe above?**

4 A: Yes. Columbia has implemented all of the changes as directed by the  
5 Commission. Going forward, as described in the testimony of Columbia  
6 Witness Gore, the SMRP mechanism will no longer be devoted solely to the  
7 accelerated recovery of infrastructure investments between rate cases, but  
8 will include increasingly historical investments. These changes have  
9 altered the risk profile associated with the SMRP.

10 **Q: How have these changes altered the risk profile of the SMRP Rider?**

11 A: The Commission has previously opined that from a historical perspective,  
12 the Company's SMRP Rider balance may have theoretically reflected a  
13 lower risk profile as compared to those investments residing in the  
14 Company's rate base.<sup>11</sup> However, all of the changes in the SMRP Rider  
15 mechanism have significantly reduced previous differentiating effects or  
16 benefits resulting from accelerated cost recovery under the SMRP Rider.  
17 For this reason, the authorized ROE for the SMRP should be equal to the

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<sup>10</sup> *Supra* Note 8.

<sup>11</sup> *In the Matter of Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief*, Case No. 2020-00174, Order (Ky PSC Jan. 13, 2021) at 66-67.

1 authorized ROE for the Company's base rates as recommended by  
2 Columbia Witness Rea.

3 In other words, without rolling the SMRP investments into base  
4 rates, historic SMRP investments will not be fully recovered as they would  
5 be if rolled-in to base rates. Further, valuation of the SMRP investments for  
6 the forecasted year are only about half of what they would have been  
7 previously when the investments were valued at ending year net plant  
8 balance; and, following the base rate case recovery of the full valuation of  
9 what was rolled-into base rates has been discontinued. The combination  
10 of all these changes significantly alters the nature of the cost recovery of the  
11 SMRP Rider, bringing the risk profile of the SMRP mechanism closer to that  
12 of base rate recovery. Therefore, the authorized ROE for the SMRP should  
13 be no different than the authorized ROE for the Company's base rates as  
14 recommended by Columbia Witness Rea.

15 **Q. What is the change to Tariff Sheet No. 74?**

16 A. The change on Tariff Sheet No. 74 is to revise the Late Payment Penalty terms  
17 to exclude residential customers. The sentence stating, "Customers enrolled  
18 in utility bill assistance programs (including those customers who have been  
19 issued a Certificate of Need) shall not be charged a late payment charge," is  
20 also removed because those customers are residential customers and the



1 sentence would no longer be applicable with the reinstatement of the  
2 residential exemption in the terms of the Late Payment Penalty.

3 **Q: Are there any other tariff changes that haven't already been described?**

4 A: Yes, there are a few "housekeeping" revisions on Tariff Sheet No. 6. It is a  
5 summary page and the Base Rate Charge column is missing rates for Rate  
6 Schedule DS and Rate Schedule MLDS so the proposed rates are shown  
7 inserted as a text change where the current rates are missing.

8 **Q: Why does Columbia propose to exclude residential customers from its late  
9 payment terms?**

10 A: In Columbia's 2009 base rate case,<sup>12</sup> the Commission approved Columbia's  
11 proposal to remove its long-standing residential customer exemption from its  
12 Late Payment Penalty, thereby authorizing a late payment charge to assessed  
13 on residential customer bills, only once for any bill. Customers enrolled in  
14 utility bill assistance programs (including those customers issued a Certificate  
15 of Need) maintained the exemption and were still not subject to a late  
16 payment penalty. In Columbia's most recent base rate case,<sup>13</sup> Columbia did  
17 not propose any changes to the terms of its Late Payment Penalty in the  
18 General Terms and Conditions section of its tariff. However, Commission

---

<sup>12</sup> *In the Matter of Application of Columbia Gas of Kentucky, Inc. for an Adjustment in Rates*, Case No. 2009-00141, Order (Ky PSC Oct. 26, 2009).

<sup>13</sup> *Supra* Note 8.

1 asked for cost support for the late payment penalty and Columbia responded  
2 with its cost analysis. Columbia asserted that the late payment charge is  
3 intended to be an incentive for customers to pay on time. Columbia proposes  
4 to restore the residential customer exemption which will benefit customers  
5 who may be in a troubled payment situation.

6 **Q: Is there a revenue requirement impact associated with Columbia's proposal**  
7 **to reinstate the residential customer exemption?**

8 A: Yes. Columbia Witnesses Wozniak and Shaeffer address the shift in revenues  
9 incumbent with the elimination of the revenues associated with residential  
10 late payment charges.

11 **Q: Please explain Columbia's non-regulated activity as it relates to the filing**  
12 **requirement of KRS 278.2205(6) that requires the filing of a cost allocation**  
13 **manual for nonregulated activity as part of the initial filing requirement**  
14 **for an adjustment in rates pursuant to KRS 278.190.**

15 A: Columbia does not maintain a cost allocation manual pursuant to the ex-  
16 emption provisions of KRS 278.2203 and KRS 278.2205. The only  
17 nonregulated activity that Columbia engages in is the provision of  
18 incidental billing services for two entities that were previously affiliates but  
19 were sold in 2003 and are no longer affiliates. Columbia's rendering of

1 billing services is “incidental” as defined in KRS 278.2203(4), and Columbia  
2 is not required to file a cost allocation manual.

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

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

TAB 20

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Donald Ayers

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

In the matter of: )  
)  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

---

**PREPARED DIRECT TESTIMONY OF  
DONALD AYERS  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

---

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Attorneys for Applicant

May 16, 2024

**COLUMBIA GAS OF KENTUCKY, INC.**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
)
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF )
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

Case No. 2024-00092

VERIFICATION OF DONALD AYERS

STATE OF OHIO )
)
COUNTY OF FRANKLIN )

Donald Ayers, Vice President of Operations for Columbia Gas of Kentucky, Inc., being duly sworn, states that he has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

[Signature]
Donald Ayers

The foregoing Verification was signed, acknowledged and sworn to before me this 30th day of April, 2024, by Donald Ayers.

[Signature]
Notary Commission No. N/A
Commission expiration: N/A



John R Ryan III
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

**PREPARED DIRECT TESTIMONY OF DONALD AYERS**

1       **I.       INTRODUCTION**

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

3       A:       My name is Donald Ayers and my business address is 2001 Mercer Rd.  
4               Lexington, KY 40511.

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

6       A:       I am the Vice President of Operations for Columbia Gas of Kentucky, Inc.  
7               ("Columbia"). My responsibilities include oversight over all of Columbia's  
8               operations to ensure the safe, reliable delivery of natural gas to all of  
9               Columbia's customers. Beyond these core responsibilities, I am also  
10              responsible for the safety and development of all field personnel, as well as,  
11              their direct leadership.

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

13      A:       I attended both Ohio State University and Franklin University. I have  
14              worked for or in service of several of the Columbia Gas Distribution  
15              Companies for 36 years. During that time, I have had an opportunity to  
16              work in many different positions at different levels in the organization  
17              from a front line worker to my current position.

18

19

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

2 A: I have provided written direct testimony before the Public Utilities  
3 Commission of Ohio.

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

5 A: The purpose of my testimony is to provide a general overview of  
6 Columbia's operating territory and gas distribution system. I will also  
7 discuss Columbia's Distribution Integrity Management Program ("DIMP"),  
8 as well as Columbia's recent operating performance.

9 **Q: What Filing Requirements will you be supporting?**

10 A: I will sponsor and support the following Filing Requirements:

<b>Filing Requirement</b>	<b>Description</b>
807 KAR 5:001 Section 16(7)(c)	A complete description, which may be filed in written testimony form, of all factors used in preparing the utility's forecast period. All econometric models, variables assumptions, escalation factors, contingency provisions, and changes in activity levels shall be quantified, explained, and properly supported.

11

12



1 **Q: For each of the documents included within the Filing Requirements that**  
2 **you are supporting, were they prepared by you or someone working**  
3 **under your direction and did you review each of the documents included**  
4 **within the Filing Requirements that you are co-sponsoring?**

5 A: Yes.

6 **II. COLUMBIA'S DIMP PLAN**

7 **Q: What is a Distribution Integrity Management Program ("DIMP") Plan**  
8 **and how is Columbia's developed?**

9 A: Federal pipeline safety regulations contained within 49 CFR Part 192,  
10 Subpart P "Gas Distribution Pipeline Integrity Management" prescribe  
11 minimum requirements for an integrity management program for gas  
12 distribution operators. These rules require us to develop and implement a  
13 written DIMP that contains procedures for developing and implementing  
14 seven required program elements:

- 15 (1) knowledge of the system;
- 16 (2) identification of threats to pipeline safety;
- 17 (3) evaluation and ranking of risk;
- 18 (4) identification and implementation of measures to address risk;
- 19 (5) measurement of performance, monitoring of results and  
20 evaluation of program effectiveness;

1 (6) periodic evaluation and improvement; and

2 (7) reporting of results.

3 DIMP requires distribution companies to create, document, and  
4 implement an inclusive plan to utilize all information available to  
5 understand and more safely operate our pipeline systems. We utilize  
6 system design, materials installed, conditions, environment and pipeline  
7 history to identify, create a plan and mitigate risks to our pipeline systems.  
8 The Columbia DIMP plan is developed by utilizing all historical records,  
9 industry trends, facility failure documentation etc. to identify and address  
10 risks. While the DIMP plan is formally updated on an annual basis, it is  
11 reviewed periodically to consider new information.

12 **Q: What are Columbia’s biggest threats pertaining to its gas distribution**  
13 **system?**

14 **A:** Columbia’s 2024 DIMP identifies (10) threats that are classified as “High”.  
15 Those ten threats classified as high on our distribution assets are the  
16 following:

- 17 1. Damage Excavator Error
- 18 2. Excavator Damage (Not Reported)
- 19 3. Cross Bore
- 20 4. Damage / Failure to Notify

- 1                   5. Damage Locator Error
- 2                   6. Damage Poor Records
- 3                   7. Possible Low Pressure (“LP”) Maximum Allowable
- 4                   Operating Pressure (“MAOP”) Excursions
- 5                   8. Excavation Damage (Unmarked Stubs)
- 6                   9. External Corrosion (Bare Steel Services)
- 7                   10. External Corrosion (Bare Steel Main)

8   **Q: For each threat listed as “High” in Columbia’s DIMP, please provide an**  
9   **overview of Columbia’s efforts taken to mitigate those threats.**

10 **A: Threat 1, Damage Excavator Error:** Columbia collaborates with excavators  
11 through jobsite meetings and training programs to ensure adherence to safe  
12 digging practices, reducing the likelihood of errors leading to damage.  
13 Additionally, our Damage Prevention Specialists actively engage with  
14 excavating communities and participate in regional Damage Prevention  
15 Councils to enhance communication and awareness. Columbia also uses a  
16 probability risk model that uses various criteria to identify tickets that  
17 might be high risk. When this happens, Columbia takes proactive steps to  
18 ensure excavators receive additional damage prevention communication.

19                   Threat 2, Excavator Damage (Not Reported): This category includes  
20 damages that Columbia discovers after they occur (i.e. they are not reported

1 to us when the damage happens). Columbia educates excavators on the  
2 Kentucky Dig Law and reporting requirements. Despite our efforts, we  
3 acknowledge the challenge posed by excavators who deliberately conceal  
4 or are unaware they have caused damages. To address this, we rely on our  
5 leakage and patrolling survey program as an additional measure to identify  
6 damages promptly.

7 Threat 3, Cross Bore: Columbia employs sewer camera technologies  
8 for regular inspections to detect and mitigate cross bore instances, thereby  
9 minimizing the risk of damage to distribution assets.

10 Threat 4, Damage/Failure to Notify: Columbia emphasizes the  
11 importance of Kentucky 811 and timely notification to prevent damages to  
12 distribution assets. Our public awareness program further educates the  
13 community, including the overall public and excavators, on safe digging  
14 practices and reporting procedures.

15 Threat 5, Damage Locator Error: Columbia collaborates closely with  
16 locating vendors to improve asset identification accuracy and reduce errors  
17 leading to damage. We have upgraded our GIS systems and have mapped  
18 all services lines using GIS, and conducts root cause analysis on locator  
19 errors to continually enhance locating practices. Improved IT systems and  
20 access to enhanced mobile technology, empowered by the Field Mobility

1 program discussed in Witness Greg Skinner’s Testimony, will improve  
2 access to information for the field employees and contractors working on  
3 this issue.

4 Threat 6, Damage Poor Records: Columbia has implemented robust  
5 record-keeping systems and updated map revision processes to ensure the  
6 accuracy and completeness of asset records, reducing the risk of damage  
7 due to outdated or incomplete information. NiSource is also in the process  
8 of developing and implementing updated IT systems and mobile solutions  
9 that will aid with better access to the most current information in the field.

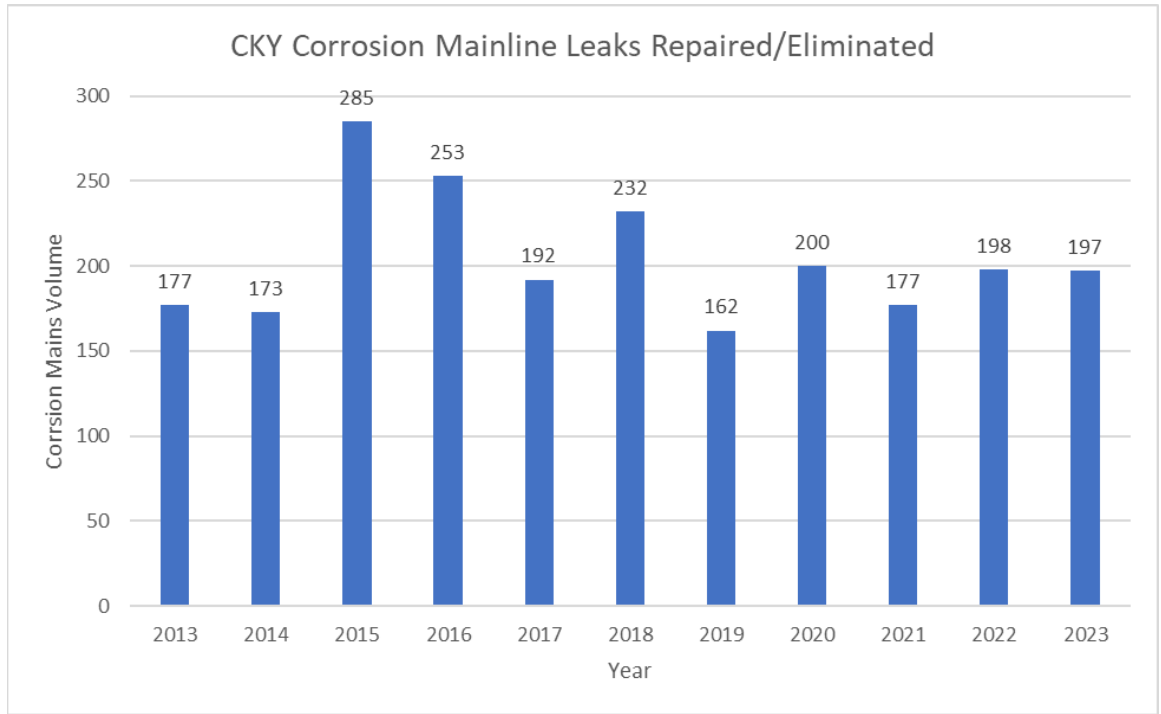
10 Threat 7, Possible LP MAOP Excursions: Columbia has installed  
11 several additional safety devices including automatic shut off valves that  
12 activate if pressure exceeds or falls below regulator set points. In addition  
13 to the automatic shut valves, Columbia has installed gasket strainers to  
14 prevent debris from damaging district regulators. The final safety device  
15 installed is electronic pressure recording equipment that notifies  
16 Columbia’s gas control center when the regulators are not functioning  
17 correctly. Additionally, when performing mainline tie ins and  
18 abandonments in close proximity of district regulator stations, Columbia’s  
19 Engineering department may require a qualified Measurement and

1 Regulation (“M&R”) technician to monitor the setting in case of  
2 emergencies while capital work is being completed.

3 Threat 8, Excavation Damage (Unmarked Stubs): Columbia works  
4 closely with utility locators and excavators to accurately identify and mark  
5 all underground assets, reducing the incidence or excavation damage.  
6 Additionally, we update Gas Standards and procedures to prevent leaving  
7 any unmapped stubs in our system. Columbia employees have been  
8 trained when traveling near excavation sites to visually observe the  
9 presence or absence of utility locate marks. If no marks are present,  
10 employees are expected to stop and make inquiries.

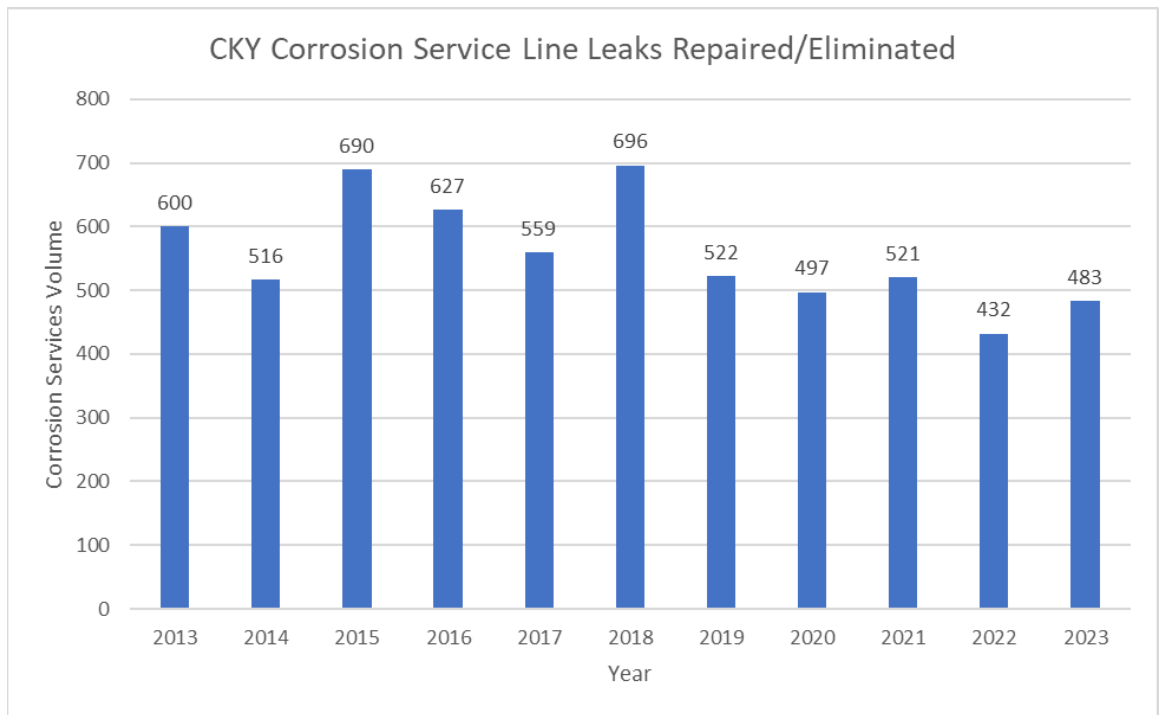
11 Threats 9 and 10, External Corrosion (Bare Steel Mains & Services):  
12 Columbia has experienced a fairly consistent level of leakage over the last  
13 ten years. Columbia is mitigating these risks through routine leak repair  
14 and through capital replacement programs. The continued existence of  
15 these risks in the DIMP program shows the importance of the priority  
16 pipe replacement program. As shown in the two tables below, the pace of  
17 leakage on main lines and service lines is trending slightly down  
18 compared to previous years. However, this remains a high category risk  
19 worthy of accelerated investment.

1



2

3



4

1 Q: **Have any the risk level of any risk previously categorized as “high” been**  
2 **reduced since previous filing?**

3 A: Yes. Several risks categorized as “high” have been lowered. Examples of  
4 these risks include: Various threats to regulator control lines, Vehicular  
5 damage to various field asset and leaks on inside Home/Business assets.

6 NiSource mitigated threats to regulator control lines through the  
7 installation of several additional safety devices including automatic shut off  
8 valves, strainers, and electronic recorders (this included investments in  
9 Supervisory Control and Data Acquisition (“SCADA”)).

10 Vehicular damage to various field assets was addressed through  
11 improved processes for identifying and reporting facilities at risk and an  
12 aggressive initiative to install protection for facilities at risk. From 2021 to  
13 2023, we have averaged 360 meter protection installations (i.e. bollards) at  
14 above ground facilities identified as “at risk”.

15 Columbia has enhanced our customer experience around the  
16 requirement of inside inspections at the home or business of our customers.  
17 The steps Columbia takes to communicate with customers about inside  
18 inspections of service lines and meters have been expanded. These include  
19 multiple attempts using various communications methods to gain access



1 before ultimately being required to temporarily disconnect customers in  
2 order to gain access.

3 **Q: Are there any changes coming to the way Columbia populates its DIMP**  
4 **Plan?**

5 A: Yes. Columbia is currently working to integrate Probabilistic Risk  
6 Assessment (“PRA”) modeling into the annual DIMP Plan resulting in a  
7 more holistic approach to identifying risks to our system. Currently, the  
8 PRA model outputs are a factor in determining the portions of our system  
9 that need to be replaced or upgraded under our ongoing infrastructure  
10 modernization program. This upcoming improvement will not limit the  
11 risk assessment to threats that are mitigated by infrastructure  
12 modernization program, but will analyze the risk of all threats. The PRA  
13 uses data from various internal and external sources, including but not  
14 limited to leak data, material failure reports, pipe specifications, reportable  
15 gas incidents environmental impacts, and geography. By using PRA in  
16 DIMP, Columbia can use this data to improve the accuracy and  
17 thoroughness of risk assessments and give us the ability to foresee potential  
18 threats that will affect the system in the future.

19

20

1 **III. COLUMBIA’S WORK TO BE PERFORMED DURING THE TEST YEAR**

2 **Q: Is Columbia making technology investments that will impact the future**  
3 **test year in this case?**

4 A: Yes. The forecasted test year includes roughly \$745,000 in SCADA capital  
5 investments. These investments provide real-time remote monitoring of  
6 Columbia’s stations in its Gas Control Center using the information  
7 generated by the SCADA equipment. SCADA visibility provides enhanced  
8 system awareness and improves emergency response. There is also a  
9 project to improve Field Mobility as explained in the Testimony of  
10 Columbia Witness Gregory Skinner.

11 **Q: How will SCADA investments benefit Columbia’s customers?**

12 A: SCADA enhancements will assist with earlier detection of potential  
13 overages of a pipeline’s MAOP, situations where low pressure might occur,  
14 and in some situations SCADA equipment may provide notification when  
15 heaters have stopped working. Heightened SCADA visibility also  
16 enhances emergency response. Increased real-time visibility into the details  
17 of the distribution system and allows emergency responders to move  
18 quickly to address the issues causing emergencies. Mitigation of this risk  
19 enhances Columbia’s ability to continue to provide safe and reliable service  
20 to its customers. The potential for an MAOP exceedance is a risk with a

1 potentially high impact on both the safety of the distribution system, but  
2 also one that could lead to customer outages.

3 **Q: How will the Field Mobility project benefit Columbia's customers?**

4 A: As explained by Witness Skinner, Field Mobility will improve connectivity  
5 to our IT systems in the field by installing new equipment in company  
6 vehicles. Our service area includes multiple regions where internet  
7 connectivity can be challenging. In response to communications from our  
8 field employees, we are deploying these technology upgrades to allow  
9 employees better access to IT platforms necessary to complete work. These  
10 investments will also provide Columbia with greater visibility into the  
11 location of our vehicles to be better positioned to respond to emergencies.

12 **Q: Will the field mobility investments create efficiencies that are included  
13 in the future test year?**

14 A: Yes. The efficiencies created from this investment as well as other  
15 anticipated process changes have resulted in the ability to maintain a flat  
16 level of O&M in the 2025 future test period budget for field operations  
17 despite increases in the cost of labor.

18

1 **Q: Are you aware of Pipeline and Hazardous Materials Safety**  
2 **Administration’s (“PHMSA”) Leak Detection and Repair (“LDAR”)**  
3 **Rule?**

4 A: Yes. PHMSA is considering enhancements to the leak detection  
5 requirements as well as the timeline for repair or replacement in federal  
6 regulations. These changes will likely change the way Columbia addresses  
7 leaks on its system. However, we will not have the details on the impact of  
8 the changes until the final rule is released.

9 **Q: Is Columbia requesting any additional funding in this case to address**  
10 **this potential rule?**

11 A: No. Because we do not know what exactly will be required by the final rule,  
12 we do not yet know what will eventually be required or the associated costs.  
13 We anticipate that enhanced leak detection will be a component of the final  
14 rule. Our Picarro pilot that was authorized in our last rate case has helped  
15 prepare us for potential requirements.

16 **Q: Has Columbia investigated opportunities to gain efficiencies on O&M**  
17 **tasks?**

18 A: Yes. Columbia always looks for ways to provide safe and reliable service  
19 in a more cost-efficient way. Savings associated with efficiencies are  
20 included within the O&M budget for the future test year. Some examples

1 of successful efficiencies include: improved turnback process, reduced  
2 buffer zone for infrastructure locating, more focused approach to the meter  
3 change program, increased monitoring and management of overtime,  
4 reassignment of internal work to allow the insourcing of work from  
5 contractors to reduce third party costs.

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

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

TAB 21

807 KAR 5:001 Section 16(7)(a)

Direct Testimony John Spanos

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

In the matter of: )  
 )  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

---

**PREPARED DIRECT TESTIMONY OF  
JOHN J. SPANOS  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

---

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May 16, 2024

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

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF )
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

Case No. 2024-00092

VERIFICATION OF JOHN J. SPANOS

COMMONWEALTH OF PENNSYLVANIA )
COUNTY OF CUMBERLAND )

John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants, LLC, being duly sworn, states that he has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

John J. Spanos
John J. Spanos

The foregoing Verification was signed, acknowledged and sworn to before me this 6th day of May, 2024, by John J. Spanos.

Notary Commission No. 1143028
Commission Expiration: February 20, 2027

Commonwealth of Pennsylvania - Notary Seal
Cheryl Ann Rutter, Notary Public
Cumberland County
My commission expires February 20, 2027
Commission number 1143028
Member, Pennsylvania Association of Notaries



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Attachments

ATTACHMENT JJS-1 – Qualification Statement

ATTACHMENT JJS-2 – Depreciation Calculation as of December 31, 2023

ATTACHMENT JJS-3 – Depreciation Calculation as of December 31, 2025

**PREPARED DIRECT TESTIMONY OF JOHN J. SPANOS**

1   **I.    INTRODUCTION**

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

3   A:    My name is John J. Spanos and my business address is 207 Senate Avenue,  
4        Camp Hill, Pennsylvania, 17011.

5   **Q:    Are you associated with any firm?**

6   A:    Yes. I am associated with the firm of Gannett Fleming Valuation and Rate  
7        Consultants, LLC (“Gannett Fleming”).

8   **Q:    How long have you been associated with Gannett Fleming?**

9   A:    I have been associated with the firm since June 1986.

10  **Q:    What is your position with the firm?**

11  A:    I am President.

12  **Q:    On whose behalf are you testifying in this case?**

13  A:    I am testifying on behalf of Columbia Gas of Kentucky, Inc. (“Columbia” or  
14        “Company”).

15  **Q:    Please state your qualifications.**

16  A:    I have over 37 years of depreciation experience, which includes expert  
17        testimony in more than 450 cases before 46 regulatory commissions. The  
18        cases include depreciation studies in the electric, gas, water, wastewater  
19        and pipeline industries. In addition to cases where I have submitted

1 testimony, I have also supervised over 800 other depreciation or valuation  
2 assignments. Please refer to Attachment JJS-1 for my qualifications  
3 statement, which includes further information with respect to my work  
4 history, case experience, and leadership in the Society of Depreciation  
5 Professionals.

6 **II. PURPOSE OF TESTIMONY**

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

8 A: My testimony will support and explain the Depreciation Study performed  
9 for Columbia in accordance with the Filing Requirement under 807 KAR  
10 5:001 Section 16-(7)(s). The Depreciation Study sets forth the calculated  
11 annual depreciation accrual rates by account as of December 31, 2023. I also  
12 support the depreciation accrual rates by account for the forecasted period  
13 as of December 31, 2025. I also support 807 KAR 5:001 Section 16-(7)(c).

14 **Q: Please summarize the results of your Depreciation Study.**

15 A: The depreciation rates as of December 31, 2023 appropriately reflect the  
16 rates at which the value of Columbia's assets has been consumed over their  
17 useful lives to date. These rates are based on the most commonly used  
18 methods and procedures for determining depreciation rates. The life and  
19 salvage parameters are based on widely used techniques and the

1 depreciation rates are based on the average service life procedure and  
2 remaining life method.

3 **Q: Are the recommended depreciation accrual rates presented in your study**  
4 **reasonable and applicable to the plant in service as of December 31, 2023?**

5 A: Yes, they are. Based on the Depreciation Study, I am recommending  
6 depreciation rates using the December 31, 2023 plant and reserve balances  
7 for approval. I am also recommending depreciation rates using the  
8 forecasted December 31, 2025 plant and reserve balances.

9 **Q: What is the Effect of the Recommended Depreciation Accrual Rates as**  
10 **Compared to Currently Approved Accrual Rates?**

11 A: The Depreciation Study results establish an increase of approximately \$3.5  
12 million in depreciation expense as of December 31, 2023 related to the  
13 depreciable plant in service. The amortizable plant expense was provided  
14 by the Company on an individual asset basis so there is not change for those  
15 assets. This increase is primarily the result of changes in some life  
16 parameters and net salvage accruals as well as the complete recovery of  
17 general plant assets.

18

19

1 **III. DEPRECIATION STUDY**

2 **Q: Please define the concept of depreciation.**

3 A: Depreciation refers to the loss in service value not restored by current  
4 maintenance, incurred in connection with the consumption or prospective  
5 retirement of utility plant in the course of service from causes which are  
6 known to be in current operation against which the Company is not  
7 protected by insurance. Among the causes to be given consideration are  
8 wear and tear, decay, action of the elements, inadequacy, obsolescence,  
9 changes in the art, changes in demand and the requirements of public  
10 authorities.

11 **Q: Was your Depreciation Study included as part of the application filed in  
12 this case?**

13 A: Yes, it is included as a report entitled "2023 Depreciation Study - Calculated  
14 Annual Depreciation Accruals Related to Gas Plant as of December 31,  
15 2023." This report sets forth the results of my Depreciation Study for  
16 Columbia.

17 **Q: Is the study a true and accurate copy of your Depreciation Study?**

18 A: Yes.

19 **Q: Was the Depreciation Study prepared under your direction and control?**

20 A: Yes.

1 **Q: In preparing the Depreciation Study, did you follow generally accepted**  
2 **practices in the field of depreciation valuation?**

3 A: Yes.

4 **Q: What is the purpose of the Depreciation Study?**

5 A: The purpose of my Deprecation Study was to estimate the annual  
6 depreciation accruals for Columbia's plant in service for financial and  
7 ratemaking purposes and to determine appropriate average service lives  
8 and net salvage percentages for each plant account.

9 **Q: Are the methods and procedures of this Depreciation Study consistent**  
10 **with Columbia's past practices?**

11 A: The depreciation methods and procedures of this study are the same as  
12 those utilized in the past by Columbia. The rates determined in this  
13 Depreciation Study are based on the average service life procedure and the  
14 remaining life method.

15 **Q: Please describe the contents of the Depreciation Study.**

16 A: The Depreciation Study is presented in nine parts: Part I, Introduction,  
17 presents the scope and basis for the Depreciation Study. Part II, Estimation  
18 of Survivor Curves, includes descriptions of the methodology of estimating  
19 survivor curves. Parts III and IV set forth the analysis for determining  
20 service life and net salvage estimates. Part V, Calculation of Annual and

1 Accrued Depreciation, includes the concepts of depreciation and  
2 amortization using the remaining life. Part VI, Results of Study, presents a  
3 description of the results of my analysis and a summary of the depreciation  
4 calculations. Parts VII, VIII and IX include graphs and tables that relate to  
5 the service life and net salvage analyses, and the detailed depreciation  
6 calculations by account.

7 Table 1 on pages VI-4 and VI-5 of the Depreciation Study presents  
8 the estimated survivor curve, the net salvage percent, the original cost as of  
9 December 31, 2023, the book reserve, and the calculated annual  
10 depreciation accrual and rate for each account or subaccount. The section  
11 beginning on page VII-2 presents the results of the retirement rate analyses  
12 prepared as the historical bases for the service life estimates. The section  
13 beginning on page VIII-2 presents the results of the salvage analysis. The  
14 section beginning on page IX-2 presents the depreciation calculations  
15 related to surviving original cost as of December 31, 2023.

16 **Q: Please explain how you performed your Depreciation Study.**

17 A: I used the straight line remaining life method of depreciation, with the  
18 equal life group procedure. The annual depreciation is based on a method  
19 of depreciation accounting that seeks to distribute the unrecovered cost of

1 fixed capital assets over the estimated remaining useful life of each unit, or  
2 group of assets, in a systematic and rational manner.

3 For General Plant Accounts 391.10, 391.12, 394.00, 395.00 and 398.00,  
4 I used the straight line remaining life method of amortization.<sup>1</sup> The annual  
5 amortization is based on amortization accounting that distributes the  
6 unrecovered cost of fixed capital assets over the remaining amortization  
7 period selected for each account and vintage.

8 **Q: How did you determine the recommended annual depreciation accrual**  
9 **rates?**

10 **A:** I did this in two phases. In the first phase, I estimated the service life and  
11 net salvage characteristics for each depreciable group, that is, each plant  
12 account or subaccount identified as having similar characteristics. In the  
13 second phase, I calculated the composite remaining lives and annual  
14 depreciation accrual rates based on the service life and net salvage estimates  
15 determined in the first phase.

16

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<sup>1</sup> The account numbers identified throughout my testimony represent those in effect as of December 31, 2023.



1 **Q: Please describe the first phase of the Depreciation Study, in which you**  
2 **estimated the service life and net salvage characteristics for each**  
3 **depreciable group.**

4 A: The service life and net salvage study consisted of compiling historical data  
5 from records related to Columbia's plant; analyzing these data to obtain  
6 historical trends of survivor characteristics; obtaining supplementary  
7 information from Columbia's management and operating personnel  
8 concerning practices and plans as they relate to plant operations; and  
9 interpreting the data and the estimates used by other gas utilities to form  
10 judgments of average service life and net salvage characteristics.

11 **Q: What historical data did you analyze for the purpose of estimating service**  
12 **life characteristics?**

13 A: I analyzed Columbia's accounting entries that record plant transactions  
14 during the period 1939 through 2023, to the extent available. The  
15 transactions I analyzed included additions, retirements, transfers, sales,  
16 and the related balances. Columbia's records included surviving dollar  
17 value by year installed for each plant account as of December 31, 2023.

18 **Q: What method did you use to analyze these service life data?**

19 A: I used the retirement rate method for most plant accounts. This is the most  
20 appropriate method when retirement data covering a long period of time is

1 available because this method determines the average rates of retirement  
2 actually experienced by Columbia during the period of time covered by the  
3 Depreciation Study.

4 **Q: Please describe how you used the retirement rate method to analyze**  
5 **Columbia's service life data.**

6 A: I applied the retirement rate analysis to each different group of property in  
7 the study. For each property group, I used the retirement rate data to form  
8 a life table which, when plotted, shows an original survivor curve for that  
9 property group. Each original survivor curve represents the average  
10 survivor pattern experienced by the several vintage groups during the  
11 experience band studied. The survivor patterns do not necessarily describe  
12 the life characteristics of the property group; therefore, interpretation of the  
13 original survivor curves is required in order to use them as valid  
14 considerations in estimating service life. The "Iowa-type survivor curves"  
15 were used to perform these interpretations.

16 **Q: What are "Iowa-type survivor curves" and how did you use such curves**  
17 **to estimate the service life characteristics for each property group?**

18 A: Iowa-type survivor curves are a widely-used group of survivor curves that  
19 contain the range of survivor characteristics usually experienced by utilities  
20 and other industrial companies. These curves were developed at the Iowa

1 State College Engineering Experiment Station through an extensive process  
2 of observing and classifying the ages at which various types of property  
3 used by utilities and other industrial companies had been retired.

4 Iowa-type survivor curves are used to smooth and extrapolate  
5 original survivor curves determined by the retirement rate method. The  
6 Iowa curves and truncated Iowa curves were used in the Columbia  
7 Depreciation Study to describe the forecasted rates of retirement based on  
8 the observed rates of retirement and the outlook for future retirements. The  
9 estimated survivor curve designations for each depreciable property group  
10 indicate the average service life, the family within the Iowa system to which  
11 the property group belongs, and the relative height of the mode. For  
12 example, the Iowa 67-R1.5 indicates an average service life of sixty-seven  
13 years; a right-moded, or R, type curve (the mode occurs after average life  
14 for right-moded curves); and a moderate height, 1.5, for the mode (possible  
15 modes for R type curves range from 0.5 to 5).

16 **Q: Did you physically observe Columbia’s plant and equipment as part of**  
17 **your depreciation assignments?**

18 A: Yes. I have made field reviews of Columbia’s property on March 18 and 19,  
19 2002, October 27 and 28, 2008, February 4 and 5, 2013, April 7, 2021 and  
20 February 5 and 6, 2024 to observe representative portions of plant. Field

1 reviews are conducted to become familiar with Company operations and  
2 obtain an understanding of the function of the plant and information with  
3 respect to the reasons for past retirements and the expected future causes  
4 of retirements. This knowledge, as well as information from other  
5 discussions with Columbia management, was incorporated in the  
6 interpretation and extrapolation of the statistical analyses.

7 **Q: How did your experience in development of other depreciation studies**  
8 **affect your work in this case for Columbia?**

9 A: Because I customarily conduct field reviews for my depreciation studies, I  
10 have had the opportunity to visit scores of similar facilities and meet with  
11 operations personnel at many other companies. The knowledge I have  
12 accumulated from those visits and meetings provides me with useful  
13 information to draw upon to confirm or challenge my numerical analyses  
14 concerning asset condition and remaining life estimates.

15 **Q: Please explain the concept of “net salvage.”**

16 A: Net salvage is a component of the service value of capital assets that is  
17 recovered through depreciation rates. The service value of an asset is its  
18 original cost less its net salvage. Net salvage is the salvage value received  
19 for the asset upon retirement less the cost to retire the asset. When the cost

1 to retire the asset exceeds the salvage value, the result is negative net  
2 salvage.

3 Because depreciation expense is the loss in service value of an asset  
4 during a defined period (*e.g.*, one year), it must include a ratable portion of  
5 both the original cost of the asset and the net salvage. That is, the net  
6 salvage related to an asset should be incorporated in the cost of service  
7 during the same period as its original cost, so that customers receiving  
8 service from the asset pay rates that include a portion of both elements of  
9 the asset's service value, the original cost and the net salvage value.

10 For example, the full service value of a \$2,000 regulator will include  
11 not only the \$2,000 of original cost, but also, on average \$425 to remove the  
12 regulator at the end of its life and \$25 in salvage value. In this example, the  
13 net salvage component is negative \$400 ( $\$25 - \$425$ ), and the net salvage  
14 percent is negative 20% ( $(\$25 - \$425)/\$2,000$ ).

15 **Q: Please describe how you estimated net salvage percentages.**

16 A: I estimated the net salvage percentages by incorporating Columbia's actual  
17 historical data for the period 1969 through 2023; considered information  
18 provided to me by the Company's operating personnel; and reviewed  
19 industry experience of net salvage estimates for other gas companies. Thus,  
20 net salvage percentages in the Depreciation Study are based on a

1 combination of statistical analyses and informed judgment. The statistical  
2 analyses consider the cost of removal and gross salvage ratios to the  
3 associated retirements during the 55-year period. Trends of these data are  
4 also measured based on three-year moving averages and the most recent  
5 five-year indications.

6 **Q: Please describe the second phase of the process that you used in the**  
7 **Depreciation Study in which you calculated composite remaining lives**  
8 **and annual depreciation accrual rates.**

9 A: After I estimated the service life and net salvage characteristics for each  
10 depreciable property group, I calculated the annual depreciation accrual  
11 rates for each group using the straight line remaining life method, and  
12 using remaining lives weighted consistent with the equal life group  
13 procedure. The calculation of annual depreciation accrual rates was  
14 developed as of December 31, 2023.

15 **Q: Please describe the straight line remaining life method of depreciation.**

16 A: The straight line remaining life method of depreciation allocates the  
17 original cost of the property, less accumulated depreciation, less future net  
18 salvage, in equal amounts to each year of remaining service life.

19

20

1 **Q: Please describe the average service life procedure for calculating**  
2 **remaining life accrual rates.**

3 A: The average service life procedure defines the group or account for which  
4 the remaining life annual accrual is determined. Under this procedure, the  
5 annual accrual rate is determined for the entire group or account based on  
6 its average remaining life and the rate is then applied to the surviving  
7 balance of the group's cost. The average remaining life of the group is  
8 calculated by first dividing the future book accruals (original cost less  
9 allocated book reserve less future net salvage) by the average remaining life  
10 for each vintage. The average remaining life for each vintage is derived  
11 from the area under the survivor curve between the attained age of the  
12 vintage and the maximum age. The sum of the future book accruals is then  
13 divided by the sum of the annual accruals to determine the average  
14 remaining life of the entire group for use in calculating the annual  
15 depreciation accrual rate.

16 **Q: Please describe amortization accounting in contrast to depreciation**  
17 **accounting.**

18 A: Amortization accounting is used for accounts with a large number of units,  
19 but small asset values. In amortization accounting, units of property are  
20 capitalized in the same manner as they are in depreciation accounting.

1           However, depreciation accounting is difficult for these types of assets  
2           because depreciation accounting requires periodic inventories to properly  
3           reflect plant in service. Consequently, amortization accounting is used for  
4           these types of assets, such that retirements are recorded when a vintage is  
5           fully amortized rather than as the units are removed from service. That is,  
6           there is no dispersion of retirement in amortization accounting. All units  
7           are retired when the age of the vintage reaches the amortization period.  
8           Each plant account or group of assets is assigned a fixed period that  
9           represents an anticipated life during which the asset will render full benefit.  
10          For example, in amortization accounting, assets that have a 20-year  
11          amortization period will be fully recovered after 20 years of service and  
12          taken off Columbia's books at that time, but not necessarily removed from  
13          service. In contrast, assets that are taken out of service before 20 years  
14          remain on the books until the amortization period for that vintage has  
15          expired.

16   **Q:   Is amortization accounting being utilized for certain plant accounts?**

17   A:   Yes. However, amortization accounting is only appropriate for certain  
18   General Plant accounts. These accounts are 391.10, 391.12, 394.00, 395.00  
19   and 398.00, which represent slightly less than one percent of Columbia's  
20   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 28 percent of  
6 depreciable plant. The retirement rate method was used to analyze the  
7 survivor characteristics of this property group. Aged plant accounting data  
8 was compiled from 1939 through 2023 and analyzed in periods that best  
9 represent the overall service life of this property. The life tables for the 1939-  
10 2023, 1984-2023 and 2004-2023 experience bands are presented on pages  
11 VII-56 through VII-61 of the Depreciation Study. The life tables display the  
12 retirement and surviving ratios of the aged plant data exposed to retirement  
13 by age interval. For example, page VII-56 of the study shows \$753,395  
14 retired at age 0.5 with \$231,710,549 exposed to retirement. Consequently,  
15 the retirement ratio is 0.0033 and the surviving ratio is 0.9967. These life  
16 tables, or original survivor curves, are plotted along with the estimated  
17 smooth survivor curve, the 37-R1 on page VII-55 of the study.

18 The net salvage analyses for Account 380.00, Services, is presented  
19 on pages VIII-17 through VIII-19 of the Depreciation Study. The percentage  
20 is 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 2023. This 55-year period experienced \$36,395,808 (\$73,097 -  
3 \$36,468,905) in negative net salvage for \$42,759,625 plant retired. The result  
4 is negative net salvage of 85 percent ( $\$36,395,808/\$42,759,625$ ). Based on the  
5 overall negative 85 percent net salvage and the most recent five years of  
6 negative 101 percent, as well as industry ranges and Columbia's  
7 expectations, it was determined that negative 75 percent is the most  
8 appropriate estimate.

9 My calculation of the annual depreciation related to the original cost  
10 as of December 31, 2023, of gas plant is presented on pages IX-23 and IX-24  
11 of the study. The calculation is based on the 37-R1 survivor curve, 75  
12 percent negative net salvage, the attained age, and the allocated book  
13 reserve. The tabulation sets forth the installation year, the original cost,  
14 calculated accrued depreciation, allocated book reserve, future accruals,  
15 remaining 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  
20 identifier, but historical balances were available by type pipe therefore,

1 separate life characteristics could not be accurately studied. Thus, one  
2 common service life and net salvage estimate for all mains. The common  
3 survivor curve and net salvage percent was applied to the surviving  
4 balance as of December 31, 2023 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. As explained in the Testimony of Columbia Witness Dave Roy,  
8 the program originally targeted a 30-year replacement of bare steel and cast  
9 iron pipe. However, as explained by Witness Roy, Columbia currently  
10 estimates the projected completion date to be 2043. As of December 31,  
11 2023, all the cast iron has been replaced. Therefore, the depreciation rates  
12 must be established to match capital recovery to life expectancy. In order to  
13 accomplish the appropriate matching principle, the surviving bare steel  
14 investment must be recovered by year-end 2043. Consequently, the annual  
15 depreciation rate for bare steel in Account 376.00 has a truncation date of  
16 December 2043. This is consistent with the current practices and  
17 depreciation rates.

18

19

1 **Q: Please explain how you calculated the forecasted depreciation rates as of**  
2 **December 31, 2025.**

3 A: First, the plant in service and book reserve were brought forward from  
4 December 31, 2023 to December 31, 2025 based on the capital budget by  
5 account and by year. The book depreciation reserve by account as of  
6 December 31, 2025 was developed by adding the annual accruals and gross  
7 salvage each month and subtracting retirements and cost of removal each  
8 month for the two-year period. Once the plant in service as of December  
9 31, 2025 was developed by vintage within account and the book  
10 depreciation reserve is developed by account, then the December 31, 2025  
11 depreciation rates were calculated using the same methods and procedures  
12 as in the 2023 Depreciation Study. Attachment JJS-3 sets forth the  
13 depreciation rates and expense as of December 31, 2025.

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

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

# Attachment JJS-1

Attachment JJS-1

**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, January 2013, February 2018 and February 2023.

**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., in April 2012, I was promoted to the 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) and in January of 2019, I was promoted to my present position of President of 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; Iowa-American Water Company; New Jersey-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.; Aqua Illinois, 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; MidAmerican 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; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee- American Water Company; Columbia Gas of Maryland; Maryland-American Water Company; 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 Energy Arkansas, Inc.; 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; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire; FirstEnergy Service Corporation; Northeast Ohio Natural Gas Corporation; Blue Granite Water Company; Spire Missouri, Inc.; Dominion Energy South Carolina, Inc.; South FirstEnergy Operating Companies; Dayton Power and Light Company; Liberty Utilities; East Kentucky Power Cooperative; Bangor Natural Gas; Hanover Borough Municipal Water Works; West Virginia American Water Company; Evergy Metro; Evergy Missouri West; Granite State Electric; Bluegrass Water; The Borough of Ambler; Newtown Artesian Water Company and Connecticut Water Company.

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; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities 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 Company	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 Company	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 Company	Depreciation
17.	2003	MO PSC	WR-2003-0500	Missouri-American Water Company	Depreciation
18.	2003	FERC	ER03-1274-000	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
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-ICC-06	North Shore Gas Company	Depreciation
33.	2005	IL CC	05-ICC-06	Peoples Gas Light and Coke Company	Depreciation
34.	2005	KY PSC	2005-00042	Union Light Heat & Power	Depreciation

	<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client Utility</u>	<u>Subject</u>
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	US District Court	Cause No. 1:99-CV-1693- LJM/VSS	Cinergy Corporation	Accounting
40.	2005	OK CC	PUD 200500151	Oklahoma Gas and Electric Company	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 Company	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 Company	Depreciation
47.	2006	NC Util Cm.	G-5, Sub522	Pub. Service Company 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	Accounting
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
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	IS05-82-002, et 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

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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 Company	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 Company	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 Company	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
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	Docket No. 2011-UA-183	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



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99.	2009	OH PUC		Aqua Ohio Water Company	Depreciation
100.	2009	WI PSC	3270-DU-103	Madison Gas & Electric Company	Depreciation
101.	2009	MO PSC	WR-2010	Missouri American Water Company	Depreciation
102.	2009	AK Reg Cm	U-09-097	Chugach Electric Association	Depreciation
103.	2010	IN URC	43969	Northern Indiana Public Service Company	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 Company	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 Company	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 Company	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 Company	Depreciation
119.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Company - NIFL	Depreciation
120.	2010	IN URC	Cause No. 43894	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
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	City of Lancaster – 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 Company	Depreciation
132.	2011	PA PUC	2011-2232243	Pennsylvania American Water Company	Depreciation

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133.	2011	FERC	RP11-___-000	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	Borough of Hanover – 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	City of Lancaster – 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 Company	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
154.	2012	TX PUC	SOAH 582-14-1051/ TECQ 2013-2007-UCR	Aqua Texas	Depreciation
155.	2012	PA PUC	2012-2336379	York Water Company	Depreciation
156.	2013	NJ BPU	ER12121071	PHI Service Company– 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 Company	Depreciation
159.	2013	IA Util Bd	2013-0004	MidAmerican Energy Corporation	Depreciation
160.	2013	PA PUC	2013-2355276	Pennsylvania American Water Company	Depreciation
161.	2013	NY PSC	13-E-0030, 13-G-0031, 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 Company – PEPCO	Depreciation

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166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Company	Depreciation
167.	2013	FERC	ER13-2428-0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13-2410-0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Company	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- -0000	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	Borough of Hanover – 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
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 Water Company	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric Company	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

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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	NiSource - 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/ 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	3270-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC	Docket UE-17	Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	SUEZ Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Corporation	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC	Case No. 16-0907-WW-AIR	Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	NiSource - Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Company – Electric	Depreciation
228.	2016	DE PSC	16-0650	Delmarva Power and Light Company – Gas	Depreciation
229.	2016	NY PSC	Case 16-G-0257	National Fuel Gas Distribution Corp – NY Div	Depreciation
230.	2016	PA PUC	R-2016-2537349	Metropolitan Edison Company	Depreciation
231.	2016	PA PUC	R-2016-2537352	Pennsylvania Electric Company	Depreciation
232.	2016	PA PUC	R-2016-2537355	Pennsylvania Power Company	Depreciation

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233.	2016	PA PUC	R-2016-2537359	West Penn Power Company	Depreciation
234.	2016	PA PUC	R-2016-2529660	NiSource - Columbia Gas of PA	Depreciation
235.	2016	KY PSC	Case No. 2016-00063	Kentucky Utilities / Louisville Gas & Electric Co	Depreciation
236.	2016	MO PSC	ER-2016-0285	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation
239.	2016	ID PUC	IPC-E-16-23	Idaho Power Company	Depreciation
240.	2016	OR PUC	UM1801	Idaho Power Company	Depreciation
241.	2016	ILL CC	16-	MidAmerican Energy Company	Depreciation
242.	2016	KY PSC	Case No. 2016-00370	Kentucky Utilities Company	Depreciation
243.	2016	KY PSC	Case No. 2016-00371	Louisville Gas and Electric Company	Depreciation
244.	2016	IN URC	Cause No. 45029	Indianapolis Power & Light	Depreciation
245.	2016	AL RC	U-16-081	Chugach Electric Association	Depreciation
246.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation
247.	2017	TX PUC	PUC-26831, SOAH 973-17-2686	El Paso Electric Company	Depreciation
248.	2017	WA UTC	UE-17033 and UG-170034	Puget Sound Energy	Depreciation
249.	2017	OH PUC	Case No. 17-0032-EL-AIR	Duke Energy Ohio	Depreciation
250.	2017	VA SCC	Case No. PUE-2016-00413	Virginia Natural Gas, Inc.	Depreciation
251.	2017	OK CC	Case No. PUD201700151	Public Service Company of Oklahoma	Depreciation
252.	2017	MD PSC	Case No. 9447	Columbia Gas of Maryland	Depreciation
253.	2017	NC UC	Docket No. E-2, Sub 1142	Duke Energy Progress	Depreciation
254.	2017	VA SCC	Case No. PUR-2017-00090	Dominion Virginia Electric and Power Company	Depreciation
255.	2017	FERC	ER17-1162	MidAmerican Energy Company	Depreciation
256.	2017	PA PUC	R-2017-2595853	Pennsylvania American Water Company	Depreciation
257.	2017	OR PUC	UM1809	Portland General Electric	Depreciation
258.	2017	FERC	ER17-217-000	Jersey Central Power & Light	Depreciation
259.	2017	FERC	ER17-211-000	Mid-Atlantic Interstate Transmission, LLC	Depreciation
260.	2017	MN PUC	Docket No. G007/D-17-442	Minnesota Energy Resources Corporation	Depreciation
261.	2017	IL CC	Docket No. 17-0124	Northern Illinois Gas Company	Depreciation
262.	2017	OR PUC	UM1808	Northwest Natural Gas Company	Depreciation
263.	2017	NY PSC	Case No. 17-W-0528	SUEZ Water Owego-Nichols	Depreciation
264.	2017	MO PSC	GR-2017-0215	Laclede Gas Company	Depreciation
265.	2017	MO PSC	GR-2017-0216	Missouri Gas Energy	Depreciation

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266.	2017	ILL CC	Docket No. 17-0337	Illinois-American Water Company	Depreciation
267.	2017	FERC	Docket No. ER18-22-000	PPL Electric Utilities Corporation	Depreciation
268.	2017	IN URC	Cause No. 44988	Northern Indiana Public Service Company	Depreciation
269.	2017	NJ BPU	BPU Docket No. WR17090985	New Jersey American Water Company, Inc.	Depreciation
270.	2017	RI PUC	Docket No. 4800	SUEZ Water Rhode Island	Depreciation
271.	2017	OK CC	Cause No. PUD 201700496	Oklahoma Gas and Electric Company	Depreciation
272.	2017	NJ BPU	ER18010029 & GR18010030	Public Service Electric and Gas Company	Depreciation
273.	2017	NC Util Com.	Docket No. E-7, SUB 1146	Duke Energy Carolinas, LLC	Depreciation
274.	2017	KY PSC	Case No. 2017-00321	Duke Energy Kentucky, Inc.	Depreciation
275.	2017	MA DPU	D.P.U. 18-40	Berkshire Gas Company	Depreciation
276.	2018	IN IURC	Cause No. 44992	Indiana-American Water Company, Inc.	Depreciation
277.	2018	IN IURC	Cause No. 45029	Indianapolis Power and Light	Depreciation
278.	2018	NC Util Com.	Docket No. W-218, Sub 497	Aqua North Carolina, Inc.	Depreciation
279.	2018	PA PUC	Docket No. R-2018-2647577	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
280.	2018	OR PUC	Docket UM 1933	Avista Corporation	Depreciation
281.	2018	WA UTC	Docket No. UE-108167	Avista Corporation	Depreciation
282.	2018	ID PUC	AVU-E-18-03, AVU-G-18-02	Avista Corporation	Depreciation
283.	2018	IN URC	Cause No. 45039	Citizens Energy Group	Depreciation
284.	2018	FERC	Docket No. ER18-	Duke Energy Progress	Depreciation
285.	2018	PA PUC	Docket No. R-2018-3000124	Duquesne Light Company	Depreciation
286.	2018	MD PSC	Case No. 948	NiSource - Columbia Gas of Maryland	Depreciation
287.	2018	MA DPU	D.P.U. 18-45	NiSource - Columbia Gas of Massachusetts	Depreciation
288.	2018	OH PUC	Case No. 18-0299-GA-ALT	Vectren Energy Delivery of Ohio	Depreciation
289.	2018	PA PUC	Docket No. R-2018-3000834	SUEZ Water Pennsylvania Inc.	Depreciation
290.	2018	MD PSC	Case No. 9847	Maryland-American Water Company	Depreciation
291.	2018	PA PUC	Docket No. R-2018-3000019	The York Water Company	Depreciation
292.	2018	FERC	ER-18-2231-000	Duke Energy Carolinas, LLC	Depreciation
293.	2018	KY PSC	Case No. 2018-00261	Duke Energy Kentucky, Inc.	Depreciation
294.	2018	NJ BPU	BPU Docket No. WR18050593	SUEZ Water New Jersey	Depreciation
295.	2018	WA UTC	Docket No. UE-180778	PacifiCorp	Depreciation
296.	2018	UT PSC	Docket No. 18-035-36	PacifiCorp	Depreciation
297.	2018	OR PUC	Docket No. UM-1968	PacifiCorp	Depreciation
298.	2018	ID PUC	Case No. PAC-E-18-08	PacifiCorp	Depreciation
299.	2018	WY PSC	20000-539-EA-18	PacifiCorp	Depreciation
300.	2018	PA PUC	Docket No. R-2018-3003068	Aqua Pennsylvania, Inc.	Depreciation

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301.	2018	IL CC	Docket No. 18-1467	Aqua Illinois, Inc.	Depreciation
302.	2018	KY PSC	Case No. 2018-00294	Louisville Gas & Electric Company	Depreciation
303.	2018	KY PSC	Case No. 2018-00295	Kentucky Utilities Company	Depreciation
304.	2018	IN URC	Cause No. 45159	Northern Indiana Public Service Company	Depreciation
305.	2018	VA SCC	Case No. PUR-2019-00175	Virginia American Water Company	Depreciation
306.	2019	PA PUC	Docket No. R-2018-3006818	Peoples Natural Gas Company, LLC	Depreciation
307.	2019	OK CC	Cause No. PUD201800140	Oklahoma Gas and Electric Company	Depreciation
308.	2019	MD PSC	Case No. 9490	FirstEnergy – Potomac Edison	Depreciation
309.	2019	SC PSC	Docket No. 2018-318-E	Duke Energy Progress	Depreciation
310.	2019	SC PSC	Docket No. 2018-319-E	Duke Energy Carolinas	Depreciation
311.	2019	DE PSC	DE 19-057	Public Service of New Hampshire	Depreciation
312.	2019	NY PSC	Case No. 19-W-0168 & 19-W-0269	SUEZ Water New York	Depreciation
313.	2019	PA PUC	Docket No. R-2019-3006904	Newtown Artesian Water Company	Depreciation
314.	2019	MO PSC	ER-2019-0335	Ameren Missouri	Depreciation
315.	2019	MO PSC	EC-2019-0200	KCP&L Greater Missouri Operations Company	Depreciation
316.	2019	MN DOC	G011/D-19-377	Minnesota Energy Resource Corp.	Depreciation
317.	2019	NY PSC	Case 19-E-0378 & 19-G-0379	New York State Electric and Gas Corporation	Depreciation
318.	2019	NY PSC	Case 19-E-0380 & 19-G-0381	Rochester Gas and Electric Corporation	Depreciation
319.	2019	WA UTC	Docket UE-190529 / UG-190530	Puget Sound Energy	Depreciation
320.	2019	PA PUC	Docket No. R-2019-3010955	City of Lancaster	Depreciation
321.	2019	IURC	Cause No. 45253	Duke Energy Indiana	Depreciation
322.	2019	KY PSC	Case No. 2019-00271	Duke Energy Kentucky, Inc.	Depreciation
323.	2019	OH PUC	Case No. 18-1720-GA-AIR	Northeast Ohio Natural Gas Corp	Depreciation
324.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Carolinas	Depreciation
325.	2019	FERC	Docket No. ER20-277-000	Jersey Central Power & Light Company	Depreciation
326.	2019	MA DPU	D.P.U. 19-120	NSTAR Gas Company	Depreciation
327.	2019	SC PSC	Docket No. 2019-290-WS	Blue Granite Water Company	Depreciation
328.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Progress	Depreciation
329.	2019	MD PSC	Case No. 9609	NiSource Columbia Gas of Maryland, Inc.	Depreciation
330.	2019	HI PUC	Docket No. 2019-0117	Young Brothers, LLC	Depreciation
331.	2020	NJ BPU	Docket No. ER20020146	Jersey Central Power & Light Company	Depreciation
332.	2020	PA PUC	Docket No. R-2020-3018835	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
333.	2020	PA PUC	Docket No. R-2020-3019369	Pennsylvania-American Water Company	Depreciation
334.	2020	PA PUC	Docket No. R-2020-3019371	Pennsylvania-American Water Company	Depreciation
335.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
336.	2020	NM PRC	Case No. 20-00104-UT	El Paso Electric Company	Depreciation
337.	2020	MD PSC	Case No. 9644	Columbia Gas of Maryland, Inc.	Depreciation
338.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation

	<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client Utility</u>	<u>Subject</u>
339.	2020	VA St CC	Case No. PUR-2020-00095	Virginia Natural Gas Company	Depreciation
340.	2020	SC PSC	Docket No. 2020-125-E	Dominion Energy South Carolina, Inc.	Depreciation
341.	2020	WV PSC	Case No. 20-0745-G-D	Hope Gas, Inc. d/b/a Dominion Energy West	Depreciation
342.	2020	VA St CC	Case No. PUR-2020-00106	Aqua Virginia, Inc.	Depreciation
343.	2020	PA PUC	Docket No. R-2020-3020256	City of Bethlehem – Bureau of Water	Depreciation
344.	2020	NE PSC	Docket No. NG-109	Black Hills Nebraska	Depreciation
345.	2020	NY PSC	Case No. 20-E-0428 & 20-G-0429	Central Hudson Gas & Electric Corporation	Depreciation
346.	2020	FERC	ER20-598	Duke Energy Indiana	Depreciation
347.	2020	FERC	ER20-855	Northern Indiana Public Service Company	Depreciation
348.3	2020	OR PSC	UE 374	PacifiCorp	Depreciation
349.	2020	MD PSC	Case No. 9490 Phase II	Potomac Edison – Maryland	Depreciation
350.	2020	IN URC	Case No. 45447	Southern Indiana Gas and Electric Company	Depreciation
351.	2020	IN URC	IURC Cause No. 45468	Indiana Gas Company, Inc. d/b/a Vectren Energy	Depreciation
352.	2020	KY PSC	Case No. 2020-00349	Kentucky Utilities Company	Depreciation
353.	2020	KY PSC	Case No. 2020-00350	Louisville Gas and Electric Company	Depreciation
354.	2020	FERC	Docket No. ER21- 000	South FirstEnergy Operating Companies	Depreciation
355.	2020	OH PUC	Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM & 20-1653-EL-ATA	Dayton Power and Light Company	Depreciation
356.	2020	OR PSC	UG 388	Northwest Natural Gas Company	Depreciation
357.	2020	MO PSC	Case No. GR-2021-0241	Ameren Missouri Gas	Depreciation
358.	2021	KY PSC	Case No. 2021-00103	East Kentucky Power Cooperative	Depreciation
359.	2021	MPUC	Docket No. 2021-00024	Bangor Natural Gas	Depreciation
360.	2021	PA PUC	Docket No. R-2021-3024296	Columbia Gas of Pennsylvania, Inc.	Depreciation
361.	2021	NC Util.	Doc. No. G-5, Sub 632	Public Service of North Carolina	Depreciation
362.	2021	MO PSC	ER-2021-0240	Ameren Missouri	Depreciation
363.	2021	PA PUC	Docket No. R-2021-3024750	Duquesne Light Company	Depreciation
364.	2021	KS PSC	21-BHCG-418-RTS	Black Hills Kansas Gas	Depreciation
365.	2021	KY PSC	Case No. 2021-00190	Duke Energy Kentucky	Depreciation
366.	2021	OR PSC	Docket UM 2152	Portland General Electric	Depreciation
367.	2021	ILL CC	Docket No. 20-0810	North Shore Gas Company	Depreciation
368.	2021	FERC	ER21-1939-000	Duke Energy Progress	Depreciation
369.	2021	FERC	ER21-1940-000	Duke Energy Carolina	Depreciation
370.	2021	KY PSC	Case No. 2021-00183	NiSource Columbia Gas of Kentucky	Depreciation
371.	2021	MD PSC	Case No. 9664	NiSource Columbia Gas of Maryland	Depreciation
372.	2021	OH PUC	Case No. 21-0596-ST-AIR	Aqua Ohio	Depreciation
373.	2021	PA PUC	Docket No. R-2021-3026116	Hanover Borough Municipal Water Works	Depreciation
374.	2021	OR PSC	UM-2180	Idaho Power Company	Depreciation
375.	2021	ID PUC	Case No. IPC-E-21-18	Idaho Power Company	Depreciation



	<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client Utility</u>	<u>Subject</u>
376.	2021	WPSC	6690-DU-104	Wisconsin Public Service Company	Depreciation
377.	2021	PAPUC	Docket No. R-2021-3026116	Borough of Hanover	Depreciation
378.	2021	OH PUC	Case No. 21-637-GA-AIR; Case No. 21-638-GA-ALT; Case No. 21-639-GA-UNC; Case No. 21-640-GA-AAM	NiSource Columbia Gas of Ohio	Depreciation
379.	2021	TX PUC	Texas PUC Docket No. 52195; SOHA Docket No. 473-21-2606	El Paso Electric	Depreciation
380.	2021	MO PSC	Case No. GR.2021-0108	Spire Missouri	Depreciation
381.	2021	WV PSC	Case No. 21-0215-WS-P	West Virginia American Water Company	Depreciation
382.	2021	FERC	ER21-2736	Duke Energy Carolinas	Depreciation
383.	2021	FERC	ER21-2737	Duke Energy Progress	Depreciation
384.	2021	IN URC	Cause #45621	Northern Indiana Public Service Company	Depreciation
385.	2021	PA PUC	Docket No. R-2021-3026682	City of Lancaster	Depreciation
386.	2021	OH PUC	Case No. 21-887-EL-AIR; Case No. 21-888-EL-ATA; Case No. 889-EL-AAM	Duke Energy Ohio	Depreciation
387.	2021	AK PSC	Docket No. 21-097-U	Black Hills Energy Arkansas, Inc.	Depreciation
388.	2021	OK CC	Cause No. PUD202100164	Oklahoma Gas & Electric	Depreciation
389.	2021	FERC	Case ER-22-392-001	El Paso Electric	Depreciation
390.	2021	FERC	Case ER-21-XXX	MidAmerican Electric	Depreciation
391.	2021	PA PUC	Docket Nos. R-2021-3027385, R-2021-3027386	Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc.	Depreciation
392.	2022	FERC	Case ER-22-282-000	El Paso Electric	Depreciation
393.	2022	ILL CC	Docket No. 22-0154	MidAmerican Gas	Depreciation
394.	2022	MO PSC	Case No. ER-2022-0129	Evergy Metro	Depreciation
395.	2022	MO PSC	Case No. ER-2022-0130	Evergy Missouri West	Depreciation
396.	2022	PA PUC	Docket No. R-2022-3031211	NiSource Columbia Gas of Pennsylvania, Inc.	Depreciation
397.	2022	MA DPU	D.P.U. 22-20	The Berkshire Gas Company	Depreciation
398.	2022	PA PUC	R-2022-3031672; R-2022-3031673	Pennsylvania-American Water Company	Depreciation
399.	2022	SD PUC	Docket No. NG22-	MidAmerican Gas	Depreciation
400.	2022	MD PSC	Case No. 9680	NiSource Columbia Gas of Maryland	Depreciation
401.	2022	WYPSC	Docket No. 20003-214-ER-22	Black Hills Energy – Cheyenne Light, Fuel and	Depreciation
402.	2022	MA DPU	D.P.U. 22.22	NSTAR Electric Company d/b/a Eversource Energ	Depreciation
403.	2022	NC Util Com	Docket No. W-218, Sub 573	Aqua North Carolina, Inc.	Depreciation
404.	2022	OR PUC	UM2213	Northwest Natural Gas	Depreciation

	<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client Utility</u>	<u>Subject</u>
405.	2022	OR PUC	UM2214	Northwest Natural Gas	Depreciation
406.	2022	ME PUC	Docket No. 2022-00152	Central Maine Power	Depreciation
407.	2022	SC PSC	Docket No. 2022-254-E	Duke Energy Progress	Depreciation
408.	2022	NC Util Com	Docket No. E-2, SUB 1300	Duke Energy Progress	Depreciation
409.	2022	IN URC	Cause #45772	Northern Indiana Public Service Company	Depreciation
410.	2022	PA PUC	R-2022-3031340	The York Water Company	Depreciation
411.	2022	PA PUC	R-2022-3032806	The York Water Company	Depreciation
412.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Depreciation
413.	2022	MO PSC	ER-2022-0337	Ameren Missouri	Depreciation
414.	2022	OH PUC	Case No. 22-507-GA-AIR	Duke Energy Ohio	Depreciation
415.	2022	PA PUC	R-2022-3035730	National Fuel Gas Distribution Corporation – PA	Depreciation
416.	2022	WY PSC	20003-214-ER-22	Cheyenne Light, Fuel and Power Company	Depreciation
417.	2022	NJ BPU	BPU Docket No. ER2303144	Jersey Central Power & Light Company	Depreciation
418.	2022	KY PSC	Case No. 2022-00372	Duke Energy Kentucky	Depreciation
419.	2022	TX PUC	SOAH Docket No. 473-23-04521	Aqua Texas, Inc.	Depreciation
420.	2022	NC Util Com	Docket No. E-7, Sub 1276	Duke Energy Carolinas, LLC	Depreciation
421.	2022	KY PSC	Case No. 2022-00432	Bluegrass Water	Depreciation
422.	2023	ILL CC	Docket No. 23-0069	The Peoples Gas Light and Coke Company	Depreciation
423.	2023	ILL CC	Docket No. 23-0068	North Shore Gas Company	Depreciation
424.	2023	WV PSC	Case No. 23-0030-E-D	Monongahela Power Company and The Potomac	Depreciation
425.	2023	ID PUC	AVU-E-23-01; AVU-G-23-01	Avista Corporation	Depreciation
426.	2023	ILL CC	Docket No. 23-0066	Northern Illinois Gas Company d/b/a Nicor Gas	Depreciation
427.	2023	SC PSC	Docket No. 2023-70-G	Dominion Energy South Carolina, Inc.	Depreciation
428.	2023	FERC	Docket No. ER23-xxx-00	Duke Energy Ohio, Inc.	Depreciation
429.	2023	WY PSC	Docket No. 30036-78-GR-23	Black Hills Wyoming Gas Company d/b/a Black Hi	Depreciation
430.	2023	PSC MD	Case No. 9695	The Potomac Edison Company	Depreciation
431.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
432.	2023	FERC	Docket No. ER23-xxx-000	PPL Electric Utilities	Depreciation
433.	2023	OH PUC	Case No. 23-0154-GA-AIR	Northeast Ohio Natural Gas Corporation	Depreciation
434.	2023	DE PSC	PSC Docket No. 23-0601	Artesian Water Company	Depreciation
435.	2023	CO PUC	No. 23AL-0231G	Black Hills Colorado d/b/a Black Hills Energy	Depreciation
436.	2023	NH PUC	Docket No. DE 23-039	Granite State Electric d/b/a Liberty Utilities	Depreciation
437.	2023	MD PSC	Case No. 9701	Columbia Gas of Maryland	Depreciation
438.	2023	NY PSC	Case Nos. 23-E-0418; 23-G-0419	Central Hudson Gas and Electric	Depreciation
439.	2023	FERC	Docket No. ER23-xxx-000	Central Maine Power Company	Depreciation
440.	2023	SD PUC	Docket Number EL23-016	Northwestern Energy	Depreciation
441.	2023	CT PURA	Docket No. 23-08-32	Connecticut Water Company	Depreciation

	<u>Year</u>	<u>Jurisdiction</u>	<u>Docket No.</u>	<u>Client Utility</u>	<u>Subject</u>
442.	2023	OH PUC	Case 23-0894-GA-AIR	The East Ohio Gas Company d/b/a Dominion	Depreciation
443.	2023	IN URC	Cause No. 45911	Indianapolis Power & Light	Depreciation
444.	2023	IN URC	Cause No. 45967	Northern Indiana Public Service Company	Depreciation
445.	2023	PA PUC	Docket No. R-2023-3043189 and Docket No. R-2023-3043190	Pennsylvania-American Water Company	Depreciation
446.	2023	IN URC	Cause No. 45988	Citizens Energy Group	Depreciation
447.	2023	NY PSC	Case No. 23-G-0627	National Fuel Gas Distribution Corporation	Depreciation
448.	2023	IN URC	Cause No. 45990	Southern Indiana Gas and Electric Company d/b/ Centerpoint Energy Indiana South	Depreciation
449.	2023	PA PUC	Docket No. R-2023-3044549	Peoples Natural Gas Company LLC	Depreciation
450.	2023	OR PUC	Docket No. UM-2312	Northwest Natural Gas Company	Depreciation
451.	2023	AZ PCC	Docket No. WS-21182A-23-2092	Northwest Natural Water Company, LLC	Depreciation
452.	2023	SC PSC	Docket No. 2023-388-E	Duke Energy Carolinas	Depreciation
453.	2023	ILL CC	Docket No. 23-	North Shore Gas Company	Depreciation
454.	2023	ILL CC	Docket No. 23-	The Peoples Gas Light and Coke Company	Depreciation
455.	2024	FERC	Docket No. ER24-768-000	Duke Energy Progress	Depreciation
456.	2024	FERC	Docket No. SPP-0007	Evergy Metro, Inc. and Evergy Missouri West, Inc	Depreciation
457.	2024	NJ BPU	Docket No. WR24010057	Aqua New Jersey, Inc.	Depreciation
458.	2024	ILL CC	Docket No. 24-0044	Aqua Illinois, Inc.	Depreciation
459.	2024	PA PUC	Docket No. R-2024-3046519	NiSource – Columbia Gas of Pennsylvania, Inc.	Depreciation
460.	2024	KY PSC	Case No. 2024-00092	NiSource – Columbia Gas of Kentucky, Inc.	Depreciation
461.	2024	VA SCC	Case No. PUR-2024-00030	NiSource – Columbia Gas of Virginia, Inc.	Depreciation

# Attachment JJS-2



## **2023 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2023**

*Prepared by:*



**GANNETT FLEMING**

**Excellence Delivered As Promised**

COLUMBIA GAS OF KENTUCKY, INC.  
Lexington, Kentucky

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC  
Camp Hill, Pennsylvania



**Gannett Fleming**  
**Valuation and Rate Consultants, LLC**

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April 24, 2024

Columbia Gas of Kentucky, Inc.  
2001 Mercer Road  
Lexington, KY 40512

Attention Ms. Judith Cooper  
Director of Regulatory Affairs

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas plant of Columbia Gas of Kentucky, Inc. as of December 31, 2023. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC.

A handwritten signature in blue ink that reads "John J. Spanos".

JOHN J. SPANOS

President

A handwritten signature in blue ink that reads "Frederick B. Johnston, Jr.".

FREDERICK B. JOHNSTON, JR.

Assistant Project Manager

JJS:mle

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## **COLUMBIA GAS OF KENTUCKY, INC.**

### **DEPRECIATION STUDY**

#### **EXECUTIVE SUMMARY**

Pursuant to Columbia Gas of Kentucky, Inc.'s ("CKY" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to the gas plant of CKY as of December 31, 2023. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The depreciation rates are based on the straight line method using the average service life ("ASL") procedure and were applied on a remaining life basis. The calculations were based on attained ages and estimated average service life and forecasted net salvage characteristics for each depreciable group of assets.

CKY's accounting policy has not changed since the last depreciation study. However, there have been changes in the life and net salvage estimates since the last depreciation study which creates new depreciation rates than what currently are utilized. The result of these updated parameters is an increase in depreciation expense.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to gas plant in service as of December 31, 2023 as summarized by Table 1 of the study. Supporting analysis and calculations are provided within the study.

The study results set forth an annual depreciation expense of \$25.9 million when applied to depreciable plant balances as of December 31, 2023. The results are summarized at the functional level as follows:

**SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS**

<b><u>FUNCTION</u></b>	<b><u>ORIGINAL COST AS OF DECEMBER 31, 2023</u></b>	<b><u>PROPOSED RATE</u></b>	<b><u>ANNUAL ACCRUAL</u></b>
DISTRIBUTION PLANT	\$762,179,106.60	2.98	\$22,730,967
GENERAL PLANT	6,532,496.81	4.11	268,196
RESERVE ADJUSTMENT FOR AMORTIZATION	-	-	63,240
AMORTIZABLE PLANT	<u>15,369,016.35</u>	-	<u>2,791,473</u>
<b>TOTAL</b>	<b><u>\$784,080,619.76</u></b>		<b><u>\$25,853,876</u></b>

---

## PART I. INTRODUCTION

## **COLUMBIA GAS OF KENTUCKY, INC. DEPRECIATION STUDY**

### **PART I. INTRODUCTION**

#### **SCOPE**

This report sets forth the results of the depreciation study for Columbia Gas of Kentucky, Inc. (“CKY”), to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of gas plant as of December 31, 2023. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to gas plant in service as of December 31, 2023.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2023, a review of Company practice and outlook as they relate to plant operation and retirement, and consideration of current practice in the gas industry, including knowledge of service lives and net salvage estimates used for other gas companies.

#### **PLAN OF REPORT**

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and methods used in the service life study. Part III, Service Life Considerations, presents the results of the average service life analysis. Part IV, Net Salvage Considerations, presents the results of the net salvage study. Part V, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part VI, Results of Study, presents summaries by depreciable group

of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VII, Service Life Statistics presents the statistical analysis of service life estimates, Part VIII, Net Salvage Statistics sets forth the statistical indications of net salvage percents, and Part IX, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation.

## **BASIS OF THE STUDY**

### **Depreciation**

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing gas utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

For most accounts, the annual depreciation was calculated by the straight line method using the average service life procedure and the remaining life basis. For certain General Plant accounts, the annual depreciation is based on amortization accounting.

Both types of calculations were based on original cost, attained ages, and estimates of service lives and net salvage.

The straight line method, average service life procedure is a commonly used depreciation calculation procedure that has been accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented beginning on page V-4 of the report.

### **Service Life and Net Salvage Estimates**

The service life and net salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the gas utility industry, and comparisons of the service life and net salvage estimates from our studies of other gas utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for gas plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and the estimated future yielded estimated survivor curves from which the average service lives were derived.

---

## **PART II. ESTIMATION OF SURVIVOR CURVES**



## PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

### SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

### **Iowa Type Curves**

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

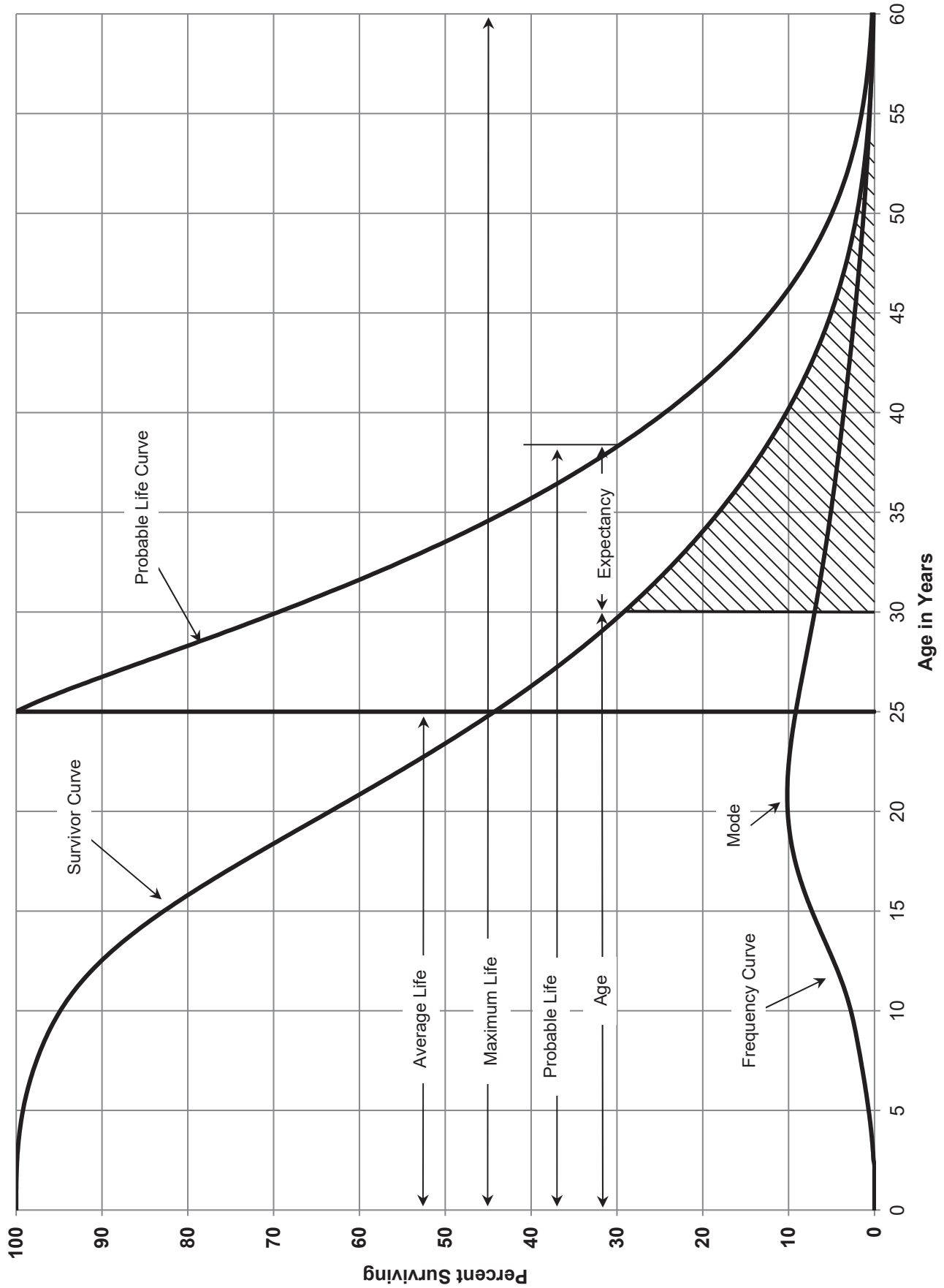


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

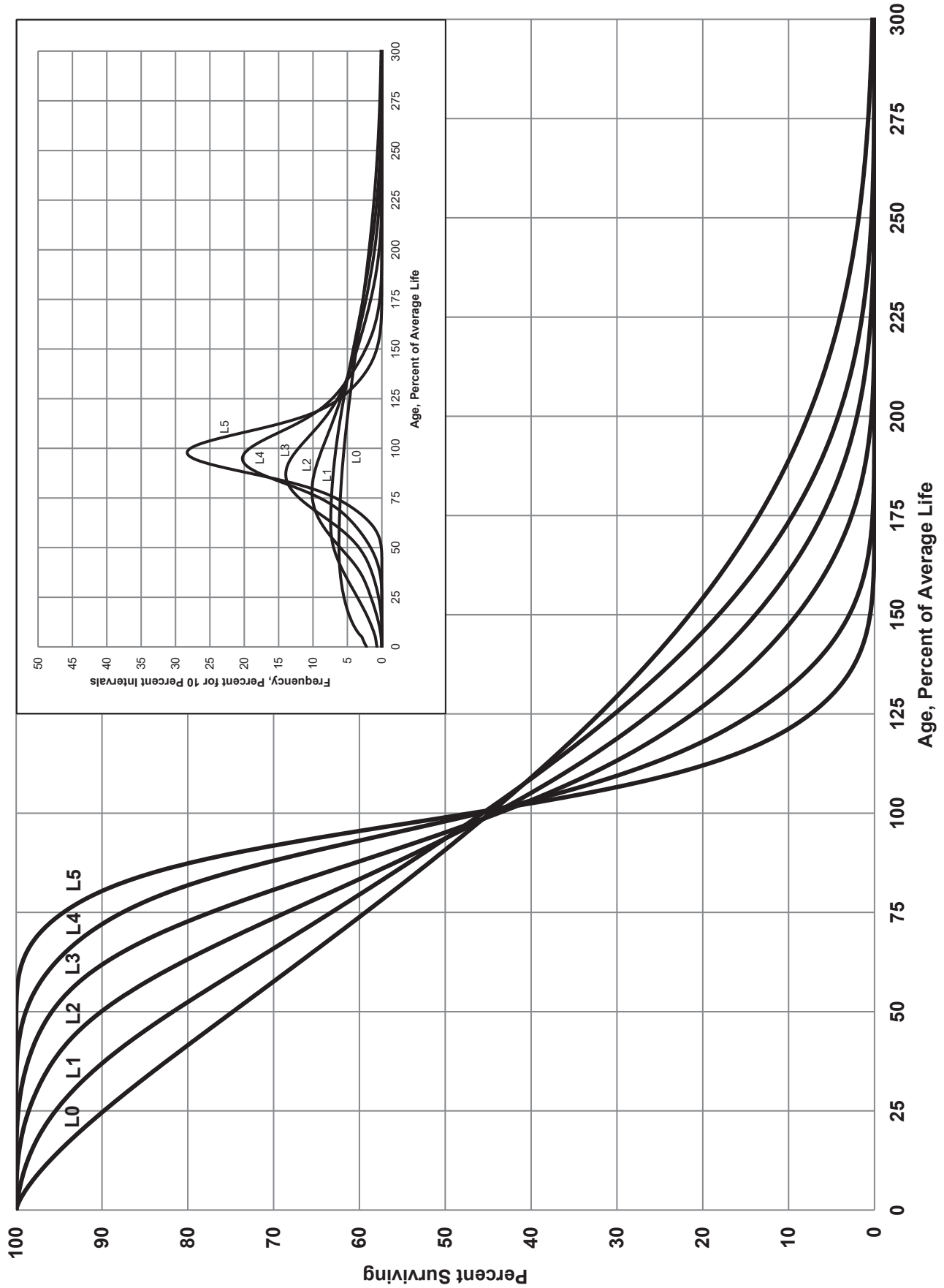
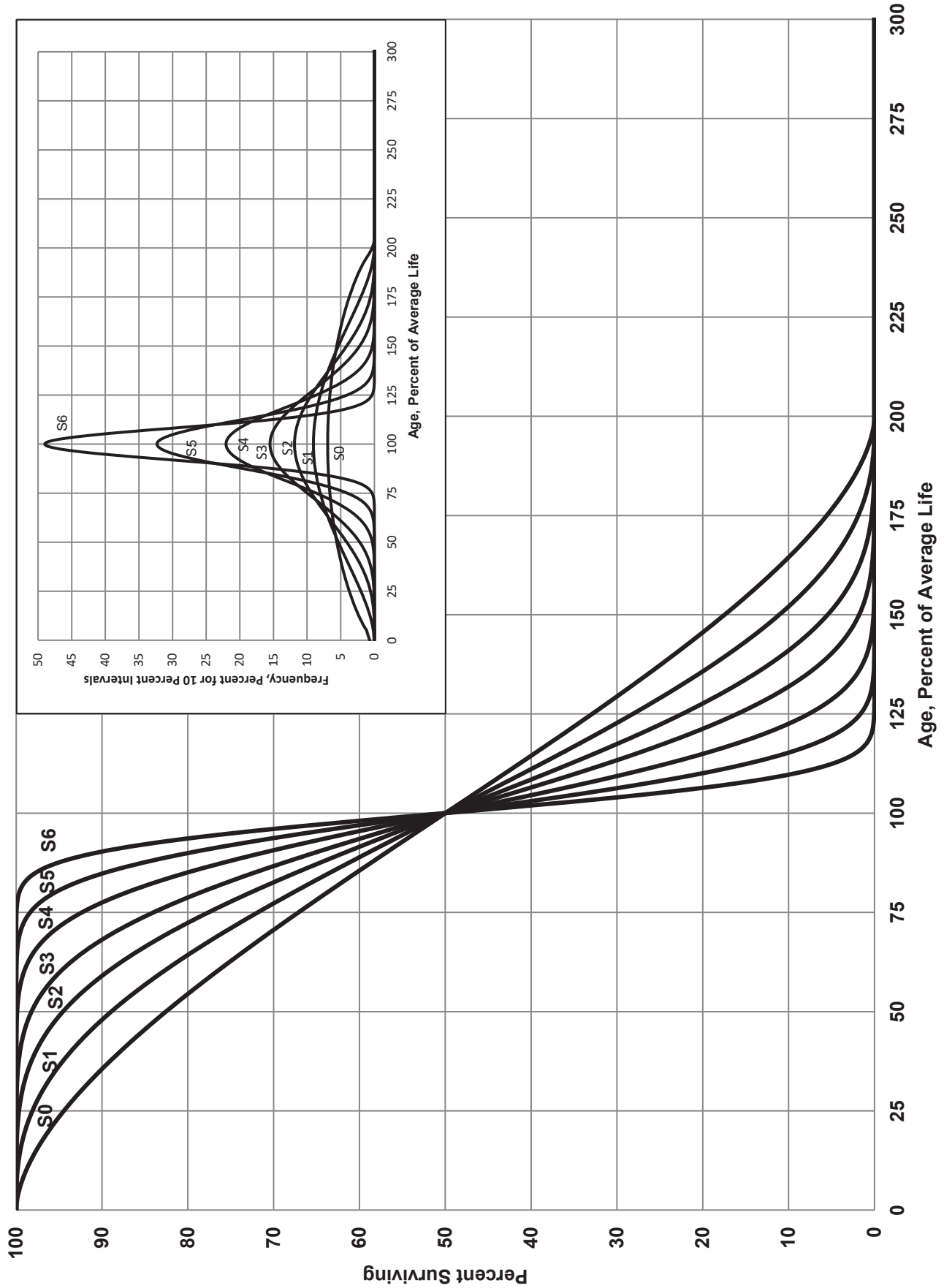
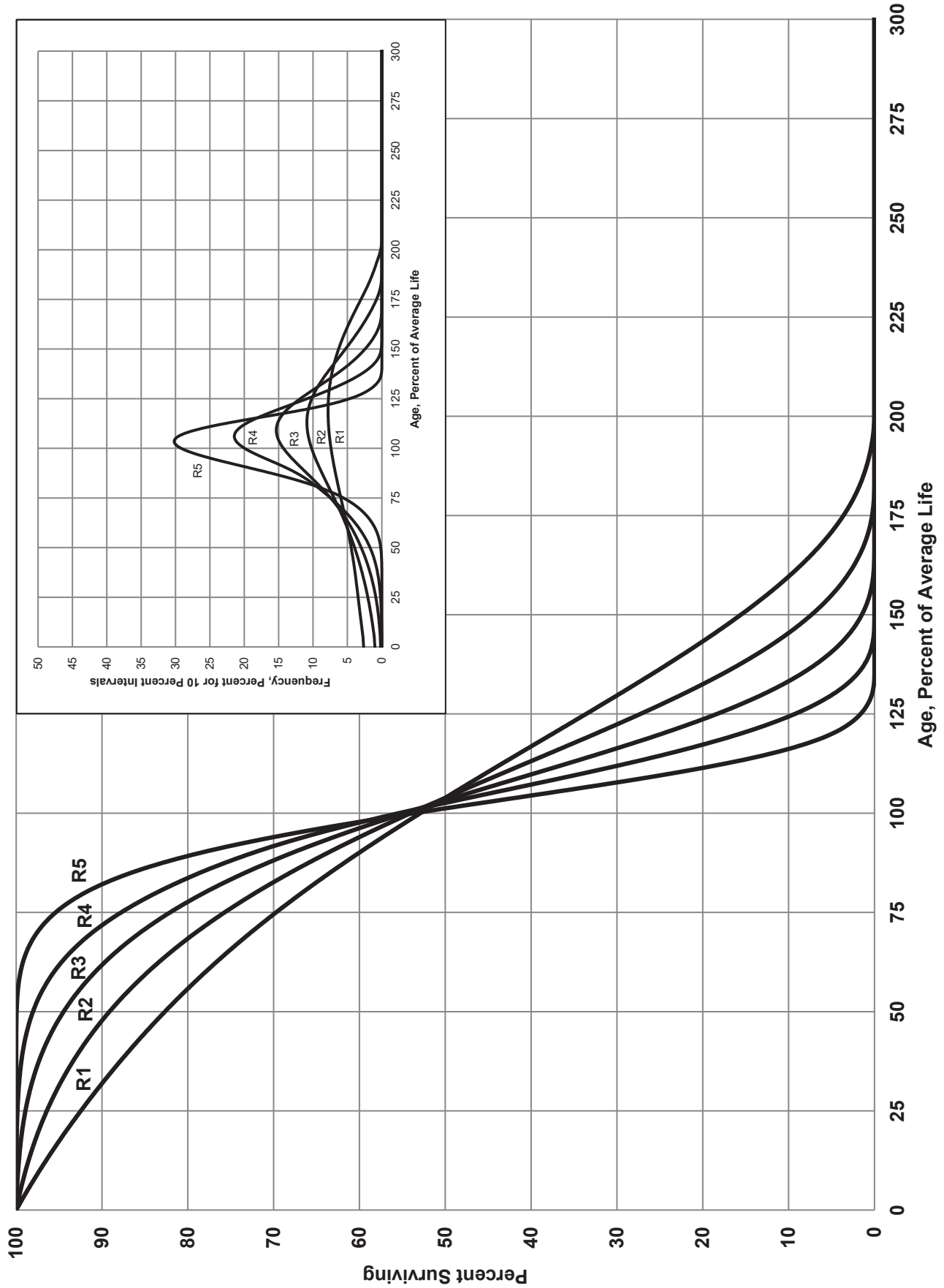


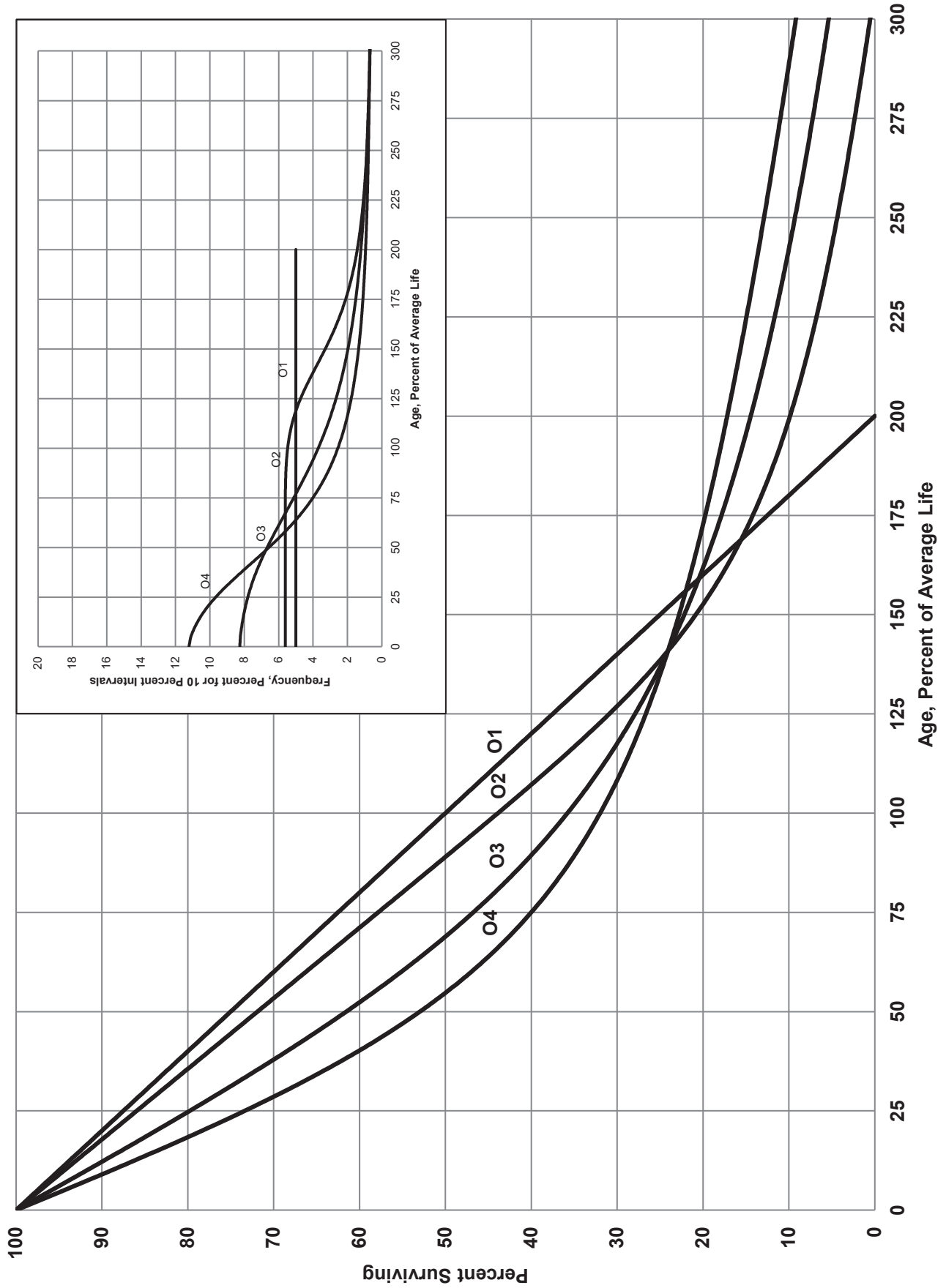
FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES



**FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES**



**FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES**



**FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES**

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."<sup>1</sup> In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

### **Retirement Rate Method of Analysis**

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"<sup>2</sup> "Engineering Valuation and Depreciation,"<sup>3</sup> and "Depreciation Systems."<sup>4</sup>

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

<sup>1</sup>Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

<sup>2</sup>Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

<sup>3</sup>Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

<sup>4</sup>Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.



## **Schedules of Annual Transactions in Plant Records**

The property group used to illustrate the retirement rate method is observed for the experience band 2014-2023 for which there were placements during the years 2009-2023. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2009 were retired in 2014. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2014 retirements of 2009 installations and ending with the 2023 retirements of the 2018 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.$$

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2014-2023  
 SUMMARIZED BY AGE INTERVAL

Year Placed (1)	Retirements, Thousands of Dollars											Total During Age Interval (12)	Age Interval (13)
	During Year												
	2014 (2)	2015 (3)	2016 (4)	2017 (5)	2018 (6)	2019 (7)	2020 (8)	2021 (9)	2022 (10)	2023 (11)			
2009	10	11	12	13	14	16	23	24	25	26	26	13½-14½	
2010	11	12	13	15	16	18	20	21	22	19	44	12½-13½	
2011	11	12	13	14	16	17	19	21	22	18	64	11½-12½	
2012	8	9	10	11	11	13	14	15	16	17	83	10½-11½	
2013	9	10	11	12	13	14	16	17	19	20	93	9½-10½	
2014	4	9	10	11	12	13	14	15	16	20	105	8½-9½	
2015		5	11	12	13	14	15	16	18	20	113	7½-8½	
2016			6	12	13	15	16	17	19	19	124	6½-7½	
2017				6	13	15	16	17	19	19	131	5½-6½	
2018					13	15	16	17	19	20	143	4½-5½	
2019					7	14	16	17	19	23	146	3½-4½	
2020						8	18	20	22	25	150	2½-3½	
2021							9	20	22	25	151	1½-2½	
2022								11	23	24	153	½-1½	
2023									11	13	80	0-½	
<b>Total</b>	<b>53</b>	<b>68</b>	<b>86</b>	<b>106</b>	<b>128</b>	<b>157</b>	<b>196</b>	<b>231</b>	<b>273</b>	<b>308</b>	<b>1,606</b>		

Experience Band 2014-2023

Placement Band 2009-2023

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2014-2023  
SUMMARIZED BY AGE INTERVAL

Placement Band 2009-2023

Experience Band 2014-2023

Year Placed (1)	Acquisitions, Transfers and Sales, Thousands of Dollars													Total During Age Interval (12)	Age Interval (13)
	During Year														
(2)	2014 (3)	2015 (4)	2016 (5)	2017 (6)	2018 (7)	2019 (8)	2020 (9)	2021 (10)	2022 (11)	2023 (12)					
2009	-	-	-	-	-	60 <sup>a</sup>	-	-	-	-	-	-	-	13½-14½	
2010	-	-	-	-	-	-	-	-	-	-	-	-	-	12½-13½	
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	11½-12½	
2012	-	-	-	-	-	-	(5) <sup>b</sup>	-	-	60	-	-	-	10½-11½	
2013	-	-	-	-	-	-	6 <sup>a</sup>	-	-	-	-	-	-	9½-10½	
2014	-	-	-	-	-	-	-	-	-	(5)	-	-	-	8½-9½	
2015	-	-	-	-	-	-	-	-	-	6	-	-	-	7½-8½	
2016	-	-	-	-	-	-	-	-	-	-	-	-	-	6½-7½	
2017	-	-	-	-	-	-	(12) <sup>b</sup>	-	-	-	-	-	-	5½-6½	
2018	-	-	-	-	-	-	-	-	22 <sup>a</sup>	-	-	-	-	4½-5½	
2019	-	-	-	-	-	-	(19) <sup>b</sup>	-	-	10	-	-	-	3½-4½	
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	2½-3½	
2021	-	-	-	-	-	-	-	-	(102) <sup>c</sup>	-	-	-	-	1½-2½	
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	½-1½	
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	0-½	
<b>Total</b>	-	-	-	-	-	60	(30)	22	(102)	(50)					

<sup>a</sup> Transfer Affecting Exposures at Beginning of Year

<sup>b</sup> Transfer Affecting Exposures at End of Year

<sup>c</sup> Sale with Continued Use

Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

**Schedule of Plant Exposed to Retirement**

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2014 through 2023 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2019 are calculated in the following manner:

Exposures at age 0	= amount of addition	= \$750,000
Exposures at age ½	= \$750,000 - \$ 8,000	= \$742,000
Exposures at age 1½	= \$742,000 - \$18,000	= \$724,000
Exposures at age 2½	= \$724,000 - \$20,000 - \$19,000	= \$685,000
Exposures at age 3½	= \$685,000 - \$22,000	= \$663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT  
 JANUARY 1 OF EACH YEAR 2014-2023  
 SUMMARIZED BY AGE INTERVAL

Year Placed	Exposures, Thousands of Dollars													Total at	
	Annual Survivors at the Beginning of the Year													Beginning of	
	2014 (1)	2015 (2)	2016 (3)	2017 (4)	2018 (5)	2019 (6)	2020 (7)	2021 (8)	2022 (9)	2023 (10)	2023 (11)	2023 (12)	Age Interval (13)		
2009	255	245	234	222	209	195	239	216	192	167	167	167	13½-14½		
2010	279	268	256	243	228	212	194	174	153	131	323	323	12½-13½		
2011	307	296	284	271	257	241	224	205	184	162	531	531	11½-12½		
2012	338	330	321	311	300	289	276	262	242	226	823	823	10½-11½		
2013	376	367	357	346	334	321	307	297	280	261	1,097	1,097	9½-10½		
2014	420 <sup>a</sup>	416	407	397	386	374	361	347	332	316	1,503	1,503	8½-9½		
2015		460 <sup>a</sup>	455	444	432	419	405	390	374	356	1,952	1,952	7½-8½		
2016			510 <sup>a</sup>	504	492	479	464	448	431	412	2,463	2,463	6½-7½		
2017				580 <sup>a</sup>	574	561	546	530	501	482	3,057	3,057	5½-6½		
2018					660 <sup>a</sup>	653	639	623	628	609	3,789	3,789	4½-5½		
2019						750 <sup>a</sup>	742	724	685	663	4,332	4,332	3½-4½		
2020							850 <sup>a</sup>	841	821	799	4,955	4,955	2½-3½		
2021								960 <sup>a</sup>	949	926	5,719	5,719	1½-2½		
2022									1,080 <sup>a</sup>	1,069	6,579	6,579	½-1½		
2023										1,220 <sup>a</sup>	7,490	7,490	0-½		
<b>Total</b>	<b>1,975</b>	<b>2,382</b>	<b>2,824</b>	<b>3,318</b>	<b>3,872</b>	<b>4,494</b>	<b>5,247</b>	<b>6,017</b>	<b>6,852</b>	<b>7,799</b>	<b>44,780</b>	<b>44,780</b>			

<sup>a</sup>Additions during the year

Experience Band 2014-2023

Placement Band 2009-2023

For the entire experience band 2014-2023, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

$$255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.$$

### **Original Life Table**

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15	
Exposures at age 4½	=	3,789,000	
Retirements from age 4½ to 5½	=	143,000	
Retirement Ratio	=	143,000 ÷ 3,789,000	= 0.0377
Survivor Ratio	=	1.000 - 0.0377	= 0.9623
Percent surviving at age 5½	=	(88.15) x (0.9623)	= 84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE  
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2014-2023

Placement Band 2009-2023

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	<u>167</u>	<u>26</u>	0.1557	0.8443	42.24
					35.66
Total	<u>44,780</u>	<u>1,606</u>			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.  
Column 3 from Schedule 1, Column 12, Retirements for Each Year.  
Column 4 = Column 3 Divided by Column 2.  
Column 5 = 1.0000 Minus Column 4.  
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

### **Smoothing the Original Survivor Curve**

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.





FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

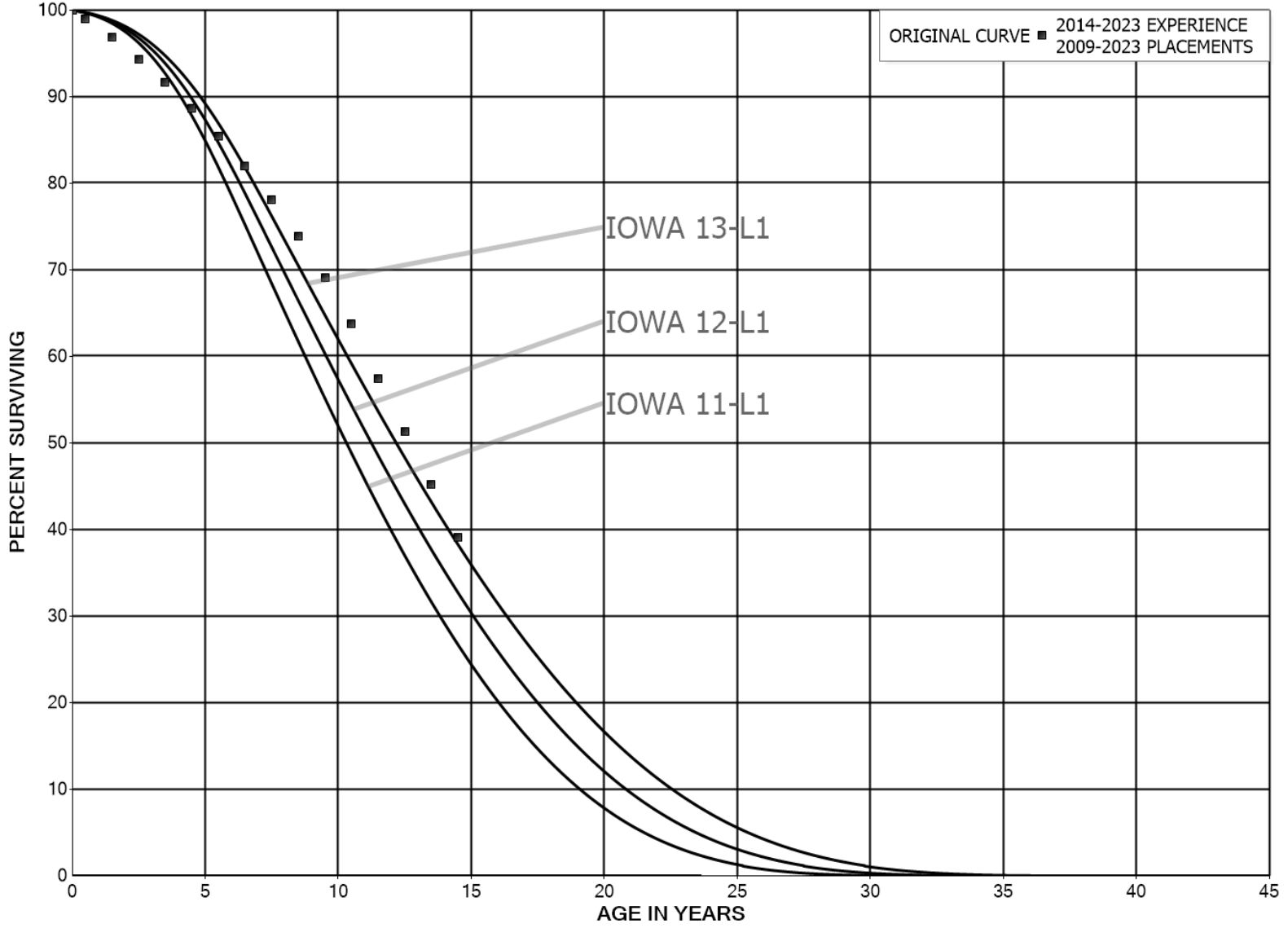


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

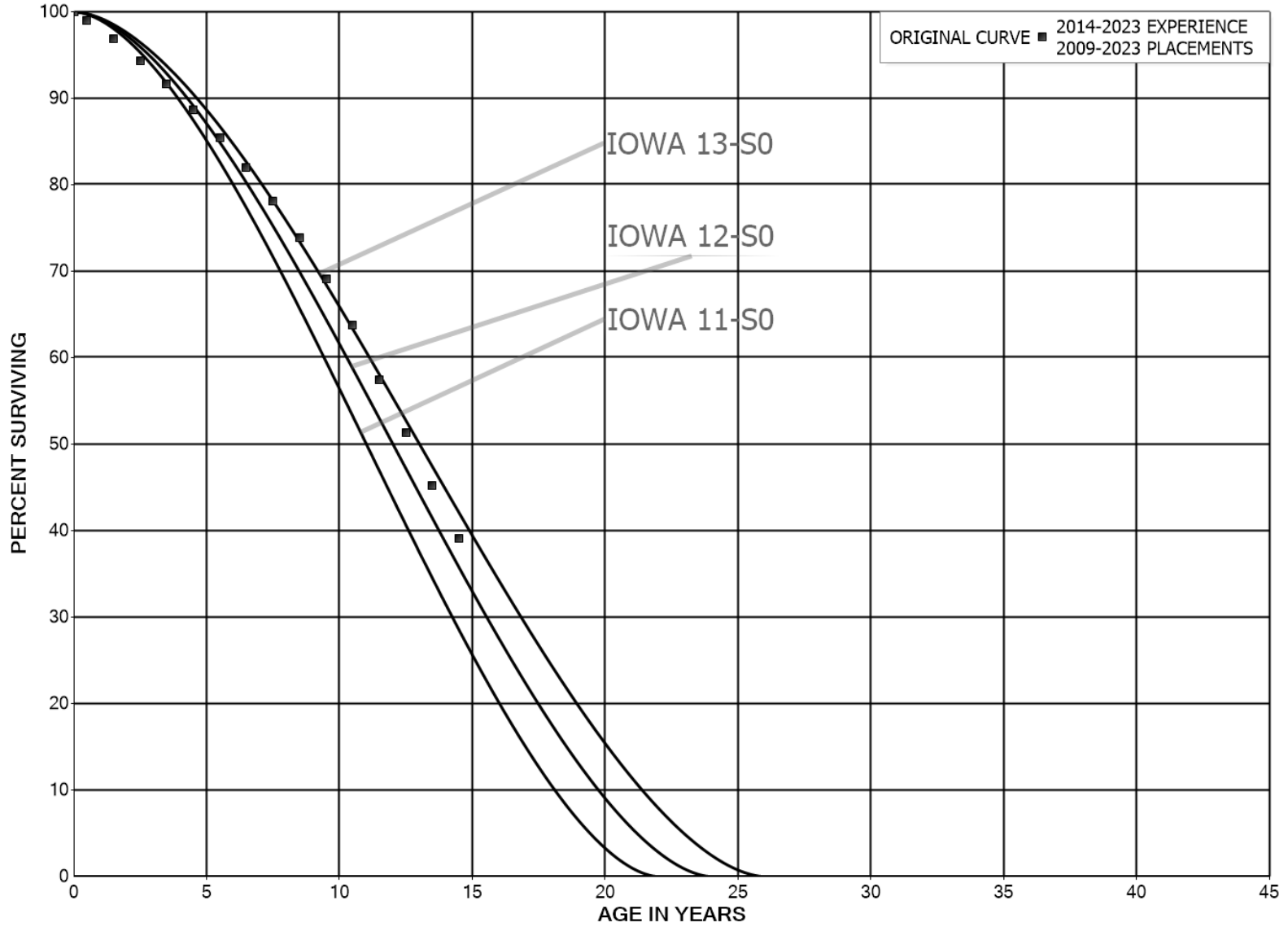


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

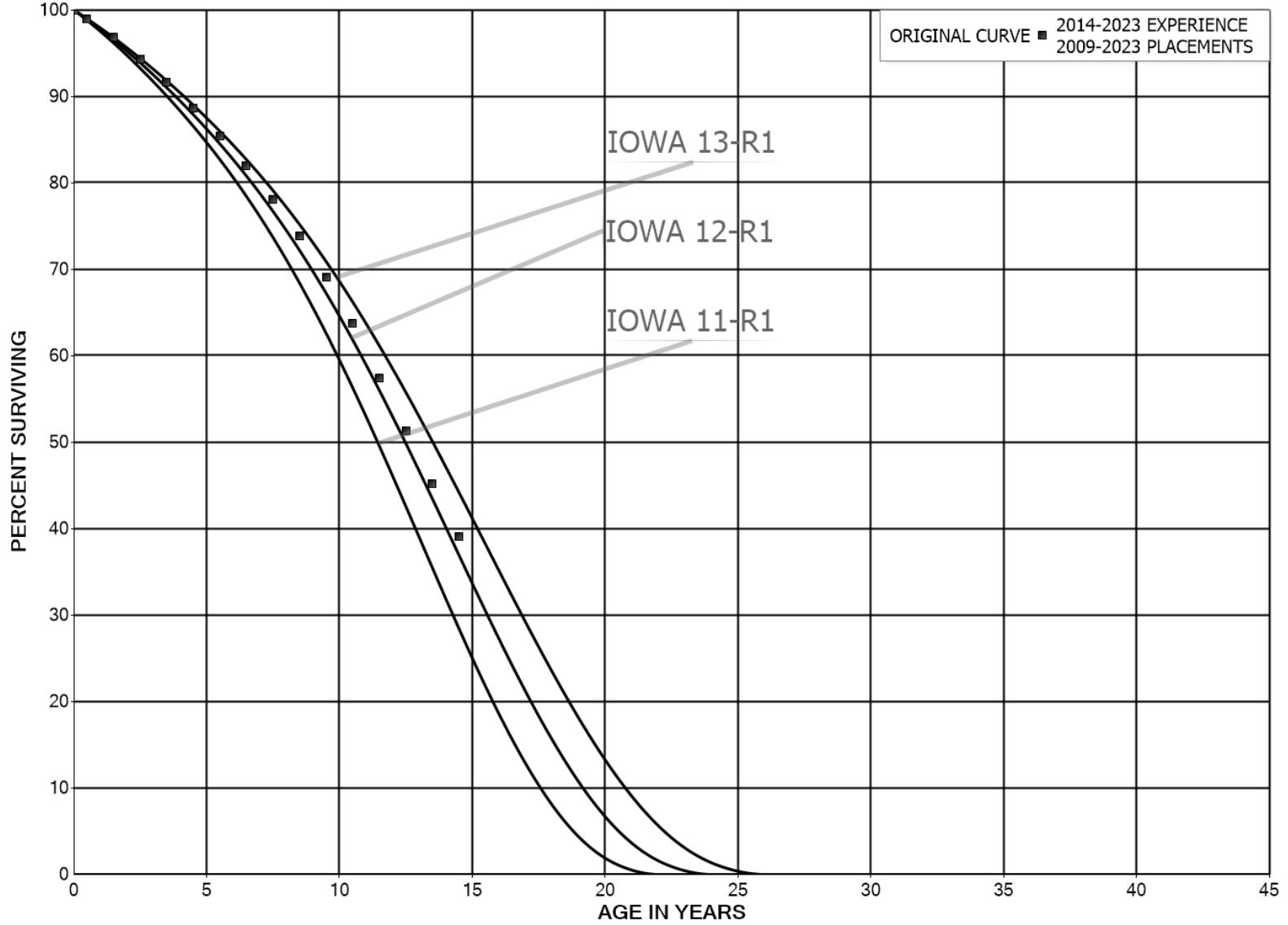
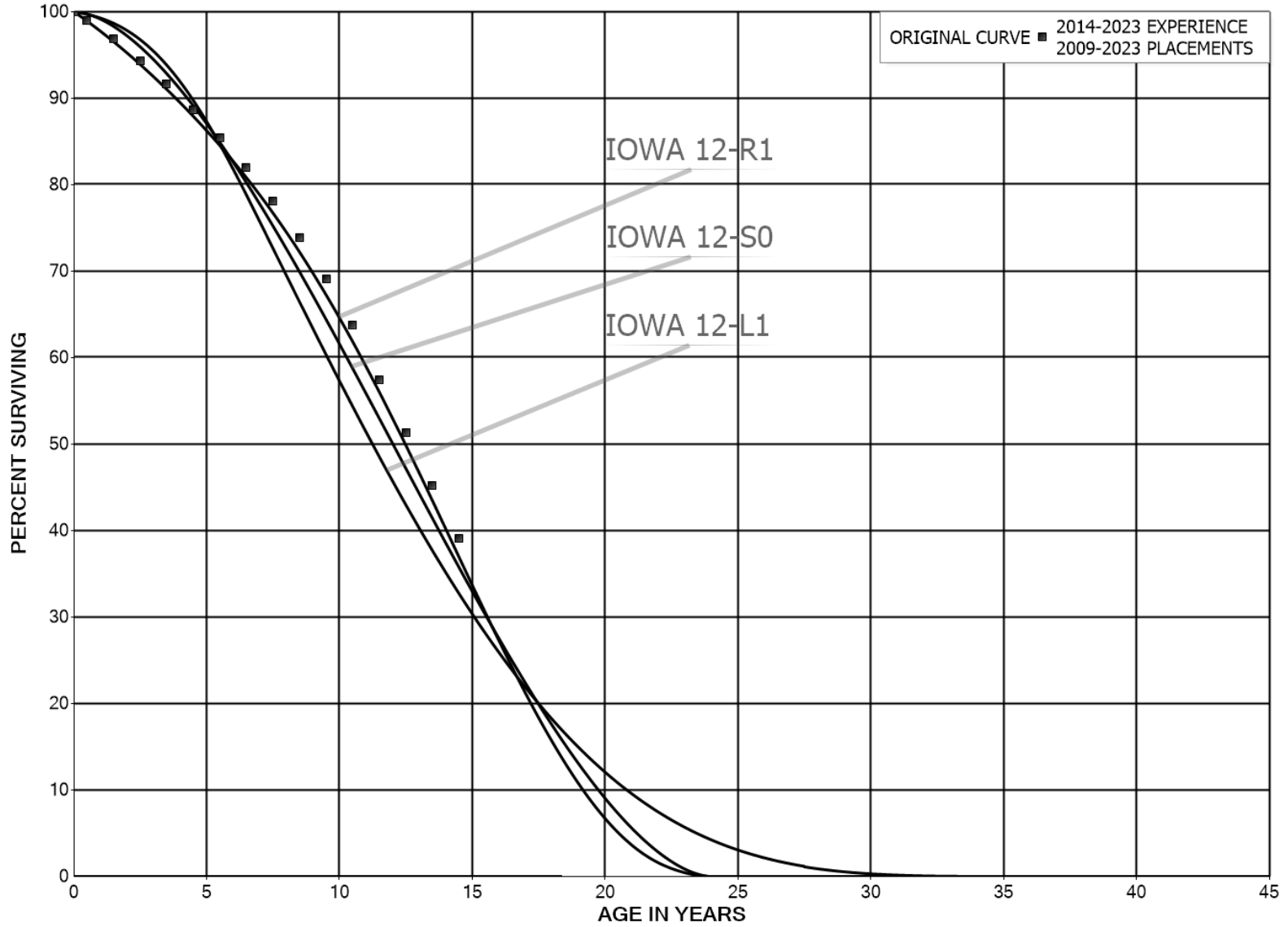


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES



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## **PART III. SERVICE LIFE CONSIDERATIONS**

### **PART III. SERVICE LIFE CONSIDERATIONS**

#### **FIELD TRIPS**

In order to be familiar with the operation of the Company and observe representative portions of the plant, a field trip was conducted for the study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during field trips.

#### February 6, 2024

- Paul Miller Ford POD
- Link Belt POD and District Regulator Station
- Young Drive District Regulator Station
- Pipe Yard Regulator Station
- Royster Road District Regulator Station
- Winchester Service Center
- Propane POD
- UPS Industrial Regulation Station
- Lexington Office and Service Center

#### April 7, 2021

- Lexington Office and Service Center
- Wakefield Terrace Regulator Station
- St. James Regulating Station
- Fortune Drive Pod
- Fortune Drive District Regulator Station
- Woodward Regulator Station
- Woodward Pod
- Link Belt District Regulator Station
- Tower Hill Sports Complex Meter Set
- International Power Meter Set
- Cardinal Hill Regulator Station

#### February 4-5, 2013

- Lexington Headquarters
- Jim Beam Regulating Station
- Toyota Regulating Station
- Turner Town Border Station

October 27-28, 2008

Lexington Operations Center  
Propane Plant District Regulating Station and City Gate Station  
Oakwood Drive Regulating Station (#1100)  
Spindle Top/Univ. of Kentucky Research Regulating Station  
Sewell Station (#1572)  
Showalter Regulating Station

March 18-19, 2002

Hampton Ave. District Station  
Toyota Plant District Station  
Turner Town Border Station  
Old Propane Plant  
Lexington Office  
Winchester Service Center  
Measuring and Regulating Station at Rosalie Road  
Keeneland Measuring and Regulating Station  
Buffalo Trace Measuring and Regulating Station  
Jim Beam Regulating Station  
Versailles City Gate Station  
Osram Sylvania Station

## **SERVICE LIFE ANALYSIS**

The service life estimates were based on informed judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during conversations with management; and the survivor curve estimates from previous studies of this company and other gas companies.

For many of the plant accounts and subaccounts for which survivor curves were estimated, the statistical analyses using the retirement rate method resulted in good to excellent indications of the survivor patterns experienced. These accounts represent 97 percent of depreciable plant. Generally, the information external to the statistics led to no significant departure from the indicated survivor curves for the accounts listed below. The

statistical support for the service life estimates is presented in the section beginning on page VII-2.

#### DISTRIBUTION PLANT

375.34	Structures and Improvements - Measuring and Regulating
375.70	Structures and Improvements - Other Distribution System
376.00	Mains
378.00	Measuring and Regulating Station Equipment - General
379.10	Measuring and Regulating Station Equipment - City Gate
380.00	Services
381.00	Meters
382.00	Meter Installations
383.00	House Regulators
384.00	House Regulator Installations
385.00	Industrial Measuring and Regulating Station Equipment
387.40	Other Equipment - Customer Information Services

#### GENERAL PLANT

392.20	Transportation Equipment - Trailers
396.00	Power Operated Equipment

The combined analyses for Account 376.00, Mains, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Account 376.00 represents 57 percent of the total depreciable plant. Aged plant accounting data have been compiled for the years 1939 through 2023. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the gas plant was placed in service. The retirements, other plant transactions, and plant additions were analyzed by the retirement rate method.

The survivor curve estimate is based on the statistical indications for the periods 1939-2023, 1984-2023 and 2004-2023. The Iowa 67-R1.5 is an excellent fit of the original survivor curve. The 67-year service life is at the upper end, but still within, the typical service life range of 55 to 70 years for mains. The 67-year life reflects the Company's



plans and practices of the past and next few years. The previous estimate was the Iowa 69-R1.5. The survivor curve for the bare steel mains is truncated as of December 2043 to reflect the main replacement program in place for these mains. This is consistent with the past study, however, in the past the truncation also included cast iron mains which are now removed.

The survivor curve estimate for Account 380.00, Services is based on statistical analyses of historical retirement experience for the periods 1939-2023, 1984-2023 and 2004-2023. The 37-R1 estimate for Account 380.00, Services, is an excellent fit of the original survivor curve developed from historical plant retirements for the period 1939 through 2023. The 37-R1 survivor curve sets forth the higher rates of retirement starting at approximately age 35. The 37-year average service life is at the lower end of the typical range of 35 to 50 years for services. The previous estimate was the Iowa 41-R1.

Similar studies were performed for the remaining plant accounts. Each of the judgments represented a consideration of statistical analyses of aged plant activity, management's outlook for the future, and the typical range of lives used by other gas companies.

The selected amortization periods for other General Plant accounts are described in the section "Calculated Annual and Accrued Amortization."

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## **PART IV. NET SALVAGE CONSIDERATIONS**

## **PART IV. NET SALVAGE CONSIDERATIONS**

### **NET SALVAGE ANALYSIS**

The estimates of net salvage by account were based in part on historical data compiled for the years 1969 through 2023. Cost of removal and gross salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

### **Net Salvage Considerations**

The estimates of future net salvage are expressed as percentages of surviving plant in service, i.e., all future retirements. In cases in which removal costs are expected to exceed salvage receipts, a negative net salvage percentage is estimated. The net salvage estimates were based on judgment which incorporated analyses of historical cost of removal and gross salvage data, expectations with respect to future removal requirements and markets for retired equipment and materials.

The analyses of historical cost of removal and gross salvage data are presented in the section titled "Net Salvage Statistics" for the plant accounts for which the net salvage estimate relied partially on those analyses.

Statistical analyses of historical data for the period 1969 through 2023 contributed significantly toward the net salvage estimates for 11 plant accounts, representing 95 percent of the depreciable plant, as follows:

DISTRIBUTION PLANT

376.00	Mains
378.00	Measuring and Regulating Station Equipment - General
379.10	Measuring and Regulating Station Equipment - City Gate
380.00	Services
381.00	Meters
382.00	Meter Installations
383.00	House Regulators
384.00	House Regulator Installations
385.00	Industrial Measuring and Regulating Station Equipment
387.40	Other Equipment - Customer Information Services

GENERAL PLANT

396.00	Power Operated Equipment
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Account 376.00, Mains, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Net salvage data for the period 1969 through 2023 were analyzed for this account. The data include cost of removal, gross salvage and net salvage amounts and each of these amounts is expressed as a percent of the original cost of regular retirements. Three-year moving averages for the 1969-1971 through 2021-2023 periods were computed to smooth the annual amounts.

Cost of removal was relatively consistent during the overall 55-year period, 1969-2023, however, there has been a lower levels the last two years. The practice of applying labor costs to removing pipe versus installing new pipe has not changed. Cost of removal for the most recent five years averaged 16 percent, however, the lower level in recent years is not expected to continue.

Gross salvage has varied slightly; however, the amounts have been minimal. The most recent five-year average of 0 percent gross salvage reflects recent trends of no gross salvage value for pipe.

The net salvage percent based on the overall period 1969 through 2023 is 16 percent negative net salvage and the most recent five-year average has also averaged negative 16 percent, however, part of the recent levels is due to some delayed cost of removal recorded for recent years. The range of estimates made by other gas companies for mains is negative 15 to negative 75 percent. With the overall statistical indication of negative 16 percent and the recent years of delayed cost of removal as well as higher cost of removal levels within the industry, negative 20 percent was selected for the Company's mains.

The net salvage estimates for the remaining plant accounts were estimated using the above-described process of historical indications, judgment and reviewing the typical range of estimates used by other gas companies. The results of the net salvage for each plant account are presented in account sequence beginning in the section titled "Net Salvage Statistics," page VIII-2.

Generally, the net salvage estimates for general plant accounts were zero percent, consistent with amortization accounting.

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**PART V. CALCULATION OF ANNUAL AND  
ACCRUED DEPRECIATION**

## PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

### GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

#### Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a \$1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1,000 \left( 1 - \frac{6}{10} \right) = \$400.$$

### **Remaining Life Annual Accruals**

For the purpose of calculating remaining life accruals as of December 31, 2023, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2023, are set forth in the Results of Study section of the report.

### **Average Service Life Procedure**

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$Ratio = 1 - \frac{Average\ Remaining\ Life}{Average\ Service\ Life}.$$



## CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is appropriate for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable gas plant in service. The accounts and their amortization periods are as follows:

<u>Account</u>	<u>Amortization Period, Years</u>
391.00, Office Furniture and Equipment	
Furniture	20
Information Systems	5
394.00, Tools, Shop and Garage Equipment	25
395.00, Laboratory Equipment	20
398.00, Miscellaneous Equipment	15

For the purpose of calculating annual amortization amounts as of December 31, 2023, the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to

the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

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## **PART VI. RESULTS OF STUDY**

## **PART VI. RESULTS OF STUDY**

### **QUALIFICATION OF RESULTS**

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the gas plant in service as of December 31, 2023. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2023, is reasonable for a period of three to five years.

### **DESCRIPTION OF DETAILED TABULATIONS**

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other gas utilities. The results of the statistical analysis of service life are presented in the section beginning on page VII-2, within the supporting documents of this report.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of

the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of net salvage data are presented in the section titled, "Net Salvage Statistics." The tabulations present annual cost of removal and gross salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

The tables of the calculated annual depreciation applicable to depreciable assets as of December 31, 2023 are presented in account sequence starting on page IX-2 of the supporting documents. The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the calculated accrued depreciation, the allocated book depreciation reserve, future accruals, the remaining life, and the calculated annual accrual amount.

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2023

DEPRECIABLE PLANT	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2023 (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE BOOK ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
<b>DEPRECIABLE PLANT</b>									
<b>DISTRIBUTION PLANT</b>									
LAND AND LAND RIGHTS									
374.40 LAND RIGHTS		75-R3	0	2,957,826.15	368,882	2,588,944	39,405	1.33	65.7
374.50 RIGHTS OF WAY		80-S4	0	2,666,577.16	1,156,299	1,510,278	29,379	1.10	51.4
TOTAL ACCOUNT 374.00				5,624,403.31	1,525,181	4,099,222	68,784	1.22	
STRUCTURES AND IMPROVEMENTS									
MEASURING AND REGULATING									
375.34		56-R1	(30)	2,998,115.51	596,528	3,302,322	71,753	2.39	46.0
OTHER DISTRIBUTION SYSTEM									
DISTRIBUTION SYSTEM STRUCTURES		SQUARE	0	9,377,241.49	4,599,778	4,777,463	235,789	2.51	20.3
OTHER BUILDINGS		43-S2	0	195,377.97	90,708	104,670	4,624	2.37	22.6
TOTAL ACCOUNT 375.70				9,572,619.46	4,690,486	4,882,133	240,413	2.51	
375.80 COMMUNICATION		45-R3	0	132,125.04	10,827	121,298	2,787	2.11	43.5
TOTAL ACCOUNT 375.00				12,703,860.01	5,297,841	8,305,753	314,953	2.48	
376.00 MAINS									
BARE STEEL		67-R1.5	(20)	16,097,808.02	14,325,095	4,992,275	320,466	1.99	15.6
COATED STEEL		67-R1.5	(20)	81,595,117.77	21,853,588	76,060,553	1,464,365	1.79	51.9
PLASTIC		67-R1.5	(20)	344,287,096.32	43,388,931	369,755,585	6,171,473	1.79	59.9
TOTAL ACCOUNT 376.00				441,980,022.11	79,567,614	450,808,413	7,956,304	1.80	
378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL		38-R0.5	(20)	25,562,443.08	3,392,165	27,282,767	845,823	3.31	32.3
379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE		45-R1.5	(20)	1,554,144.06	351,385	1,513,588	39,470	2.54	38.3
380.00 SERVICES		37-R1	(75)	212,084,988.01	54,648,601	316,500,093	10,978,526	5.18	28.8
381.00 METERS		33-R2	1	19,455,628.81	2,502,408	16,758,665	697,415	3.58	24.0
381.10 METERS - AMR		15-S2.5	0	9,980,854.48	5,360,942	4,619,912	677,477	6.79	6.8
382.00 METER INSTALLATIONS		45-R3	(5)	10,602,664.76	4,991,235	6,141,563	241,237	2.28	25.5
383.00 HOUSE REGULATORS		47-R3	(5)	7,327,690.74	2,333,203	5,360,872	162,990	2.22	32.9
384.00 HOUSE REGULATOR INSTALLATIONS		47-R3	0	2,085,058.65	1,295,289	789,770	41,454	1.99	19.1
385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT		30-S0	(20)	6,050,694.32	785,825	6,475,008	330,981	5.47	19.6
387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES		24-S0	(5)	6,928,601.57	1,235,525	6,039,507	343,424	4.96	17.6
387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS		10-L3	0	238,072.69	104,097	133,976	32,129	13.50	4.2
TOTAL DISTRIBUTION PLANT				762,179,106.60	163,391,311	854,829,109	22,730,967	2.98	
<b>GENERAL PLANT</b>									
OFFICE FURNITURE AND EQUIPMENT									
391.10 FURNITURE		20-SQ	0	923,516.33	290,000	633,516	46,202	5.00	13.7
391.12 INFORMATION SYSTEMS		5-SQ	0	37,129.58	11,140	25,990	7,426	20.00	3.5
TOTAL ACCOUNT 391.00				960,645.91	301,140	659,506	53,628	5.58	
392.20 TRANSPORTATION EQUIPMENT - TRAILERS		20-S3	10	120,240.20	108,734	(518)	0	-	**



COLUMBIA GAS OF KENTUCKY, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2023

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2023 (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE BOOK ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	CALCULATED RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
394.00 TOOLS, SHOP AND GARAGE EQUIPMENT FULLY ACCURED AMORTIZED	25-SQ	0	275.59 5,113,597.86	276 1,555,000	0 3,558,598	0 204,489	- 4.00	17.4
TOTAL ACCOUNT 394.00			5,113,873.45	1,555,276	3,558,598	204,489	4.00	
395.00 LABORATORY EQUIPMENT	20-SQ	0	4,162.05	3,954	208	208	5.00	1.0
396.00 POWER OPERATED EQUIPMENT	19-SQ.5	20	185,547.00	171,936	(23,500)	0	-	**
398.00 MISCELLANEOUS EQUIPMENT	15-SQ	0	148,028.20	79,650	68,378	9,871	6.67	6.9
<b>TOTAL GENERAL PLANT</b>			<b>6,532,496.81</b>	<b>2,220,692</b>	<b>4,262,672</b>	<b>268,196</b>	<b>4.11</b>	
<b>RESERVE ADJUSTMENT FOR AMORTIZATION</b>								
391.10 FURNITURE				(173,320)		57,773	***	
391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT				(18,934)		6,311	***	
391.12 INFORMATION SYSTEMS				(16,424)		5,475	***	
394.00 EQUIPMENT				28,404		(9,468)	***	
395.00 LABORATORY EQUIPMENT				99		(33)	***	
398.00 MISCELLANEOUS EQUIPMENT				(9,546)		3,182	***	
<b>TOTAL RESERVE ADJUSTMENT FOR AMORTIZATION</b>				<b>(189,721)</b>		<b>63,240</b>		
<b>TOTAL DEPRECIABLE PLANT</b>			<b>768,711,603.41</b>	<b>165,422,282</b>	<b>859,091,781</b>	<b>23,062,403</b>	<b>3.00</b>	
<b>AMORTIZABLE PLANT</b>								
303.00 MISCELLANEOUS INTANGIBLE PLANT			13,199,898.62	6,859,548	6,340,351	2,342,289	***	
303.99 MISCELLANEOUS INTANGIBLE PLANT - CLOUD			2,060,025.96	987,551	1,072,475	418,165	***	
375.71 STRUCTURES AND IMPROVEMENTS - LEASEHOLDS			880,994.59	758,963	122,031	56,922	***	
378.21 MEASURING AND REGULATING STATION EQUIPMENT - FMV			(771,902.82)	(200,541)	(571,362)	(25,903)	*****	
<b>TOTAL AMORTIZABLE PLANT</b>			<b>15,369,016.35</b>	<b>8,405,521</b>	<b>6,963,496</b>	<b>2,791,473</b>		
<b>NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>								
301.00 ORGANIZATION			521.20					
374.10 LAND			205.40					
374.20 LAND			876,986.66	(522)				
375.90 LEASE			399,999.92	643,373				
376.02 MAINS - ARO				521,376				
376.03 MAINS - ARO				32,661				
<b>TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>			<b>1,277,713.18</b>	<b>1,196,888</b>				
<b>TOTAL GAS PLANT</b>			<b>765,358,332.94</b>	<b>175,024,691</b>	<b>866,055,277</b>	<b>25,853,876</b>		

\* INDICATES THE USE OF AN INTERIM SURVIVOR CURVE. EACH ASSET CLASS HAS A PROBABLE RETIREMENT DATE.  
\*\* ASSETS PLACED INTO SERVICE AS OF JANUARY 1, 2024 WILL UTILIZE ACCRUAL RATES REFLECTED BELOW BASED ON THE LIFE AND NET SALVAGE ESTIMATES IN COLUMNS 2 AND 3.

ACCOUNT	392.20	4.50
	396.00	4.21

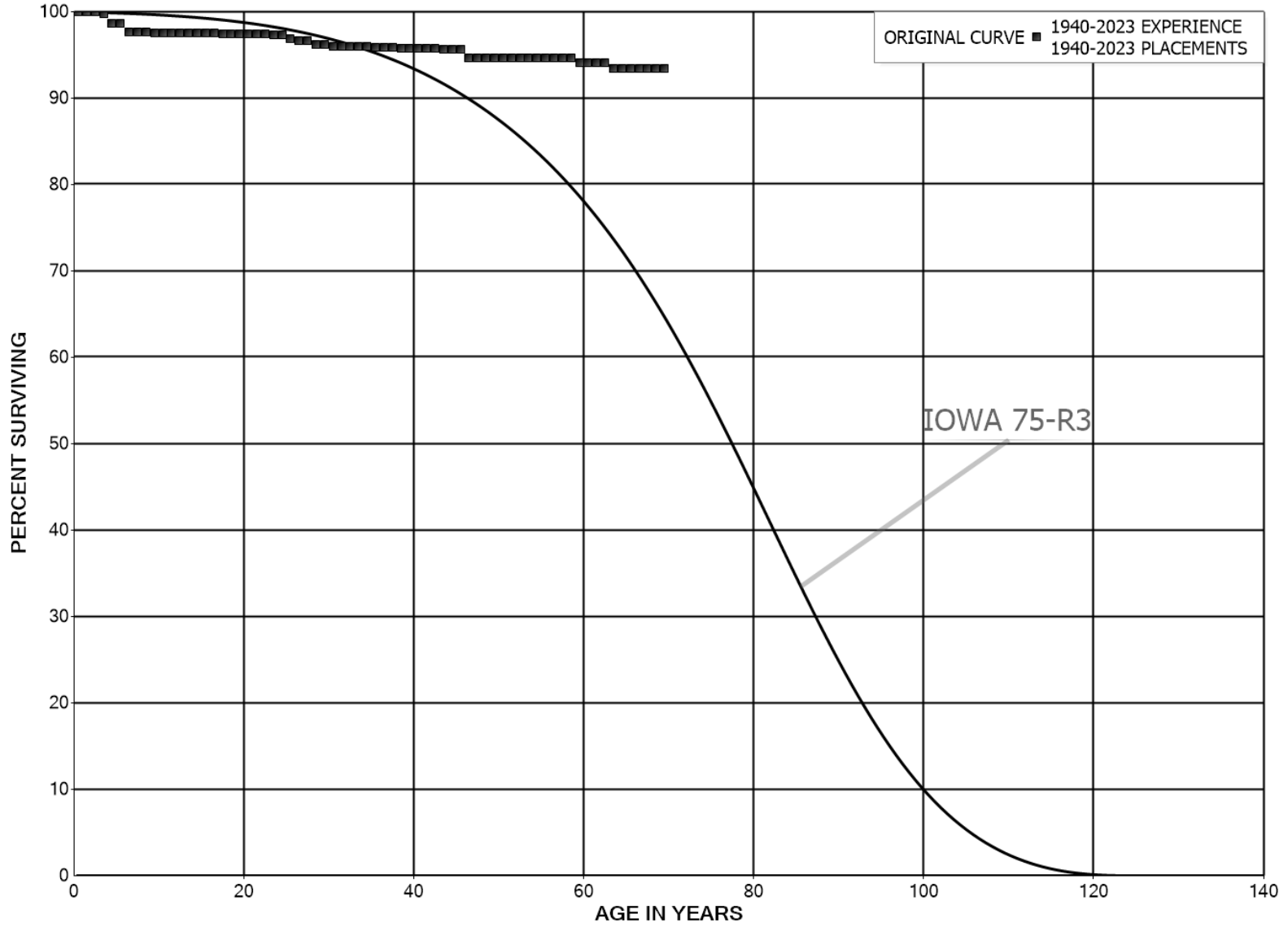
\*\*\* 3-YEAR AMORTIZATION OF UNRECOVERED RESERVE RELATED TO IMPLEMENTATION OF AMORTIZATION ACCOUNTING.  
\*\*\*\* ACCRUAL RATE BASED ON INDIVIDUAL ASSET AMORTIZATION.  
\*\*\*\*\* FAIR MARKET VALUE RECOVERED OVER 30 YEARS.

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## **PART VII. SERVICE LIFE STATISTICS**



COLUMBIA GAS OF KENTUCKY, INC.  
ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1940-2023			EXPERIENCE BAND 1940-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,849,119		0.0000	1.0000	100.00
0.5	2,666,280		0.0000	1.0000	100.00
1.5	2,431,300	2,211	0.0009	0.9991	100.00
2.5	2,357,258	3,071	0.0013	0.9987	99.91
3.5	1,117,172	13,066	0.0117	0.9883	99.78
4.5	897,319	0	0.0000	1.0000	98.61
5.5	775,679	8,244	0.0106	0.9894	98.61
6.5	756,338		0.0000	1.0000	97.56
7.5	670,561		0.0000	1.0000	97.56
8.5	670,561	84	0.0001	0.9999	97.56
9.5	654,488	36	0.0001	0.9999	97.55
10.5	631,213		0.0000	1.0000	97.55
11.5	609,174		0.0000	1.0000	97.55
12.5	594,572	435	0.0007	0.9993	97.55
13.5	552,083	32	0.0001	0.9999	97.47
14.5	503,558		0.0000	1.0000	97.47
15.5	581,575		0.0000	1.0000	97.47
16.5	595,481	161	0.0003	0.9997	97.47
17.5	610,323	533	0.0009	0.9991	97.44
18.5	607,344		0.0000	1.0000	97.36
19.5	590,471		0.0000	1.0000	97.36
20.5	579,715		0.0000	1.0000	97.36
21.5	563,825		0.0000	1.0000	97.36
22.5	452,880	339	0.0007	0.9993	97.36
23.5	425,004		0.0000	1.0000	97.29
24.5	409,941	1,887	0.0046	0.9954	97.29
25.5	400,516	931	0.0023	0.9977	96.84
26.5	376,643	199	0.0005	0.9995	96.61
27.5	376,444	1,683	0.0045	0.9955	96.56
28.5	358,491		0.0000	1.0000	96.13
29.5	307,911	518	0.0017	0.9983	96.13
30.5	305,752	227	0.0007	0.9993	95.97
31.5	298,227		0.0000	1.0000	95.90
32.5	288,199		0.0000	1.0000	95.90
33.5	272,598		0.0000	1.0000	95.90
34.5	234,479	112	0.0005	0.9995	95.90
35.5	211,163	8	0.0000	1.0000	95.85
36.5	149,683		0.0000	1.0000	95.85
37.5	124,850	114	0.0009	0.9991	95.85
38.5	103,758		0.0000	1.0000	95.76

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1940-2023			EXPERIENCE BAND 1940-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	70,128		0.0000	1.0000	95.76
40.5	52,810		0.0000	1.0000	95.76
41.5	43,047		0.0000	1.0000	95.76
42.5	36,835	56	0.0015	0.9985	95.76
43.5	33,740	11	0.0003	0.9997	95.61
44.5	33,729		0.0000	1.0000	95.58
45.5	30,806	318	0.0103	0.9897	95.58
46.5	29,985	3	0.0001	0.9999	94.59
47.5	29,647		0.0000	1.0000	94.59
48.5	29,647		0.0000	1.0000	94.59
49.5	26,827		0.0000	1.0000	94.59
50.5	26,827		0.0000	1.0000	94.59
51.5	22,097		0.0000	1.0000	94.59
52.5	21,133		0.0000	1.0000	94.59
53.5	19,520		0.0000	1.0000	94.59
54.5	18,995		0.0000	1.0000	94.59
55.5	18,464		0.0000	1.0000	94.59
56.5	17,976		0.0000	1.0000	94.59
57.5	17,128		0.0000	1.0000	94.59
58.5	16,421	83	0.0051	0.9949	94.59
59.5	12,914		0.0000	1.0000	94.11
60.5	9,741		0.0000	1.0000	94.11
61.5	7,987		0.0000	1.0000	94.11
62.5	7,351	59	0.0080	0.9920	94.11
63.5	7,030		0.0000	1.0000	93.36
64.5	5,561		0.0000	1.0000	93.36
65.5	4,067		0.0000	1.0000	93.36
66.5	3,760		0.0000	1.0000	93.36
67.5	3,040		0.0000	1.0000	93.36
68.5	2,395		0.0000	1.0000	93.36
69.5	977		0.0000	1.0000	93.36
70.5	977	1	0.0014	0.9986	93.36
71.5	976		0.0000	1.0000	93.22
72.5	976		0.0000	1.0000	93.22
73.5	976		0.0000	1.0000	93.22
74.5	658		0.0000	1.0000	93.22
75.5	658		0.0000	1.0000	93.22
76.5	658		0.0000	1.0000	93.22
77.5	632		0.0000	1.0000	93.22
78.5	632		0.0000	1.0000	93.22

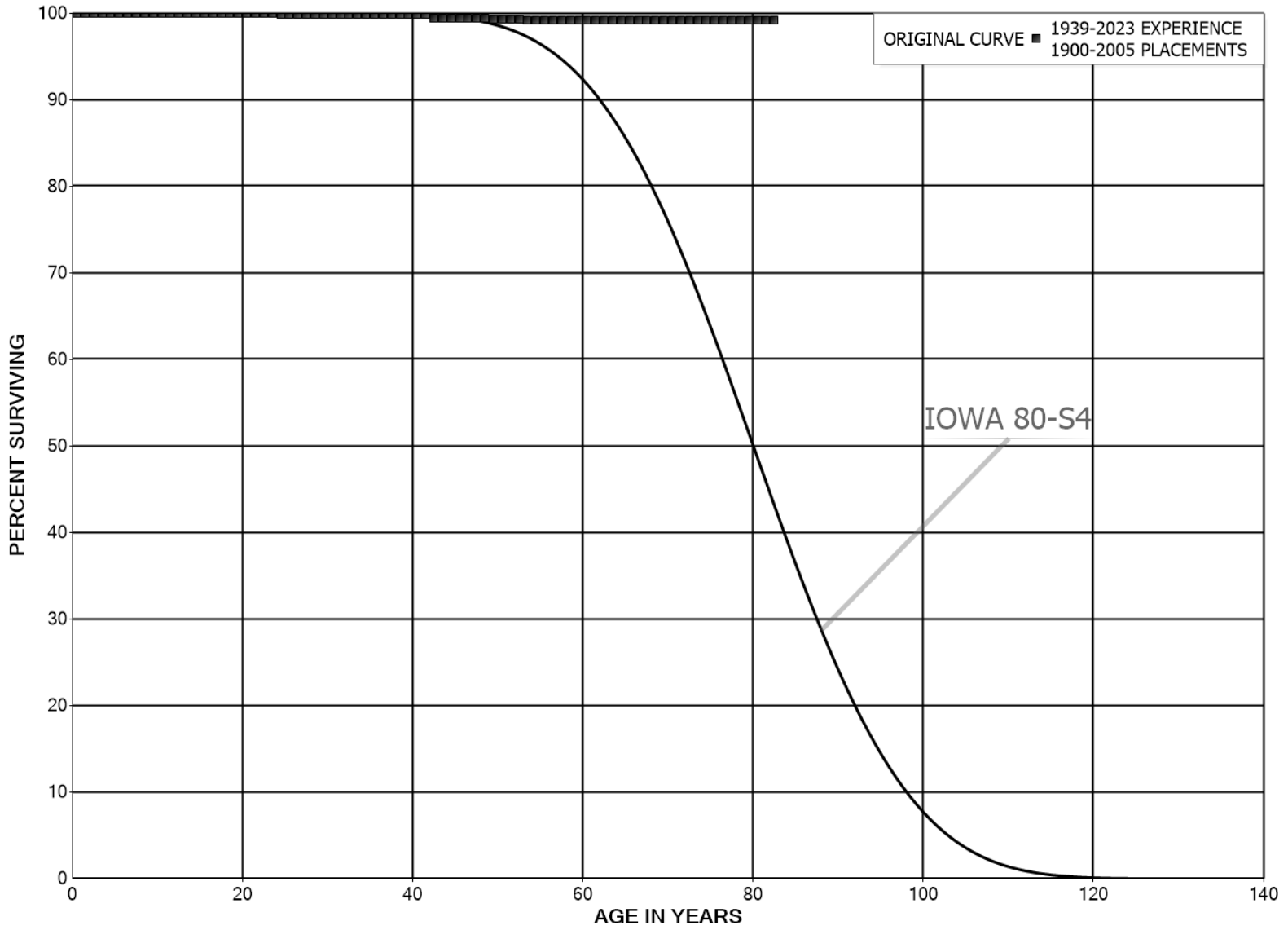
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1940-2023			EXPERIENCE BAND 1940-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	632		0.0000	1.0000	93.22
80.5	632		0.0000	1.0000	93.22
81.5	632		0.0000	1.0000	93.22
82.5	632		0.0000	1.0000	93.22
83.5					93.22

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1900-2005			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	2,492,682		0.0000	1.0000	100.00	
0.5	2,493,454	2,533	0.0010	0.9990	100.00	
1.5	2,507,332		0.0000	1.0000	99.90	
2.5	2,515,352		0.0000	1.0000	99.90	
3.5	2,517,177		0.0000	1.0000	99.90	
4.5	2,519,459		0.0000	1.0000	99.90	
5.5	2,525,236		0.0000	1.0000	99.90	
6.5	2,526,439		0.0000	1.0000	99.90	
7.5	2,532,762		0.0000	1.0000	99.90	
8.5	2,537,594		0.0000	1.0000	99.90	
9.5	2,537,978		0.0000	1.0000	99.90	
10.5	2,545,006		0.0000	1.0000	99.90	
11.5	2,556,250		0.0000	1.0000	99.90	
12.5	2,556,697		0.0000	1.0000	99.90	
13.5	2,557,036		0.0000	1.0000	99.90	
14.5	2,557,024		0.0000	1.0000	99.90	
15.5	2,557,387		0.0000	1.0000	99.90	
16.5	2,563,410		0.0000	1.0000	99.90	
17.5	2,563,559		0.0000	1.0000	99.90	
18.5	2,561,884		0.0000	1.0000	99.90	
19.5	2,581,040		0.0000	1.0000	99.90	
20.5	2,584,297		0.0000	1.0000	99.90	
21.5	1,464,921		0.0000	1.0000	99.90	
22.5	1,319,313		0.0000	1.0000	99.90	
23.5	1,307,492	390	0.0003	0.9997	99.90	
24.5	1,307,403		0.0000	1.0000	99.87	
25.5	1,301,789		0.0000	1.0000	99.87	
26.5	1,301,771		0.0000	1.0000	99.87	
27.5	1,281,759		0.0000	1.0000	99.87	
28.5	1,102,424		0.0000	1.0000	99.87	
29.5	888,470		0.0000	1.0000	99.87	
30.5	838,324		0.0000	1.0000	99.87	
31.5	778,282		0.0000	1.0000	99.87	
32.5	727,856		0.0000	1.0000	99.87	
33.5	641,552		0.0000	1.0000	99.87	
34.5	565,851		0.0000	1.0000	99.87	
35.5	468,617		0.0000	1.0000	99.87	
36.5	447,384		0.0000	1.0000	99.87	
37.5	414,568		0.0000	1.0000	99.87	
38.5	401,853		0.0000	1.0000	99.87	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2005			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	333,125	21	0.0001	0.9999	99.87	
40.5	333,155		0.0000	1.0000	99.86	
41.5	332,358	1,378	0.0041	0.9959	99.86	
42.5	321,146		0.0000	1.0000	99.45	
43.5	308,342		0.0000	1.0000	99.45	
44.5	294,933	236	0.0008	0.9992	99.45	
45.5	291,821		0.0000	1.0000	99.37	
46.5	287,633		0.0000	1.0000	99.37	
47.5	282,588		0.0000	1.0000	99.37	
48.5	300,182	106	0.0004	0.9996	99.37	
49.5	298,611		0.0000	1.0000	99.33	
50.5	296,221		0.0000	1.0000	99.33	
51.5	268,686		0.0000	1.0000	99.33	
52.5	252,466	313	0.0012	0.9988	99.33	
53.5	223,840		0.0000	1.0000	99.21	
54.5	192,838		0.0000	1.0000	99.21	
55.5	187,907		0.0000	1.0000	99.21	
56.5	183,228		0.0000	1.0000	99.21	
57.5	155,928		0.0000	1.0000	99.21	
58.5	153,131		0.0000	1.0000	99.21	
59.5	149,525		0.0000	1.0000	99.21	
60.5	144,664		0.0000	1.0000	99.21	
61.5	141,357		0.0000	1.0000	99.21	
62.5	129,647		0.0000	1.0000	99.21	
63.5	128,767		0.0000	1.0000	99.21	
64.5	123,512		0.0000	1.0000	99.21	
65.5	102,506		0.0000	1.0000	99.21	
66.5	101,329		0.0000	1.0000	99.21	
67.5	99,421		0.0000	1.0000	99.21	
68.5	99,107		0.0000	1.0000	99.21	
69.5	93,386		0.0000	1.0000	99.21	
70.5	89,286		0.0000	1.0000	99.21	
71.5	87,920		0.0000	1.0000	99.21	
72.5	80,027		0.0000	1.0000	99.21	
73.5	76,838		0.0000	1.0000	99.21	
74.5	74,047		0.0000	1.0000	99.21	
75.5	72,816		0.0000	1.0000	99.21	
76.5	72,427		0.0000	1.0000	99.21	
77.5	72,372		0.0000	1.0000	99.21	
78.5	73,896		0.0000	1.0000	99.21	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2005			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	73,840		0.0000	1.0000	99.21
80.5	73,662		0.0000	1.0000	99.21
81.5	73,579		0.0000	1.0000	99.21
82.5	70,495		0.0000	1.0000	99.21
83.5	69,089		0.0000	1.0000	99.21
84.5	69,035		0.0000	1.0000	99.21
85.5	68,743		0.0000	1.0000	99.21
86.5	68,596		0.0000	1.0000	99.21
87.5	68,553		0.0000	1.0000	99.21
88.5	68,553		0.0000	1.0000	99.21
89.5	68,515		0.0000	1.0000	99.21
90.5	68,393		0.0000	1.0000	99.21
91.5	68,382		0.0000	1.0000	99.21
92.5	68,306		0.0000	1.0000	99.21
93.5	68,012		0.0000	1.0000	99.21
94.5	58,647		0.0000	1.0000	99.21
95.5	51,031		0.0000	1.0000	99.21
96.5	50,457		0.0000	1.0000	99.21
97.5	50,457		0.0000	1.0000	99.21
98.5	50,457		0.0000	1.0000	99.21
99.5	50,457		0.0000	1.0000	99.21
100.5	50,457		0.0000	1.0000	99.21
101.5	49,906		0.0000	1.0000	99.21
102.5	49,902		0.0000	1.0000	99.21
103.5	49,894		0.0000	1.0000	99.21
104.5	49,894		0.0000	1.0000	99.21
105.5	49,672		0.0000	1.0000	99.21
106.5	49,669		0.0000	1.0000	99.21
107.5	45,955		0.0000	1.0000	99.21
108.5	45,937		0.0000	1.0000	99.21
109.5	45,496		0.0000	1.0000	99.21
110.5	5,849		0.0000	1.0000	99.21
111.5	5,682		0.0000	1.0000	99.21
112.5	5,643		0.0000	1.0000	99.21
113.5	5,610		0.0000	1.0000	99.21
114.5	5,610		0.0000	1.0000	99.21
115.5	5,101		0.0000	1.0000	99.21
116.5	5,101		0.0000	1.0000	99.21
117.5	4,647		0.0000	1.0000	99.21
118.5	8		0.0000	1.0000	99.21



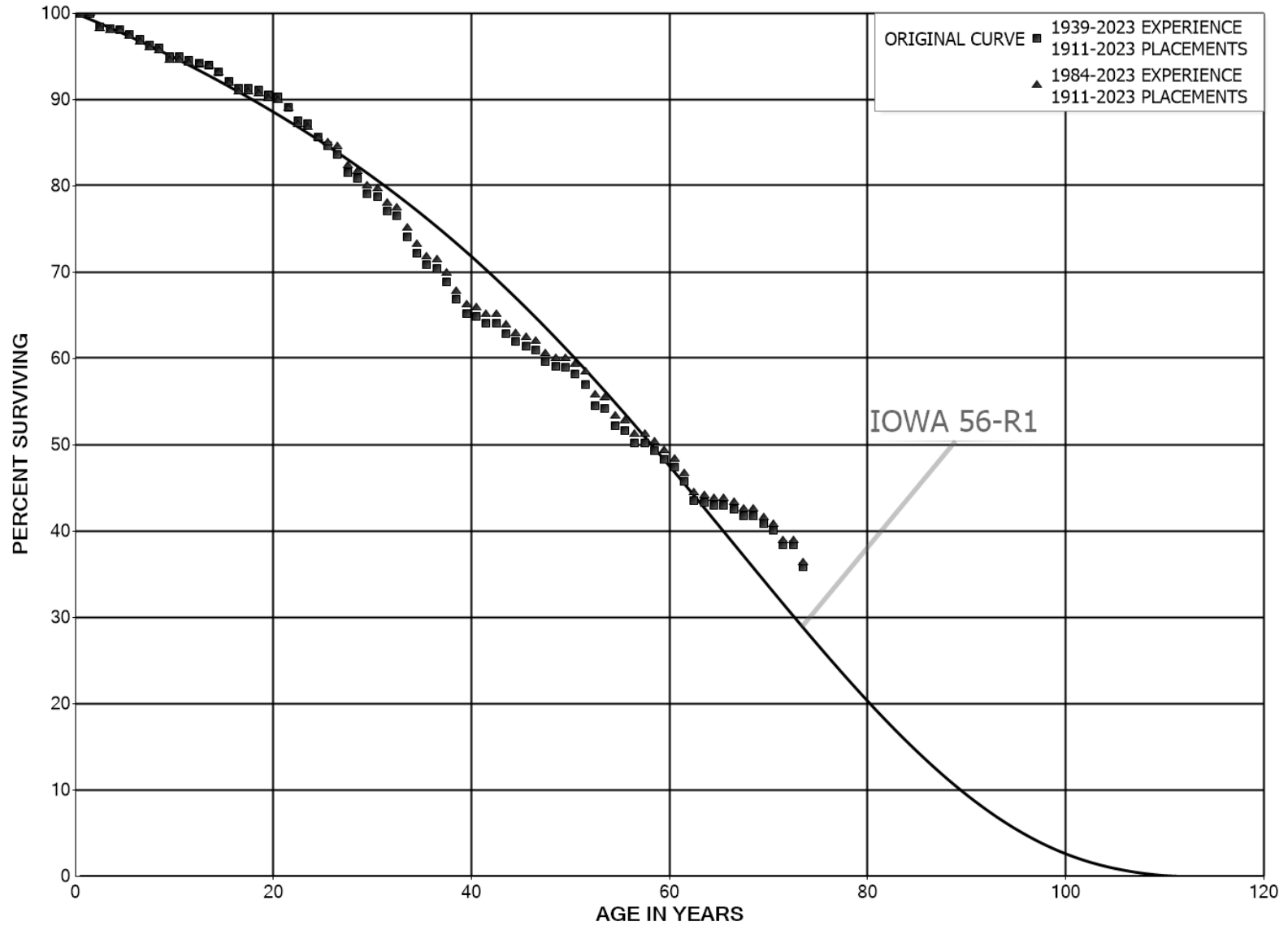
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2005			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	8		0.0000	1.0000	99.21
120.5	8		0.0000	1.0000	99.21
121.5	8		0.0000	1.0000	99.21
122.5	8		0.0000	1.0000	99.21
123.5					99.21

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1911-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,295,882	94	0.0000	1.0000	100.00
0.5	3,175,864	43	0.0000	1.0000	100.00
1.5	3,015,286	49,530	0.0164	0.9836	100.00
2.5	2,945,233	6,592	0.0022	0.9978	98.35
3.5	2,552,679	445	0.0002	0.9998	98.13
4.5	2,430,004	14,514	0.0060	0.9940	98.12
5.5	2,296,588	14,631	0.0064	0.9936	97.53
6.5	2,185,789	14,207	0.0065	0.9935	96.91
7.5	2,074,477	6,924	0.0033	0.9967	96.28
8.5	1,557,149	16,319	0.0105	0.9895	95.96
9.5	1,438,220	422	0.0003	0.9997	94.95
10.5	1,269,759	5,354	0.0042	0.9958	94.92
11.5	1,116,243	4,105	0.0037	0.9963	94.52
12.5	1,013,825	2,213	0.0022	0.9978	94.18
13.5	872,422	7,300	0.0084	0.9916	93.97
14.5	848,656	9,990	0.0118	0.9882	93.18
15.5	809,588	6,945	0.0086	0.9914	92.09
16.5	778,669	360	0.0005	0.9995	91.30
17.5	773,111	1,630	0.0021	0.9979	91.26
18.5	773,543	4,850	0.0063	0.9937	91.06
19.5	767,933	2,122	0.0028	0.9972	90.49
20.5	765,114	9,567	0.0125	0.9875	90.24
21.5	737,992	13,037	0.0177	0.9823	89.11
22.5	695,078	3,306	0.0048	0.9952	87.54
23.5	698,441	12,254	0.0175	0.9825	87.12
24.5	683,324	7,401	0.0108	0.9892	85.59
25.5	665,195	8,557	0.0129	0.9871	84.67
26.5	662,653	16,368	0.0247	0.9753	83.58
27.5	619,616	5,468	0.0088	0.9912	81.51
28.5	610,260	12,964	0.0212	0.9788	80.79
29.5	595,647	2,485	0.0042	0.9958	79.08
30.5	593,501	13,037	0.0220	0.9780	78.75
31.5	580,547	4,022	0.0069	0.9931	77.02
32.5	574,416	17,942	0.0312	0.9688	76.48
33.5	531,865	13,475	0.0253	0.9747	74.10
34.5	517,733	10,208	0.0197	0.9803	72.22
35.5	498,859	2,975	0.0060	0.9940	70.79
36.5	394,053	8,528	0.0216	0.9784	70.37
37.5	364,549	10,822	0.0297	0.9703	68.85
38.5	297,927	7,054	0.0237	0.9763	66.81

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	258,805	1,390	0.0054	0.9946	65.22	
40.5	242,634	2,841	0.0117	0.9883	64.87	
41.5	196,612	32	0.0002	0.9998	64.11	
42.5	191,635	3,817	0.0199	0.9801	64.10	
43.5	176,149	2,609	0.0148	0.9852	62.83	
44.5	171,447	1,304	0.0076	0.9924	61.90	
45.5	166,882	1,260	0.0075	0.9925	61.43	
46.5	165,623	3,606	0.0218	0.9782	60.96	
47.5	161,952	1,693	0.0105	0.9895	59.63	
48.5	160,298	240	0.0015	0.9985	59.01	
49.5	158,080	2,098	0.0133	0.9867	58.92	
50.5	148,944	2,933	0.0197	0.9803	58.14	
51.5	139,415	6,032	0.0433	0.9567	57.00	
52.5	119,930	868	0.0072	0.9928	54.53	
53.5	106,843	3,886	0.0364	0.9636	54.13	
54.5	102,957	1,087	0.0106	0.9894	52.17	
55.5	100,019	2,833	0.0283	0.9717	51.62	
56.5	94,598		0.0000	1.0000	50.15	
57.5	88,166	1,585	0.0180	0.9820	50.15	
58.5	80,498	1,502	0.0187	0.9813	49.25	
59.5	69,384	1,421	0.0205	0.9795	48.33	
60.5	65,376	2,243	0.0343	0.9657	47.34	
61.5	60,443	2,870	0.0475	0.9525	45.72	
62.5	57,175	310	0.0054	0.9946	43.55	
63.5	50,401	461	0.0091	0.9909	43.31	
64.5	44,355	0	0.0000	1.0000	42.92	
65.5	38,194	396	0.0104	0.9896	42.92	
66.5	34,754	582	0.0168	0.9832	42.47	
67.5	28,217		0.0000	1.0000	41.76	
68.5	24,758	537	0.0217	0.9783	41.76	
69.5	19,084	347	0.0182	0.9818	40.85	
70.5	15,785	675	0.0428	0.9572	40.11	
71.5	12,789	1	0.0001	0.9999	38.40	
72.5	7,966	522	0.0655	0.9345	38.39	
73.5	5,491	6	0.0011	0.9989	35.88	
74.5	5,485	205	0.0373	0.9627	35.84	
75.5	5,219	25	0.0048	0.9952	34.50	
76.5	4,980	148	0.0297	0.9703	34.34	
77.5	4,832		0.0000	1.0000	33.32	
78.5	4,832	95	0.0197	0.9803	33.32	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	4,737	242	0.0511	0.9489	32.66	
80.5	4,456		0.0000	1.0000	30.99	
81.5	4,456		0.0000	1.0000	30.99	
82.5	3,618		0.0000	1.0000	30.99	
83.5	3,204	269	0.0841	0.9159	30.99	
84.5	2,616		0.0000	1.0000	28.39	
85.5	2,616	0	0.0001	0.9999	28.39	
86.5	2,591	3	0.0011	0.9989	28.38	
87.5	2,365		0.0000	1.0000	28.35	
88.5	2,365		0.0000	1.0000	28.35	
89.5	2,365		0.0000	1.0000	28.35	
90.5	2,365	6	0.0026	0.9974	28.35	
91.5	2,359	75	0.0318	0.9682	28.28	
92.5	2,284		0.0000	1.0000	27.38	
93.5	2,108	125	0.0593	0.9407	27.38	
94.5	1,585	9	0.0057	0.9943	25.76	
95.5	1,091		0.0000	1.0000	25.61	
96.5	1,091		0.0000	1.0000	25.61	
97.5	1,091		0.0000	1.0000	25.61	
98.5	1,091		0.0000	1.0000	25.61	
99.5	1,091		0.0000	1.0000	25.61	
100.5	1,091		0.0000	1.0000	25.61	
101.5	1,091		0.0000	1.0000	25.61	
102.5	1,091		0.0000	1.0000	25.61	
103.5	1,091		0.0000	1.0000	25.61	
104.5	1,091		0.0000	1.0000	25.61	
105.5	1,091		0.0000	1.0000	25.61	
106.5	1,091		0.0000	1.0000	25.61	
107.5	1,091	197	0.1808	0.8192	25.61	
108.5	894		0.0000	1.0000	20.98	
109.5	894		0.0000	1.0000	20.98	
110.5	894		0.0000	1.0000	20.98	
111.5	894	894	1.0000		20.98	
112.5						

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,908,890		0.0000	1.0000	100.00
0.5	2,814,418		0.0000	1.0000	100.00
1.5	2,723,924	49,430	0.0181	0.9819	100.00
2.5	2,661,259	5,534	0.0021	0.9979	98.19
3.5	2,302,565	445	0.0002	0.9998	97.98
4.5	2,176,804	14,514	0.0067	0.9933	97.96
5.5	2,040,514	14,255	0.0070	0.9930	97.31
6.5	1,932,509	12,612	0.0065	0.9935	96.63
7.5	1,826,937	6,578	0.0036	0.9964	96.00
8.5	1,311,700	15,364	0.0117	0.9883	95.65
9.5	1,186,477		0.0000	1.0000	94.53
10.5	1,021,473	3,376	0.0033	0.9967	94.53
11.5	878,155	1,787	0.0020	0.9980	94.22
12.5	794,566	1,632	0.0021	0.9979	94.03
13.5	667,077	5,265	0.0079	0.9921	93.84
14.5	646,559	8,790	0.0136	0.9864	93.09
15.5	617,898	6,642	0.0107	0.9893	91.83
16.5	590,664	69	0.0001	0.9999	90.84
17.5	593,496	1,326	0.0022	0.9978	90.83
18.5	602,510	3,544	0.0059	0.9941	90.63
19.5	614,529	1,874	0.0030	0.9970	90.10
20.5	618,023	6,349	0.0103	0.9897	89.82
21.5	596,864	12,409	0.0208	0.9792	88.90
22.5	561,804	2,100	0.0037	0.9963	87.05
23.5	585,647	8,394	0.0143	0.9857	86.72
24.5	585,816	3,269	0.0056	0.9944	85.48
25.5	579,479	3,563	0.0061	0.9939	85.00
26.5	590,950	15,669	0.0265	0.9735	84.48
27.5	568,988	4,099	0.0072	0.9928	82.24
28.5	564,747	11,901	0.0211	0.9789	81.65
29.5	558,601	1,837	0.0033	0.9967	79.93
30.5	560,416	11,972	0.0214	0.9786	79.67
31.5	552,252	3,746	0.0068	0.9932	77.96
32.5	556,647	17,184	0.0309	0.9691	77.43
33.5	517,775	12,732	0.0246	0.9754	75.04
34.5	506,494	10,208	0.0202	0.9798	73.20
35.5	488,181	2,351	0.0048	0.9952	71.72
36.5	385,040	8,298	0.0216	0.9784	71.38
37.5	356,859	10,689	0.0300	0.9700	69.84
38.5	290,202	6,660	0.0229	0.9771	67.75

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	251,322	1,307	0.0052	0.9948	66.19	
40.5	235,233	2,752	0.0117	0.9883	65.85	
41.5	189,208	32	0.0002	0.9998	65.08	
42.5	185,601	3,544	0.0191	0.9809	65.07	
43.5	171,378	2,551	0.0149	0.9851	63.83	
44.5	166,553	1,261	0.0076	0.9924	62.88	
45.5	162,031	1,260	0.0078	0.9922	62.40	
46.5	160,897	3,606	0.0224	0.9776	61.91	
47.5	157,475	1,610	0.0102	0.9898	60.53	
48.5	155,904	10	0.0001	0.9999	59.91	
49.5	153,916	1,594	0.0104	0.9896	59.90	
50.5	145,285	2,289	0.0158	0.9842	59.28	
51.5	136,276	6,032	0.0443	0.9557	58.35	
52.5	116,792	837	0.0072	0.9928	55.77	
53.5	103,913	3,886	0.0374	0.9626	55.37	
54.5	101,178	1,087	0.0107	0.9893	53.30	
55.5	98,655	2,833	0.0287	0.9713	52.72	
56.5	93,381		0.0000	1.0000	51.21	
57.5	86,949	1,585	0.0182	0.9818	51.21	
58.5	79,281	1,502	0.0189	0.9811	50.28	
59.5	68,167	1,421	0.0208	0.9792	49.32	
60.5	64,276	2,243	0.0349	0.9651	48.30	
61.5	59,343	2,870	0.0484	0.9516	46.61	
62.5	56,075	310	0.0055	0.9945	44.36	
63.5	49,301	461	0.0093	0.9907	44.11	
64.5	43,255	0	0.0000	1.0000	43.70	
65.5	37,094	396	0.0107	0.9893	43.70	
66.5	33,654	582	0.0173	0.9827	43.23	
67.5	27,117		0.0000	1.0000	42.48	
68.5	23,858	537	0.0225	0.9775	42.48	
69.5	18,184	347	0.0191	0.9809	41.53	
70.5	14,885	675	0.0453	0.9547	40.74	
71.5	11,889	1	0.0001	0.9999	38.89	
72.5	7,966	522	0.0655	0.9345	38.89	
73.5	5,491	6	0.0011	0.9989	36.34	
74.5	5,485	205	0.0373	0.9627	36.30	
75.5	5,219	25	0.0048	0.9952	34.94	
76.5	4,980	148	0.0297	0.9703	34.78	
77.5	4,832		0.0000	1.0000	33.74	
78.5	4,832	95	0.0197	0.9803	33.74	

COLUMBIA GAS OF KENTUCKY, INC.

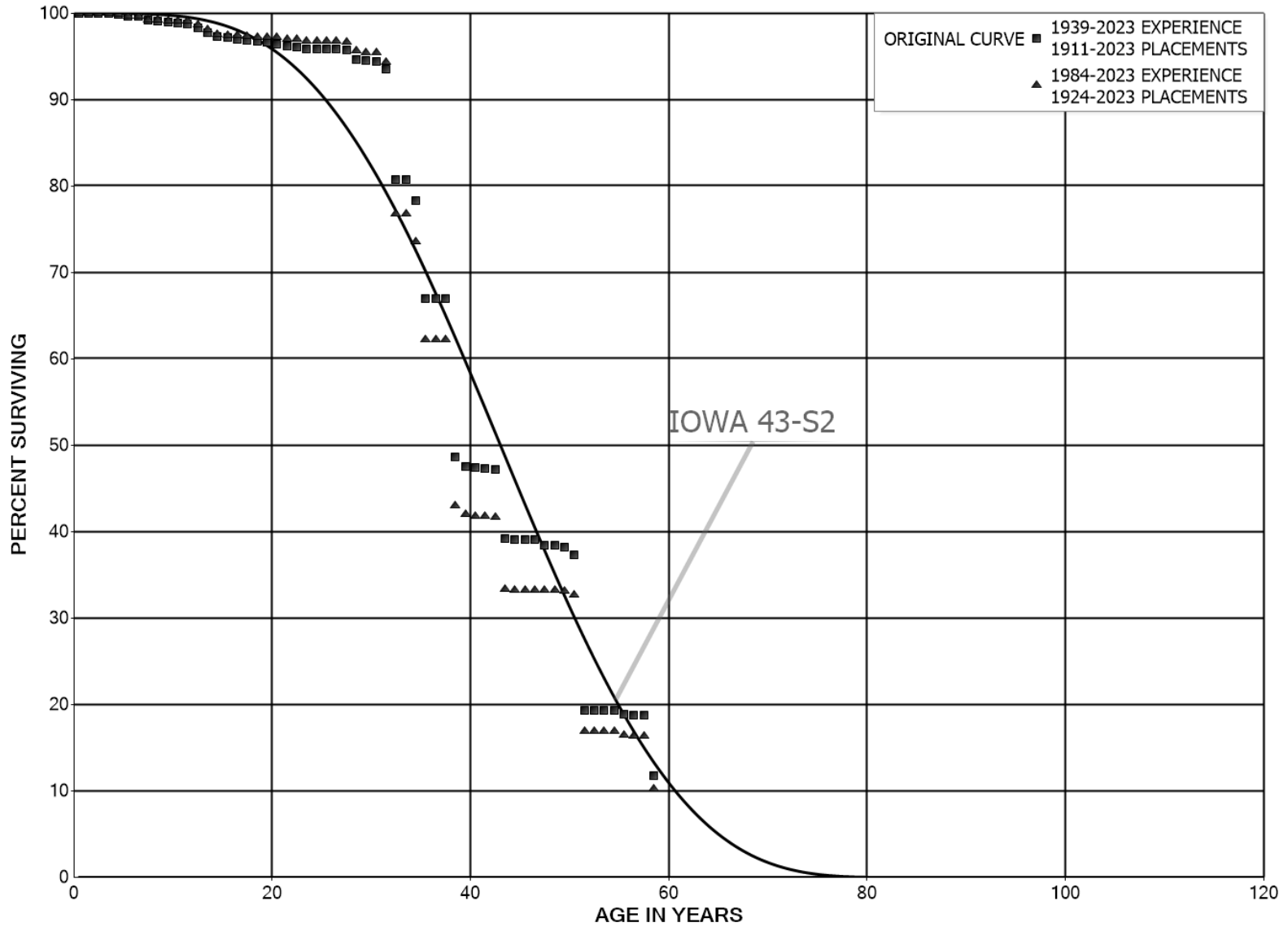
ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	4,737	242	0.0511	0.9489	33.08	
80.5	4,456		0.0000	1.0000	31.39	
81.5	4,456		0.0000	1.0000	31.39	
82.5	3,618		0.0000	1.0000	31.39	
83.5	3,204	269	0.0841	0.9159	31.39	
84.5	2,616		0.0000	1.0000	28.75	
85.5	2,616	0	0.0001	0.9999	28.75	
86.5	2,591	3	0.0011	0.9989	28.75	
87.5	2,365		0.0000	1.0000	28.72	
88.5	2,365		0.0000	1.0000	28.72	
89.5	2,365		0.0000	1.0000	28.72	
90.5	2,365	6	0.0026	0.9974	28.72	
91.5	2,359	75	0.0318	0.9682	28.64	
92.5	2,284		0.0000	1.0000	27.73	
93.5	2,108	125	0.0593	0.9407	27.73	
94.5	1,585	9	0.0057	0.9943	26.09	
95.5	1,091		0.0000	1.0000	25.94	
96.5	1,091		0.0000	1.0000	25.94	
97.5	1,091		0.0000	1.0000	25.94	
98.5	1,091		0.0000	1.0000	25.94	
99.5	1,091		0.0000	1.0000	25.94	
100.5	1,091		0.0000	1.0000	25.94	
101.5	1,091		0.0000	1.0000	25.94	
102.5	1,091		0.0000	1.0000	25.94	
103.5	1,091		0.0000	1.0000	25.94	
104.5	1,091		0.0000	1.0000	25.94	
105.5	1,091		0.0000	1.0000	25.94	
106.5	1,091		0.0000	1.0000	25.94	
107.5	1,091	197	0.1808	0.8192	25.94	
108.5	894		0.0000	1.0000	21.25	
109.5	894		0.0000	1.0000	21.25	
110.5	894		0.0000	1.0000	21.25	
111.5	894	894	1.0000		21.25	
112.5						



COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,309,773		0.0000	1.0000	100.00
0.5	9,813,233		0.0000	1.0000	100.00
1.5	9,574,714	1,939	0.0002	0.9998	100.00
2.5	9,543,689	875	0.0001	0.9999	99.98
3.5	9,507,888	10,759	0.0011	0.9989	99.97
4.5	9,418,747	23,710	0.0025	0.9975	99.86
5.5	9,369,250	1,476	0.0002	0.9998	99.61
6.5	9,038,007	42,406	0.0047	0.9953	99.59
7.5	8,582,769	647	0.0001	0.9999	99.12
8.5	7,979,103	11,989	0.0015	0.9985	99.12
9.5	7,867,737	13,858	0.0018	0.9982	98.97
10.5	7,659,569	2,144	0.0003	0.9997	98.79
11.5	7,658,159	34,458	0.0045	0.9955	98.76
12.5	7,620,216	41,969	0.0055	0.9945	98.32
13.5	7,567,999	40,287	0.0053	0.9947	97.78
14.5	7,516,081	8,092	0.0011	0.9989	97.26
15.5	7,507,988	17,595	0.0023	0.9977	97.15
16.5	7,494,909	5,409	0.0007	0.9993	96.93
17.5	7,489,646	13,378	0.0018	0.9982	96.86
18.5	7,477,345	1,393	0.0002	0.9998	96.68
19.5	7,476,430	19,538	0.0026	0.9974	96.66
20.5	7,411,817	20,090	0.0027	0.9973	96.41
21.5	7,229,912	3,292	0.0005	0.9995	96.15
22.5	7,225,025	19,193	0.0027	0.9973	96.11
23.5	7,189,356	3,033	0.0004	0.9996	95.85
24.5	7,189,688	116	0.0000	1.0000	95.81
25.5	7,163,164	146	0.0000	1.0000	95.81
26.5	7,163,017	9,507	0.0013	0.9987	95.81
27.5	7,128,241	77,814	0.0109	0.9891	95.68
28.5	7,069,452	12,910	0.0018	0.9982	94.64
29.5	877,148	317	0.0004	0.9996	94.46
30.5	877,182	8,949	0.0102	0.9898	94.43
31.5	307,628	41,812	0.1359	0.8641	93.47
32.5	265,972		0.0000	1.0000	80.76
33.5	265,972	8,081	0.0304	0.9696	80.76
34.5	257,891	37,321	0.1447	0.8553	78.31
35.5	215,891	189	0.0009	0.9991	66.98
36.5	197,640	63	0.0003	0.9997	66.92
37.5	198,127	54,287	0.2740	0.7260	66.90
38.5	143,808	3,029	0.0211	0.9789	48.57

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	140,340	543	0.0039	0.9961	47.54	
40.5	139,798	226	0.0016	0.9984	47.36	
41.5	138,652	417	0.0030	0.9970	47.28	
42.5	142,318	24,152	0.1697	0.8303	47.14	
43.5	118,167	294	0.0025	0.9975	39.14	
44.5	117,873		0.0000	1.0000	39.04	
45.5	120,694		0.0000	1.0000	39.04	
46.5	118,236	2,093	0.0177	0.9823	39.04	
47.5	116,144		0.0000	1.0000	38.35	
48.5	115,675	392	0.0034	0.9966	38.35	
49.5	114,781	2,818	0.0246	0.9754	38.22	
50.5	108,768	52,458	0.4823	0.5177	37.28	
51.5	55,832	148	0.0026	0.9974	19.30	
52.5	56,003		0.0000	1.0000	19.25	
53.5	53,064		0.0000	1.0000	19.25	
54.5	53,064	1,116	0.0210	0.9790	19.25	
55.5	49,124	361	0.0074	0.9926	18.85	
56.5	47,800		0.0000	1.0000	18.71	
57.5	47,800	17,906	0.3746	0.6254	18.71	
58.5	28,397		0.0000	1.0000	11.70	
59.5	28,397		0.0000	1.0000	11.70	
60.5	28,078		0.0000	1.0000	11.70	
61.5	27,958		0.0000	1.0000	11.70	
62.5	24,167		0.0000	1.0000	11.70	
63.5	22,348		0.0000	1.0000	11.70	
64.5	18,762		0.0000	1.0000	11.70	
65.5	15,624		0.0000	1.0000	11.70	
66.5	10,461		0.0000	1.0000	11.70	
67.5	10,461		0.0000	1.0000	11.70	
68.5	9,552		0.0000	1.0000	11.70	
69.5	8,749		0.0000	1.0000	11.70	
70.5	8,121		0.0000	1.0000	11.70	
71.5	6,179		0.0000	1.0000	11.70	
72.5	4,994		0.0000	1.0000	11.70	
73.5	1,419		0.0000	1.0000	11.70	
74.5	671		0.0000	1.0000	11.70	
75.5	671		0.0000	1.0000	11.70	
76.5	671		0.0000	1.0000	11.70	
77.5	671		0.0000	1.0000	11.70	
78.5	671		0.0000	1.0000	11.70	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	671		0.0000	1.0000	11.70
80.5	671		0.0000	1.0000	11.70
81.5	671		0.0000	1.0000	11.70
82.5	671		0.0000	1.0000	11.70
83.5	671		0.0000	1.0000	11.70
84.5	671	431	0.6421	0.3579	11.70
85.5	240		0.0000	1.0000	4.19
86.5	240		0.0000	1.0000	4.19
87.5	240		0.0000	1.0000	4.19
88.5	240		0.0000	1.0000	4.19
89.5	240		0.0000	1.0000	4.19
90.5	240		0.0000	1.0000	4.19
91.5	240		0.0000	1.0000	4.19
92.5	240		0.0000	1.0000	4.19
93.5	240		0.0000	1.0000	4.19
94.5	240		0.0000	1.0000	4.19
95.5	240	1	0.0026	0.9974	4.19
96.5	239		0.0000	1.0000	4.18
97.5	239		0.0000	1.0000	4.18
98.5	239		0.0000	1.0000	4.18
99.5					4.18

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,871,581		0.0000	1.0000	100.00
0.5	9,376,590		0.0000	1.0000	100.00
1.5	9,153,923		0.0000	1.0000	100.00
2.5	9,133,743		0.0000	1.0000	100.00
3.5	9,145,275	10,072	0.0011	0.9989	100.00
4.5	9,070,118	23,263	0.0026	0.9974	99.89
5.5	8,997,168		0.0000	1.0000	99.63
6.5	8,676,549	38,507	0.0044	0.9956	99.63
7.5	8,218,447		0.0000	1.0000	99.19
8.5	7,621,791	10,134	0.0013	0.9987	99.19
9.5	7,526,011	2,626	0.0003	0.9997	99.06
10.5	7,326,853		0.0000	1.0000	99.03
11.5	7,326,784	33,637	0.0046	0.9954	99.03
12.5	7,293,146	40,342	0.0055	0.9945	98.57
13.5	7,242,853	38,520	0.0053	0.9947	98.03
14.5	7,175,789	5,262	0.0007	0.9993	97.50
15.5	7,175,838	4,014	0.0006	0.9994	97.43
16.5	7,174,454	4,734	0.0007	0.9993	97.38
17.5	7,197,208	11,727	0.0016	0.9984	97.31
18.5	7,188,530		0.0000	1.0000	97.16
19.5	7,197,923		0.0000	1.0000	97.16
20.5	7,196,208	18,590	0.0026	0.9974	97.16
21.5	7,017,870	387	0.0001	0.9999	96.90
22.5	7,022,600	9,739	0.0014	0.9986	96.90
23.5	7,063,076	1,697	0.0002	0.9998	96.76
24.5	7,064,965		0.0000	1.0000	96.74
25.5	7,041,433		0.0000	1.0000	96.74
26.5	7,047,314	9,507	0.0013	0.9987	96.74
27.5	7,012,824	75,533	0.0108	0.9892	96.61
28.5	6,956,261	12,910	0.0019	0.9981	95.57
29.5	764,993		0.0000	1.0000	95.39
30.5	792,554	8,949	0.0113	0.9887	95.39
31.5	224,274	41,713	0.1860	0.8140	94.32
32.5	184,027		0.0000	1.0000	76.77
33.5	189,331	8,024	0.0424	0.9576	76.77
34.5	234,513	36,110	0.1540	0.8460	73.52
35.5	193,723		0.0000	1.0000	62.20
36.5	175,843		0.0000	1.0000	62.20
37.5	175,843	54,287	0.3087	0.6913	62.20
38.5	120,228	3,029	0.0252	0.9748	43.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	117,199	543	0.0046	0.9954	41.91	
40.5	116,656		0.0000	1.0000	41.72	
41.5	116,656	234	0.0020	0.9980	41.72	
42.5	119,617	24,132	0.2017	0.7983	41.64	
43.5	113,392	294	0.0026	0.9974	33.24	
44.5	113,098		0.0000	1.0000	33.15	
45.5	115,919		0.0000	1.0000	33.15	
46.5	113,461		0.0000	1.0000	33.15	
47.5	113,892		0.0000	1.0000	33.15	
48.5	113,423	281	0.0025	0.9975	33.15	
49.5	112,640	1,426	0.0127	0.9873	33.07	
50.5	108,019	52,458	0.4856	0.5144	32.65	
51.5	55,083		0.0000	1.0000	16.79	
52.5	55,402		0.0000	1.0000	16.79	
53.5	52,463		0.0000	1.0000	16.79	
54.5	52,814	1,116	0.0211	0.9789	16.79	
55.5	48,874	351	0.0072	0.9928	16.44	
56.5	47,560		0.0000	1.0000	16.32	
57.5	47,560	17,906	0.3765	0.6235	16.32	
58.5	28,157		0.0000	1.0000	10.18	
59.5	28,397		0.0000	1.0000	10.18	
60.5	28,078		0.0000	1.0000	10.18	
61.5	27,958		0.0000	1.0000	10.18	
62.5	24,167		0.0000	1.0000	10.18	
63.5	22,348		0.0000	1.0000	10.18	
64.5	18,762		0.0000	1.0000	10.18	
65.5	15,624		0.0000	1.0000	10.18	
66.5	10,461		0.0000	1.0000	10.18	
67.5	10,461		0.0000	1.0000	10.18	
68.5	9,552		0.0000	1.0000	10.18	
69.5	8,749		0.0000	1.0000	10.18	
70.5	8,121		0.0000	1.0000	10.18	
71.5	6,179		0.0000	1.0000	10.18	
72.5	4,994		0.0000	1.0000	10.18	
73.5	1,419		0.0000	1.0000	10.18	
74.5	671		0.0000	1.0000	10.18	
75.5	671		0.0000	1.0000	10.18	
76.5	671		0.0000	1.0000	10.18	
77.5	671		0.0000	1.0000	10.18	
78.5	671		0.0000	1.0000	10.18	

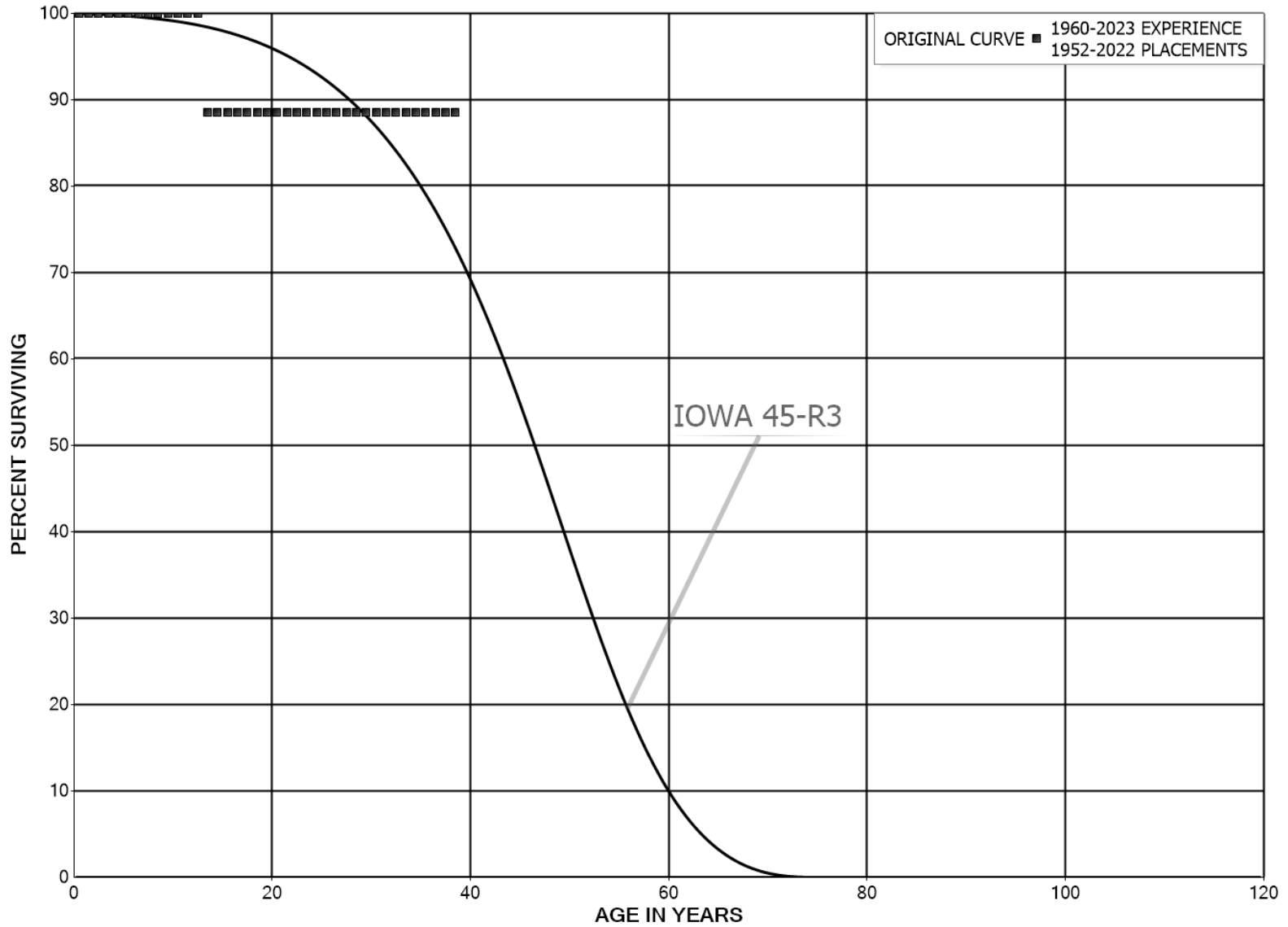
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	671		0.0000	1.0000	10.18
80.5	671		0.0000	1.0000	10.18
81.5	671		0.0000	1.0000	10.18
82.5	671		0.0000	1.0000	10.18
83.5	671		0.0000	1.0000	10.18
84.5	671	431	0.6421	0.3579	10.18
85.5	240		0.0000	1.0000	3.64
86.5	240		0.0000	1.0000	3.64
87.5	240		0.0000	1.0000	3.64
88.5	240		0.0000	1.0000	3.64
89.5	240		0.0000	1.0000	3.64
90.5	240		0.0000	1.0000	3.64
91.5	240		0.0000	1.0000	3.64
92.5	240		0.0000	1.0000	3.64
93.5	240		0.0000	1.0000	3.64
94.5	240		0.0000	1.0000	3.64
95.5	240	1	0.0026	0.9974	3.64
96.5	239		0.0000	1.0000	3.63
97.5	239		0.0000	1.0000	3.63
98.5	239		0.0000	1.0000	3.63
99.5					3.63

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 375.80 STRUCTURES AND IMPROVEMENTS - COMMUNICATION  
 ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.80 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1952-2022			EXPERIENCE BAND 1960-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	162,152		0.0000	1.0000	100.00
0.5	162,152		0.0000	1.0000	100.00
1.5	30,027		0.0000	1.0000	100.00
2.5	30,027		0.0000	1.0000	100.00
3.5	30,027		0.0000	1.0000	100.00
4.5	30,027		0.0000	1.0000	100.00
5.5	30,027		0.0000	1.0000	100.00
6.5	30,027		0.0000	1.0000	100.00
7.5	30,027		0.0000	1.0000	100.00
8.5	30,027		0.0000	1.0000	100.00
9.5	30,027		0.0000	1.0000	100.00
10.5	30,027		0.0000	1.0000	100.00
11.5	30,027		0.0000	1.0000	100.00
12.5	30,027	3,451	0.1149	0.8851	100.00
13.5	26,577		0.0000	1.0000	88.51
14.5	26,577		0.0000	1.0000	88.51
15.5	26,577		0.0000	1.0000	88.51
16.5	26,577		0.0000	1.0000	88.51
17.5	26,577		0.0000	1.0000	88.51
18.5	29,772		0.0000	1.0000	88.51
19.5	29,772		0.0000	1.0000	88.51
20.5	29,772		0.0000	1.0000	88.51
21.5	32,593		0.0000	1.0000	88.51
22.5	32,593		0.0000	1.0000	88.51
23.5	32,593		0.0000	1.0000	88.51
24.5	32,593		0.0000	1.0000	88.51
25.5	32,593		0.0000	1.0000	88.51
26.5	32,593		0.0000	1.0000	88.51
27.5	27,913		0.0000	1.0000	88.51
28.5	8,942		0.0000	1.0000	88.51
29.5	8,942		0.0000	1.0000	88.51
30.5	8,942		0.0000	1.0000	88.51
31.5	8,942		0.0000	1.0000	88.51
32.5	8,942		0.0000	1.0000	88.51
33.5	8,942		0.0000	1.0000	88.51
34.5	8,942		0.0000	1.0000	88.51
35.5	8,942		0.0000	1.0000	88.51
36.5	8,942		0.0000	1.0000	88.51
37.5	8,942		0.0000	1.0000	88.51
38.5	8,942		0.0000	1.0000	88.51

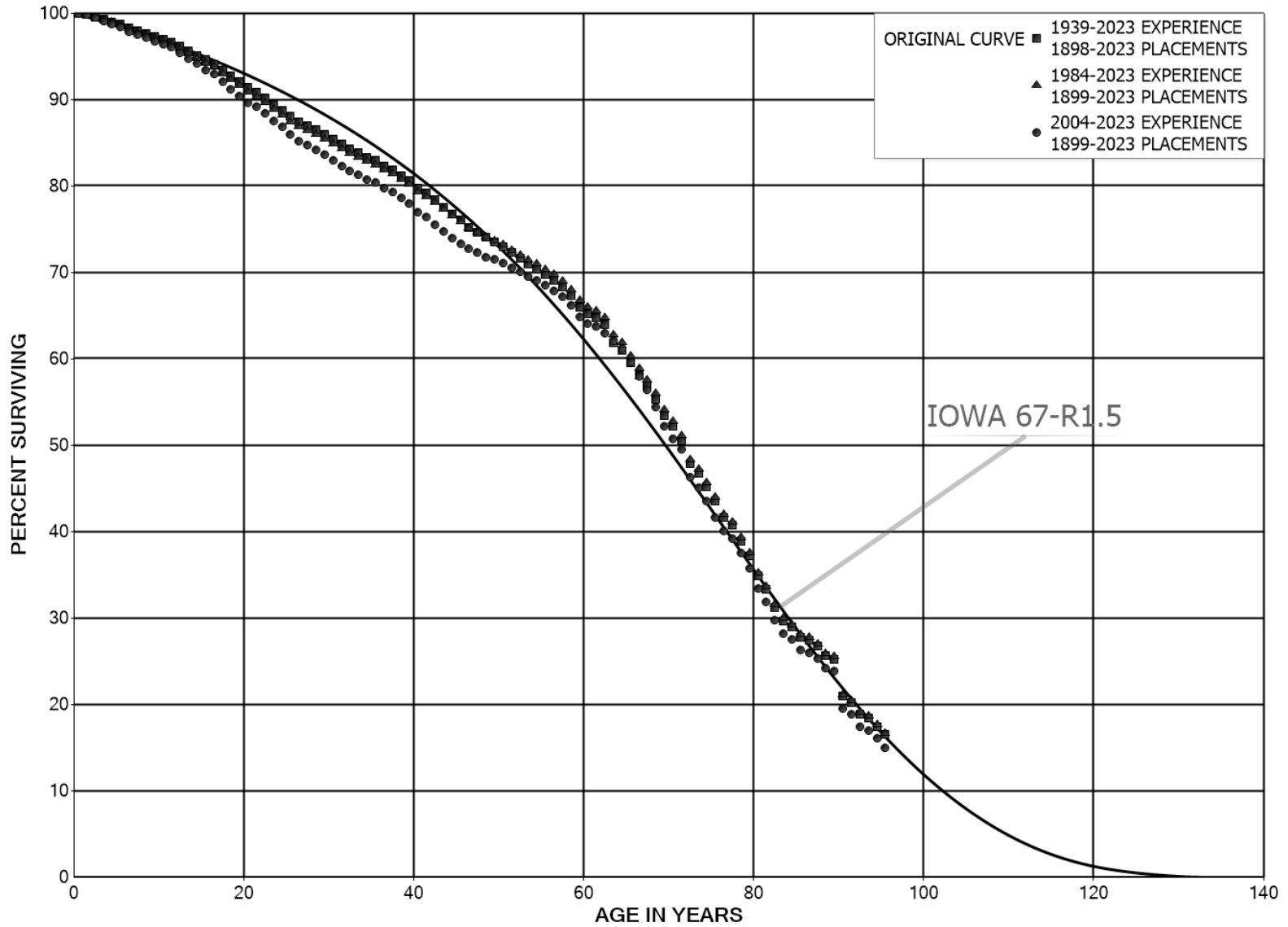
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.80 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1952-2022			EXPERIENCE BAND 1960-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	9,610		0.0000	1.0000	88.51
40.5	9,610		0.0000	1.0000	88.51
41.5	9,610		0.0000	1.0000	88.51
42.5	6,415		0.0000	1.0000	88.51
43.5	6,415		0.0000	1.0000	88.51
44.5	6,415		0.0000	1.0000	88.51
45.5	3,594		0.0000	1.0000	88.51
46.5	3,594		0.0000	1.0000	88.51
47.5	3,594		0.0000	1.0000	88.51
48.5	3,594		0.0000	1.0000	88.51
49.5	3,594		0.0000	1.0000	88.51
50.5	3,594		0.0000	1.0000	88.51
51.5	3,594		0.0000	1.0000	88.51
52.5	3,275		0.0000	1.0000	88.51
53.5	3,155		0.0000	1.0000	88.51
54.5	3,155		0.0000	1.0000	88.51
55.5	668		0.0000	1.0000	88.51
56.5	668		0.0000	1.0000	88.51
57.5	668		0.0000	1.0000	88.51
58.5	668		0.0000	1.0000	88.51
59.5	668		0.0000	1.0000	88.51
60.5	668		0.0000	1.0000	88.51
61.5	668		0.0000	1.0000	88.51
62.5	668		0.0000	1.0000	88.51
63.5	668		0.0000	1.0000	88.51

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 376.00 MAINS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1898-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	464,701,055	270,903	0.0006	0.9994	100.00
0.5	429,460,548	409,197	0.0010	0.9990	99.94
1.5	382,904,781	1,163,408	0.0030	0.9970	99.85
2.5	337,272,254	1,053,730	0.0031	0.9969	99.54
3.5	304,253,073	766,186	0.0025	0.9975	99.23
4.5	268,999,264	820,840	0.0031	0.9969	98.98
5.5	247,276,359	1,095,911	0.0044	0.9956	98.68
6.5	228,124,514	773,358	0.0034	0.9966	98.24
7.5	208,571,642	536,870	0.0026	0.9974	97.91
8.5	192,682,598	709,093	0.0037	0.9963	97.66
9.5	180,067,853	614,430	0.0034	0.9966	97.30
10.5	167,938,778	579,741	0.0035	0.9965	96.97
11.5	157,163,874	789,024	0.0050	0.9950	96.63
12.5	150,300,152	825,266	0.0055	0.9945	96.15
13.5	145,601,112	803,741	0.0055	0.9945	95.62
14.5	139,235,821	773,738	0.0056	0.9944	95.09
15.5	131,599,809	617,590	0.0047	0.9953	94.56
16.5	127,015,602	960,259	0.0076	0.9924	94.12
17.5	119,499,890	871,424	0.0073	0.9927	93.41
18.5	117,178,776	799,697	0.0068	0.9932	92.73
19.5	114,987,595	860,695	0.0075	0.9925	92.09
20.5	113,590,339	690,682	0.0061	0.9939	91.40
21.5	107,824,194	797,436	0.0074	0.9926	90.85
22.5	102,473,218	863,340	0.0084	0.9916	90.18
23.5	99,201,537	712,143	0.0072	0.9928	89.42
24.5	91,689,122	746,824	0.0081	0.9919	88.77
25.5	87,271,048	606,482	0.0069	0.9931	88.05
26.5	86,670,754	497,329	0.0057	0.9943	87.44
27.5	83,344,400	384,754	0.0046	0.9954	86.94
28.5	80,140,181	510,364	0.0064	0.9936	86.54
29.5	76,055,365	530,970	0.0070	0.9930	85.99
30.5	72,200,336	506,542	0.0070	0.9930	85.38
31.5	69,071,817	406,882	0.0059	0.9941	84.79
32.5	66,650,159	357,429	0.0054	0.9946	84.29
33.5	63,570,114	407,849	0.0064	0.9936	83.83
34.5	60,139,607	282,258	0.0047	0.9953	83.30
35.5	56,059,449	437,058	0.0078	0.9922	82.91
36.5	45,138,539	214,363	0.0047	0.9953	82.26
37.5	41,664,898	367,253	0.0088	0.9912	81.87
38.5	39,816,547	273,829	0.0069	0.9931	81.15

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	36,791,358	376,350	0.0102	0.9898	80.59
40.5	35,021,043	270,194	0.0077	0.9923	79.76
41.5	32,628,536	300,610	0.0092	0.9908	79.15
42.5	30,317,548	335,297	0.0111	0.9889	78.42
43.5	28,265,418	289,332	0.0102	0.9898	77.55
44.5	26,527,515	246,445	0.0093	0.9907	76.76
45.5	25,200,878	276,902	0.0110	0.9890	76.05
46.5	24,305,062	193,209	0.0079	0.9921	75.21
47.5	23,512,132	178,725	0.0076	0.9924	74.61
48.5	22,952,912	176,476	0.0077	0.9923	74.05
49.5	22,286,374	152,463	0.0068	0.9932	73.48
50.5	21,596,459	216,917	0.0100	0.9900	72.97
51.5	20,038,136	181,305	0.0090	0.9910	72.24
52.5	18,691,637	173,423	0.0093	0.9907	71.59
53.5	17,724,644	140,359	0.0079	0.9921	70.92
54.5	16,069,687	137,334	0.0085	0.9915	70.36
55.5	14,949,272	141,002	0.0094	0.9906	69.76
56.5	14,213,645	158,239	0.0111	0.9889	69.10
57.5	12,745,576	193,723	0.0152	0.9848	68.33
58.5	11,701,092	237,165	0.0203	0.9797	67.29
59.5	10,513,824	122,051	0.0116	0.9884	65.93
60.5	9,635,470	62,884	0.0065	0.9935	65.16
61.5	8,945,792	111,277	0.0124	0.9876	64.74
62.5	8,345,652	267,899	0.0321	0.9679	63.93
63.5	7,453,778	106,609	0.0143	0.9857	61.88
64.5	6,538,778	155,112	0.0237	0.9763	61.00
65.5	5,390,693	134,257	0.0249	0.9751	59.55
66.5	4,164,775	87,529	0.0210	0.9790	58.07
67.5	3,569,245	98,134	0.0275	0.9725	56.85
68.5	3,089,818	107,341	0.0347	0.9653	55.28
69.5	2,717,939	62,982	0.0232	0.9768	53.36
70.5	2,298,496	70,656	0.0307	0.9693	52.13
71.5	2,096,644	113,176	0.0540	0.9460	50.52
72.5	1,725,175	39,257	0.0228	0.9772	47.80
73.5	1,534,244	51,031	0.0333	0.9667	46.71
74.5	1,414,092	51,555	0.0365	0.9635	45.16
75.5	1,309,026	57,073	0.0436	0.9564	43.51
76.5	1,231,969	27,618	0.0224	0.9776	41.61
77.5	1,181,426	52,467	0.0444	0.9556	40.68
78.5	1,119,389	49,332	0.0441	0.9559	38.87

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	1,068,346	66,122	0.0619	0.9381	37.16	
80.5	999,232	44,210	0.0442	0.9558	34.86	
81.5	951,485	60,502	0.0636	0.9364	33.32	
82.5	869,961	42,802	0.0492	0.9508	31.20	
83.5	804,995	20,641	0.0256	0.9744	29.66	
84.5	764,646	30,530	0.0399	0.9601	28.90	
85.5	722,701	8,318	0.0115	0.9885	27.75	
86.5	687,659	17,327	0.0252	0.9748	27.43	
87.5	662,439	28,418	0.0429	0.9571	26.74	
88.5	618,489	9,028	0.0146	0.9854	25.59	
89.5	604,166	103,641	0.1715	0.8285	25.22	
90.5	240,607	8,277	0.0344	0.9656	20.89	
91.5	227,883	14,850	0.0652	0.9348	20.17	
92.5	206,870	4,492	0.0217	0.9783	18.86	
93.5	195,120	11,144	0.0571	0.9429	18.45	
94.5	130,451	6,830	0.0524	0.9476	17.40	
95.5	55,327	2,336	0.0422	0.9578	16.48	
96.5	47,597	8,304	0.1745	0.8255	15.79	
97.5	37,138	908	0.0245	0.9755	13.03	
98.5	36,229	95	0.0026	0.9974	12.72	
99.5	36,134	615	0.0170	0.9830	12.68	
100.5	34,633		0.0000	1.0000	12.47	
101.5	34,633	9,642	0.2784	0.7216	12.47	
102.5	24,914	2,701	0.1084	0.8916	9.00	
103.5	20,284	971	0.0479	0.9521	8.02	
104.5	19,313	1,566	0.0811	0.9189	7.64	
105.5	17,747	2	0.0001	0.9999	7.02	
106.5	17,745	3,625	0.2043	0.7957	7.02	
107.5	14,070	27	0.0019	0.9981	5.58	
108.5	8,379		0.0000	1.0000	5.57	
109.5	8,177	12	0.0015	0.9985	5.57	
110.5	7,572		0.0000	1.0000	5.56	
111.5	7,572	584	0.0771	0.9229	5.56	
112.5	6,989		0.0000	1.0000	5.14	
113.5	6,966	4	0.0006	0.9994	5.14	
114.5	6,962		0.0000	1.0000	5.13	
115.5	6,913		0.0000	1.0000	5.13	
116.5	6,913		0.0000	1.0000	5.13	
117.5	6,597		0.0000	1.0000	5.13	
118.5	875		0.0000	1.0000	5.13	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
119.5	875	367	0.4194	0.5806	5.13	
120.5	508		0.0000	1.0000	2.98	
121.5	508		0.0000	1.0000	2.98	
122.5	508		0.0000	1.0000	2.98	
123.5	508	21	0.0420	0.9580	2.98	
124.5					2.85	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	429,164,097	268,565	0.0006	0.9994	100.00
0.5	395,493,803	387,602	0.0010	0.9990	99.94
1.5	351,294,478	1,145,089	0.0033	0.9967	99.84
2.5	307,747,734	1,029,253	0.0033	0.9967	99.51
3.5	276,400,194	745,024	0.0027	0.9973	99.18
4.5	242,865,252	785,497	0.0032	0.9968	98.91
5.5	222,171,904	1,056,890	0.0048	0.9952	98.59
6.5	203,819,512	740,288	0.0036	0.9964	98.12
7.5	184,735,209	496,005	0.0027	0.9973	97.77
8.5	169,212,537	677,515	0.0040	0.9960	97.51
9.5	157,023,984	589,793	0.0038	0.9962	97.12
10.5	145,551,773	529,546	0.0036	0.9964	96.75
11.5	135,798,734	726,700	0.0054	0.9946	96.40
12.5	129,986,660	769,143	0.0059	0.9941	95.88
13.5	126,157,372	744,533	0.0059	0.9941	95.32
14.5	121,353,442	732,856	0.0060	0.9940	94.75
15.5	114,712,062	537,313	0.0047	0.9953	94.18
16.5	110,895,951	892,749	0.0081	0.9919	93.74
17.5	104,842,752	831,026	0.0079	0.9921	92.99
18.5	103,445,459	755,763	0.0073	0.9927	92.25
19.5	102,359,190	809,568	0.0079	0.9921	91.57
20.5	101,906,022	626,411	0.0061	0.9939	90.85
21.5	96,825,657	736,303	0.0076	0.9924	90.29
22.5	92,418,823	774,445	0.0084	0.9916	89.60
23.5	90,113,916	666,228	0.0074	0.9926	88.85
24.5	83,618,947	712,313	0.0085	0.9915	88.20
25.5	80,320,981	563,810	0.0070	0.9930	87.45
26.5	81,101,637	449,065	0.0055	0.9945	86.83
27.5	78,264,708	352,914	0.0045	0.9955	86.35
28.5	75,397,668	471,965	0.0063	0.9937	85.96
29.5	71,804,221	489,429	0.0068	0.9932	85.42
30.5	68,702,504	480,659	0.0070	0.9930	84.84
31.5	65,909,239	374,708	0.0057	0.9943	84.25
32.5	63,846,755	340,149	0.0053	0.9947	83.77
33.5	61,111,044	369,913	0.0061	0.9939	83.32
34.5	57,863,296	266,972	0.0046	0.9954	82.82
35.5	53,906,045	420,471	0.0078	0.9922	82.44
36.5	43,055,223	200,201	0.0046	0.9954	81.79
37.5	39,647,531	352,377	0.0089	0.9911	81.41
38.5	37,831,667	255,292	0.0067	0.9933	80.69



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	34,812,944	357,452	0.0103	0.9897	80.14
40.5	33,063,224	237,916	0.0072	0.9928	79.32
41.5	30,650,653	278,508	0.0091	0.9909	78.75
42.5	28,451,337	274,667	0.0097	0.9903	78.04
43.5	26,794,814	262,483	0.0098	0.9902	77.28
44.5	25,119,281	212,176	0.0084	0.9916	76.53
45.5	23,855,693	246,195	0.0103	0.9897	75.88
46.5	23,035,852	156,683	0.0068	0.9932	75.10
47.5	22,264,852	156,271	0.0070	0.9930	74.58
48.5	21,771,444	125,339	0.0058	0.9942	74.06
49.5	21,158,592	130,768	0.0062	0.9938	73.63
50.5	20,980,140	185,773	0.0089	0.9911	73.18
51.5	19,465,486	155,926	0.0080	0.9920	72.53
52.5	18,158,030	130,234	0.0072	0.9928	71.95
53.5	17,231,229	129,351	0.0075	0.9925	71.43
54.5	15,772,635	127,518	0.0081	0.9919	70.90
55.5	14,741,672	135,752	0.0092	0.9908	70.33
56.5	14,009,892	144,209	0.0103	0.9897	69.68
57.5	12,576,938	180,076	0.0143	0.9857	68.96
58.5	11,570,712	217,388	0.0188	0.9812	67.97
59.5	10,429,025	118,521	0.0114	0.9886	66.70
60.5	9,512,366	55,759	0.0059	0.9941	65.94
61.5	8,831,371	109,478	0.0124	0.9876	65.55
62.5	8,234,682	259,170	0.0315	0.9685	64.74
63.5	7,355,158	106,447	0.0145	0.9855	62.70
64.5	6,442,172	154,499	0.0240	0.9760	61.79
65.5	5,294,829	132,768	0.0251	0.9749	60.31
66.5	4,070,477	86,800	0.0213	0.9787	58.80
67.5	3,475,754	94,489	0.0272	0.9728	57.55
68.5	3,011,708	104,492	0.0347	0.9653	55.98
69.5	2,645,130	62,960	0.0238	0.9762	54.04
70.5	2,229,398	69,211	0.0310	0.9690	52.75
71.5	2,029,182	113,176	0.0558	0.9442	51.12
72.5	1,657,733	38,164	0.0230	0.9770	48.26
73.5	1,467,990	46,184	0.0315	0.9685	47.15
74.5	1,361,636	51,514	0.0378	0.9622	45.67
75.5	1,256,985	56,193	0.0447	0.9553	43.94
76.5	1,180,807	26,958	0.0228	0.9772	41.98
77.5	1,154,330	49,278	0.0427	0.9573	41.02
78.5	1,116,800	49,332	0.0442	0.9558	39.27

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	1,065,757	66,122	0.0620	0.9380	37.53	
80.5	996,643	44,210	0.0444	0.9556	35.20	
81.5	948,896	60,502	0.0638	0.9362	33.64	
82.5	867,372	42,802	0.0493	0.9507	31.50	
83.5	802,405	20,413	0.0254	0.9746	29.94	
84.5	764,646	30,530	0.0399	0.9601	29.18	
85.5	722,701	8,318	0.0115	0.9885	28.02	
86.5	687,659	17,327	0.0252	0.9748	27.69	
87.5	662,439	28,418	0.0429	0.9571	27.00	
88.5	618,489	9,028	0.0146	0.9854	25.84	
89.5	604,166	103,641	0.1715	0.8285	25.46	
90.5	240,607	8,277	0.0344	0.9656	21.09	
91.5	227,883	14,850	0.0652	0.9348	20.37	
92.5	206,870	4,492	0.0217	0.9783	19.04	
93.5	195,120	11,144	0.0571	0.9429	18.63	
94.5	130,451	6,830	0.0524	0.9476	17.56	
95.5	55,327	2,336	0.0422	0.9578	16.64	
96.5	47,597	8,304	0.1745	0.8255	15.94	
97.5	37,138	908	0.0245	0.9755	13.16	
98.5	36,229	95	0.0026	0.9974	12.84	
99.5	36,134	615	0.0170	0.9830	12.80	
100.5	34,633		0.0000	1.0000	12.59	
101.5	34,633	9,642	0.2784	0.7216	12.59	
102.5	24,914	2,701	0.1084	0.8916	9.08	
103.5	20,284	971	0.0479	0.9521	8.10	
104.5	19,313	1,566	0.0811	0.9189	7.71	
105.5	17,747	2	0.0001	0.9999	7.08	
106.5	17,745	3,625	0.2043	0.7957	7.08	
107.5	14,070	27	0.0019	0.9981	5.64	
108.5	8,379		0.0000	1.0000	5.63	
109.5	8,177	12	0.0015	0.9985	5.63	
110.5	7,572		0.0000	1.0000	5.62	
111.5	7,572	584	0.0771	0.9229	5.62	
112.5	6,989		0.0000	1.0000	5.18	
113.5	6,966	4	0.0006	0.9994	5.18	
114.5	6,962		0.0000	1.0000	5.18	
115.5	6,913		0.0000	1.0000	5.18	
116.5	6,913		0.0000	1.0000	5.18	
117.5	6,597		0.0000	1.0000	5.18	
118.5	875		0.0000	1.0000	5.18	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
119.5	875	367	0.4194	0.5806	5.18	
120.5	508		0.0000	1.0000	3.01	
121.5	508		0.0000	1.0000	3.01	
122.5	508		0.0000	1.0000	3.01	
123.5	508	21	0.0420	0.9580	3.01	
124.5					2.88	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2023

EXPERIENCE BAND 2004-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	348,113,897	268,325	0.0008	0.9992	100.00
0.5	313,812,078	346,537	0.0011	0.9989	99.92
1.5	272,881,548	986,339	0.0036	0.9964	99.81
2.5	232,294,238	895,698	0.0039	0.9961	99.45
3.5	202,048,895	653,826	0.0032	0.9968	99.07
4.5	174,215,386	575,976	0.0033	0.9967	98.75
5.5	156,549,612	886,681	0.0057	0.9943	98.42
6.5	137,421,722	555,440	0.0040	0.9960	97.86
7.5	121,633,610	375,695	0.0031	0.9969	97.47
8.5	109,189,732	446,355	0.0041	0.9959	97.17
9.5	100,899,446	395,129	0.0039	0.9961	96.77
10.5	92,020,585	343,008	0.0037	0.9963	96.39
11.5	84,201,658	527,309	0.0063	0.9937	96.03
12.5	79,552,343	576,925	0.0073	0.9927	95.43
13.5	78,061,940	495,824	0.0064	0.9936	94.74
14.5	75,183,152	551,712	0.0073	0.9927	94.14
15.5	71,983,070	405,274	0.0056	0.9944	93.45
16.5	78,577,904	752,302	0.0096	0.9904	92.92
17.5	74,808,316	716,248	0.0096	0.9904	92.03
18.5	74,188,340	582,710	0.0079	0.9921	91.15
19.5	75,073,296	636,586	0.0085	0.9915	90.43
20.5	75,594,278	456,424	0.0060	0.9940	89.67
21.5	72,353,072	618,861	0.0086	0.9914	89.12
22.5	69,765,347	652,490	0.0094	0.9906	88.36
23.5	68,751,651	574,847	0.0084	0.9916	87.54
24.5	63,330,123	653,192	0.0103	0.9897	86.80
25.5	60,291,969	504,871	0.0084	0.9916	85.91
26.5	60,629,253	357,819	0.0059	0.9941	85.19
27.5	57,872,942	317,976	0.0055	0.9945	84.69
28.5	54,912,324	371,785	0.0068	0.9932	84.22
29.5	51,590,709	435,479	0.0084	0.9916	83.65
30.5	48,528,597	369,121	0.0076	0.9924	82.95
31.5	47,011,254	307,972	0.0066	0.9934	82.31
32.5	45,949,801	270,992	0.0059	0.9941	81.77
33.5	43,901,981	277,670	0.0063	0.9937	81.29
34.5	42,261,590	187,744	0.0044	0.9956	80.78
35.5	39,325,501	350,996	0.0089	0.9911	80.42
36.5	29,149,531	158,811	0.0054	0.9946	79.70
37.5	27,113,641	224,027	0.0083	0.9917	79.27
38.5	26,317,699	215,750	0.0082	0.9918	78.61

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	24,368,382	317,871	0.0130	0.9870	77.97
40.5	23,324,243	183,422	0.0079	0.9921	76.95
41.5	21,656,023	250,522	0.0116	0.9884	76.35
42.5	20,243,286	208,246	0.0103	0.9897	75.46
43.5	19,159,416	173,771	0.0091	0.9909	74.69
44.5	18,443,912	171,720	0.0093	0.9907	74.01
45.5	18,310,870	148,188	0.0081	0.9919	73.32
46.5	18,772,354	124,393	0.0066	0.9934	72.73
47.5	18,728,931	126,610	0.0068	0.9932	72.24
48.5	18,753,115	79,069	0.0042	0.9958	71.76
49.5	18,588,430	104,041	0.0056	0.9944	71.45
50.5	18,441,780	141,553	0.0077	0.9923	71.05
51.5	17,213,873	120,183	0.0070	0.9930	70.51
52.5	16,427,493	116,856	0.0071	0.9929	70.02
53.5	15,805,361	108,488	0.0069	0.9931	69.52
54.5	14,283,978	119,026	0.0083	0.9917	69.04
55.5	13,257,425	113,025	0.0085	0.9915	68.47
56.5	12,574,725	135,374	0.0108	0.9892	67.88
57.5	11,168,814	165,631	0.0148	0.9852	67.15
58.5	10,168,328	199,037	0.0196	0.9804	66.16
59.5	9,022,818	104,102	0.0115	0.9885	64.86
60.5	8,122,354	45,045	0.0055	0.9945	64.11
61.5	7,477,937	90,943	0.0122	0.9878	63.76
62.5	6,753,815	102,168	0.0151	0.9849	62.98
63.5	6,158,110	84,331	0.0137	0.9863	62.03
64.5	5,289,922	131,793	0.0249	0.9751	61.18
65.5	4,180,200	122,669	0.0293	0.9707	59.65
66.5	2,999,577	77,984	0.0260	0.9740	57.90
67.5	2,424,122	85,318	0.0352	0.9648	56.40
68.5	1,989,523	81,211	0.0408	0.9592	54.41
69.5	1,647,699	46,809	0.0284	0.9716	52.19
70.5	1,741,730	42,859	0.0246	0.9754	50.71
71.5	1,578,379	102,470	0.0649	0.9351	49.46
72.5	1,234,099	32,269	0.0261	0.9739	46.25
73.5	1,073,777	36,321	0.0338	0.9662	45.04
74.5	1,065,910	45,361	0.0426	0.9574	43.52
75.5	1,180,788	44,816	0.0380	0.9620	41.67
76.5	1,126,480	25,850	0.0229	0.9771	40.08
77.5	1,093,293	47,670	0.0436	0.9564	39.16
78.5	1,050,681	49,111	0.0467	0.9533	37.46

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,003,270	63,770	0.0636	0.9364	35.71
80.5	937,593	43,498	0.0464	0.9536	33.44
81.5	891,188	59,088	0.0663	0.9337	31.89
82.5	811,362	42,632	0.0525	0.9475	29.77
83.5	748,506	19,410	0.0259	0.9741	28.21
84.5	709,347	30,316	0.0427	0.9573	27.48
85.5	667,742	7,687	0.0115	0.9885	26.30
86.5	633,332	17,139	0.0271	0.9729	26.00
87.5	608,351	27,899	0.0459	0.9541	25.30
88.5	573,583	6,781	0.0118	0.9882	24.14
89.5	565,654	103,104	0.1823	0.8177	23.85
90.5	205,315	6,924	0.0337	0.9663	19.50
91.5	193,944	14,850	0.0766	0.9234	18.84
92.5	172,932	4,492	0.0260	0.9740	17.40
93.5	161,204	8,871	0.0550	0.9450	16.95
94.5	98,807	6,830	0.0691	0.9309	16.02
95.5	23,759	1,762	0.0742	0.9258	14.91
96.5	16,603	724	0.0436	0.9564	13.80
97.5	26,228	908	0.0346	0.9654	13.20
98.5	34,270	95	0.0028	0.9972	12.75
99.5	34,175	194	0.0057	0.9943	12.71
100.5	33,095		0.0000	1.0000	12.64
101.5	33,095	9,642	0.2913	0.7087	12.64
102.5	23,376	2,622	0.1122	0.8878	8.96
103.5	18,825	971	0.0516	0.9484	7.95
104.5	19,313	1,566	0.0811	0.9189	7.54
105.5	17,747	2	0.0001	0.9999	6.93
106.5	17,745	3,625	0.2043	0.7957	6.93
107.5	14,070	27	0.0019	0.9981	5.51
108.5	8,379		0.0000	1.0000	5.50
109.5	8,177	12	0.0015	0.9985	5.50
110.5	7,572		0.0000	1.0000	5.49
111.5	7,572	584	0.0771	0.9229	5.49
112.5	6,989		0.0000	1.0000	5.07
113.5	6,966	4	0.0006	0.9994	5.07
114.5	6,962		0.0000	1.0000	5.07
115.5	6,913		0.0000	1.0000	5.07
116.5	6,913		0.0000	1.0000	5.07
117.5	6,597		0.0000	1.0000	5.07
118.5	875		0.0000	1.0000	5.07

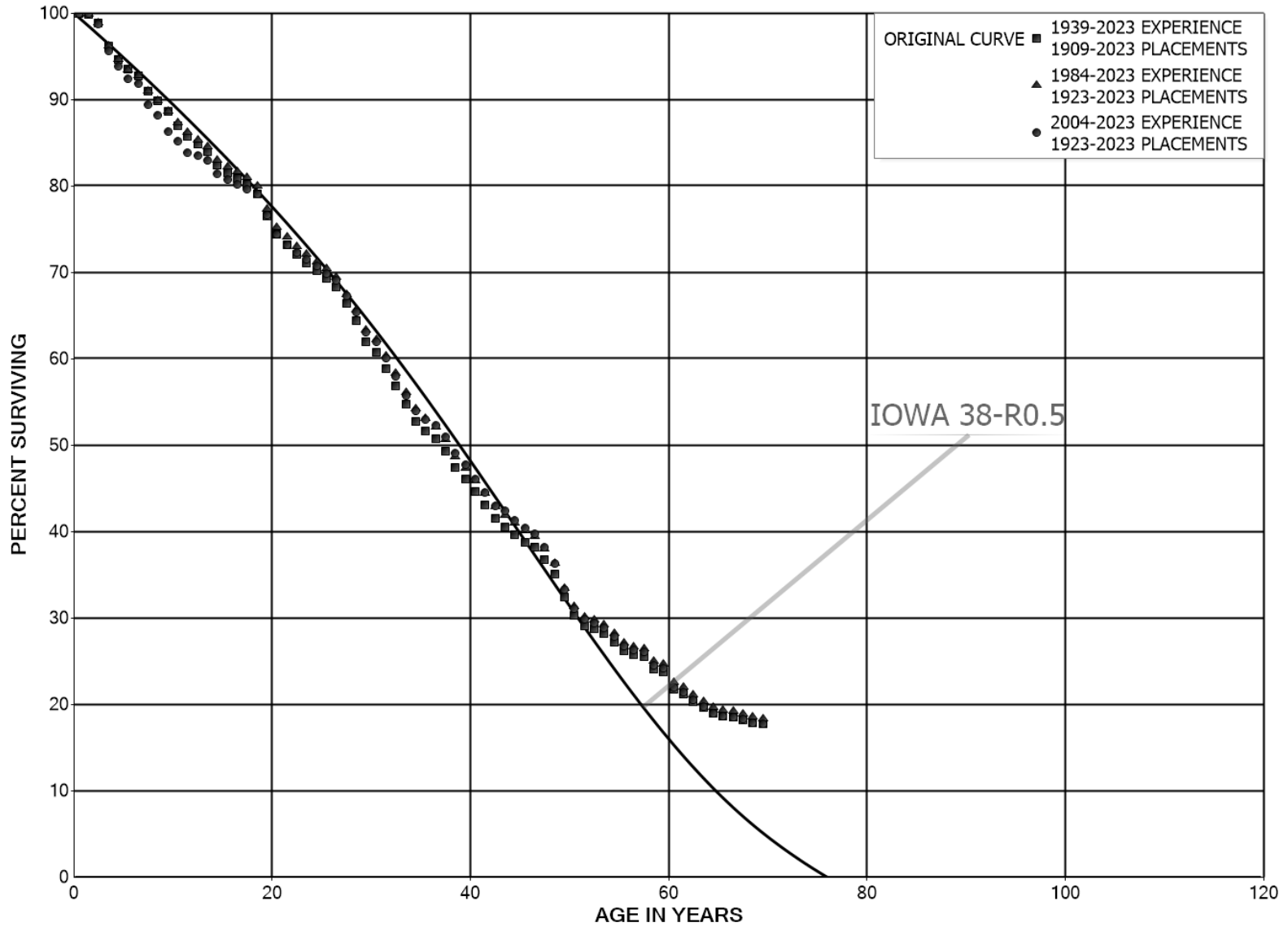
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 2004-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
119.5	875	367	0.4194	0.5806	5.07	
120.5	508		0.0000	1.0000	2.94	
121.5	508		0.0000	1.0000	2.94	
122.5	508		0.0000	1.0000	2.94	
123.5	508	21	0.0420	0.9580	2.94	
124.5					2.82	

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL  
 ORIGINAL AND SMOOTH SURVIVOR CURVES





COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	29,694,731	19,287	0.0006	0.9994	100.00
0.5	29,593,488	31,601	0.0011	0.9989	99.94
1.5	28,743,171	286,993	0.0100	0.9900	99.83
2.5	27,902,265	752,462	0.0270	0.9730	98.83
3.5	19,684,012	315,791	0.0160	0.9840	96.17
4.5	14,314,658	176,221	0.0123	0.9877	94.62
5.5	12,338,031	97,804	0.0079	0.9921	93.46
6.5	11,765,007	228,465	0.0194	0.9806	92.72
7.5	11,283,962	140,846	0.0125	0.9875	90.92
8.5	7,243,501	98,328	0.0136	0.9864	89.78
9.5	6,752,250	124,383	0.0184	0.9816	88.56
10.5	6,392,985	86,149	0.0135	0.9865	86.93
11.5	5,670,455	63,555	0.0112	0.9888	85.76
12.5	5,427,963	50,894	0.0094	0.9906	84.80
13.5	5,340,111	102,192	0.0191	0.9809	84.00
14.5	5,133,815	53,049	0.0103	0.9897	82.40
15.5	4,927,507	40,430	0.0082	0.9918	81.55
16.5	4,817,117	44,028	0.0091	0.9909	80.88
17.5	4,726,805	65,224	0.0138	0.9862	80.14
18.5	4,600,319	146,670	0.0319	0.9681	79.03
19.5	4,430,254	120,688	0.0272	0.9728	76.51
20.5	4,315,782	70,775	0.0164	0.9836	74.43
21.5	4,065,113	65,641	0.0161	0.9839	73.21
22.5	3,800,157	50,534	0.0133	0.9867	72.02
23.5	3,714,844	46,130	0.0124	0.9876	71.07
24.5	3,635,747	47,550	0.0131	0.9869	70.18
25.5	3,538,632	51,035	0.0144	0.9856	69.27
26.5	3,328,977	93,800	0.0282	0.9718	68.27
27.5	3,094,442	88,552	0.0286	0.9714	66.34
28.5	2,813,300	109,945	0.0391	0.9609	64.45
29.5	2,599,989	52,704	0.0203	0.9797	61.93
30.5	2,375,606	73,362	0.0309	0.9691	60.67
31.5	2,200,758	73,524	0.0334	0.9666	58.80
32.5	2,057,637	77,701	0.0378	0.9622	56.83
33.5	1,920,179	67,493	0.0351	0.9649	54.69
34.5	1,691,582	36,058	0.0213	0.9787	52.77
35.5	1,446,877	26,788	0.0185	0.9815	51.64
36.5	1,067,943	28,844	0.0270	0.9730	50.68
37.5	932,162	36,843	0.0395	0.9605	49.32
38.5	773,885	21,383	0.0276	0.9724	47.37

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	694,725	22,205	0.0320	0.9680	46.06
40.5	627,697	21,527	0.0343	0.9657	44.59
41.5	556,477	20,058	0.0360	0.9640	43.06
42.5	485,925	11,956	0.0246	0.9754	41.50
43.5	462,520	10,154	0.0220	0.9780	40.48
44.5	447,809	9,403	0.0210	0.9790	39.59
45.5	432,988	6,849	0.0158	0.9842	38.76
46.5	425,579	15,438	0.0363	0.9637	38.15
47.5	407,695	18,809	0.0461	0.9539	36.77
48.5	376,012	29,249	0.0778	0.9222	35.07
49.5	334,747	21,250	0.0635	0.9365	32.34
50.5	296,933	12,081	0.0407	0.9593	30.29
51.5	166,719	2,164	0.0130	0.9870	29.06
52.5	143,035	2,556	0.0179	0.9821	28.68
53.5	133,440	4,515	0.0338	0.9662	28.17
54.5	117,857	4,377	0.0371	0.9629	27.21
55.5	101,544	1,660	0.0163	0.9837	26.20
56.5	94,969	899	0.0095	0.9905	25.77
57.5	89,968	4,988	0.0554	0.9446	25.53
58.5	79,621	1,150	0.0144	0.9856	24.12
59.5	72,785	6,132	0.0842	0.9158	23.77
60.5	63,045	1,730	0.0274	0.9726	21.76
61.5	57,595	2,291	0.0398	0.9602	21.17
62.5	51,815	1,784	0.0344	0.9656	20.33
63.5	44,852	1,595	0.0356	0.9644	19.63
64.5	38,326	638	0.0167	0.9833	18.93
65.5	36,030	231	0.0064	0.9936	18.61
66.5	33,758	631	0.0187	0.9813	18.49
67.5	27,030	468	0.0173	0.9827	18.15
68.5	20,163	142	0.0070	0.9930	17.83
69.5	14,200	467	0.0329	0.9671	17.71
70.5	11,743	965	0.0822	0.9178	17.13
71.5	9,651	86	0.0089	0.9911	15.72
72.5	8,060	12	0.0015	0.9985	15.58
73.5	5,069	176	0.0347	0.9653	15.56
74.5	4,450	20	0.0046	0.9954	15.01
75.5	4,394	445	0.1013	0.8987	14.95
76.5	3,949		0.0000	1.0000	13.43
77.5	3,809	34	0.0088	0.9912	13.43
78.5	3,775	48	0.0128	0.9872	13.31

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,698		0.0000	1.0000	13.14
80.5	3,698	154	0.0416	0.9584	13.14
81.5	3,545	115	0.0325	0.9675	12.60
82.5	2,605	374	0.1437	0.8563	12.19
83.5	2,006	92	0.0457	0.9543	10.44
84.5	1,864	85	0.0455	0.9545	9.96
85.5	1,779	95	0.0536	0.9464	9.51
86.5	1,649		0.0000	1.0000	9.00
87.5	1,649		0.0000	1.0000	9.00
88.5	1,649		0.0000	1.0000	9.00
89.5	1,649		0.0000	1.0000	9.00
90.5	1,274	75	0.0587	0.9413	9.00
91.5	1,200		0.0000	1.0000	8.47
92.5	1,200	178	0.1487	0.8513	8.47
93.5	1,021		0.0000	1.0000	7.21
94.5	807		0.0000	1.0000	7.21
95.5	310		0.0000	1.0000	7.21
96.5	310		0.0000	1.0000	7.21
97.5	310	228	0.7359	0.2641	7.21
98.5	82		0.0000	1.0000	1.90
99.5	82		0.0000	1.0000	1.90
100.5					1.90

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	28,524,533	16,339	0.0006	0.9994	100.00
0.5	28,462,005	24,206	0.0009	0.9991	99.94
1.5	27,701,299	280,887	0.0101	0.9899	99.86
2.5	26,932,853	742,297	0.0276	0.9724	98.85
3.5	18,745,987	303,943	0.0162	0.9838	96.12
4.5	13,385,337	163,415	0.0122	0.9878	94.56
5.5	11,433,423	81,148	0.0071	0.9929	93.41
6.5	10,879,006	215,102	0.0198	0.9802	92.74
7.5	10,415,205	127,583	0.0122	0.9878	90.91
8.5	6,397,017	81,381	0.0127	0.9873	89.80
9.5	5,923,776	89,233	0.0151	0.9849	88.66
10.5	5,690,629	75,282	0.0132	0.9868	87.32
11.5	5,109,211	54,228	0.0106	0.9894	86.16
12.5	4,972,058	43,620	0.0088	0.9912	85.25
13.5	4,912,752	89,108	0.0181	0.9819	84.50
14.5	4,748,644	46,548	0.0098	0.9902	82.97
15.5	4,564,929	31,443	0.0069	0.9931	82.16
16.5	4,468,138	33,542	0.0075	0.9925	81.59
17.5	4,404,219	55,965	0.0127	0.9873	80.98
18.5	4,307,715	141,411	0.0328	0.9672	79.95
19.5	4,167,761	113,958	0.0273	0.9727	77.32
20.5	4,075,738	64,513	0.0158	0.9842	75.21
21.5	3,854,698	56,228	0.0146	0.9854	74.02
22.5	3,620,111	45,016	0.0124	0.9876	72.94
23.5	3,557,585	39,747	0.0112	0.9888	72.03
24.5	3,497,717	41,690	0.0119	0.9881	71.23
25.5	3,416,236	47,258	0.0138	0.9862	70.38
26.5	3,216,391	91,780	0.0285	0.9715	69.41
27.5	3,005,167	82,677	0.0275	0.9725	67.42
28.5	2,742,743	96,995	0.0354	0.9646	65.57
29.5	2,550,809	45,189	0.0177	0.9823	63.25
30.5	2,340,914	70,509	0.0301	0.9699	62.13
31.5	2,170,951	71,225	0.0328	0.9672	60.26
32.5	2,032,286	76,305	0.0375	0.9625	58.28
33.5	1,900,777	66,322	0.0349	0.9651	56.09
34.5	1,674,270	34,427	0.0206	0.9794	54.14
35.5	1,431,307	26,146	0.0183	0.9817	53.02
36.5	1,054,188	28,503	0.0270	0.9730	52.05
37.5	919,170	35,946	0.0391	0.9609	50.65
38.5	761,785	21,068	0.0277	0.9723	48.67

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	682,128	21,063	0.0309	0.9691	47.32	
40.5	616,147	19,722	0.0320	0.9680	45.86	
41.5	546,732	19,254	0.0352	0.9648	44.39	
42.5	478,903	11,235	0.0235	0.9765	42.83	
43.5	456,997	9,940	0.0218	0.9782	41.82	
44.5	442,806	9,325	0.0211	0.9789	40.91	
45.5	428,234	6,828	0.0159	0.9841	40.05	
46.5	420,885	15,351	0.0365	0.9635	39.41	
47.5	403,087	18,312	0.0454	0.9546	37.98	
48.5	371,897	29,080	0.0782	0.9218	36.25	
49.5	330,801	20,689	0.0625	0.9375	33.42	
50.5	294,193	11,553	0.0393	0.9607	31.33	
51.5	164,505	2,164	0.0132	0.9868	30.10	
52.5	140,822	2,556	0.0182	0.9818	29.70	
53.5	131,264	4,515	0.0344	0.9656	29.16	
54.5	116,558	4,377	0.0376	0.9624	28.16	
55.5	101,081	1,660	0.0164	0.9836	27.10	
56.5	94,506	899	0.0095	0.9905	26.66	
57.5	89,505	4,988	0.0557	0.9443	26.40	
58.5	79,158	1,150	0.0145	0.9855	24.93	
59.5	72,322	5,988	0.0828	0.9172	24.57	
60.5	63,045	1,730	0.0274	0.9726	22.53	
61.5	57,595	2,291	0.0398	0.9602	21.92	
62.5	51,815	1,784	0.0344	0.9656	21.04	
63.5	44,852	1,595	0.0356	0.9644	20.32	
64.5	38,326	638	0.0167	0.9833	19.60	
65.5	36,030	231	0.0064	0.9936	19.27	
66.5	33,758	631	0.0187	0.9813	19.15	
67.5	27,030	468	0.0173	0.9827	18.79	
68.5	20,163	142	0.0070	0.9930	18.46	
69.5	14,200	467	0.0329	0.9671	18.33	
70.5	11,743	965	0.0822	0.9178	17.73	
71.5	9,651	86	0.0089	0.9911	16.28	
72.5	8,060	12	0.0015	0.9985	16.13	
73.5	5,069	176	0.0347	0.9653	16.11	
74.5	4,450	20	0.0046	0.9954	15.55	
75.5	4,394	445	0.1013	0.8987	15.47	
76.5	3,949		0.0000	1.0000	13.91	
77.5	3,809	34	0.0088	0.9912	13.91	
78.5	3,775	48	0.0128	0.9872	13.78	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,698		0.0000	1.0000	13.61
80.5	3,698	154	0.0416	0.9584	13.61
81.5	3,545	115	0.0325	0.9675	13.04
82.5	2,605	374	0.1437	0.8563	12.62
83.5	2,006	92	0.0457	0.9543	10.81
84.5	1,864	85	0.0455	0.9545	10.31
85.5	1,779	95	0.0536	0.9464	9.84
86.5	1,649		0.0000	1.0000	9.32
87.5	1,649		0.0000	1.0000	9.32
88.5	1,649		0.0000	1.0000	9.32
89.5	1,649		0.0000	1.0000	9.32
90.5	1,274	75	0.0587	0.9413	9.32
91.5	1,200		0.0000	1.0000	8.77
92.5	1,200	178	0.1487	0.8513	8.77
93.5	1,021		0.0000	1.0000	7.47
94.5	807		0.0000	1.0000	7.47
95.5	310		0.0000	1.0000	7.47
96.5	310		0.0000	1.0000	7.47
97.5	310	228	0.7359	0.2641	7.47
98.5	82		0.0000	1.0000	1.97
99.5	82		0.0000	1.0000	1.97
100.5					1.97

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2023

EXPERIENCE BAND 2004-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	24,473,479	6,449	0.0003	0.9997	100.00
0.5	24,371,320	20,190	0.0008	0.9992	99.97
1.5	23,804,089	274,247	0.0115	0.9885	99.89
2.5	23,240,219	740,554	0.0319	0.9681	98.74
3.5	15,086,038	284,647	0.0189	0.9811	95.59
4.5	9,790,555	147,715	0.0151	0.9849	93.79
5.5	7,924,995	42,179	0.0053	0.9947	92.37
6.5	7,644,102	203,841	0.0267	0.9733	91.88
7.5	7,354,372	99,935	0.0136	0.9864	89.43
8.5	3,636,366	77,617	0.0213	0.9787	88.22
9.5	3,336,840	44,682	0.0134	0.9866	86.33
10.5	3,331,440	52,011	0.0156	0.9844	85.18
11.5	2,786,360	10,903	0.0039	0.9961	83.85
12.5	2,690,321	16,819	0.0063	0.9937	83.52
13.5	2,735,042	52,063	0.0190	0.9810	83.00
14.5	2,812,022	25,359	0.0090	0.9910	81.42
15.5	2,924,997	19,511	0.0067	0.9933	80.68
16.5	3,318,696	19,910	0.0060	0.9940	80.15
17.5	3,398,990	26,470	0.0078	0.9922	79.67
18.5	3,476,607	108,154	0.0311	0.9689	79.05
19.5	3,371,486	97,607	0.0290	0.9710	76.59
20.5	3,328,667	51,024	0.0153	0.9847	74.37
21.5	3,178,758	40,986	0.0129	0.9871	73.23
22.5	3,008,867	33,690	0.0112	0.9888	72.28
23.5	2,953,585	32,790	0.0111	0.9889	71.48
24.5	2,902,023	33,673	0.0116	0.9884	70.68
25.5	2,817,753	33,303	0.0118	0.9882	69.86
26.5	2,628,291	67,925	0.0258	0.9742	69.04
27.5	2,422,079	66,551	0.0275	0.9725	67.25
28.5	2,179,716	78,087	0.0358	0.9642	65.40
29.5	2,014,060	35,926	0.0178	0.9822	63.06
30.5	1,866,209	57,473	0.0308	0.9692	61.94
31.5	1,891,159	64,320	0.0340	0.9660	60.03
32.5	1,829,758	70,577	0.0386	0.9614	57.99
33.5	1,712,931	55,065	0.0321	0.9679	55.75
34.5	1,513,380	27,853	0.0184	0.9816	53.96
35.5	1,288,386	17,486	0.0136	0.9864	52.97
36.5	918,905	22,965	0.0250	0.9750	52.25
37.5	792,028	28,936	0.0365	0.9635	50.94
38.5	651,252	17,702	0.0272	0.9728	49.08

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	585,130	20,654	0.0353	0.9647	47.75
40.5	524,827	17,649	0.0336	0.9664	46.06
41.5	465,018	15,767	0.0339	0.9661	44.51
42.5	407,058	6,229	0.0153	0.9847	43.00
43.5	396,670	9,823	0.0248	0.9752	42.34
44.5	388,859	8,476	0.0218	0.9782	41.30
45.5	378,189	6,226	0.0165	0.9835	40.40
46.5	375,706	14,756	0.0393	0.9607	39.73
47.5	367,050	18,219	0.0496	0.9504	38.17
48.5	347,660	28,756	0.0827	0.9173	36.28
49.5	313,872	20,576	0.0656	0.9344	33.27
50.5	279,796	11,520	0.0412	0.9588	31.09
51.5	152,509	2,001	0.0131	0.9869	29.81
52.5	131,323	2,541	0.0194	0.9806	29.42
53.5	126,670	4,428	0.0350	0.9650	28.85
54.5	112,101	4,377	0.0390	0.9610	27.84
55.5	95,825	1,608	0.0168	0.9832	26.76
56.5	89,336	899	0.0101	0.9899	26.31
57.5	84,752	4,988	0.0589	0.9411	26.04
58.5	74,406	1,150	0.0155	0.9845	24.51
59.5	67,599	5,988	0.0886	0.9114	24.13
60.5	58,002	1,663	0.0287	0.9713	21.99
61.5	52,618	2,227	0.0423	0.9577	21.36
62.5	48,162	1,780	0.0369	0.9631	20.46
63.5	41,683	1,591	0.0382	0.9618	19.70
64.5	35,417	638	0.0180	0.9820	18.95
65.5	33,321	193	0.0058	0.9942	18.61
66.5	31,125	452	0.0145	0.9855	18.50
67.5	24,575	468	0.0190	0.9810	18.23
68.5	17,708	129	0.0073	0.9927	17.89
69.5	11,758	356	0.0302	0.9698	17.76
70.5	10,045	965	0.0961	0.9039	17.22
71.5	7,953	35	0.0044	0.9956	15.57
72.5	6,413	1	0.0001	0.9999	15.50
73.5	3,434		0.0000	1.0000	15.50
74.5	3,363	20	0.0060	0.9940	15.50
75.5	4,074	445	0.1092	0.8908	15.40
76.5	3,629		0.0000	1.0000	13.72
77.5	3,489	34	0.0096	0.9904	13.72
78.5	3,456	38	0.0111	0.9889	13.59



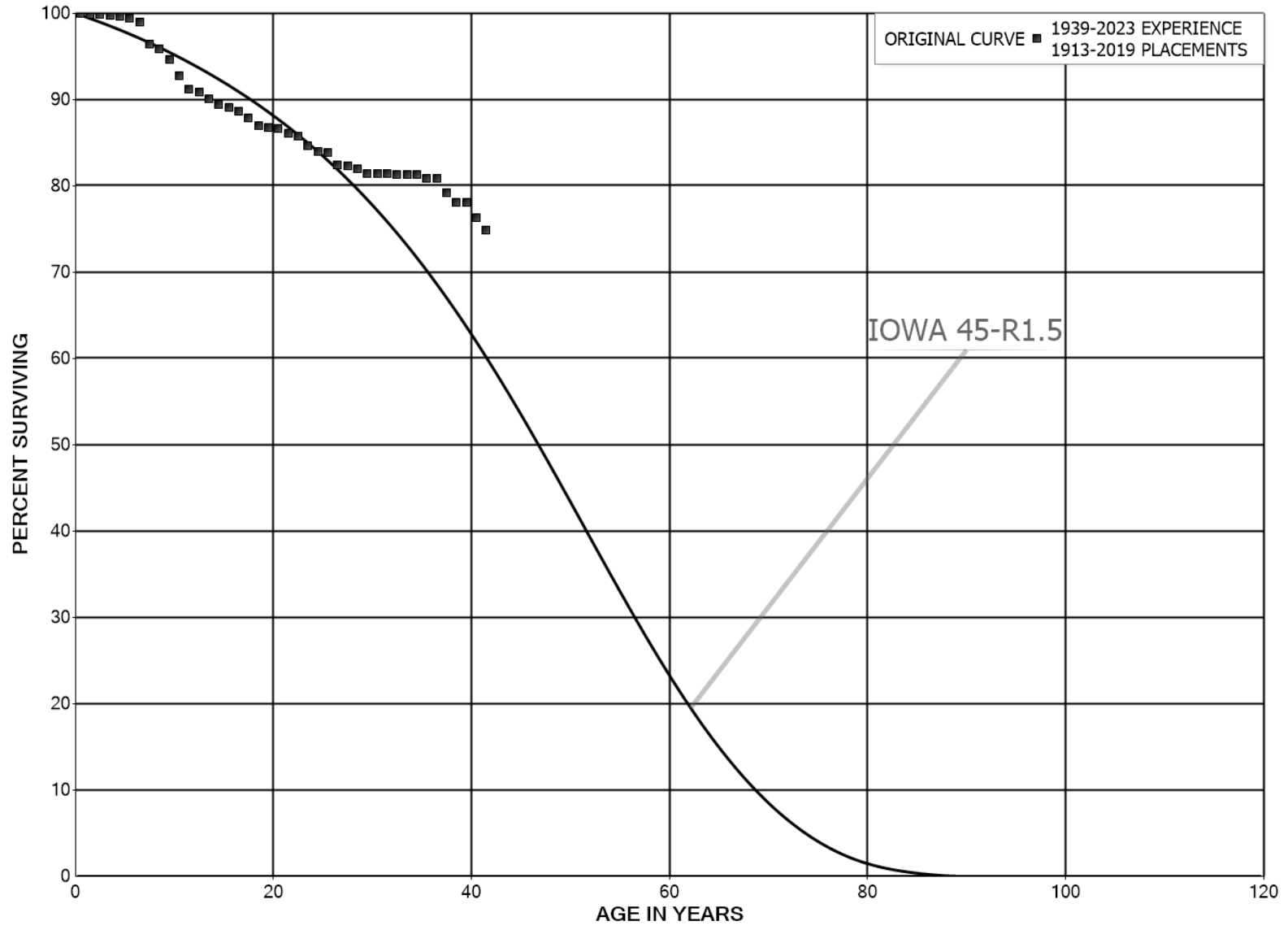
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	3,389		0.0000	1.0000	13.44
80.5	3,698	154	0.0416	0.9584	13.44
81.5	3,545	115	0.0325	0.9675	12.88
82.5	2,605	374	0.1437	0.8563	12.46
83.5	2,006	92	0.0457	0.9543	10.67
84.5	1,864	85	0.0455	0.9545	10.18
85.5	1,779	95	0.0536	0.9464	9.72
86.5	1,649		0.0000	1.0000	9.20
87.5	1,649		0.0000	1.0000	9.20
88.5	1,649		0.0000	1.0000	9.20
89.5	1,649		0.0000	1.0000	9.20
90.5	1,274	75	0.0587	0.9413	9.20
91.5	1,200		0.0000	1.0000	8.66
92.5	1,200	178	0.1487	0.8513	8.66
93.5	1,021		0.0000	1.0000	7.37
94.5	807		0.0000	1.0000	7.37
95.5	310		0.0000	1.0000	7.37
96.5	310		0.0000	1.0000	7.37
97.5	310	228	0.7359	0.2641	7.37
98.5	82		0.0000	1.0000	1.95
99.5	82		0.0000	1.0000	1.95
100.5					1.95

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1913-2019			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
0.0	1,676,254	564	0.0003	0.9997	100.00	
0.5	1,669,892	2,001	0.0012	0.9988	99.97	
1.5	1,664,100	691	0.0004	0.9996	99.85	
2.5	1,662,924	1,372	0.0008	0.9992	99.81	
3.5	1,630,576	918	0.0006	0.9994	99.72	
4.5	335,580	777	0.0023	0.9977	99.67	
5.5	335,645	1,748	0.0052	0.9948	99.44	
6.5	329,100	8,290	0.0252	0.9748	98.92	
7.5	309,365	1,993	0.0064	0.9936	96.43	
8.5	306,085	3,716	0.0121	0.9879	95.81	
9.5	305,336	6,195	0.0203	0.9797	94.64	
10.5	292,153	4,903	0.0168	0.9832	92.72	
11.5	287,243	1,063	0.0037	0.9963	91.17	
12.5	286,786	2,468	0.0086	0.9914	90.83	
13.5	284,442	1,920	0.0067	0.9933	90.05	
14.5	279,119	1,101	0.0039	0.9961	89.44	
15.5	278,580	1,454	0.0052	0.9948	89.09	
16.5	277,081	2,294	0.0083	0.9917	88.62	
17.5	274,997	2,811	0.0102	0.9898	87.89	
18.5	274,790	971	0.0035	0.9965	86.99	
19.5	274,154	336	0.0012	0.9988	86.68	
20.5	274,129	1,510	0.0055	0.9945	86.57	
21.5	272,949	1,294	0.0047	0.9953	86.10	
22.5	272,847	3,572	0.0131	0.9869	85.69	
23.5	269,738	1,967	0.0073	0.9927	84.57	
24.5	263,291	515	0.0020	0.9980	83.95	
25.5	262,398	4,362	0.0166	0.9834	83.79	
26.5	258,036	428	0.0017	0.9983	82.39	
27.5	257,656	878	0.0034	0.9966	82.26	
28.5	256,836	1,721	0.0067	0.9933	81.98	
29.5	255,101	99	0.0004	0.9996	81.43	
30.5	255,002	36	0.0001	0.9999	81.40	
31.5	253,357	298	0.0012	0.9988	81.39	
32.5	253,059	14	0.0001	0.9999	81.29	
33.5	253,045	8	0.0000	1.0000	81.29	
34.5	253,037	1,341	0.0053	0.9947	81.28	
35.5	251,696		0.0000	1.0000	80.85	
36.5	8,123	173	0.0213	0.9787	80.85	
37.5	7,950	105	0.0132	0.9868	79.13	
38.5	7,845		0.0000	1.0000	78.08	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2019			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	7,845	176	0.0224	0.9776	78.08	
40.5	6,075	120	0.0197	0.9803	76.34	
41.5	1,004		0.0000	1.0000	74.83	
42.5	1,004		0.0000	1.0000	74.83	
43.5	1,004		0.0000	1.0000	74.83	
44.5	1,004		0.0000	1.0000	74.83	
45.5	1,004		0.0000	1.0000	74.83	
46.5	1,004		0.0000	1.0000	74.83	
47.5	1,004	67	0.0672	0.9328	74.83	
48.5	936		0.0000	1.0000	69.80	
49.5	936	1	0.0007	0.9993	69.80	
50.5	936		0.0000	1.0000	69.76	
51.5	936		0.0000	1.0000	69.76	
52.5	936		0.0000	1.0000	69.76	
53.5	936		0.0000	1.0000	69.76	
54.5	936	6	0.0063	0.9937	69.76	
55.5	930		0.0000	1.0000	69.32	
56.5	930	30	0.0328	0.9672	69.32	
57.5	899		0.0000	1.0000	67.04	
58.5	377		0.0000	1.0000	67.04	
59.5	377		0.0000	1.0000	67.04	
60.5	377		0.0000	1.0000	67.04	
61.5	377		0.0000	1.0000	67.04	
62.5	377		0.0000	1.0000	67.04	
63.5	377		0.0000	1.0000	67.04	
64.5	377	92	0.2430	0.7570	67.04	
65.5	285		0.0000	1.0000	50.75	
66.5	285		0.0000	1.0000	50.75	
67.5	285		0.0000	1.0000	50.75	
68.5	285		0.0000	1.0000	50.75	
69.5	285		0.0000	1.0000	50.75	
70.5	285		0.0000	1.0000	50.75	
71.5	285		0.0000	1.0000	50.75	
72.5	285		0.0000	1.0000	50.75	
73.5	285		0.0000	1.0000	50.75	
74.5	285		0.0000	1.0000	50.75	
75.5	285		0.0000	1.0000	50.75	
76.5	285		0.0000	1.0000	50.75	
77.5	285		0.0000	1.0000	50.75	
78.5	285		0.0000	1.0000	50.75	

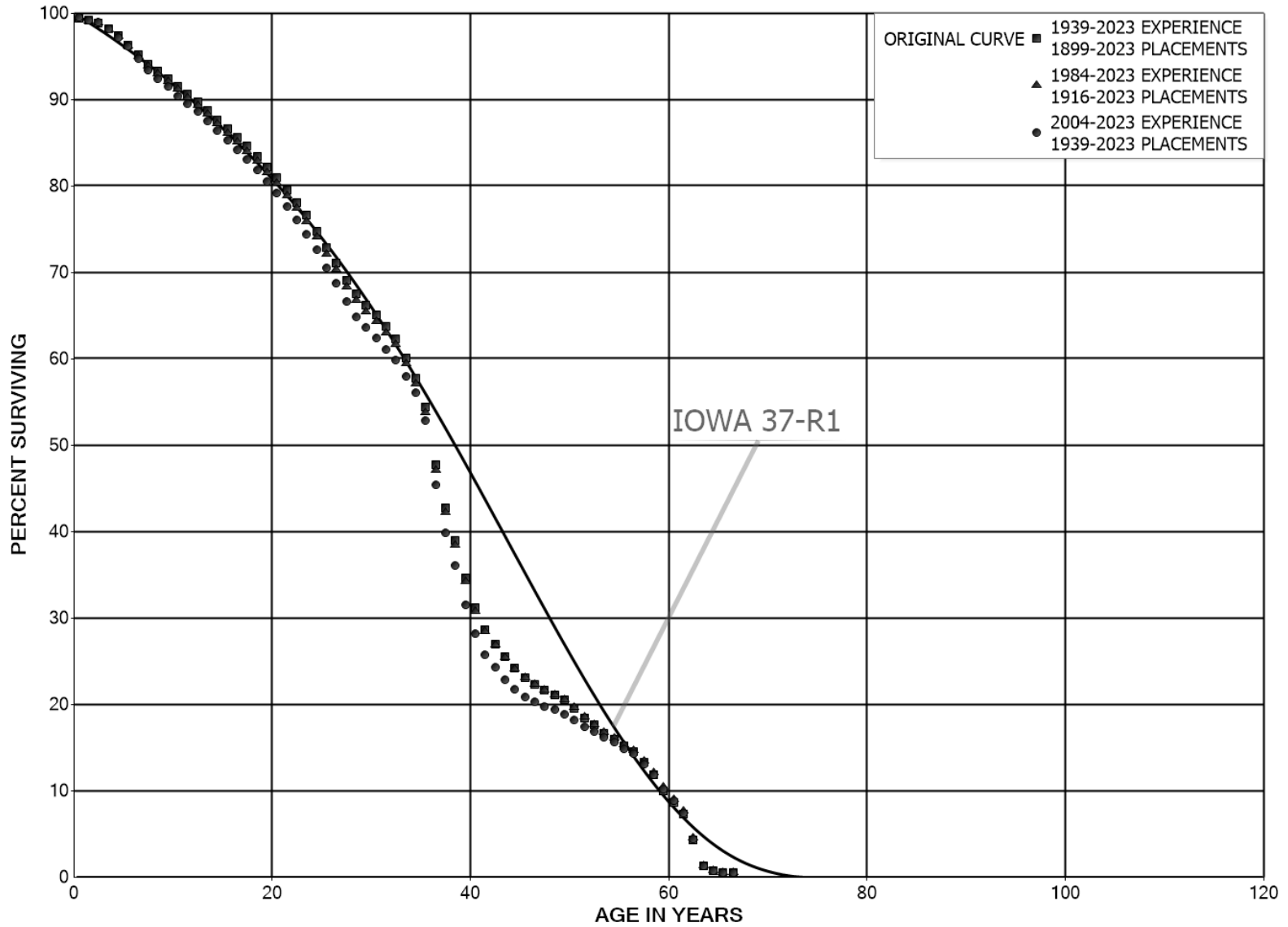
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1913-2019			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	285		0.0000	1.0000	50.75
80.5	285		0.0000	1.0000	50.75
81.5	285		0.0000	1.0000	50.75
82.5	285		0.0000	1.0000	50.75
83.5	285		0.0000	1.0000	50.75
84.5	285		0.0000	1.0000	50.75
85.5	285		0.0000	1.0000	50.75
86.5	285		0.0000	1.0000	50.75
87.5	190		0.0000	1.0000	50.75
88.5	21		0.0000	1.0000	50.75
89.5	21		0.0000	1.0000	50.75
90.5	21		0.0000	1.0000	50.75
91.5	21		0.0000	1.0000	50.75
92.5	21		0.0000	1.0000	50.75
93.5	21		0.0000	1.0000	50.75
94.5					50.75

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 380.00 SERVICES  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	255,764,747	1,422,693	0.0056	0.9944	100.00
0.5	231,710,549	753,395	0.0033	0.9967	99.44
1.5	212,481,608	555,446	0.0026	0.9974	99.12
2.5	194,235,471	1,316,580	0.0068	0.9932	98.86
3.5	177,147,023	1,516,596	0.0086	0.9914	98.19
4.5	162,143,162	1,729,777	0.0107	0.9893	97.35
5.5	148,621,632	1,740,251	0.0117	0.9883	96.31
6.5	136,728,135	1,541,634	0.0113	0.9887	95.18
7.5	126,919,366	1,183,523	0.0093	0.9907	94.11
8.5	118,239,164	1,066,205	0.0090	0.9910	93.23
9.5	110,392,580	1,078,404	0.0098	0.9902	92.39
10.5	103,302,065	1,008,457	0.0098	0.9902	91.49
11.5	97,014,304	982,403	0.0101	0.9899	90.60
12.5	91,840,579	1,005,114	0.0109	0.9891	89.68
13.5	87,574,150	1,073,968	0.0123	0.9877	88.70
14.5	82,515,412	960,065	0.0116	0.9884	87.61
15.5	78,563,283	912,433	0.0116	0.9884	86.59
16.5	75,009,473	894,471	0.0119	0.9881	85.59
17.5	71,755,425	958,166	0.0134	0.9866	84.56
18.5	68,517,784	1,025,230	0.0150	0.9850	83.44
19.5	64,599,416	985,381	0.0153	0.9847	82.19
20.5	61,231,750	1,066,419	0.0174	0.9826	80.93
21.5	57,874,860	1,060,481	0.0183	0.9817	79.52
22.5	54,300,233	1,041,388	0.0192	0.9808	78.07
23.5	50,203,836	1,175,890	0.0234	0.9766	76.57
24.5	46,320,119	1,215,307	0.0262	0.9738	74.78
25.5	42,032,364	1,004,504	0.0239	0.9761	72.81
26.5	37,984,608	1,063,230	0.0280	0.9720	71.07
27.5	33,788,834	797,290	0.0236	0.9764	69.08
28.5	30,102,367	549,718	0.0183	0.9817	67.45
29.5	26,593,603	485,979	0.0183	0.9817	66.22
30.5	23,845,712	487,325	0.0204	0.9796	65.01
31.5	21,360,665	472,203	0.0221	0.9779	63.68
32.5	19,272,614	692,668	0.0359	0.9641	62.28
33.5	16,674,519	646,214	0.0388	0.9612	60.04
34.5	14,039,772	809,977	0.0577	0.9423	57.71
35.5	12,245,075	1,487,680	0.1215	0.8785	54.38
36.5	10,401,838	1,094,721	0.1052	0.8948	47.77
37.5	8,975,523	794,407	0.0885	0.9115	42.75
38.5	7,832,633	872,783	0.1114	0.8886	38.96

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	6,670,120	662,033	0.0993	0.9007	34.62
40.5	5,800,473	474,572	0.0818	0.9182	31.19
41.5	5,025,406	290,232	0.0578	0.9422	28.63
42.5	4,500,659	252,558	0.0561	0.9439	26.98
43.5	3,944,199	202,659	0.0514	0.9486	25.47
44.5	3,359,922	148,594	0.0442	0.9558	24.16
45.5	2,993,244	104,382	0.0349	0.9651	23.09
46.5	2,755,159	85,665	0.0311	0.9689	22.28
47.5	2,612,732	62,321	0.0239	0.9761	21.59
48.5	2,533,270	71,129	0.0281	0.9719	21.08
49.5	2,420,099	115,614	0.0478	0.9522	20.48
50.5	2,244,969	123,586	0.0551	0.9449	19.51
51.5	1,959,491	89,435	0.0456	0.9544	18.43
52.5	1,767,445	102,944	0.0582	0.9418	17.59
53.5	1,568,976	58,993	0.0376	0.9624	16.57
54.5	1,397,804	71,629	0.0512	0.9488	15.94
55.5	1,171,504	48,860	0.0417	0.9583	15.13
56.5	1,005,659	80,906	0.0805	0.9195	14.50
57.5	853,170	94,301	0.1105	0.8895	13.33
58.5	655,474	104,613	0.1596	0.8404	11.86
59.5	496,035	64,437	0.1299	0.8701	9.96
60.5	396,173	61,989	0.1565	0.8435	8.67
61.5	323,221	135,281	0.4185	0.5815	7.31
62.5	177,924	126,115	0.7088	0.2912	4.25
63.5	49,303	20,815	0.4222	0.5778	1.24
64.5	28,368	7,732	0.2726	0.7274	0.72
65.5	20,579	140	0.0068	0.9932	0.52
66.5	995	383	0.3851	0.6149	0.52
67.5	612	130	0.2125	0.7875	0.32
68.5	482	49	0.1023	0.8977	0.25
69.5	432	171	0.3964	0.6036	0.22
70.5	261	46	0.1779	0.8221	0.14
71.5	215	68	0.3165	0.6835	0.11
72.5	147	16	0.1123	0.8877	0.08
73.5	130	52	0.3976	0.6024	0.07
74.5	78	49	0.6290	0.3710	0.04
75.5	29	8	0.2829	0.7171	0.02
76.5	21	8	0.3945	0.6055	0.01
77.5	13	13	1.0000		0.01
78.5					



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	244,003,503	1,421,178	0.0058	0.9942	100.00
0.5	220,702,493	747,177	0.0034	0.9966	99.42
1.5	202,382,792	547,561	0.0027	0.9973	99.08
2.5	185,097,855	1,309,034	0.0071	0.9929	98.81
3.5	168,843,095	1,508,434	0.0089	0.9911	98.11
4.5	154,708,148	1,721,975	0.0111	0.9889	97.24
5.5	141,722,950	1,727,647	0.0122	0.9878	96.16
6.5	130,254,297	1,532,819	0.0118	0.9882	94.98
7.5	120,663,692	1,166,187	0.0097	0.9903	93.87
8.5	112,127,862	1,048,147	0.0093	0.9907	92.96
9.5	104,422,872	1,060,600	0.0102	0.9898	92.09
10.5	97,526,988	991,485	0.0102	0.9898	91.15
11.5	91,712,333	972,185	0.0106	0.9894	90.23
12.5	86,943,788	985,398	0.0113	0.9887	89.27
13.5	83,035,350	1,061,229	0.0128	0.9872	88.26
14.5	78,313,543	948,785	0.0121	0.9879	87.13
15.5	74,728,459	900,799	0.0121	0.9879	86.08
16.5	71,488,007	879,718	0.0123	0.9877	85.04
17.5	68,486,999	945,560	0.0138	0.9862	83.99
18.5	65,558,122	1,007,279	0.0154	0.9846	82.83
19.5	61,948,446	970,139	0.0157	0.9843	81.56
20.5	58,813,797	1,052,232	0.0179	0.9821	80.28
21.5	55,676,452	1,040,851	0.0187	0.9813	78.85
22.5	52,325,560	1,026,245	0.0196	0.9804	77.37
23.5	48,440,070	1,161,809	0.0240	0.9760	75.85
24.5	44,771,025	1,192,890	0.0266	0.9734	74.03
25.5	40,653,479	988,018	0.0243	0.9757	72.06
26.5	36,769,163	1,047,825	0.0285	0.9715	70.31
27.5	32,757,224	780,004	0.0238	0.9762	68.31
28.5	29,213,547	539,366	0.0185	0.9815	66.68
29.5	25,806,727	467,738	0.0181	0.9819	65.45
30.5	23,156,864	472,523	0.0204	0.9796	64.26
31.5	20,751,699	449,829	0.0217	0.9783	62.95
32.5	18,746,901	682,572	0.0364	0.9636	61.59
33.5	16,225,748	629,863	0.0388	0.9612	59.34
34.5	13,655,819	789,800	0.0578	0.9422	57.04
35.5	11,923,893	1,473,105	0.1235	0.8765	53.74
36.5	10,122,887	1,063,795	0.1051	0.8949	47.10
37.5	8,746,404	775,755	0.0887	0.9113	42.15
38.5	7,625,535	852,248	0.1118	0.8882	38.41

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	6,484,594	638,253	0.0984	0.9016	34.12	
40.5	5,638,546	439,081	0.0779	0.9221	30.76	
41.5	4,902,227	268,772	0.0548	0.9452	28.37	
42.5	4,401,992	240,373	0.0546	0.9454	26.81	
43.5	3,860,914	191,619	0.0496	0.9504	25.35	
44.5	3,311,515	139,692	0.0422	0.9578	24.09	
45.5	2,954,688	100,437	0.0340	0.9660	23.07	
46.5	2,721,036	83,874	0.0308	0.9692	22.29	
47.5	2,580,659	59,959	0.0232	0.9768	21.60	
48.5	2,483,822	70,101	0.0282	0.9718	21.10	
49.5	2,371,679	109,223	0.0461	0.9539	20.50	
50.5	2,202,940	117,989	0.0536	0.9464	19.56	
51.5	1,923,059	88,623	0.0461	0.9539	18.51	
52.5	1,731,825	92,452	0.0534	0.9466	17.66	
53.5	1,532,865	57,655	0.0376	0.9624	16.72	
54.5	1,363,073	70,839	0.0520	0.9480	16.09	
55.5	1,137,562	48,778	0.0429	0.9571	15.25	
56.5	971,841	80,760	0.0831	0.9169	14.60	
57.5	819,498	78,918	0.0963	0.9037	13.38	
58.5	637,227	91,953	0.1443	0.8557	12.10	
59.5	490,489	64,380	0.1313	0.8687	10.35	
60.5	390,726	61,959	0.1586	0.8414	8.99	
61.5	317,885	130,197	0.4096	0.5904	7.57	
62.5	177,731	126,041	0.7092	0.2908	4.47	
63.5	49,258	20,782	0.4219	0.5781	1.30	
64.5	28,356	7,732	0.2727	0.7273	0.75	
65.5	20,566	140	0.0068	0.9932	0.55	
66.5	982	383	0.3901	0.6099	0.54	
67.5	612	130	0.2125	0.7875	0.33	
68.5	482	49	0.1023	0.8977	0.26	
69.5	432	171	0.3964	0.6036	0.23	
70.5	261	46	0.1779	0.8221	0.14	
71.5	215	68	0.3165	0.6835	0.12	
72.5	147	16	0.1123	0.8877	0.08	
73.5	130	52	0.3976	0.6024	0.07	
74.5	78	49	0.6290	0.3710	0.04	
75.5	29	8	0.2829	0.7171	0.02	
76.5	21	8	0.3945	0.6055	0.01	
77.5	13	13	1.0000		0.01	
78.5						

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1939-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	180,339,043	866,658	0.0048	0.9952	100.00
0.5	160,096,049	520,464	0.0033	0.9967	99.52
1.5	144,180,349	283,065	0.0020	0.9980	99.20
2.5	129,345,792	1,049,698	0.0081	0.9919	99.00
3.5	116,337,846	1,164,651	0.0100	0.9900	98.20
4.5	105,093,584	1,144,940	0.0109	0.9891	97.21
5.5	96,091,961	1,440,595	0.0150	0.9850	96.16
6.5	88,606,594	1,209,498	0.0137	0.9863	94.71
7.5	83,226,146	915,477	0.0110	0.9890	93.42
8.5	78,885,201	801,597	0.0102	0.9898	92.39
9.5	75,297,815	835,264	0.0111	0.9889	91.45
10.5	72,034,246	747,720	0.0104	0.9896	90.44
11.5	69,184,930	702,807	0.0102	0.9898	89.50
12.5	67,140,392	809,982	0.0121	0.9879	88.59
13.5	66,097,059	860,363	0.0130	0.9870	87.52
14.5	64,006,951	837,348	0.0131	0.9869	86.38
15.5	61,711,055	793,859	0.0129	0.9871	85.25
16.5	59,767,533	786,282	0.0132	0.9868	84.16
17.5	57,856,608	863,012	0.0149	0.9851	83.05
18.5	55,898,240	926,149	0.0166	0.9834	81.81
19.5	53,006,553	874,800	0.0165	0.9835	80.46
20.5	50,471,950	984,599	0.0195	0.9805	79.13
21.5	48,044,806	969,850	0.0202	0.9798	77.58
22.5	45,424,130	942,571	0.0208	0.9792	76.02
23.5	42,170,284	1,062,059	0.0252	0.9748	74.44
24.5	39,197,344	1,094,160	0.0279	0.9721	72.57
25.5	35,521,932	927,400	0.0261	0.9739	70.54
26.5	31,933,766	987,474	0.0309	0.9691	68.70
27.5	27,995,753	724,634	0.0259	0.9741	66.57
28.5	24,485,154	484,619	0.0198	0.9802	64.85
29.5	21,181,902	393,262	0.0186	0.9814	63.57
30.5	18,680,776	382,566	0.0205	0.9795	62.39
31.5	16,682,922	353,808	0.0212	0.9788	61.11
32.5	15,007,969	474,116	0.0316	0.9684	59.81
33.5	12,836,989	405,498	0.0316	0.9684	57.92
34.5	10,641,534	622,619	0.0585	0.9415	56.09
35.5	9,351,783	1,322,322	0.1414	0.8586	52.81
36.5	7,929,088	959,365	0.1210	0.8790	45.34
37.5	6,824,408	644,046	0.0944	0.9056	39.86
38.5	6,049,380	775,883	0.1283	0.8717	36.10

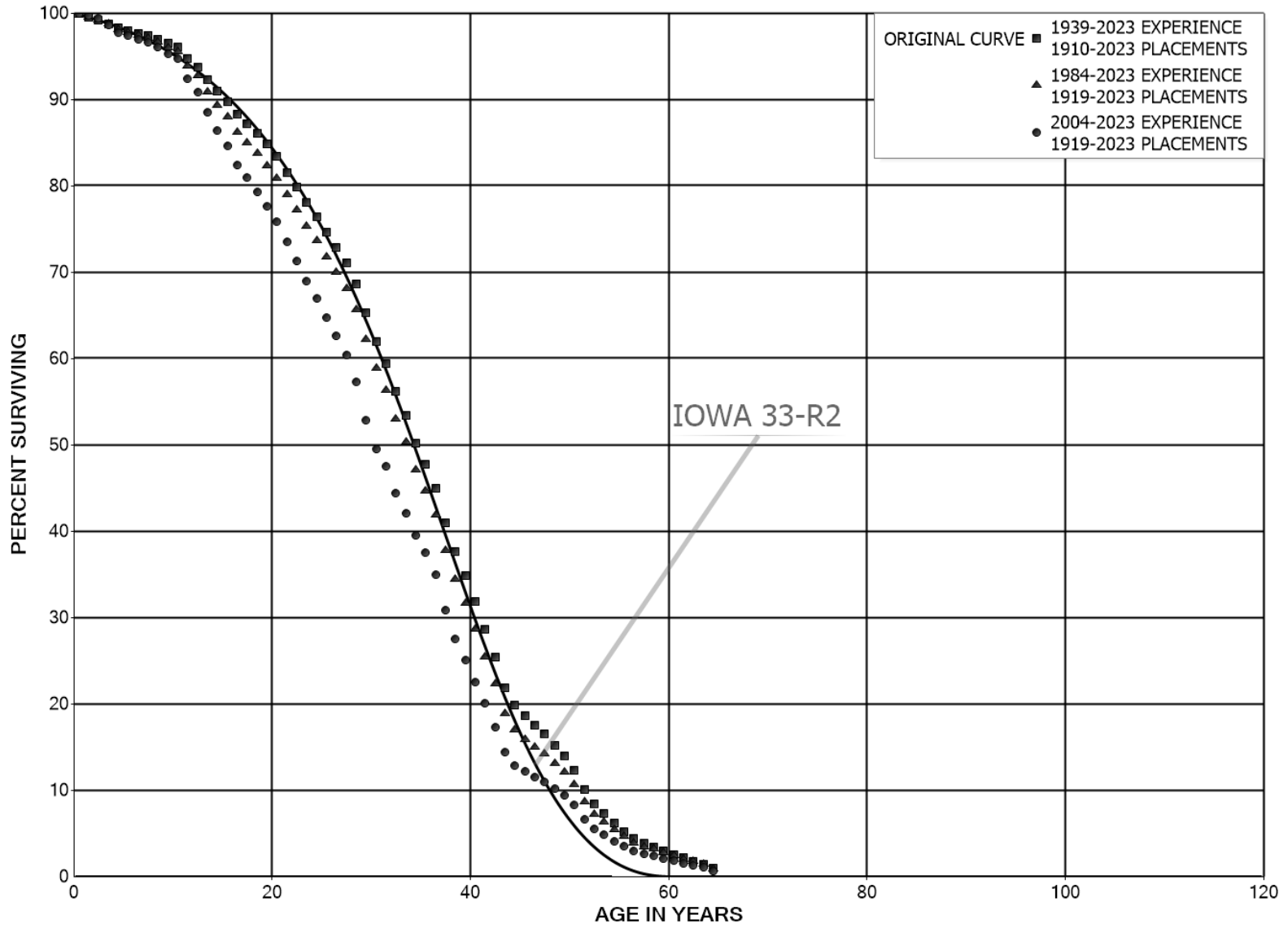
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1939-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,144,797	544,502	0.1058	0.8942	31.47
40.5	4,506,979	381,662	0.0847	0.9153	28.14
41.5	3,940,510	228,825	0.0581	0.9419	25.75
42.5	3,586,082	207,593	0.0579	0.9421	24.26
43.5	3,178,379	160,521	0.0505	0.9495	22.85
44.5	2,736,665	107,767	0.0394	0.9606	21.70
45.5	2,486,465	70,088	0.0282	0.9718	20.85
46.5	2,357,478	59,771	0.0254	0.9746	20.26
47.5	2,296,967	43,655	0.0190	0.9810	19.74
48.5	2,269,832	58,777	0.0259	0.9741	19.37
49.5	2,206,783	79,304	0.0359	0.9641	18.87
50.5	2,074,744	85,541	0.0412	0.9588	18.19
51.5	1,827,402	58,017	0.0317	0.9683	17.44
52.5	1,668,710	65,000	0.0390	0.9610	16.89
53.5	1,499,458	54,118	0.0361	0.9639	16.23
54.5	1,347,664	65,905	0.0489	0.9511	15.64
55.5	1,130,581	47,458	0.0420	0.9580	14.88
56.5	966,302	79,170	0.0819	0.9181	14.25
57.5	816,404	77,427	0.0948	0.9052	13.09
58.5	635,657	90,762	0.1428	0.8572	11.84
59.5	490,069	64,334	0.1313	0.8687	10.15
60.5	390,311	61,883	0.1585	0.8415	8.82
61.5	317,464	130,154	0.4100	0.5900	7.42
62.5	177,295	125,872	0.7100	0.2900	4.38
63.5	48,917	20,689	0.4229	0.5771	1.27
64.5	28,109	7,732	0.2751	0.7249	0.73
65.5	20,319	132	0.0065	0.9935	0.53
66.5	743	367	0.4932	0.5068	0.53
67.5	377	97	0.2576	0.7424	0.27
68.5	280	16	0.0584	0.9416	0.20
69.5	263	114	0.4321	0.5679	0.19
70.5	150	22	0.1452	0.8548	0.11
71.5	128	35	0.2736	0.7264	0.09
72.5	93		0.0000	1.0000	0.07
73.5	93	44	0.4688	0.5312	0.07
74.5	49	49	1.0000		0.04
75.5					

COLUMBIA GAS OF KENTUCKY, INC.  
ACCOUNT 381.00 METERS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	29,739,659	25,432	0.0009	0.9991	100.00
0.5	26,688,730	118,202	0.0044	0.9956	99.91
1.5	24,254,242	63,722	0.0026	0.9974	99.47
2.5	22,843,915	102,149	0.0045	0.9955	99.21
3.5	21,744,751	116,451	0.0054	0.9946	98.77
4.5	20,250,800	53,665	0.0027	0.9973	98.24
5.5	19,568,702	61,910	0.0032	0.9968	97.98
6.5	18,692,407	61,727	0.0033	0.9967	97.67
7.5	18,046,749	68,034	0.0038	0.9962	97.35
8.5	17,130,690	92,089	0.0054	0.9946	96.98
9.5	16,665,231	75,037	0.0045	0.9955	96.46
10.5	16,257,326	226,350	0.0139	0.9861	96.02
11.5	15,642,694	156,773	0.0100	0.9900	94.69
12.5	15,247,628	242,653	0.0159	0.9841	93.74
13.5	14,713,644	213,408	0.0145	0.9855	92.25
14.5	13,995,847	176,551	0.0126	0.9874	90.91
15.5	13,478,933	224,260	0.0166	0.9834	89.76
16.5	12,892,717	151,741	0.0118	0.9882	88.27
17.5	12,488,926	166,592	0.0133	0.9867	87.23
18.5	12,020,186	175,252	0.0146	0.9854	86.06
19.5	11,364,241	190,202	0.0167	0.9833	84.81
20.5	10,743,165	240,423	0.0224	0.9776	83.39
21.5	10,358,063	216,377	0.0209	0.9791	81.52
22.5	9,907,056	215,085	0.0217	0.9783	79.82
23.5	9,676,104	205,889	0.0213	0.9787	78.09
24.5	9,217,249	215,976	0.0234	0.9766	76.43
25.5	8,655,979	203,791	0.0235	0.9765	74.64
26.5	8,439,307	216,003	0.0256	0.9744	72.88
27.5	7,802,201	259,564	0.0333	0.9667	71.01
28.5	7,580,553	371,118	0.0490	0.9510	68.65
29.5	7,095,100	359,415	0.0507	0.9493	65.29
30.5	6,690,845	284,342	0.0425	0.9575	61.98
31.5	6,246,488	338,022	0.0541	0.9459	59.35
32.5	5,838,439	280,690	0.0481	0.9519	56.14
33.5	5,369,968	327,245	0.0609	0.9391	53.44
34.5	4,864,778	239,615	0.0493	0.9507	50.18
35.5	4,550,650	263,980	0.0580	0.9420	47.71
36.5	4,233,091	375,951	0.0888	0.9112	44.94
37.5	3,907,074	315,768	0.0808	0.9192	40.95
38.5	3,594,851	271,117	0.0754	0.9246	37.64

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2023			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,327,162	285,574	0.0858	0.9142	34.80
40.5	3,041,618	310,850	0.1022	0.8978	31.82
41.5	2,730,829	305,557	0.1119	0.8881	28.56
42.5	2,425,252	336,562	0.1388	0.8612	25.37
43.5	2,088,761	191,274	0.0916	0.9084	21.85
44.5	1,898,655	117,491	0.0619	0.9381	19.85
45.5	1,781,109	108,666	0.0610	0.9390	18.62
46.5	1,672,523	92,441	0.0553	0.9447	17.48
47.5	1,580,323	124,793	0.0790	0.9210	16.52
48.5	1,455,599	118,958	0.0817	0.9183	15.21
49.5	1,336,840	163,164	0.1221	0.8779	13.97
50.5	1,173,799	212,395	0.1809	0.8191	12.26
51.5	961,881	157,660	0.1639	0.8361	10.04
52.5	804,223	111,464	0.1386	0.8614	8.40
53.5	692,724	105,114	0.1517	0.8483	7.23
54.5	587,577	89,129	0.1517	0.8483	6.14
55.5	498,426	74,657	0.1498	0.8502	5.21
56.5	423,736	54,290	0.1281	0.8719	4.43
57.5	369,404	40,970	0.1109	0.8891	3.86
58.5	328,434	50,231	0.1529	0.8471	3.43
59.5	278,203	34,074	0.1225	0.8775	2.91
60.5	244,129	39,267	0.1608	0.8392	2.55
61.5	204,862	36,132	0.1764	0.8236	2.14
62.5	168,731	35,448	0.2101	0.7899	1.76
63.5	133,283	44,540	0.3342	0.6658	1.39
64.5	88,743	9,432	0.1063	0.8937	0.93
65.5	79,311	13,021	0.1642	0.8358	0.83
66.5	66,290	12,480	0.1883	0.8117	0.69
67.5	53,810	2,906	0.0540	0.9460	0.56
68.5	50,904	14,241	0.2798	0.7202	0.53
69.5	36,663	4,248	0.1159	0.8841	0.38
70.5	32,415	3,945	0.1217	0.8783	0.34
71.5	28,470	3,426	0.1203	0.8797	0.30
72.5	25,044	6,093	0.2433	0.7567	0.26
73.5	18,951	3,636	0.1919	0.8081	0.20
74.5	15,315	4,546	0.2968	0.7032	0.16
75.5	10,770	4,280	0.3975	0.6025	0.11
76.5	6,489	812	0.1252	0.8748	0.07
77.5	5,677	1,718	0.3026	0.6974	0.06
78.5	3,959	174	0.0440	0.9560	0.04

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	3,785	69	0.0183	0.9817	0.04	
80.5	3,716	264	0.0709	0.9291	0.04	
81.5	3,452	1,464	0.4241	0.5759	0.04	
82.5	1,988	1,802	0.9064	0.0936	0.02	
83.5	186	165	0.8844	0.1156	0.00	
84.5	22		0.0000	1.0000	0.00	
85.5	22		0.0000	1.0000	0.00	
86.5	22		0.0000	1.0000	0.00	
87.5	22		0.0000	1.0000	0.00	
88.5	22		0.0000	1.0000	0.00	
89.5	22		0.0000	1.0000	0.00	
90.5	22		0.0000	1.0000	0.00	
91.5	22		0.0000	1.0000	0.00	
92.5	22	22	1.0000		0.00	
93.5						



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1919-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	24,397,353	19,185	0.0008	0.9992	100.00
0.5	21,443,949	83,442	0.0039	0.9961	99.92
1.5	19,330,700	59,656	0.0031	0.9969	99.53
2.5	18,190,028	99,520	0.0055	0.9945	99.23
3.5	17,447,180	113,353	0.0065	0.9935	98.68
4.5	16,192,761	50,115	0.0031	0.9969	98.04
5.5	15,577,920	58,917	0.0038	0.9962	97.74
6.5	14,727,089	51,568	0.0035	0.9965	97.37
7.5	14,111,691	64,976	0.0046	0.9954	97.03
8.5	13,228,533	81,663	0.0062	0.9938	96.58
9.5	12,784,056	64,990	0.0051	0.9949	95.98
10.5	12,394,164	215,731	0.0174	0.9826	95.50
11.5	11,973,884	146,503	0.0122	0.9878	93.83
12.5	11,773,821	230,938	0.0196	0.9804	92.69
13.5	11,522,613	201,255	0.0175	0.9825	90.87
14.5	11,009,518	167,604	0.0152	0.9848	89.28
15.5	10,712,273	212,906	0.0199	0.9801	87.92
16.5	10,292,605	143,452	0.0139	0.9861	86.17
17.5	10,041,173	153,158	0.0153	0.9847	84.97
18.5	9,779,441	158,794	0.0162	0.9838	83.68
19.5	9,270,868	162,564	0.0175	0.9825	82.32
20.5	8,820,635	210,024	0.0238	0.9762	80.88
21.5	8,597,679	192,719	0.0224	0.9776	78.95
22.5	8,247,082	200,338	0.0243	0.9757	77.18
23.5	8,148,271	182,430	0.0224	0.9776	75.30
24.5	7,886,835	199,311	0.0253	0.9747	73.62
25.5	7,434,573	187,471	0.0252	0.9748	71.76
26.5	7,331,957	202,078	0.0276	0.9724	69.95
27.5	6,802,426	240,410	0.0353	0.9647	68.02
28.5	6,649,228	350,906	0.0528	0.9472	65.62
29.5	6,248,295	332,356	0.0532	0.9468	62.15
30.5	5,905,930	259,188	0.0439	0.9561	58.85
31.5	5,515,318	323,235	0.0586	0.9414	56.27
32.5	5,172,208	266,865	0.0516	0.9484	52.97
33.5	4,777,520	302,615	0.0633	0.9367	50.24
34.5	4,333,140	224,145	0.0517	0.9483	47.05
35.5	4,073,350	255,511	0.0627	0.9373	44.62
36.5	3,784,120	366,544	0.0969	0.9031	41.82
37.5	3,426,229	305,130	0.0891	0.9109	37.77
38.5	3,126,409	257,954	0.0825	0.9175	34.41

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	2,869,012	267,443	0.0932	0.9068	31.57	
40.5	2,602,294	289,843	0.1114	0.8886	28.62	
41.5	2,316,138	283,829	0.1225	0.8775	25.44	
42.5	2,044,424	318,272	0.1557	0.8443	22.32	
43.5	1,733,798	174,478	0.1006	0.8994	18.84	
44.5	1,569,046	99,902	0.0637	0.9363	16.95	
45.5	1,476,087	89,609	0.0607	0.9393	15.87	
46.5	1,390,660	71,551	0.0515	0.9485	14.91	
47.5	1,322,395	99,960	0.0756	0.9244	14.14	
48.5	1,222,868	92,223	0.0754	0.9246	13.07	
49.5	1,131,406	137,383	0.1214	0.8786	12.08	
50.5	994,024	190,161	0.1913	0.8087	10.62	
51.5	803,915	132,321	0.1646	0.8354	8.59	
52.5	672,799	82,424	0.1225	0.8775	7.17	
53.5	592,881	88,185	0.1487	0.8513	6.29	
54.5	506,710	75,336	0.1487	0.8513	5.36	
55.5	437,966	68,586	0.1566	0.8434	4.56	
56.5	369,380	43,807	0.1186	0.8814	3.85	
57.5	325,573	24,602	0.0756	0.9244	3.39	
58.5	300,971	42,495	0.1412	0.8588	3.13	
59.5	260,402	29,199	0.1121	0.8879	2.69	
60.5	231,203	36,791	0.1591	0.8409	2.39	
61.5	194,412	29,315	0.1508	0.8492	2.01	
62.5	165,328	35,228	0.2131	0.7869	1.71	
63.5	130,100	44,540	0.3424	0.6576	1.34	
64.5	88,743	9,432	0.1063	0.8937	0.88	
65.5	79,311	13,021	0.1642	0.8358	0.79	
66.5	66,290	12,480	0.1883	0.8117	0.66	
67.5	53,810	2,906	0.0540	0.9460	0.54	
68.5	50,904	14,241	0.2798	0.7202	0.51	
69.5	36,663	4,248	0.1159	0.8841	0.36	
70.5	32,415	3,945	0.1217	0.8783	0.32	
71.5	28,470	3,426	0.1203	0.8797	0.28	
72.5	25,044	6,093	0.2433	0.7567	0.25	
73.5	18,951	3,636	0.1919	0.8081	0.19	
74.5	15,315	4,546	0.2968	0.7032	0.15	
75.5	10,770	4,280	0.3975	0.6025	0.11	
76.5	6,489	812	0.1252	0.8748	0.06	
77.5	5,677	1,718	0.3026	0.6974	0.06	
78.5	3,959	174	0.0440	0.9560	0.04	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	3,785	69	0.0183	0.9817	0.04	
80.5	3,716	264	0.0709	0.9291	0.04	
81.5	3,452	1,464	0.4241	0.5759	0.03	
82.5	1,988	1,802	0.9064	0.0936	0.02	
83.5	186	165	0.8844	0.1156	0.00	
84.5	22		0.0000	1.0000	0.00	
85.5	22		0.0000	1.0000	0.00	
86.5	22		0.0000	1.0000	0.00	
87.5	22		0.0000	1.0000	0.00	
88.5	22		0.0000	1.0000	0.00	
89.5	22		0.0000	1.0000	0.00	
90.5	22		0.0000	1.0000	0.00	
91.5	22		0.0000	1.0000	0.00	
92.5	22	22	1.0000		0.00	
93.5						

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1919-2023

EXPERIENCE BAND 2004-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	17,778,945	18,868	0.0011	0.9989	100.00
0.5	15,000,224	23,188	0.0015	0.9985	99.89
1.5	12,813,738	43,588	0.0034	0.9966	99.74
2.5	11,618,465	85,473	0.0074	0.9926	99.40
3.5	10,624,356	102,435	0.0096	0.9904	98.67
4.5	9,419,030	33,879	0.0036	0.9964	97.72
5.5	9,391,825	41,417	0.0044	0.9956	97.37
6.5	8,543,522	31,129	0.0036	0.9964	96.94
7.5	8,533,152	48,658	0.0057	0.9943	96.58
8.5	7,659,224	57,898	0.0076	0.9924	96.03
9.5	7,678,791	44,314	0.0058	0.9942	95.31
10.5	7,516,136	184,963	0.0246	0.9754	94.76
11.5	7,231,100	123,594	0.0171	0.9829	92.42
12.5	7,234,573	188,529	0.0261	0.9739	90.85
13.5	7,136,268	164,221	0.0230	0.9770	88.48
14.5	6,787,551	147,535	0.0217	0.9783	86.44
15.5	6,655,133	174,073	0.0262	0.9738	84.56
16.5	6,397,442	111,934	0.0175	0.9825	82.35
17.5	6,353,248	125,398	0.0197	0.9803	80.91
18.5	6,229,854	136,615	0.0219	0.9781	79.31
19.5	5,740,860	130,264	0.0227	0.9773	77.57
20.5	5,344,815	164,729	0.0308	0.9692	75.81
21.5	5,321,246	156,300	0.0294	0.9706	73.48
22.5	5,187,083	168,447	0.0325	0.9675	71.32
23.5	5,322,270	160,506	0.0302	0.9698	69.00
24.5	5,134,647	169,873	0.0331	0.9669	66.92
25.5	4,643,794	149,900	0.0323	0.9677	64.71
26.5	4,505,427	161,530	0.0359	0.9641	62.62
27.5	3,939,036	199,317	0.0506	0.9494	60.37
28.5	3,784,624	292,929	0.0774	0.9226	57.32
29.5	3,413,464	220,973	0.0647	0.9353	52.88
30.5	3,193,101	126,159	0.0395	0.9605	49.46
31.5	3,060,273	202,982	0.0663	0.9337	47.51
32.5	2,940,427	154,538	0.0526	0.9474	44.35
33.5	2,827,322	166,784	0.0590	0.9410	42.02
34.5	2,548,001	129,479	0.0508	0.9492	39.54
35.5	2,453,788	169,254	0.0690	0.9310	37.53
36.5	2,362,684	279,665	0.1184	0.8816	34.95
37.5	2,197,951	236,112	0.1074	0.8926	30.81
38.5	2,105,805	189,683	0.0901	0.9099	27.50

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,016,979	201,142	0.0997	0.9003	25.02
40.5	1,886,064	210,721	0.1117	0.8883	22.53
41.5	1,726,633	233,430	0.1352	0.8648	20.01
42.5	1,524,965	258,825	0.1697	0.8303	17.31
43.5	1,335,566	137,632	0.1031	0.8969	14.37
44.5	1,315,380	71,268	0.0542	0.9458	12.89
45.5	1,301,941	71,189	0.0547	0.9453	12.19
46.5	1,260,445	60,084	0.0477	0.9523	11.52
47.5	1,215,157	89,803	0.0739	0.9261	10.97
48.5	1,130,035	86,137	0.0762	0.9238	10.16
49.5	1,059,768	128,193	0.1210	0.8790	9.39
50.5	936,417	185,075	0.1976	0.8024	8.25
51.5	755,249	128,100	0.1696	0.8304	6.62
52.5	632,781	78,510	0.1241	0.8759	5.50
53.5	562,672	82,960	0.1474	0.8526	4.82
54.5	483,101	71,887	0.1488	0.8512	4.11
55.5	415,775	65,560	0.1577	0.8423	3.49
56.5	354,495	41,609	0.1174	0.8826	2.94
57.5	313,622	22,245	0.0709	0.9291	2.60
58.5	291,782	42,383	0.1453	0.8547	2.41
59.5	249,448	28,861	0.1157	0.8843	2.06
60.5	220,657	35,713	0.1618	0.8382	1.82
61.5	185,208	28,971	0.1564	0.8436	1.53
62.5	157,306	33,230	0.2112	0.7888	1.29
63.5	124,089	43,882	0.3536	0.6464	1.02
64.5	80,372	7,514	0.0935	0.9065	0.66
65.5	72,858	12,747	0.1750	0.8250	0.60
66.5	60,111	11,807	0.1964	0.8036	0.49
67.5	48,304	2,906	0.0602	0.9398	0.40
68.5	45,398	14,241	0.3137	0.6863	0.37
69.5	31,157	4,248	0.1363	0.8637	0.25
70.5	26,909	3,518	0.1307	0.8693	0.22
71.5	23,392	3,426	0.1465	0.8535	0.19
72.5	19,965	5,610	0.2810	0.7190	0.16
73.5	14,377	2,835	0.1972	0.8028	0.12
74.5	11,542	4,546	0.3938	0.6062	0.09
75.5	6,996	4,280	0.6118	0.3882	0.06
76.5	2,716	812	0.2991	0.7009	0.02
77.5	1,904	313	0.1643	0.8357	0.02
78.5	1,591		0.0000	1.0000	0.01

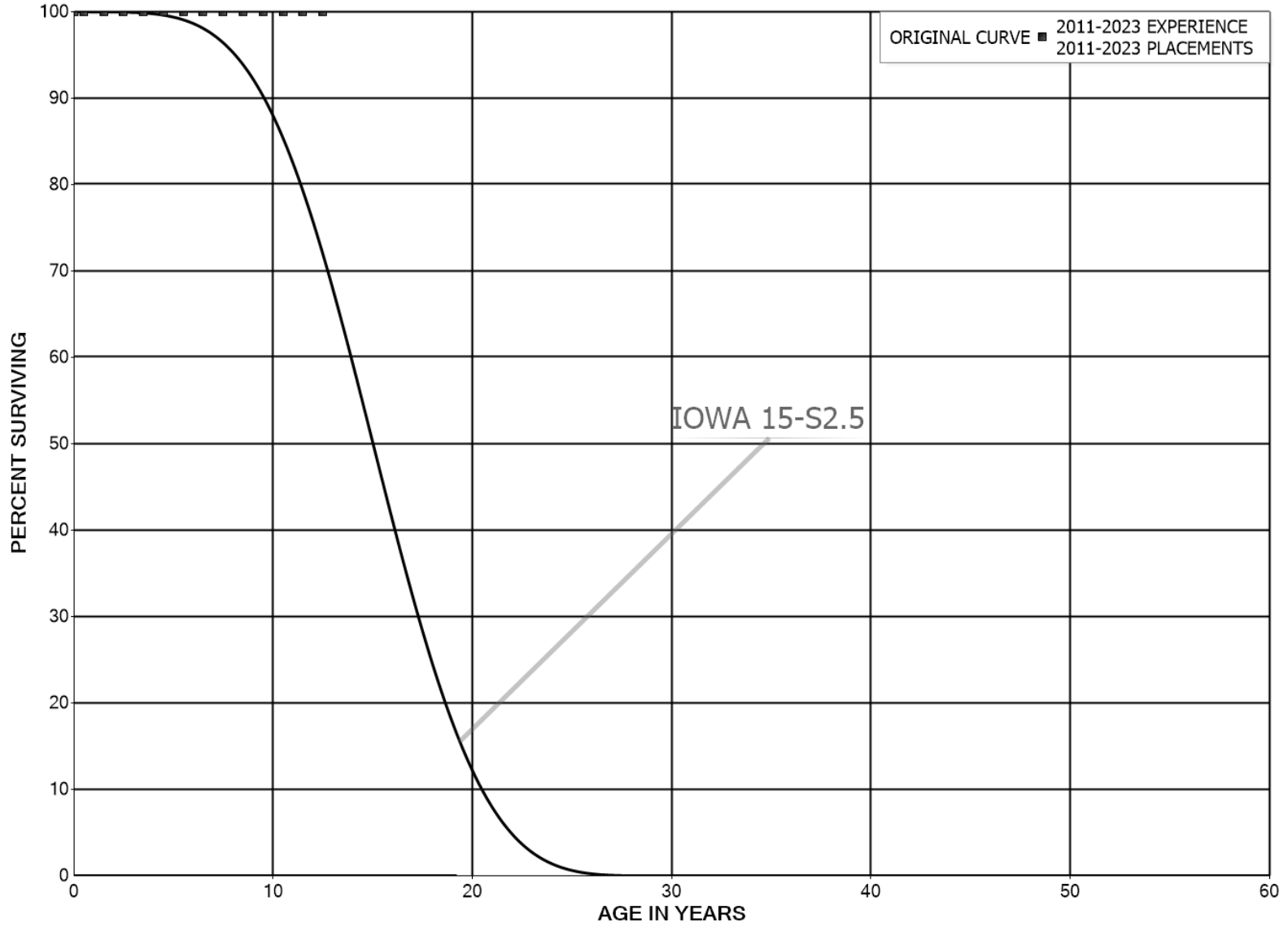
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2023			EXPERIENCE BAND 2004-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	1,591	69	0.0436	0.9564	0.01	
80.5	1,522	264	0.1732	0.8268	0.01	
81.5	1,258	1,059	0.8415	0.1585	0.01	
82.5	199	13	0.0669	0.9331	0.00	
83.5	186	165	0.8844	0.1156	0.00	
84.5	22		0.0000	1.0000	0.00	
85.5	22		0.0000	1.0000	0.00	
86.5	22		0.0000	1.0000	0.00	
87.5	22		0.0000	1.0000	0.00	
88.5	22		0.0000	1.0000	0.00	
89.5	22		0.0000	1.0000	0.00	
90.5	22		0.0000	1.0000	0.00	
91.5	22		0.0000	1.0000	0.00	
92.5	22	22	1.0000		0.00	
93.5						

COLUMBIA GAS OF KENTUCKY, INC.  
ACCOUNT 381.10 METERS - AMR  
ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

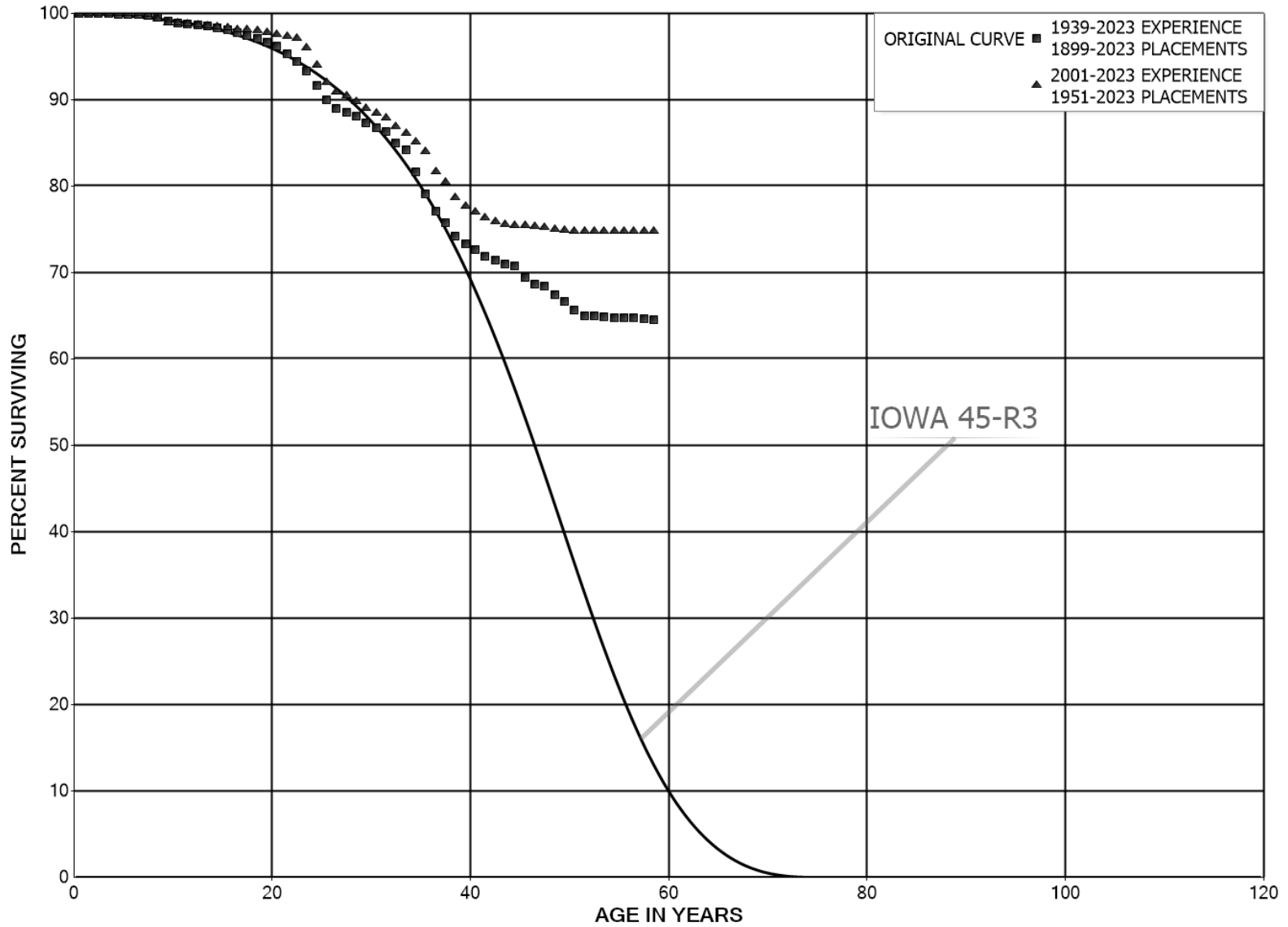
ACCOUNT 381.10 METERS - AMR

ORIGINAL LIFE TABLE

PLACEMENT BAND 2011-2023			EXPERIENCE BAND 2011-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,980,854		0.0000	1.0000	100.00
0.5	9,970,105		0.0000	1.0000	100.00
1.5	9,969,794		0.0000	1.0000	100.00
2.5	9,502,053		0.0000	1.0000	100.00
3.5	9,376,712		0.0000	1.0000	100.00
4.5	9,174,520		0.0000	1.0000	100.00
5.5	8,771,297		0.0000	1.0000	100.00
6.5	8,756,214		0.0000	1.0000	100.00
7.5	8,705,143		0.0000	1.0000	100.00
8.5	7,850,432		0.0000	1.0000	100.00
9.5	1,057,236		0.0000	1.0000	100.00
10.5	682,384		0.0000	1.0000	100.00
11.5	319,312		0.0000	1.0000	100.00
12.5					100.00



COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 382.00 METER INSTALLATIONS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	11,797,561	116	0.0000	1.0000	100.00
0.5	11,221,779	177	0.0000	1.0000	100.00
1.5	10,899,314	5,067	0.0005	0.9995	100.00
2.5	10,706,836	5,567	0.0005	0.9995	99.95
3.5	10,574,507	1,402	0.0001	0.9999	99.90
4.5	10,467,795	426	0.0000	1.0000	99.89
5.5	10,232,133	4,122	0.0004	0.9996	99.88
6.5	10,106,674	6,583	0.0007	0.9993	99.84
7.5	9,957,647	31,963	0.0032	0.9968	99.78
8.5	9,409,286	39,812	0.0042	0.9958	99.46
9.5	9,226,401	13,705	0.0015	0.9985	99.04
10.5	9,049,705	10,191	0.0011	0.9989	98.89
11.5	8,863,031	14,913	0.0017	0.9983	98.78
12.5	8,719,542	10,703	0.0012	0.9988	98.61
13.5	8,548,975	19,242	0.0023	0.9977	98.49
14.5	8,392,468	20,363	0.0024	0.9976	98.27
15.5	8,224,637	26,842	0.0033	0.9967	98.03
16.5	7,967,452	24,608	0.0031	0.9969	97.71
17.5	7,670,771	26,439	0.0034	0.9966	97.41
18.5	7,519,676	31,975	0.0043	0.9957	97.07
19.5	7,241,401	37,561	0.0052	0.9948	96.66
20.5	6,935,220	60,898	0.0088	0.9912	96.16
21.5	6,689,862	63,536	0.0095	0.9905	95.31
22.5	6,399,302	73,789	0.0115	0.9885	94.41
23.5	6,013,295	108,270	0.0180	0.9820	93.32
24.5	5,642,923	107,324	0.0190	0.9810	91.64
25.5	5,170,753	54,608	0.0106	0.9894	89.90
26.5	4,885,449	21,784	0.0045	0.9955	88.95
27.5	4,411,776	23,817	0.0054	0.9946	88.55
28.5	4,004,567	36,936	0.0092	0.9908	88.07
29.5	3,568,788	19,955	0.0056	0.9944	87.26
30.5	3,192,001	18,489	0.0058	0.9942	86.77
31.5	2,805,348	41,069	0.0146	0.9854	86.27
32.5	2,458,679	25,174	0.0102	0.9898	85.01
33.5	2,096,367	62,011	0.0296	0.9704	84.14
34.5	1,728,467	55,226	0.0320	0.9680	81.65
35.5	1,432,901	36,665	0.0256	0.9744	79.04
36.5	1,177,416	19,838	0.0168	0.9832	77.02
37.5	1,073,810	22,607	0.0211	0.9789	75.72
38.5	970,263	11,354	0.0117	0.9883	74.12

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	897,072	7,803	0.0087	0.9913	73.26	
40.5	844,310	8,853	0.0105	0.9895	72.62	
41.5	784,911	5,451	0.0069	0.9931	71.86	
42.5	723,488	3,616	0.0050	0.9950	71.36	
43.5	689,054	3,070	0.0045	0.9955	71.00	
44.5	661,958	12,044	0.0182	0.9818	70.69	
45.5	628,941	7,450	0.0118	0.9882	69.40	
46.5	602,394	1,690	0.0028	0.9972	68.58	
47.5	587,124	8,221	0.0140	0.9860	68.39	
48.5	571,096	7,244	0.0127	0.9873	67.43	
49.5	559,797	7,988	0.0143	0.9857	66.57	
50.5	509,796	5,288	0.0104	0.9896	65.62	
51.5	406,600	316	0.0008	0.9992	64.94	
52.5	337,723	169	0.0005	0.9995	64.89	
53.5	278,131	439	0.0016	0.9984	64.86	
54.5	213,508	23	0.0001	0.9999	64.76	
55.5	159,739	16	0.0001	0.9999	64.75	
56.5	129,613	256	0.0020	0.9980	64.74	
57.5	103,585	113	0.0011	0.9989	64.62	
58.5	73,305	88	0.0012	0.9988	64.55	
59.5	51,640	105	0.0020	0.9980	64.47	
60.5	38,763	52	0.0013	0.9987	64.34	
61.5	27,729	378	0.0136	0.9864	64.25	
62.5	17,414	34	0.0020	0.9980	63.38	
63.5	4,816		0.0000	1.0000	63.25	
64.5	123		0.0000	1.0000	63.25	
65.5	123		0.0000	1.0000	63.25	
66.5	61		0.0000	1.0000	63.25	
67.5	60	43	0.7170	0.2830	63.25	
68.5	6		0.0000	1.0000	17.90	
69.5	6		0.0000	1.0000	17.90	
70.5	6		0.0000	1.0000	17.90	
71.5					17.90	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1951-2023

EXPERIENCE BAND 2001-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,033,858		0.0000	1.0000	100.00
0.5	4,777,600	142	0.0000	1.0000	100.00
1.5	4,727,758	26	0.0000	1.0000	100.00
2.5	4,917,475	46	0.0000	1.0000	100.00
3.5	5,036,490	1,289	0.0003	0.9997	100.00
4.5	5,383,741	106	0.0000	1.0000	99.97
5.5	5,537,605	3,344	0.0006	0.9994	99.97
6.5	5,814,827	6,381	0.0011	0.9989	99.91
7.5	6,025,838	30,159	0.0050	0.9950	99.80
8.5	5,851,624	24,546	0.0042	0.9958	99.30
9.5	6,015,667	5,678	0.0009	0.9991	98.88
10.5	6,207,114	5,120	0.0008	0.9992	98.79
11.5	6,359,518	7,784	0.0012	0.9988	98.71
12.5	6,480,161	3,138	0.0005	0.9995	98.59
13.5	6,582,965	11,382	0.0017	0.9983	98.54
14.5	6,629,782	6,532	0.0010	0.9990	98.37
15.5	6,635,872	10,590	0.0016	0.9984	98.27
16.5	6,527,576	5,906	0.0009	0.9991	98.11
17.5	6,358,527	4,958	0.0008	0.9992	98.03
18.5	6,365,195	15,844	0.0025	0.9975	97.95
19.5	6,212,236	15,921	0.0026	0.9974	97.71
20.5	6,004,508	10,816	0.0018	0.9982	97.46
21.5	5,835,906	13,069	0.0022	0.9978	97.28
22.5	5,625,805	65,995	0.0117	0.9883	97.06
23.5	5,269,551	107,225	0.0203	0.9797	95.92
24.5	4,916,488	106,490	0.0217	0.9783	93.97
25.5	4,444,154	54,110	0.0122	0.9878	91.94
26.5	4,164,933	21,502	0.0052	0.9948	90.82
27.5	3,734,097	23,581	0.0063	0.9937	90.35
28.5	3,427,620	32,029	0.0093	0.9907	89.78
29.5	3,066,839	19,095	0.0062	0.9938	88.94
30.5	2,752,545	16,819	0.0061	0.9939	88.38
31.5	2,433,421	28,415	0.0117	0.9883	87.84
32.5	2,153,721	19,042	0.0088	0.9912	86.82
33.5	1,828,688	19,862	0.0109	0.9891	86.05
34.5	1,529,499	21,884	0.0143	0.9857	85.12
35.5	1,298,614	35,914	0.0277	0.9723	83.90
36.5	1,065,970	15,090	0.0142	0.9858	81.58
37.5	980,014	22,519	0.0230	0.9770	80.42
38.5	887,697	10,758	0.0121	0.9879	78.58

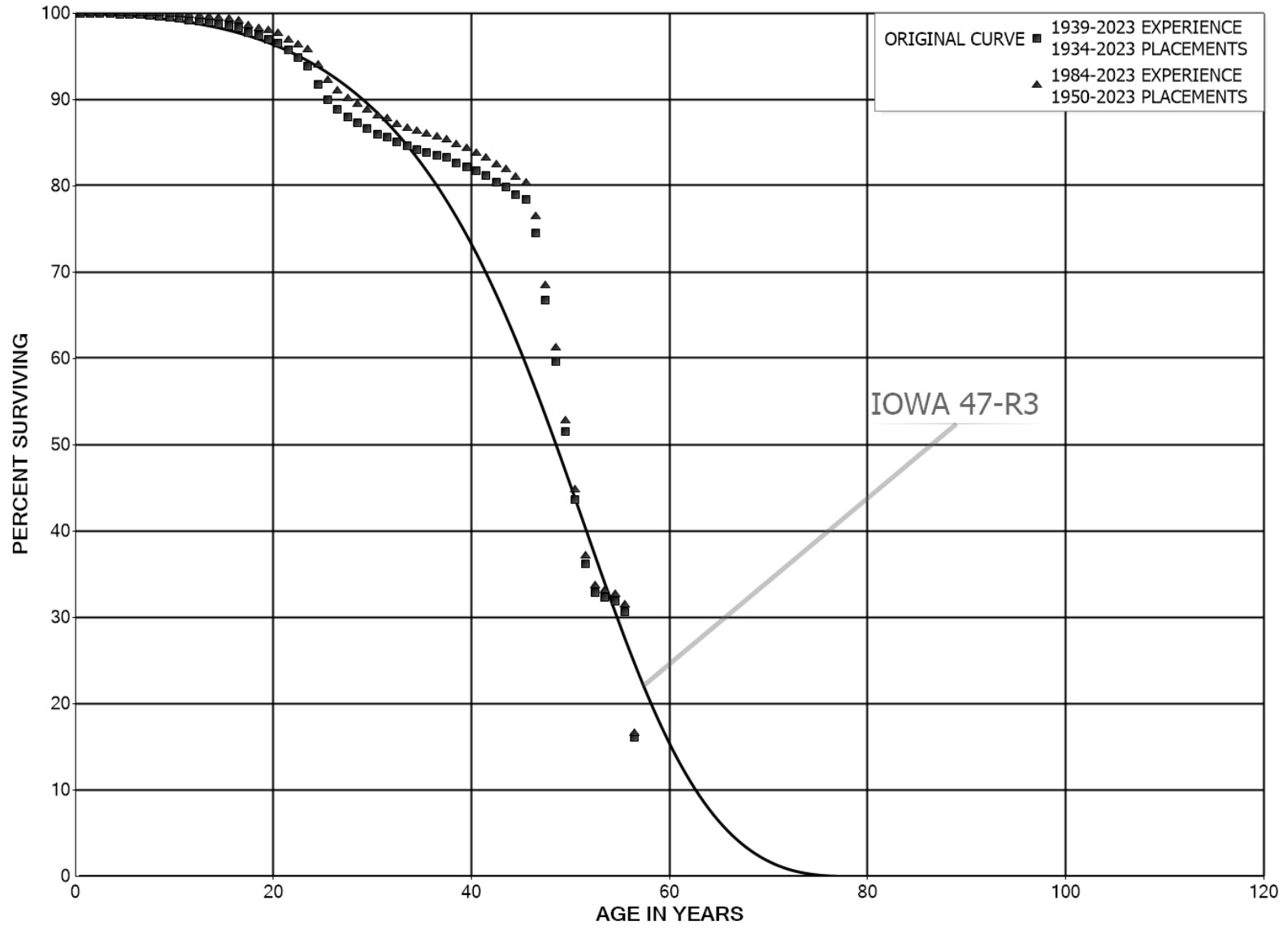
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1951-2023			EXPERIENCE BAND 2001-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	825,106	6,863	0.0083	0.9917	77.62	
40.5	786,101	7,544	0.0096	0.9904	76.98	
41.5	732,795	3,960	0.0054	0.9946	76.24	
42.5	673,004	2,776	0.0041	0.9959	75.83	
43.5	639,547	1,154	0.0018	0.9982	75.51	
44.5	614,830	274	0.0004	0.9996	75.38	
45.5	593,625	628	0.0011	0.9989	75.34	
46.5	573,916	803	0.0014	0.9986	75.26	
47.5	559,542	1,681	0.0030	0.9970	75.16	
48.5	550,063	1,118	0.0020	0.9980	74.93	
49.5	544,899	153	0.0003	0.9997	74.78	
50.5	502,734	59	0.0001	0.9999	74.76	
51.5	404,755	46	0.0001	0.9999	74.75	
52.5	336,147	62	0.0002	0.9998	74.74	
53.5	276,662		0.0000	1.0000	74.73	
54.5	212,478		0.0000	1.0000	74.73	
55.5	158,732		0.0000	1.0000	74.73	
56.5	128,622		0.0000	1.0000	74.73	
57.5	102,850	9	0.0001	0.9999	74.73	
58.5	72,675		0.0000	1.0000	74.72	
59.5	51,097	9	0.0002	0.9998	74.72	
60.5	38,317	13	0.0003	0.9997	74.71	
61.5	27,321	13	0.0005	0.9995	74.69	
62.5	17,371	34	0.0020	0.9980	74.65	
63.5	4,773		0.0000	1.0000	74.50	
64.5	80		0.0000	1.0000	74.50	
65.5	80		0.0000	1.0000	74.50	
66.5	18		0.0000	1.0000	74.50	
67.5	17		0.0000	1.0000	74.50	
68.5	6		0.0000	1.0000	74.50	
69.5	6		0.0000	1.0000	74.50	
70.5	6		0.0000	1.0000	74.50	
71.5					74.50	

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNTS 383.00 AND 384.00 HOUSE REGULATORS AND INSTALLATIONS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 383.00 AND 384.00 HOUSE REGULATORS AND INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1934-2023

EXPERIENCE BAND 1939-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,225,335	3,549	0.0003	0.9997	100.00
0.5	10,022,073	4,811	0.0005	0.9995	99.97
1.5	9,676,180	1,746	0.0002	0.9998	99.92
2.5	9,502,961	696	0.0001	0.9999	99.90
3.5	9,310,355	1,169	0.0001	0.9999	99.89
4.5	9,006,873	1,958	0.0002	0.9998	99.88
5.5	8,795,850	2,601	0.0003	0.9997	99.86
6.5	8,551,857	9,431	0.0011	0.9989	99.83
7.5	8,370,015	7,446	0.0009	0.9991	99.72
8.5	8,165,154	10,506	0.0013	0.9987	99.63
9.5	7,962,410	9,731	0.0012	0.9988	99.50
10.5	7,713,635	12,605	0.0016	0.9984	99.38
11.5	7,361,650	13,328	0.0018	0.9982	99.22
12.5	7,167,216	9,446	0.0013	0.9987	99.04
13.5	6,651,967	8,847	0.0013	0.9987	98.91
14.5	6,339,982	13,920	0.0022	0.9978	98.78
15.5	5,965,585	15,684	0.0026	0.9974	98.56
16.5	5,623,733	30,019	0.0053	0.9947	98.30
17.5	5,194,256	20,309	0.0039	0.9961	97.77
18.5	4,812,609	19,677	0.0041	0.9959	97.39
19.5	4,090,684	19,243	0.0047	0.9953	96.99
20.5	3,656,468	31,860	0.0087	0.9913	96.54
21.5	3,494,162	30,032	0.0086	0.9914	95.70
22.5	3,426,601	38,765	0.0113	0.9887	94.87
23.5	3,332,621	72,786	0.0218	0.9782	93.80
24.5	3,129,448	59,639	0.0191	0.9809	91.75
25.5	2,932,736	37,178	0.0127	0.9873	90.00
26.5	2,758,171	28,053	0.0102	0.9898	88.86
27.5	2,511,914	19,028	0.0076	0.9924	87.96
28.5	2,359,553	17,834	0.0076	0.9924	87.29
29.5	2,174,640	16,400	0.0075	0.9925	86.63
30.5	2,023,046	8,892	0.0044	0.9956	85.98
31.5	1,871,077	12,442	0.0066	0.9934	85.60
32.5	1,750,975	9,619	0.0055	0.9945	85.03
33.5	1,626,104	6,820	0.0042	0.9958	84.57
34.5	1,507,400	5,992	0.0040	0.9960	84.21
35.5	1,393,425	5,546	0.0040	0.9960	83.88
36.5	1,255,624	4,201	0.0033	0.9967	83.54
37.5	1,123,629	8,343	0.0074	0.9926	83.26
38.5	970,677	5,115	0.0053	0.9947	82.64

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 383.00 AND 384.00 HOUSE REGULATORS AND INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1934-2023			EXPERIENCE BAND 1939-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	864,330	5,498	0.0064	0.9936	82.21	
40.5	766,736	5,266	0.0069	0.9931	81.69	
41.5	646,755	5,543	0.0086	0.9914	81.12	
42.5	534,729	3,668	0.0069	0.9931	80.43	
43.5	480,246	5,705	0.0119	0.9881	79.88	
44.5	420,458	2,957	0.0070	0.9930	78.93	
45.5	370,343	18,087	0.0488	0.9512	78.37	
46.5	315,780	32,948	0.1043	0.8957	74.55	
47.5	255,129	27,155	0.1064	0.8936	66.77	
48.5	224,414	30,750	0.1370	0.8630	59.66	
49.5	190,907	29,211	0.1530	0.8470	51.49	
50.5	153,725	26,232	0.1706	0.8294	43.61	
51.5	96,536	8,908	0.0923	0.9077	36.17	
52.5	64,503	1,177	0.0182	0.9818	32.83	
53.5	39,939	532	0.0133	0.9867	32.23	
54.5	16,963	637	0.0376	0.9624	31.80	
55.5	4,672	2,212	0.4734	0.5266	30.61	
56.5	1,897	71	0.0374	0.9626	16.12	
57.5	1,382		0.0000	1.0000	15.51	
58.5	1,128		0.0000	1.0000	15.51	
59.5	978	4	0.0042	0.9958	15.51	
60.5	826	8	0.0100	0.9900	15.45	
61.5	529	8	0.0156	0.9844	15.29	
62.5	417		0.0000	1.0000	15.05	
63.5	351		0.0000	1.0000	15.05	
64.5	351		0.0000	1.0000	15.05	
65.5	351		0.0000	1.0000	15.05	
66.5	351		0.0000	1.0000	15.05	
67.5	351		0.0000	1.0000	15.05	
68.5	235		0.0000	1.0000	15.05	
69.5	235		0.0000	1.0000	15.05	
70.5	235		0.0000	1.0000	15.05	
71.5	235		0.0000	1.0000	15.05	
72.5	235		0.0000	1.0000	15.05	
73.5					15.05	



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 383.00 AND 384.00 HOUSE REGULATORS AND INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2023			EXPERIENCE BAND 1984-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,871,136		0.0000	1.0000	100.00
0.5	8,781,143	169	0.0000	1.0000	100.00
1.5	8,600,176	0	0.0000	1.0000	100.00
2.5	8,563,001	1	0.0000	1.0000	100.00
3.5	8,431,871	74	0.0000	1.0000	100.00
4.5	8,201,142	7	0.0000	1.0000	100.00
5.5	8,040,742	223	0.0000	1.0000	100.00
6.5	7,851,402	4,494	0.0006	0.9994	99.99
7.5	7,723,207	2,026	0.0003	0.9997	99.94
8.5	7,560,723	4,588	0.0006	0.9994	99.91
9.5	7,383,671	4,374	0.0006	0.9994	99.85
10.5	7,163,873	3,018	0.0004	0.9996	99.79
11.5	6,884,255	6,507	0.0009	0.9991	99.75
12.5	6,747,834	7,522	0.0011	0.9989	99.65
13.5	6,290,908	6,233	0.0010	0.9990	99.54
14.5	6,035,664	10,199	0.0017	0.9983	99.45
15.5	5,709,878	12,412	0.0022	0.9978	99.28
16.5	5,404,175	28,284	0.0052	0.9948	99.06
17.5	4,992,412	16,772	0.0034	0.9966	98.54
18.5	4,643,801	12,333	0.0027	0.9973	98.21
19.5	3,953,517	14,805	0.0037	0.9963	97.95
20.5	3,552,727	25,797	0.0073	0.9927	97.58
21.5	3,413,464	22,443	0.0066	0.9934	96.88
22.5	3,372,444	18,670	0.0055	0.9945	96.24
23.5	3,315,515	60,869	0.0184	0.9816	95.71
24.5	3,126,706	59,105	0.0189	0.9811	93.95
25.5	2,931,075	37,049	0.0126	0.9874	92.17
26.5	2,756,570	28,030	0.0102	0.9898	91.01
27.5	2,509,646	18,861	0.0075	0.9925	90.08
28.5	2,357,730	17,825	0.0076	0.9924	89.41
29.5	2,172,837	16,360	0.0075	0.9925	88.73
30.5	2,021,424	8,830	0.0044	0.9956	88.06
31.5	1,869,748	12,307	0.0066	0.9934	87.68
32.5	1,749,780	9,540	0.0055	0.9945	87.10
33.5	1,625,242	6,712	0.0041	0.9959	86.62
34.5	1,506,647	5,447	0.0036	0.9964	86.27
35.5	1,393,216	5,505	0.0040	0.9960	85.96
36.5	1,255,455	4,142	0.0033	0.9967	85.62
37.5	1,123,519	8,343	0.0074	0.9926	85.33
38.5	970,567	5,111	0.0053	0.9947	84.70

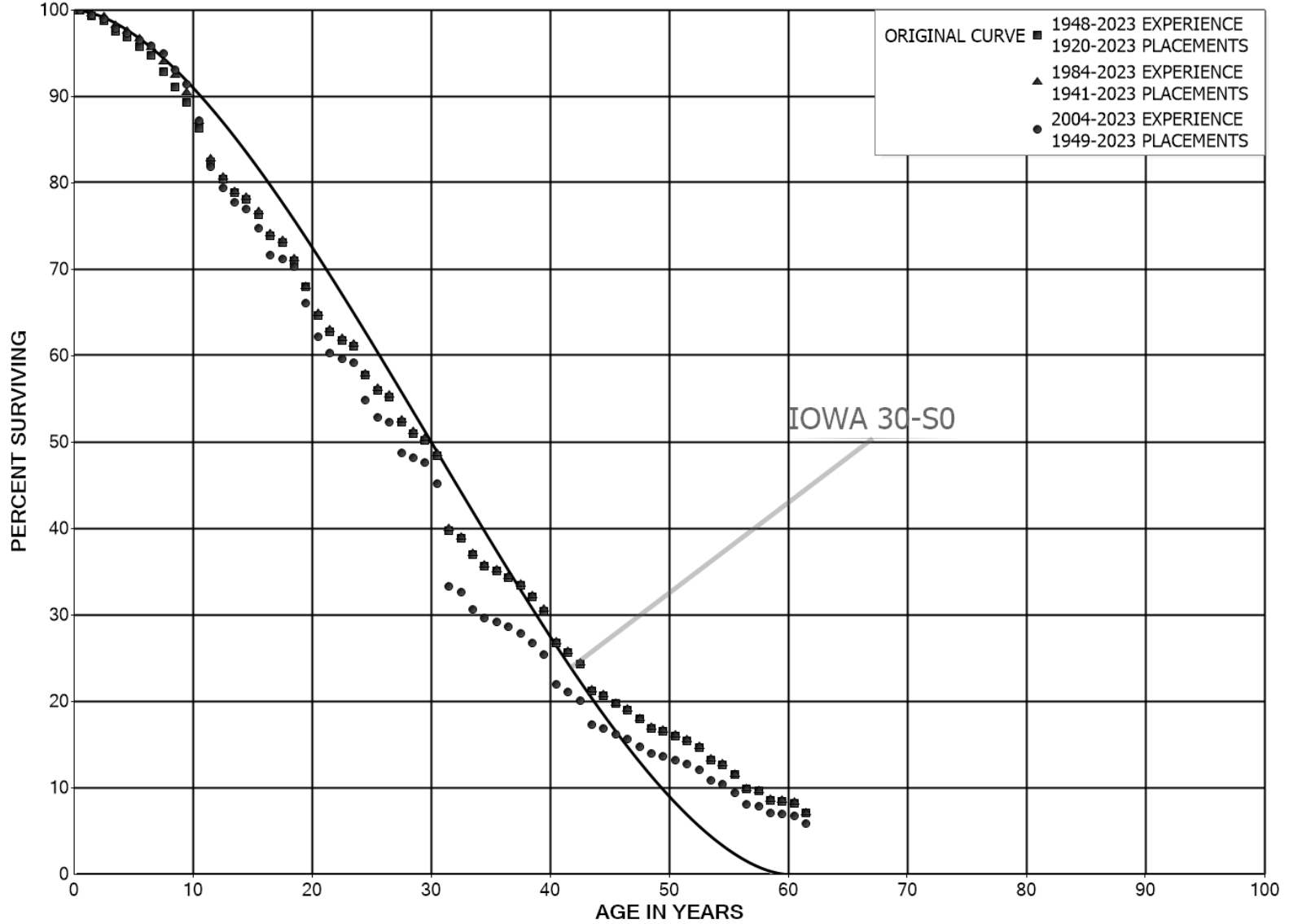
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 383.00 AND 384.00 HOUSE REGULATORS AND INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	864,224	5,498	0.0064	0.9936	84.25	
40.5	766,629	5,214	0.0068	0.9932	83.72	
41.5	646,701	5,530	0.0086	0.9914	83.15	
42.5	534,688	3,627	0.0068	0.9932	82.44	
43.5	480,246	5,705	0.0119	0.9881	81.88	
44.5	420,458	2,957	0.0070	0.9930	80.90	
45.5	370,343	18,087	0.0488	0.9512	80.34	
46.5	315,780	32,948	0.1043	0.8957	76.41	
47.5	255,129	27,155	0.1064	0.8936	68.44	
48.5	224,414	30,750	0.1370	0.8630	61.16	
49.5	190,907	29,211	0.1530	0.8470	52.78	
50.5	153,725	26,232	0.1706	0.8294	44.70	
51.5	96,536	8,908	0.0923	0.9077	37.07	
52.5	64,503	1,177	0.0182	0.9818	33.65	
53.5	39,939	532	0.0133	0.9867	33.04	
54.5	16,963	637	0.0376	0.9624	32.60	
55.5	4,672	2,212	0.4734	0.5266	31.37	
56.5	1,897	71	0.0374	0.9626	16.52	
57.5	1,382		0.0000	1.0000	15.90	
58.5	1,128		0.0000	1.0000	15.90	
59.5	978	4	0.0042	0.9958	15.90	
60.5	826	8	0.0100	0.9900	15.83	
61.5	529	8	0.0156	0.9844	15.68	
62.5	417		0.0000	1.0000	15.43	
63.5	351		0.0000	1.0000	15.43	
64.5	351		0.0000	1.0000	15.43	
65.5	351		0.0000	1.0000	15.43	
66.5	351		0.0000	1.0000	15.43	
67.5	351		0.0000	1.0000	15.43	
68.5	235		0.0000	1.0000	15.43	
69.5	235		0.0000	1.0000	15.43	
70.5	235		0.0000	1.0000	15.43	
71.5	235		0.0000	1.0000	15.43	
72.5	235		0.0000	1.0000	15.43	
73.5					15.43	

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1920-2023

EXPERIENCE BAND 1948-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,374,287	6,634	0.0008	0.9992	100.00
0.5	8,246,276	47,953	0.0058	0.9942	99.92
1.5	7,698,968	49,701	0.0065	0.9935	99.34
2.5	6,581,889	79,152	0.0120	0.9880	98.70
3.5	6,175,531	44,864	0.0073	0.9927	97.51
4.5	6,100,872	66,420	0.0109	0.9891	96.80
5.5	5,718,689	60,041	0.0105	0.9895	95.75
6.5	4,543,445	89,377	0.0197	0.9803	94.74
7.5	4,218,983	80,758	0.0191	0.9809	92.88
8.5	4,006,229	78,003	0.0195	0.9805	91.10
9.5	3,837,950	131,856	0.0344	0.9656	89.33
10.5	3,661,932	165,309	0.0451	0.9549	86.26
11.5	3,380,259	81,235	0.0240	0.9760	82.37
12.5	3,166,395	62,385	0.0197	0.9803	80.39
13.5	3,085,908	28,792	0.0093	0.9907	78.80
14.5	3,006,347	67,808	0.0226	0.9774	78.07
15.5	2,901,293	95,661	0.0330	0.9670	76.31
16.5	2,759,388	26,712	0.0097	0.9903	73.79
17.5	2,729,891	78,645	0.0288	0.9712	73.08
18.5	2,069,561	88,284	0.0427	0.9573	70.97
19.5	1,866,059	89,942	0.0482	0.9518	67.94
20.5	1,741,577	52,320	0.0300	0.9700	64.67
21.5	1,581,843	23,984	0.0152	0.9848	62.73
22.5	1,552,351	18,274	0.0118	0.9882	61.77
23.5	1,489,558	82,211	0.0552	0.9448	61.05
24.5	1,384,410	40,788	0.0295	0.9705	57.68
25.5	1,343,443	19,078	0.0142	0.9858	55.98
26.5	1,288,087	68,941	0.0535	0.9465	55.18
27.5	1,168,785	28,691	0.0245	0.9755	52.23
28.5	1,098,172	16,801	0.0153	0.9847	50.95
29.5	1,042,248	36,759	0.0353	0.9647	50.17
30.5	975,433	174,100	0.1785	0.8215	48.40
31.5	769,540	18,390	0.0239	0.9761	39.76
32.5	725,867	35,429	0.0488	0.9512	38.81
33.5	682,040	24,194	0.0355	0.9645	36.92
34.5	620,160	10,387	0.0167	0.9833	35.61
35.5	609,631	13,164	0.0216	0.9784	35.01
36.5	522,244	13,389	0.0256	0.9744	34.25
37.5	483,719	19,397	0.0401	0.9599	33.38
38.5	446,395	22,290	0.0499	0.9501	32.04

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1920-2023			EXPERIENCE BAND 1948-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	380,065	46,752	0.1230	0.8770	30.44
40.5	315,410	12,950	0.0411	0.9589	26.69
41.5	290,492	14,463	0.0498	0.9502	25.60
42.5	262,221	34,402	0.1312	0.8688	24.32
43.5	214,186	5,302	0.0248	0.9752	21.13
44.5	208,884	9,346	0.0447	0.9553	20.61
45.5	197,799	7,280	0.0368	0.9632	19.69
46.5	190,519	10,422	0.0547	0.9453	18.96
47.5	178,777	10,330	0.0578	0.9422	17.93
48.5	162,728	3,740	0.0230	0.9770	16.89
49.5	152,166	4,992	0.0328	0.9672	16.50
50.5	133,018	4,522	0.0340	0.9660	15.96
51.5	123,483	6,019	0.0487	0.9513	15.42
52.5	76,247	7,509	0.0985	0.9015	14.67
53.5	51,767	2,319	0.0448	0.9552	13.22
54.5	42,049	3,856	0.0917	0.9083	12.63
55.5	30,535	4,495	0.1472	0.8528	11.47
56.5	23,782	484	0.0203	0.9797	9.78
57.5	19,081	2,082	0.1091	0.8909	9.58
58.5	15,326	216	0.0141	0.9859	8.54
59.5	11,319	277	0.0245	0.9755	8.42
60.5	10,376	1,453	0.1400	0.8600	8.21
61.5	7,483		0.0000	1.0000	7.06
62.5	6,241	198	0.0318	0.9682	7.06
63.5	5,784	116	0.0200	0.9800	6.84
64.5	2,149	0	0.0002	0.9998	6.70
65.5	2,097	631	0.3007	0.6993	6.70
66.5	444		0.0000	1.0000	4.68
67.5	431		0.0000	1.0000	4.68
68.5	279		0.0000	1.0000	4.68
69.5	279		0.0000	1.0000	4.68
70.5	279		0.0000	1.0000	4.68
71.5	279	42	0.1493	0.8507	4.68
72.5	196		0.0000	1.0000	3.99
73.5	98		0.0000	1.0000	3.99
74.5					3.99

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1941-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,483,074		0.0000	1.0000	100.00
0.5	7,355,264	33,653	0.0046	0.9954	100.00
1.5	6,873,793	24,625	0.0036	0.9964	99.54
2.5	5,849,705	62,417	0.0107	0.9893	99.19
3.5	5,497,638	33,066	0.0060	0.9940	98.13
4.5	5,439,558	50,729	0.0093	0.9907	97.54
5.5	5,085,197	51,866	0.0102	0.9898	96.63
6.5	3,926,709	70,230	0.0179	0.9821	95.64
7.5	3,617,134	61,034	0.0169	0.9831	93.93
8.5	3,424,670	70,480	0.0206	0.9794	92.35
9.5	3,274,962	120,622	0.0368	0.9632	90.45
10.5	3,142,446	159,468	0.0507	0.9493	87.11
11.5	2,882,829	72,279	0.0251	0.9749	82.69
12.5	2,774,809	56,380	0.0203	0.9797	80.62
13.5	2,766,984	23,220	0.0084	0.9916	78.98
14.5	2,730,568	58,184	0.0213	0.9787	78.32
15.5	2,677,346	89,914	0.0336	0.9664	76.65
16.5	2,567,252	25,705	0.0100	0.9900	74.08
17.5	2,578,890	77,625	0.0301	0.9699	73.34
18.5	1,942,260	86,924	0.0448	0.9552	71.13
19.5	1,768,974	79,821	0.0451	0.9549	67.94
20.5	1,666,445	49,111	0.0295	0.9705	64.88
21.5	1,521,309	23,279	0.0153	0.9847	62.97
22.5	1,504,137	16,716	0.0111	0.9889	62.00
23.5	1,450,086	81,891	0.0565	0.9435	61.31
24.5	1,354,592	39,315	0.0290	0.9710	57.85
25.5	1,329,872	18,736	0.0141	0.9859	56.17
26.5	1,279,067	66,739	0.0522	0.9478	55.38
27.5	1,164,193	28,241	0.0243	0.9757	52.49
28.5	1,095,016	16,801	0.0153	0.9847	51.22
29.5	1,038,770	36,759	0.0354	0.9646	50.43
30.5	972,130	174,023	0.1790	0.8210	48.65
31.5	766,720	18,390	0.0240	0.9760	39.94
32.5	724,284	35,429	0.0489	0.9511	38.98
33.5	681,462	24,068	0.0353	0.9647	37.07
34.5	620,027	10,378	0.0167	0.9833	35.76
35.5	609,497	13,125	0.0215	0.9785	35.17
36.5	522,150	13,349	0.0256	0.9744	34.41
37.5	483,656	19,358	0.0400	0.9600	33.53
38.5	446,364	22,259	0.0499	0.9501	32.19

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1941-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	380,012	46,752	0.1230	0.8770	30.58	
40.5	315,356	12,950	0.0411	0.9589	26.82	
41.5	290,439	14,463	0.0498	0.9502	25.72	
42.5	262,218	34,402	0.1312	0.8688	24.44	
43.5	214,183	5,302	0.0248	0.9752	21.23	
44.5	208,881	9,346	0.0447	0.9553	20.71	
45.5	197,796	7,280	0.0368	0.9632	19.78	
46.5	190,515	10,422	0.0547	0.9453	19.05	
47.5	178,774	10,330	0.0578	0.9422	18.01	
48.5	162,725	3,740	0.0230	0.9770	16.97	
49.5	152,162	4,992	0.0328	0.9672	16.58	
50.5	133,015	4,522	0.0340	0.9660	16.03	
51.5	123,479	6,019	0.0487	0.9513	15.49	
52.5	76,243	7,509	0.0985	0.9015	14.73	
53.5	51,764	2,319	0.0448	0.9552	13.28	
54.5	42,045	3,853	0.0916	0.9084	12.69	
55.5	30,535	4,495	0.1472	0.8528	11.53	
56.5	23,782	484	0.0203	0.9797	9.83	
57.5	19,081	2,082	0.1091	0.8909	9.63	
58.5	15,326	216	0.0141	0.9859	8.58	
59.5	11,319	277	0.0245	0.9755	8.46	
60.5	10,376	1,453	0.1400	0.8600	8.25	
61.5	7,483		0.0000	1.0000	7.10	
62.5	6,241	198	0.0318	0.9682	7.10	
63.5	5,784	116	0.0200	0.9800	6.87	
64.5	2,149	0	0.0002	0.9998	6.73	
65.5	2,097	631	0.3007	0.6993	6.73	
66.5	444		0.0000	1.0000	4.71	
67.5	431		0.0000	1.0000	4.71	
68.5	279		0.0000	1.0000	4.71	
69.5	279		0.0000	1.0000	4.71	
70.5	279		0.0000	1.0000	4.71	
71.5	279	42	0.1493	0.8507	4.71	
72.5	196		0.0000	1.0000	4.00	
73.5	98		0.0000	1.0000	4.00	
74.5					4.00	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2023

EXPERIENCE BAND 2004-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	5,616,552		0.0000	1.0000	100.00
0.5	5,490,811	33,564	0.0061	0.9939	100.00
1.5	5,057,558	20,236	0.0040	0.9960	99.39
2.5	4,050,534	46,218	0.0114	0.9886	98.99
3.5	3,766,132	22,736	0.0060	0.9940	97.86
4.5	3,776,745	29,690	0.0079	0.9921	97.27
5.5	3,464,216	25,798	0.0074	0.9926	96.51
6.5	2,467,318	21,428	0.0087	0.9913	95.79
7.5	2,396,717	47,602	0.0199	0.9801	94.96
8.5	2,283,418	40,326	0.0177	0.9823	93.07
9.5	2,284,798	104,949	0.0459	0.9541	91.43
10.5	2,183,158	133,985	0.0614	0.9386	87.23
11.5	1,979,141	59,858	0.0302	0.9698	81.87
12.5	1,841,433	39,935	0.0217	0.9783	79.40
13.5	1,810,076	16,616	0.0092	0.9908	77.68
14.5	1,833,132	52,710	0.0288	0.9712	76.96
15.5	1,753,784	72,487	0.0413	0.9587	74.75
16.5	1,864,800	13,766	0.0074	0.9926	71.66
17.5	1,880,809	21,348	0.0114	0.9886	71.13
18.5	1,300,278	77,944	0.0599	0.9401	70.32
19.5	1,191,056	70,381	0.0591	0.9409	66.11
20.5	1,119,572	33,544	0.0300	0.9700	62.20
21.5	998,888	11,412	0.0114	0.9886	60.34
22.5	1,045,274	8,175	0.0078	0.9922	59.65
23.5	1,021,597	75,779	0.0742	0.9258	59.18
24.5	922,880	33,111	0.0359	0.9641	54.79
25.5	899,324	9,792	0.0109	0.9891	52.83
26.5	860,150	58,018	0.0675	0.9325	52.25
27.5	753,218	7,678	0.0102	0.9898	48.73
28.5	709,337	8,999	0.0127	0.9873	48.23
29.5	670,250	34,564	0.0516	0.9484	47.62
30.5	628,512	164,647	0.2620	0.7380	45.16
31.5	444,833	9,181	0.0206	0.9794	33.33
32.5	489,247	30,138	0.0616	0.9384	32.64
33.5	501,552	17,063	0.0340	0.9660	30.63
34.5	470,037	7,448	0.0158	0.9842	29.59
35.5	490,723	7,836	0.0160	0.9840	29.12
36.5	426,482	11,972	0.0281	0.9719	28.66
37.5	411,407	15,915	0.0387	0.9613	27.85
38.5	392,709	20,048	0.0511	0.9489	26.77



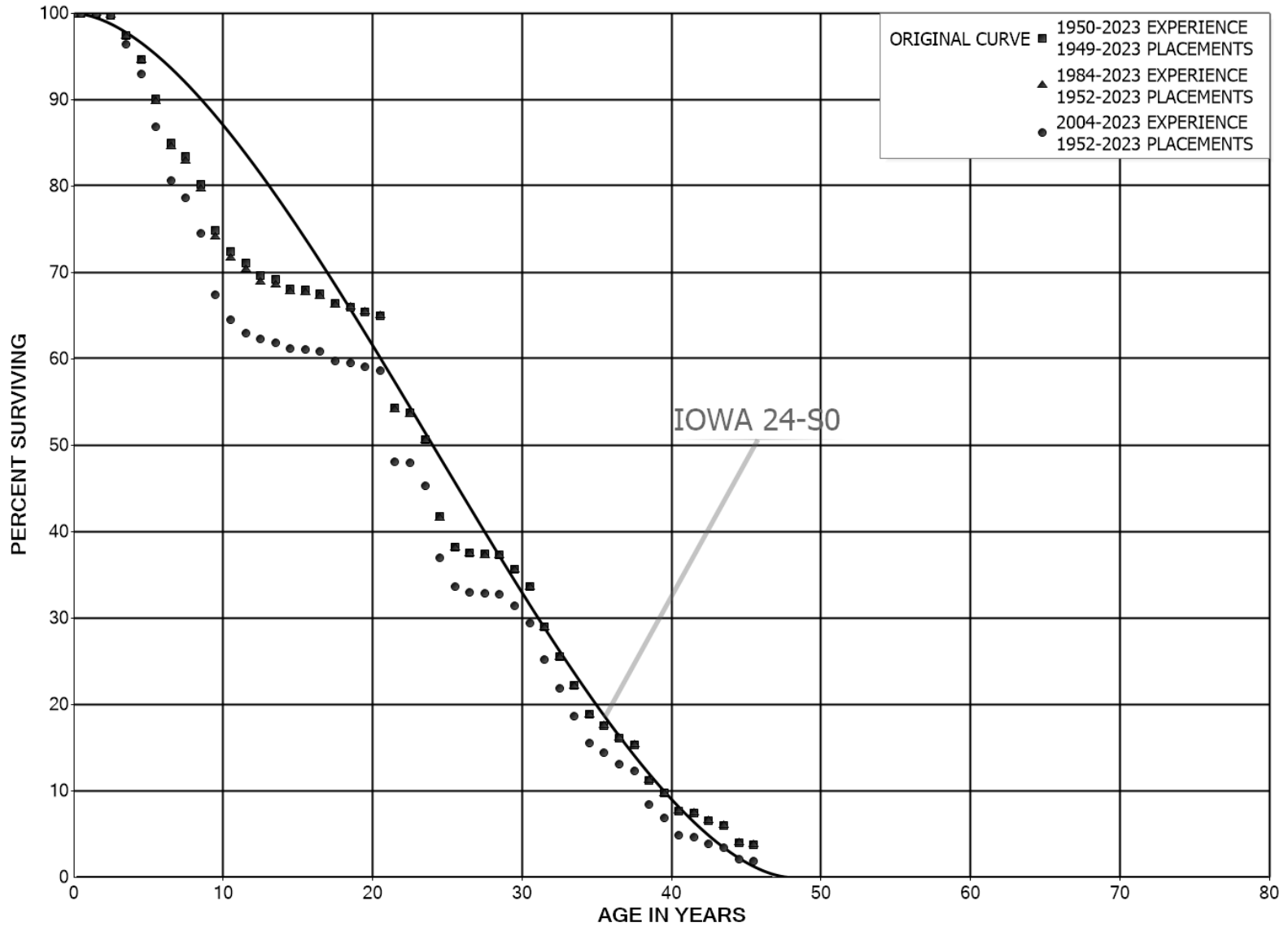
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	340,034	45,937	0.1351	0.8649	25.41
40.5	281,798	12,016	0.0426	0.9574	21.98
41.5	263,068	12,200	0.0464	0.9536	21.04
42.5	244,264	33,302	0.1363	0.8637	20.06
43.5	199,359	5,297	0.0266	0.9734	17.33
44.5	200,709	7,648	0.0381	0.9619	16.87
45.5	192,138	7,279	0.0379	0.9621	16.22
46.5	188,073	10,421	0.0554	0.9446	15.61
47.5	176,977	10,145	0.0573	0.9427	14.74
48.5	161,695	3,732	0.0231	0.9769	13.90
49.5	151,141	4,991	0.0330	0.9670	13.58
50.5	132,115	4,522	0.0342	0.9658	13.13
51.5	122,695	6,018	0.0490	0.9510	12.68
52.5	75,678	7,509	0.0992	0.9008	12.06
53.5	51,438	2,319	0.0451	0.9549	10.86
54.5	42,045	3,853	0.0916	0.9084	10.37
55.5	30,535	4,495	0.1472	0.8528	9.42
56.5	23,782	484	0.0203	0.9797	8.04
57.5	19,081	2,082	0.1091	0.8909	7.87
58.5	15,326	216	0.0141	0.9859	7.01
59.5	11,319	277	0.0245	0.9755	6.91
60.5	10,376	1,453	0.1400	0.8600	6.74
61.5	7,483		0.0000	1.0000	5.80
62.5	6,241	198	0.0318	0.9682	5.80
63.5	5,784	116	0.0200	0.9800	5.62
64.5	2,149	0	0.0002	0.9998	5.50
65.5	2,097	631	0.3007	0.6993	5.50
66.5	444		0.0000	1.0000	3.85
67.5	431		0.0000	1.0000	3.85
68.5	279		0.0000	1.0000	3.85
69.5	279		0.0000	1.0000	3.85
70.5	279		0.0000	1.0000	3.85
71.5	279	42	0.1493	0.8507	3.85
72.5	196		0.0000	1.0000	3.27
73.5	98		0.0000	1.0000	3.27
74.5					3.27

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2023

EXPERIENCE BAND 1950-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,430,383	1,651	0.0002	0.9998	100.00
0.5	9,503,156	651	0.0001	0.9999	99.98
1.5	7,939,945	21,623	0.0027	0.9973	99.98
2.5	6,946,828	161,689	0.0233	0.9767	99.71
3.5	6,587,378	184,443	0.0280	0.9720	97.38
4.5	6,301,646	304,678	0.0483	0.9517	94.66
5.5	5,470,343	311,232	0.0569	0.9431	90.08
6.5	4,984,135	92,684	0.0186	0.9814	84.96
7.5	4,647,433	177,035	0.0381	0.9619	83.38
8.5	4,212,881	281,946	0.0669	0.9331	80.20
9.5	3,698,296	120,535	0.0326	0.9674	74.83
10.5	3,453,411	62,596	0.0181	0.9819	72.39
11.5	3,381,110	71,907	0.0213	0.9787	71.08
12.5	3,311,253	17,982	0.0054	0.9946	69.57
13.5	3,286,424	51,335	0.0156	0.9844	69.19
14.5	3,236,092	6,837	0.0021	0.9979	68.11
15.5	3,229,256	22,382	0.0069	0.9931	67.97
16.5	3,177,966	50,822	0.0160	0.9840	67.50
17.5	3,117,468	19,154	0.0061	0.9939	66.42
18.5	3,108,759	27,306	0.0088	0.9912	66.01
19.5	2,811,011	18,390	0.0065	0.9935	65.43
20.5	2,446,001	404,720	0.1655	0.8345	65.00
21.5	1,831,840	17,958	0.0098	0.9902	54.25
22.5	1,811,287	103,396	0.0571	0.9429	53.71
23.5	1,707,053	302,275	0.1771	0.8229	50.65
24.5	1,404,778	116,265	0.0828	0.9172	41.68
25.5	1,257,993	23,900	0.0190	0.9810	38.23
26.5	1,234,093	4,896	0.0040	0.9960	37.50
27.5	1,151,544	619	0.0005	0.9995	37.35
28.5	1,127,792	50,299	0.0446	0.9554	37.33
29.5	843,930	49,362	0.0585	0.9415	35.67
30.5	756,417	104,498	0.1381	0.8619	33.58
31.5	612,764	72,497	0.1183	0.8817	28.94
32.5	532,908	70,673	0.1326	0.8674	25.52
33.5	427,356	64,595	0.1512	0.8488	22.14
34.5	317,227	20,916	0.0659	0.9341	18.79
35.5	255,386	21,050	0.0824	0.9176	17.55
36.5	205,786	10,001	0.0486	0.9514	16.10
37.5	162,963	43,623	0.2677	0.7323	15.32
38.5	101,367	13,945	0.1376	0.8624	11.22

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2023			EXPERIENCE BAND 1950-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	89,916	18,955	0.2108	0.7892	9.68	
40.5	70,960	2,479	0.0349	0.9651	7.64	
41.5	68,481	7,881	0.1151	0.8849	7.37	
42.5	60,601	5,668	0.0935	0.9065	6.52	
43.5	54,933	17,844	0.3248	0.6752	5.91	
44.5	37,088	2,529	0.0682	0.9318	3.99	
45.5	34,559	5,185	0.1500	0.8500	3.72	
46.5	29,374		0.0000	1.0000	3.16	
47.5	29,374	3,942	0.1342	0.8658	3.16	
48.5	25,432		0.0000	1.0000	2.74	
49.5	25,432	789	0.0310	0.9690	2.74	
50.5	24,644	5,834	0.2368	0.7632	2.65	
51.5	18,809	6,858	0.3646	0.6354	2.02	
52.5	11,951	2,366	0.1980	0.8020	1.29	
53.5	9,585	69	0.0072	0.9928	1.03	
54.5	9,516	2,603	0.2735	0.7265	1.02	
55.5	6,913		0.0000	1.0000	0.74	
56.5	6,913	1,577	0.2281	0.7719	0.74	
57.5	5,337	229	0.0429	0.9571	0.57	
58.5	5,107	2,379	0.4659	0.5341	0.55	
59.5	2,728	181	0.0663	0.9337	0.29	
60.5	2,547	2,547	1.0000		0.27	
61.5						

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1952-2023

EXPERIENCE BAND 1984-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	10,065,576		0.0000	1.0000	100.00
0.5	9,143,369	478	0.0001	0.9999	100.00
1.5	7,596,047	18,608	0.0024	0.9976	99.99
2.5	6,614,802	160,192	0.0242	0.9758	99.75
3.5	6,265,122	182,077	0.0291	0.9709	97.33
4.5	5,981,746	300,101	0.0502	0.9498	94.51
5.5	5,174,497	304,834	0.0589	0.9411	89.76
6.5	4,708,975	90,785	0.0193	0.9807	84.48
7.5	4,403,131	173,653	0.0394	0.9606	82.85
8.5	4,008,147	278,537	0.0695	0.9305	79.58
9.5	3,507,097	114,450	0.0326	0.9674	74.05
10.5	3,287,397	59,868	0.0182	0.9818	71.63
11.5	3,220,104	69,340	0.0215	0.9785	70.33
12.5	3,162,967	16,345	0.0052	0.9948	68.81
13.5	3,154,864	35,819	0.0114	0.9886	68.46
14.5	3,145,403	1,070	0.0003	0.9997	67.68
15.5	3,168,369	20,764	0.0066	0.9934	67.66
16.5	3,131,375	47,138	0.0151	0.9849	67.22
17.5	3,074,561	10,969	0.0036	0.9964	66.20
18.5	3,078,892	27,306	0.0089	0.9911	65.97
19.5	2,781,144	17,911	0.0064	0.9936	65.38
20.5	2,418,123	404,720	0.1674	0.8326	64.96
21.5	1,817,222	17,958	0.0099	0.9901	54.09
22.5	1,803,587	103,396	0.0573	0.9427	53.55
23.5	1,706,156	302,275	0.1772	0.8228	50.48
24.5	1,404,549	116,265	0.0828	0.9172	41.54
25.5	1,257,764	23,900	0.0190	0.9810	38.10
26.5	1,233,864	4,896	0.0040	0.9960	37.38
27.5	1,151,315	619	0.0005	0.9995	37.23
28.5	1,127,792	50,299	0.0446	0.9554	37.21
29.5	843,930	49,362	0.0585	0.9415	35.55
30.5	756,417	104,498	0.1381	0.8619	33.47
31.5	612,764	72,497	0.1183	0.8817	28.85
32.5	532,908	70,673	0.1326	0.8674	25.43
33.5	427,356	64,595	0.1512	0.8488	22.06
34.5	317,227	20,916	0.0659	0.9341	18.73
35.5	255,386	21,050	0.0824	0.9176	17.49
36.5	205,786	10,001	0.0486	0.9514	16.05
37.5	162,963	43,623	0.2677	0.7323	15.27
38.5	101,367	13,945	0.1376	0.8624	11.18

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1952-2023			EXPERIENCE BAND 1984-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	89,916	18,955	0.2108	0.7892	9.64	
40.5	70,960	2,479	0.0349	0.9651	7.61	
41.5	68,481	7,881	0.1151	0.8849	7.34	
42.5	60,601	5,668	0.0935	0.9065	6.50	
43.5	54,933	17,844	0.3248	0.6752	5.89	
44.5	37,088	2,529	0.0682	0.9318	3.98	
45.5	34,559	5,185	0.1500	0.8500	3.71	
46.5	29,374		0.0000	1.0000	3.15	
47.5	29,374	3,942	0.1342	0.8658	3.15	
48.5	25,432		0.0000	1.0000	2.73	
49.5	25,432	789	0.0310	0.9690	2.73	
50.5	24,644	5,834	0.2368	0.7632	2.64	
51.5	18,809	6,858	0.3646	0.6354	2.02	
52.5	11,951	2,366	0.1980	0.8020	1.28	
53.5	9,585	69	0.0072	0.9928	1.03	
54.5	9,516	2,603	0.2735	0.7265	1.02	
55.5	6,913		0.0000	1.0000	0.74	
56.5	6,913	1,577	0.2281	0.7719	0.74	
57.5	5,337	229	0.0429	0.9571	0.57	
58.5	5,107	2,379	0.4659	0.5341	0.55	
59.5	2,728	181	0.0663	0.9337	0.29	
60.5	2,547	2,547	1.0000		0.27	
61.5						

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1952-2023			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,383,238		0.0000	1.0000	100.00
0.5	6,796,363		0.0000	1.0000	100.00
1.5	5,837,561	18,341	0.0031	0.9969	100.00
2.5	4,827,286	159,172	0.0330	0.9670	99.69
3.5	4,565,693	164,983	0.0361	0.9639	96.40
4.5	4,606,277	300,101	0.0652	0.9348	92.92
5.5	3,926,065	280,436	0.0714	0.9286	86.86
6.5	3,477,258	89,402	0.0257	0.9743	80.66
7.5	3,291,800	172,858	0.0525	0.9475	78.58
8.5	2,863,519	270,337	0.0944	0.9056	74.46
9.5	2,638,485	113,849	0.0431	0.9569	67.43
10.5	2,470,475	57,961	0.0235	0.9765	64.52
11.5	2,520,103	29,594	0.0117	0.9883	63.00
12.5	2,543,314	16,299	0.0064	0.9936	62.26
13.5	2,609,067	30,495	0.0117	0.9883	61.87
14.5	2,681,965	1,070	0.0004	0.9996	61.14
15.5	2,815,127	14,880	0.0053	0.9947	61.12
16.5	2,816,841	47,138	0.0167	0.9833	60.80
17.5	2,800,352	10,366	0.0037	0.9963	59.78
18.5	2,848,389	24,260	0.0085	0.9915	59.56
19.5	2,558,403	16,480	0.0064	0.9936	59.05
20.5	2,203,319	396,825	0.1801	0.8199	58.67
21.5	1,607,360	6,723	0.0042	0.9958	48.10
22.5	1,623,155	88,863	0.0547	0.9453	47.90
23.5	1,554,759	287,363	0.1848	0.8152	45.28
24.5	1,273,825	115,598	0.0907	0.9093	36.91
25.5	1,138,255	22,206	0.0195	0.9805	33.56
26.5	1,120,181	4,247	0.0038	0.9962	32.91
27.5	1,043,158	619	0.0006	0.9994	32.78
28.5	1,022,998	43,843	0.0429	0.9571	32.76
29.5	755,302	48,460	0.0642	0.9358	31.36
30.5	687,648	97,903	0.1424	0.8576	29.35
31.5	553,068	72,497	0.1311	0.8689	25.17
32.5	481,093	70,673	0.1469	0.8531	21.87
33.5	378,606	64,595	0.1706	0.8294	18.66
34.5	286,322	20,916	0.0731	0.9269	15.47
35.5	224,833	20,548	0.0914	0.9086	14.34
36.5	180,921	10,001	0.0553	0.9447	13.03
37.5	135,718	43,623	0.3214	0.6786	12.31
38.5	77,882	13,945	0.1791	0.8209	8.35

COLUMBIA GAS OF KENTUCKY, INC.

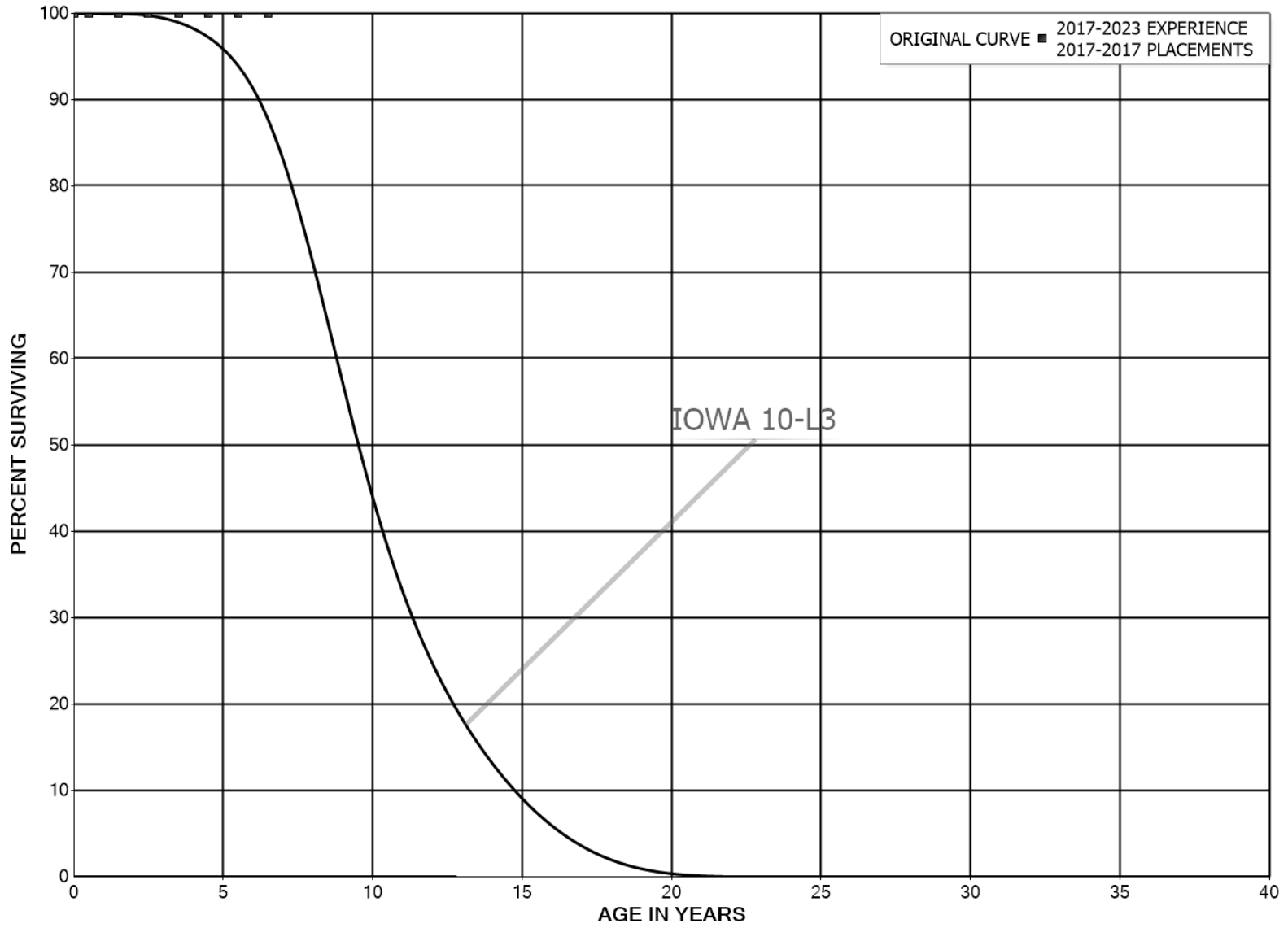
ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1952-2023			EXPERIENCE BAND 2004-2023			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
39.5	63,885	18,955	0.2967	0.7033	6.86	
40.5	45,718	2,479	0.0542	0.9458	4.82	
41.5	49,073	7,881	0.1606	0.8394	4.56	
42.5	48,050	5,668	0.1180	0.8820	3.83	
43.5	44,748	17,844	0.3988	0.6012	3.38	
44.5	27,572	2,529	0.0917	0.9083	2.03	
45.5	27,646	5,185	0.1876	0.8124	1.84	
46.5	22,461		0.0000	1.0000	1.50	
47.5	24,037	3,942	0.1640	0.8360	1.50	
48.5	20,325		0.0000	1.0000	1.25	
49.5	22,704	789	0.0347	0.9653	1.25	
50.5	22,097	5,834	0.2640	0.7360	1.21	
51.5	18,809	6,858	0.3646	0.6354	0.89	
52.5	11,951	2,366	0.1980	0.8020	0.57	
53.5	9,585	69	0.0072	0.9928	0.45	
54.5	9,516	2,603	0.2735	0.7265	0.45	
55.5	6,913		0.0000	1.0000	0.33	
56.5	6,913	1,577	0.2281	0.7719	0.33	
57.5	5,337	229	0.0429	0.9571	0.25	
58.5	5,107	2,379	0.4659	0.5341	0.24	
59.5	2,728	181	0.0663	0.9337	0.13	
60.5	2,547	2,547	1.0000		0.12	
61.5						



COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



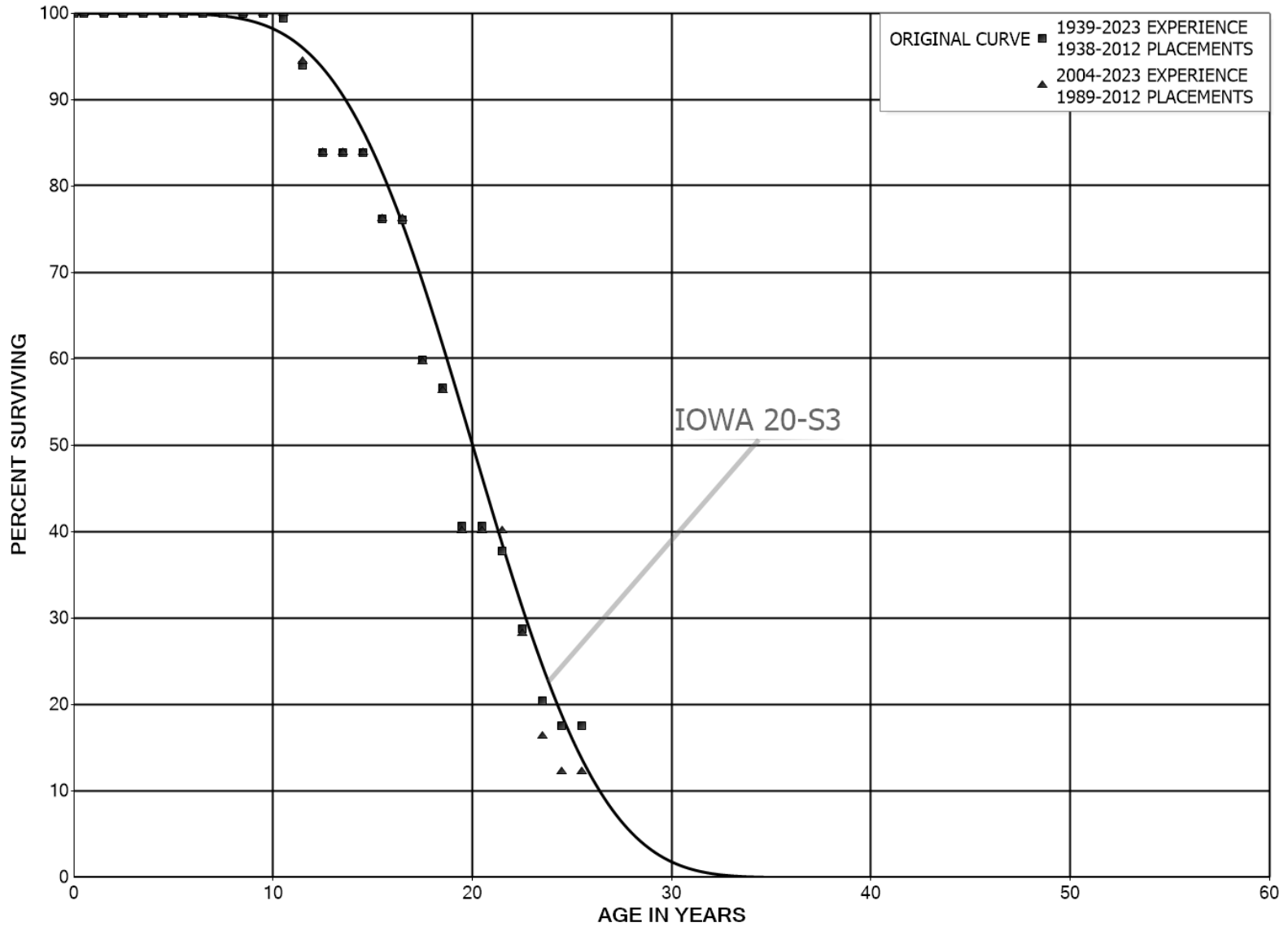
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2017-2017			EXPERIENCE BAND 2017-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	238,073		0.0000	1.0000	100.00
0.5	238,073		0.0000	1.0000	100.00
1.5	238,073		0.0000	1.0000	100.00
2.5	238,073		0.0000	1.0000	100.00
3.5	238,073		0.0000	1.0000	100.00
4.5	238,073		0.0000	1.0000	100.00
5.5	238,073		0.0000	1.0000	100.00
6.5					100.00

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1938-2012			EXPERIENCE BAND 1939-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	191,083		0.0000	1.0000	100.00
0.5	191,233		0.0000	1.0000	100.00
1.5	189,470		0.0000	1.0000	100.00
2.5	200,566		0.0000	1.0000	100.00
3.5	204,252		0.0000	1.0000	100.00
4.5	205,005		0.0000	1.0000	100.00
5.5	205,005		0.0000	1.0000	100.00
6.5	212,836		0.0000	1.0000	100.00
7.5	212,836		0.0000	1.0000	100.00
8.5	208,569		0.0000	1.0000	100.00
9.5	208,569	1,246	0.0060	0.9940	100.00
10.5	207,323	11,392	0.0549	0.9451	99.40
11.5	147,007	15,840	0.1077	0.8923	93.94
12.5	106,704		0.0000	1.0000	83.82
13.5	106,704		0.0000	1.0000	83.82
14.5	106,704	9,702	0.0909	0.9091	83.82
15.5	97,208	100	0.0010	0.9990	76.20
16.5	97,320	20,764	0.2134	0.7866	76.12
17.5	76,556	4,168	0.0544	0.9456	59.88
18.5	72,388	20,440	0.2824	0.7176	56.62
19.5	6,589		0.0000	1.0000	40.63
20.5	6,589	475	0.0721	0.9279	40.63
21.5	6,114	1,450	0.2371	0.7629	37.70
22.5	5,002	1,450	0.2899	0.7101	28.76
23.5	3,552	499	0.1404	0.8596	20.42
24.5	2,841		0.0000	1.0000	17.56
25.5	1,346		0.0000	1.0000	17.56
26.5	1,346		0.0000	1.0000	17.56
27.5	1,346		0.0000	1.0000	17.56
28.5	1,346		0.0000	1.0000	17.56
29.5	1,346	206	0.1527	0.8473	17.56
30.5	1,141	387	0.3396	0.6604	14.88
31.5	753		0.0000	1.0000	9.82
32.5	753		0.0000	1.0000	9.82
33.5	753		0.0000	1.0000	9.82
34.5	753		0.0000	1.0000	9.82
35.5	753		0.0000	1.0000	9.82
36.5	753		0.0000	1.0000	9.82
37.5	753	753	1.0000		9.82
38.5					

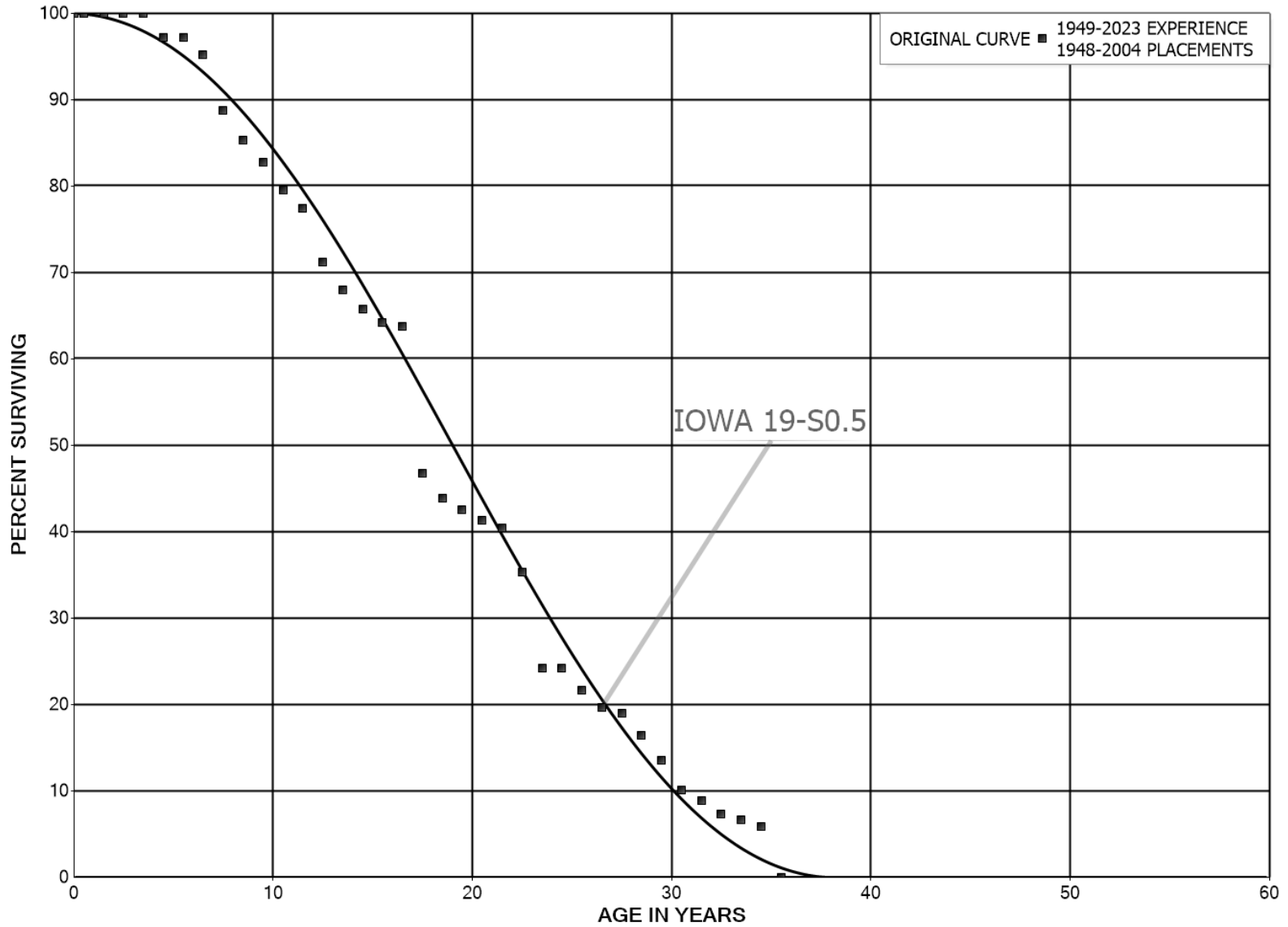
COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1989-2012			EXPERIENCE BAND 2004-2023		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	118,746		0.0000	1.0000	100.00
0.5	118,746		0.0000	1.0000	100.00
1.5	118,746		0.0000	1.0000	100.00
2.5	118,746		0.0000	1.0000	100.00
3.5	130,138		0.0000	1.0000	100.00
4.5	130,138		0.0000	1.0000	100.00
5.5	141,235		0.0000	1.0000	100.00
6.5	141,235		0.0000	1.0000	100.00
7.5	177,839		0.0000	1.0000	100.00
8.5	186,175		0.0000	1.0000	100.00
9.5	202,446		0.0000	1.0000	100.00
10.5	202,446	11,392	0.0563	0.9437	100.00
11.5	142,130	15,840	0.1114	0.8886	94.37
12.5	103,278		0.0000	1.0000	83.86
13.5	104,728		0.0000	1.0000	83.86
14.5	105,226	9,602	0.0913	0.9087	83.86
15.5	95,624		0.0000	1.0000	76.20
16.5	95,624	20,764	0.2171	0.7829	76.20
17.5	74,860	4,168	0.0557	0.9443	59.66
18.5	70,692	20,440	0.2891	0.7109	56.33
19.5	4,893		0.0000	1.0000	40.05
20.5	4,893		0.0000	1.0000	40.05
21.5	4,893	1,450	0.2963	0.7037	40.05
22.5	3,443	1,450	0.4211	0.5789	28.18
23.5	1,993	499	0.2503	0.7497	16.31
24.5	1,494		0.0000	1.0000	12.23
25.5					12.23

COLUMBIA GAS OF KENTUCKY, INC.  
 ACCOUNT 396.00 POWER OPERATED EQUIPMENT  
 ORIGINAL AND SMOOTH SURVIVOR CURVES



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1948-2004

EXPERIENCE BAND 1949-2023

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	819,375		0.0000	1.0000	100.00
0.5	844,946		0.0000	1.0000	100.00
1.5	853,647		0.0000	1.0000	100.00
2.5	853,647		0.0000	1.0000	100.00
3.5	878,247	25,062	0.0285	0.9715	100.00
4.5	950,506		0.0000	1.0000	97.15
5.5	962,286	19,298	0.0201	0.9799	97.15
6.5	960,676	65,338	0.0680	0.9320	95.20
7.5	922,649	35,779	0.0388	0.9612	88.72
8.5	895,347	27,327	0.0305	0.9695	85.28
9.5	901,356	34,709	0.0385	0.9615	82.68
10.5	923,431	24,996	0.0271	0.9729	79.50
11.5	914,530	72,957	0.0798	0.9202	77.34
12.5	841,646	38,178	0.0454	0.9546	71.17
13.5	810,658	27,007	0.0333	0.9667	67.95
14.5	783,651	17,408	0.0222	0.9778	65.68
15.5	767,865	6,265	0.0082	0.9918	64.22
16.5	761,601	203,274	0.2669	0.7331	63.70
17.5	558,327	34,127	0.0611	0.9389	46.70
18.5	524,200	16,540	0.0316	0.9684	43.84
19.5	405,169	10,730	0.0265	0.9735	42.46
20.5	394,440	8,485	0.0215	0.9785	41.34
21.5	302,898	38,669	0.1277	0.8723	40.45
22.5	264,229	82,956	0.3140	0.6860	35.28
23.5	181,274	128	0.0007	0.9993	24.21
24.5	181,145	19,353	0.1068	0.8932	24.19
25.5	160,038	15,046	0.0940	0.9060	21.60
26.5	144,991	4,491	0.0310	0.9690	19.57
27.5	140,501	19,256	0.1370	0.8630	18.97
28.5	121,245	21,133	0.1743	0.8257	16.37
29.5	100,112	25,842	0.2581	0.7419	13.51
30.5	74,270	8,975	0.1208	0.8792	10.03
31.5	65,295	11,629	0.1781	0.8219	8.81
32.5	53,666	4,259	0.0794	0.9206	7.24
33.5	49,407	6,225	0.1260	0.8740	6.67
34.5	43,182	43,182	1.0000		5.83
35.5					

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## **PART VIII. NET SALVAGE STATISTICS**



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1978	109		0		0		0
1979							
1980							
1981							
1982	295		0		0		0
1983		1				1-	
1984							
1985	376		0		0		0
1986	2,662		0		0		0
1987	518		0		0		0
1988	114		0		0		0
1989	3,071		0		0		0
1990	147		0		0		0
1991		8				8-	
1992							
1993	417	6	1		0	6-	1-
1994	112	8	8		0	8-	8-
1995							
1996				1		1	
1997							
1998							
1999							
2000	174	15	9		0	15-	9-
2001							
2002							
2003	8,195		0		0		0
2004							
2005		919				919-	
2006	107		0		0		0
2007	96-		0		0		0
2008							
2009	13,384	1,706	13		0	1,706-	13-
2010							
2011	1,742		0		0		0
2012	1,887	286	15		0	286-	15-
2013	38		0		0		0
2014	279	14	5		0	14-	5-
2015	83	576	691		0	576-	691-
2016	38-		0		0		0
2017	1		0		0		0
2018							
2019							
2020	56		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021		125				125-	
2022							
2023							
TOTAL	33,634	3,664	11	1	0	3,663-	11-

THREE-YEAR MOVING AVERAGES

78-80	36		0		0		0
79-81							
80-82	98		0		0		0
81-83	98		0		0		0
82-84	98		0		0		0
83-85	125		0		0		0
84-86	1,013		0		0		0
85-87	1,185		0		0		0
86-88	1,098		0		0		0
87-89	1,235		0		0		0
88-90	1,111		0		0		0
89-91	1,073	3	0		0	3-	0
90-92	49	3	6		0	3-	6-
91-93	139	5	3		0	5-	3-
92-94	176	5	3		0	5-	3-
93-95	176	5	3		0	5-	3-
94-96	37	3	8		1	2-	7-
95-97							
96-98							
97-99							
98-00	58	5	9		0	5-	9-
99-01	58	5	9		0	5-	9-
00-02	58	5	9		0	5-	9-
01-03	2,732		0		0		0
02-04	2,732		0		0		0
03-05	2,732	306	11		0	306-	11-
04-06	36	306	859		0	306-	859-
05-07	4	306			0	306-	
06-08	4		0		0		0
07-09	4,429	569	13		0	569-	13-
08-10	4,461	569	13		0	569-	13-
09-11	5,042	569	11		0	569-	11-
10-12	1,210	95	8		0	95-	8-
11-13	1,222	95	8		0	95-	8-
12-14	735	100	14		0	100-	14-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
13-15	134	197	147		0	197-	147-
14-16	108	197	182		0	197-	182-
15-17	15	192			0	192-	
16-18	12-		0		0		0
17-19			0		0		0
18-20	19		0		0		0
19-21	19	42	223		0	42-	223-
20-22	19	42	223		0	42-	223-
21-23		42				42-	
FIVE-YEAR AVERAGE							
19-23	11	25	223		0	25-	223-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	730	119	16		0	119-	16-
1970	59	37	63		0	37-	63-
1971	1,813	495	27		0	495-	27-
1972	811	344	42		0	344-	42-
1973	2,691	343	13	2,448	91	2,105	78
1974							
1975							
1976							
1977	205		0		0		0
1978	374	104	28		0	104-	28-
1979							
1980							
1981	5,768	754	13		0	754-	13-
1982	8,962	988	11	1,661	19	673	8
1983	2,245	522	23		0	522-	23-
1984	6,670	291	4		0	291-	4-
1985	10,023	220	2		0	220-	2-
1986	1,933	695	36		0	695-	36-
1987	10,363	163	2		0	163-	2-
1988	2,963		0		0		0
1989	735	215	29		0	215-	29-
1990	12,306	1,032	8		0	1,032-	8-
1991	1,372	243	18		0	243-	18-
1992	734		0	1	0	1	0
1993	3,701	1,342	36		0	1,342-	36-
1994	5,460	778	14	550	10	228-	4-
1995	939	22,938-			0	22,938	
1996	7,801	3,332	43		0	3,332-	43-
1997	1,627	6,242	384		0	6,242-	384-
1998	8,351	2,536	30		0	2,536-	30-
1999	860	531	62		0	531-	62-
2000	21,343	1,811	8		0	1,811-	8-
2001	2,689	884	33		0	884-	33-
2002	936	68	7		0	68-	7-
2003	1,263	2,703	214		0	2,703-	214-
2004	14,257	3,167	22		0	3,167-	22-
2005	4,765	14,911	313		0	14,911-	313-
2006	1,696	5,142-	303-		0	5,142	303
2007		3,197				3,197-	
2008	1,434	2,534	177		0	2,534-	177-
2009	4,152	6,582	159		0	6,582-	159-
2010		308				308-	
2011	13,149		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	21,758	15,934	73		0	15,934-	73-
2013	5,433	6,061	112		0	6,061-	112-
2014	9,930	1,757	18		0	1,757-	18-
2015	64,461	53,896	84		0	53,896-	84-
2016	70	8,398			0	8,398-	
2017	7,023	1,048	15		0	1,048-	15-
2018	7,732	52,359	677		0	52,359-	677-
2019	81,775	5,840	7		0	5,840-	7-
2020	11,799	20,328	172		0	20,328-	172-
2021	18,910	25,480	135		0	25,480-	135-
2022	14,601		0		0		0
2023	20,386	34,269	168		0	34,269-	168-
TOTAL	429,059	254,784	59	4,660	1	250,124-	58-

THREE-YEAR MOVING AVERAGES

69-71	867	217	25		0	217-	25-
70-72	894	292	33		0	292-	33-
71-73	1,772	394	22	816	46	422	24
72-74	1,167	229	20	816	70	587	50
73-75	897	114	13	816	91	702	78
74-76							
75-77	68		0		0		0
76-78	193	35	18		0	35-	18-
77-79	193	35	18		0	35-	18-
78-80	125	35	28		0	35-	28-
79-81	1,923	251	13		0	251-	13-
80-82	4,910	581	12	554	11	27-	1-
81-83	5,658	755	13	554	10	201-	4-
82-84	5,959	600	10	554	9	47-	1-
83-85	6,313	344	5		0	344-	5-
84-86	6,209	402	6		0	402-	6-
85-87	7,440	359	5		0	359-	5-
86-88	5,086	286	6		0	286-	6-
87-89	4,687	126	3		0	126-	3-
88-90	5,335	416	8		0	416-	8-
89-91	4,804	497	10		0	497-	10-
90-92	4,804	425	9		0	424-	9-
91-93	1,936	528	27		0	528-	27-
92-94	3,298	706	21	184	6	523-	16-
93-95	3,367	6,940-	206-	183	5	7,123	212
94-96	4,733	6,276-	133-	183	4	6,459	136

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	3,456	4,455-	129-		0	4,455	129
96-98	5,926	4,037	68		0	4,037-	68-
97-99	3,613	3,103	86		0	3,103-	86-
98-00	10,185	1,626	16		0	1,626-	16-
99-01	8,298	1,075	13		0	1,075-	13-
00-02	8,323	921	11		0	921-	11-
01-03	1,629	1,218	75		0	1,218-	75-
02-04	5,485	1,979	36		0	1,979-	36-
03-05	6,762	6,927	102		0	6,927-	102-
04-06	6,906	4,312	62		0	4,312-	62-
05-07	2,154	4,322	201		0	4,322-	201-
06-08	1,043	197	19		0	197-	19-
07-09	1,862	4,105	220		0	4,105-	220-
08-10	1,862	3,142	169		0	3,142-	169-
09-11	5,767	2,297	40		0	2,297-	40-
10-12	11,636	5,414	47		0	5,414-	47-
11-13	13,446	7,332	55		0	7,332-	55-
12-14	12,373	7,918	64		0	7,918-	64-
13-15	26,608	20,572	77		0	20,572-	77-
14-16	24,820	21,350	86		0	21,350-	86-
15-17	23,851	21,114	89		0	21,114-	89-
16-18	4,942	20,601	417		0	20,601-	417-
17-19	32,176	19,749	61		0	19,749-	61-
18-20	33,769	26,176	78		0	26,176-	78-
19-21	37,495	17,216	46		0	17,216-	46-
20-22	15,103	15,269	101		0	15,269-	101-
21-23	17,966	19,917	111		0	19,917-	111-
FIVE-YEAR AVERAGE							
19-23	29,494	17,184	58		0	17,184-	58-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	10		0		0		0
1970	8,034	439	5	32	0	406-	5-
1971	608		0		0		0
1972							
1973				55		55	
1974							
1975							
1976							
1977							
1978	1,940		0		0		0
1979							
1980	3,198		0		0		0
1981							
1982	4,676		0		0		0
1983	4,069		0		0		0
1984	1,847		0		0		0
1985	5,972	136	2		0	136-	2-
1986	2,718		0		0		0
1987	4,176	2,400	57		0	2,400-	57-
1988	1,101		0		0		0
1989	290		0		0		0
1990	182		0		0		0
1991							
1992	10,901	200	2		0	200-	2-
1993	6,187		0		0		0
1994	423	98	23		0	98-	23-
1995	15,166	2,600	17		0	2,600-	17-
1996	37,916	7,129	19	23,558	62	16,429	43
1997		30				30-	
1998	292,458	2,892	1	214,000	73	211,108	72
1999							
2000	114,701	380	0	105,301	92	104,922	91
2001							
2002							
2003							
2004							
2005							
2006	53,682		0		0		0
2007		8,299		31,983		23,684	
2008							
2009							
2010							
2011							

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020	1,117		0		0		0
2021	431	5,876			0	5,876-	
2022							
2023	6,808		0		0		0
TOTAL	578,612	30,479	5	374,930	65	344,451	60

THREE-YEAR MOVING AVERAGES

69-71	2,884	146	5	11	0	135-	5-
70-72	2,880	146	5	11	0	135-	5-
71-73	203		0	18	9	18	9
72-74				18		18	
73-75				18		18	
74-76							
75-77							
76-78	647		0		0		0
77-79	647		0		0		0
78-80	1,713		0		0		0
79-81	1,066		0		0		0
80-82	2,625		0		0		0
81-83	2,915		0		0		0
82-84	3,530		0		0		0
83-85	3,963	45	1		0	45-	1-
84-86	3,512	45	1		0	45-	1-
85-87	4,289	845	20		0	845-	20-
86-88	2,665	800	30		0	800-	30-
87-89	1,856	800	43		0	800-	43-
88-90	525		0		0		0
89-91	157		0		0		0
90-92	3,694	67	2		0	67-	2-
91-93	5,696	67	1		0	67-	1-
92-94	5,837	99	2		0	99-	2-
93-95	7,259	899	12		0	899-	12-
94-96	17,835	3,276	18	7,853	44	4,577	26



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	17,694	3,253	18	7,853	44	4,600	26
96-98	110,125	3,350	3	79,186	72	75,836	69
97-99	97,486	974	1	71,333	73	70,359	72
98-00	135,720	1,091	1	106,434	78	105,343	78
99-01	38,234	127	0	35,100	92	34,974	91
00-02	38,234	127	0	35,100	92	34,974	91
01-03							
02-04							
03-05							
04-06	17,894		0		0		0
05-07	17,894	2,766	15	10,661	60	7,895	44
06-08	17,894	2,766	15	10,661	60	7,895	44
07-09		2,766		10,661		7,895	
08-10							
09-11							
10-12							
11-13							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19							
18-20	372		0		0		0
19-21	516	1,959	380		0	1,959-	380-
20-22	516	1,959	380		0	1,959-	380-
21-23	2,413	1,959	81		0	1,959-	81-
FIVE-YEAR AVERAGE							
19-23	1,671	1,175	70		0	1,175-	70-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	62,390	7,535	12	3,779	6	3,755-	6-
1970	78,867	12,711	16	1,714	2	10,998-	14-
1971	66,071	10,507	16	2,620	4	7,887-	12-
1972	156,266	13,540	9	75-	0	13,615-	9-
1973	123,505	11,351	9	1,180-	1-	12,531-	10-
1974	37,316	2,683	7	5,361	14	2,678	7
1975	58,110	2,751-	5-	415-	1-	2,336	4
1976	74,384	8,749	12	3,372	5	5,377-	7-
1977	78,698	8,355	11	882	1	7,473-	9-
1978	72,156	7,475	10	2,715-	4-	10,191-	14-
1979	99,728	9,551	10	4,606	5	4,945-	5-
1980	92,048	10,910	12	959	1	9,951-	11-
1981	91,288	12,759	14	658	1	12,101-	13-
1982	116,865	14,812	13	1,180	1	13,632-	12-
1983	106,092	19,234	18	2,479	2	16,755-	16-
1984	188,954	23,594	12	547	0	23,048-	12-
1985	171,466	21,909	13	4,010	2	17,900-	10-
1986	127,878	13,126	10	13,023-	10-	26,149-	20-
1987	185,129	21,791	12	7,048	4	14,743-	8-
1988	158,653	21,360	13	1,867-	1-	23,227-	15-
1989	164,717	15,103	9	1,967	1	13,136-	8-
1990	271,340	33,286	12	1,861	1	31,425-	12-
1991	290,524	29,232	10	4,542-	2-	33,774-	12-
1992	169,542	16,542	10	5,708-	3-	22,249-	13-
1993	242,200	26,742	11	6,940-	3-	33,682-	14-
1994	259,776	29,876	12	291	0	29,585-	11-
1995	169,669	29,182	17	3,189-	2-	32,371-	19-
1996	421,839	49,575	12	13,827-	3-	63,402-	15-
1997	375,842	55,823	15	997-	0	56,820-	15-
1998	652,014	63,122	10	3	0	63,119-	10-
1999	250,956	42,002	17		0	42,002-	17-
2000	466,046	54,335	12		0	54,335-	12-
2001	315,695	66,343	21	4,064-	1-	70,407-	22-
2002	260,394	32,872	13	6,276	2	26,595-	10-
2003	807,118	37,373	5		0	37,373-	5-
2004	2,023,544	218,273	11	3,000	0	215,273-	11-
2005	294,801	167,583	57		0	167,583-	57-
2006	168,669	16,575	10		0	16,575-	10-
2007	936,665	88,774	9		0	88,774-	9-
2008	896,714	87,460	10	1,125	0	86,335-	10-
2009	1,203,367	77,613	6	2,738	0	74,875-	6-
2010	274,330	66,694	24	1,700-	1-	68,394-	25-
2011	369,511	220,128	60		0	220,128-	60-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	1,122,598	114,031	10		0	114,031-	10-
2013	641,621	228,885	36		0	228,885-	36-
2014	682,216	136,283	20		0	136,283-	20-
2015	254,796	128,915	51		0	128,915-	51-
2016	1,099,847	238,342	22		0	238,342-	22-
2017	830,392	262,577	32		0	262,577-	32-
2018	1,739,332	314,760	18		0	314,760-	18-
2019	2,192,106	299,296	14		0	299,296-	14-
2020	1,974,129	632,057	32		0	632,057-	32-
2021	1,286,236	364,147	28		0	364,147-	28-
2022	2,283,109	111,615	5		0	111,615-	5-
2023	2,306,551	211,788	9		0	211,788-	9-
TOTAL	29,844,068	4,816,405	16		0	4,820,172-	16-

THREE-YEAR MOVING AVERAGES

69-71	69,109	10,251	15	2,704	4	7,547-	11-
70-72	100,401	12,253	12	1,419	1	10,833-	11-
71-73	115,281	11,799	10	455	0	11,345-	10-
72-74	105,696	9,191	9	1,369	1	7,823-	7-
73-75	72,977	3,761	5	1,255	2	2,506-	3-
74-76	56,603	2,894	5	2,773	5	121-	0
75-77	70,397	4,784	7	1,280	2	3,505-	5-
76-78	75,079	8,193	11	513	1	7,680-	10-
77-79	83,527	8,461	10	924	1	7,536-	9-
78-80	87,977	9,312	11	950	1	8,362-	10-
79-81	94,355	11,073	12	2,074	2	8,999-	10-
80-82	100,067	12,827	13	932	1	11,895-	12-
81-83	104,749	15,602	15	1,439	1	14,163-	14-
82-84	137,304	19,213	14	1,402	1	17,812-	13-
83-85	155,504	21,579	14	2,345	2	19,234-	12-
84-86	162,766	19,543	12	2,822-	2-	22,365-	14-
85-87	161,491	18,942	12	655-	0	19,597-	12-
86-88	157,220	18,759	12	2,614-	2-	21,373-	14-
87-89	169,500	19,418	11	2,382	1	17,036-	10-
88-90	198,237	23,250	12	654	0	22,596-	11-
89-91	242,194	25,874	11	238-	0	26,112-	11-
90-92	243,802	26,353	11	2,796-	1-	29,149-	12-
91-93	234,089	24,172	10	5,730-	2-	29,902-	13-
92-94	223,839	24,387	11	4,119-	2-	28,505-	13-
93-95	223,882	28,600	13	3,279-	1-	31,879-	14-
94-96	283,761	36,211	13	5,575-	2-	41,786-	15-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	322,450	44,860	14	6,004-	2-	50,864-	16-
96-98	483,232	56,173	12	4,940-	1-	61,114-	13-
97-99	426,271	53,649	13	331-	0	53,981-	13-
98-00	456,339	53,153	12	1	0	53,152-	12-
99-01	344,233	54,227	16	1,355-	0	55,581-	16-
00-02	347,378	51,183	15	737	0	50,446-	15-
01-03	461,069	45,529	10	737	0	44,792-	10-
02-04	1,030,352	96,173	9	3,092	0	93,081-	9-
03-05	1,041,821	141,076	14	1,000	0	140,076-	13-
04-06	829,004	134,144	16	1,000	0	133,144-	16-
05-07	466,711	90,977	19		0	90,977-	19-
06-08	667,349	64,270	10	375	0	63,895-	10-
07-09	1,012,249	84,616	8	1,288	0	83,328-	8-
08-10	791,470	77,256	10	721	0	76,535-	10-
09-11	615,736	121,478	20	346	0	121,132-	20-
10-12	588,813	133,617	23	567-	0	134,184-	23-
11-13	711,243	187,681	26		0	187,681-	26-
12-14	815,478	159,733	20		0	159,733-	20-
13-15	526,211	164,694	31		0	164,694-	31-
14-16	678,953	167,847	25		0	167,847-	25-
15-17	728,345	209,945	29		0	209,945-	29-
16-18	1,223,191	271,893	22		0	271,893-	22-
17-19	1,587,277	292,211	18		0	292,211-	18-
18-20	1,968,522	415,371	21		0	415,371-	21-
19-21	1,817,490	431,833	24		0	431,833-	24-
20-22	1,847,824	369,273	20		0	369,273-	20-
21-23	1,958,632	229,183	12		0	229,183-	12-
FIVE-YEAR AVERAGE							
19-23	2,008,426	323,781	16		0	323,781-	16-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 378.00 AND 379.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	8,290	1,434	17	2,438	29	1,005	12
1970	9,415	2,243	24	3,056	32	814	9
1971	19,169	3,999	21	3,675	19	324-	2-
1972	29,376	5,503	19	8,718	30	3,215	11
1973	21,265	4,367	21	7,090	33	2,723	13
1974	6,400	1,242	19	1,147	18	95-	1-
1975	12,592	1,064	8	725-	6-	1,789-	14-
1976	4,154	353	8	505	12	152	4
1977	2,254	644	29	301	13	343-	15-
1978	94		0		0		0
1979	27,307	657	2	1,553	6	897	3
1980	2,080	164	8	160	8	4-	0
1981	11,208	30	0	599	5	569	5
1982	21,965	3,959	18	2,077	9	1,882-	9-
1983	12,012	692	6	15	0	677-	6-
1984	18,116	2,792	15	456-	3-	3,247-	18-
1985	14,741	1,348	9	836-	6-	2,185-	15-
1986	16,510	1,632	10	257	2	1,375-	8-
1987	33,303	1,291	4	1,232	4	59-	0
1988	30,329	2,632	9	19,534	64	16,902	56
1989	12,217	2,315	19	1,014-	8-	3,329-	27-
1990	36,083	10,128	28	4,211	12	5,917-	16-
1991	51,285	4,505	9	4,182	8	323-	1-
1992	35,265	11,696	33	173	0	11,523-	33-
1993	32,473	5,451	17	944	3	4,508-	14-
1994	30,459	2,281	7	15	0	2,266-	7-
1995	4,979	1,224	25	34	1	1,190-	24-
1996	31,143	2,125	7	3	0	2,122-	7-
1997	2,254	286	13		0	286-	13-
1998	36,185	1,681	5	823	2	858-	2-
1999	105,463	4,373	4	40,872	39	36,499	35
2000	105,619	11,303	11	512	0	10,791-	10-
2001	7,899	411	5		0	411-	5-
2002	19,909	1,916	10		0	1,916-	10-
2003	6,450	1,427	22		0	1,427-	22-
2004	170,929	5,874	3	3,000	2	2,874-	2-
2005	3,767-	17,430	463-		0	17,430-	463
2006	14,416	10,062	70		0	10,062-	70-
2007	5,736	3,124	54		0	3,124-	54-
2008	36,738	7,675	21		0	7,675-	21-
2009	52,538	12,695	24		0	12,695-	24-
2010	28,842	9,406	33		0	9,406-	33-
2011	29,532	1,599	5		0	1,599-	5-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 378.00 AND 379.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	59,882	12,677	21		0	12,677-	21-
2013	158,748	8,699	5		0	8,699-	5-
2014	92,659	36,168	39		0	36,168-	39-
2015	121,716	50,058	41		0	50,058-	41-
2016	44,297	40,266	91		0	40,266-	91-
2017	52,840	60,066	114		0	60,066-	114-
2018	124,861	17,299	14		0	17,299-	14-
2019	297,232	16,094	5		0	16,094-	5-
2020	688,931	57,951	8		0	57,951-	8-
2021	268,284	321,665	120		0	321,665-	120-
2022	698,231	176,111	25		0	176,111-	25-
2023	420,200	50,685	12		0	50,685-	12-
TOTAL	4,181,108	1,012,769	24	104,095	2	908,673-	22-

THREE-YEAR MOVING AVERAGES

69-71	12,291	2,558	21	3,056	25	498	4
70-72	19,320	3,915	20	5,150	27	1,235	6
71-73	23,270	4,623	20	6,494	28	1,871	8
72-74	19,014	3,704	19	5,652	30	1,948	10
73-75	13,419	2,224	17	2,504	19	280	2
74-76	7,716	886	11	309	4	577-	7-
75-77	6,334	687	11	27	0	660-	10-
76-78	2,168	332	15	269	12	64-	3-
77-79	9,885	434	4	618	6	185	2
78-80	9,827	274	3	571	6	298	3
79-81	13,532	283	2	771	6	487	4
80-82	11,751	1,384	12	945	8	439-	4-
81-83	15,062	1,560	10	897	6	664-	4-
82-84	17,364	2,481	14	545	3	1,936-	11-
83-85	14,956	1,611	11	426-	3-	2,036-	14-
84-86	16,456	1,924	12	345-	2-	2,269-	14-
85-87	21,518	1,424	7	217	1	1,206-	6-
86-88	26,714	1,852	7	7,008	26	5,156	19
87-89	25,283	2,079	8	6,584	26	4,505	18
88-90	26,209	5,025	19	7,577	29	2,552	10
89-91	33,195	5,649	17	2,460	7	3,189-	10-
90-92	40,877	8,776	21	2,855	7	5,921-	14-
91-93	39,674	7,217	18	1,766	4	5,451-	14-
92-94	32,732	6,476	20	377	1	6,099-	19-
93-95	22,637	2,986	13	331	1	2,655-	12-
94-96	22,194	1,877	8	17	0	1,859-	8-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNTS 378.00 AND 379.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	12,792	1,212	9	12	0	1,199-	9-
96-98	23,194	1,364	6	275	1	1,088-	5-
97-99	47,967	2,113	4	13,898	29	11,785	25
98-00	82,423	5,786	7	14,069	17	8,284	10
99-01	72,994	5,362	7	13,795	19	8,433	12
00-02	44,476	4,543	10	171	0	4,373-	10-
01-03	11,419	1,251	11		0	1,251-	11-
02-04	65,762	3,072	5	1,000	2	2,072-	3-
03-05	57,871	8,244	14	1,000	2	7,244-	13-
04-06	60,526	11,122	18	1,000	2	10,122-	17-
05-07	5,462	10,206	187		0	10,206-	187-
06-08	18,963	6,954	37		0	6,954-	37-
07-09	31,670	7,831	25		0	7,831-	25-
08-10	39,373	9,925	25		0	9,925-	25-
09-11	36,971	7,900	21		0	7,900-	21-
10-12	39,419	7,894	20		0	7,894-	20-
11-13	82,721	7,658	9		0	7,658-	9-
12-14	103,763	19,181	18		0	19,181-	18-
13-15	124,374	31,642	25		0	31,642-	25-
14-16	86,224	42,164	49		0	42,164-	49-
15-17	72,951	50,130	69		0	50,130-	69-
16-18	73,999	39,210	53		0	39,210-	53-
17-19	158,311	31,153	20		0	31,153-	20-
18-20	370,341	30,448	8		0	30,448-	8-
19-21	418,149	131,903	32		0	131,903-	32-
20-22	551,815	185,242	34		0	185,242-	34-
21-23	462,238	182,820	40		0	182,820-	40-
FIVE-YEAR AVERAGE							
19-23	474,576	124,501	26		0	124,501-	26-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	24,095	22,698	94	5,202	22	17,496-	73-
1970	31,599	14,438	46	8,510	27	5,928-	19-
1971	28,678	21,167	74	7,593	26	13,574-	47-
1972	35,178	23,523	67	4,027	11	19,496-	55-
1973	39,618	30,730	78	7,605	19	23,125-	58-
1974	19,530	31,786	163	7,291	37	24,495-	125-
1975	23,869	32,640	137	2,663	11	29,977-	126-
1976	27,900	39,419	141	5,841	21	33,577-	120-
1977	33,288	19,738	59	6,660	20	13,078-	39-
1978	40,500	20,358	50	379	1	19,979-	49-
1979	38,199	28,872	76	25-	0	28,897-	76-
1980	46,393	95,188	205	1,511-	3-	96,699-	208-
1981	45,798	109,023	238	153	0	108,870-	238-
1982	53,349	109,400	205	569	1	108,832-	204-
1983	35,692	91,355	256	1,166	3	90,188-	253-
1984	36,775	116,650	317	179	0	116,471-	317-
1985	39,852	121,120	304	15,030	38	106,090-	266-
1986	104,405	167,418	160	827-	1-	168,245-	161-
1987	35,726	162,863	456	589	2	162,274-	454-
1988	45,283	144,170	318	292-	1-	144,462-	319-
1989	81,605	154,861	190	2,106-	3-	156,968-	192-
1990	79,282	299,891	378	13,094-	17-	312,985-	395-
1991	121,326	329,214	271	24-	0	329,238-	271-
1992	43,696	80,303	184	222	1	80,081-	183-
1993	208,541	404,466	194		0	404,466-	194-
1994	492,973	241,788	49	1,321	0	240,467-	49-
1995	749,852	272,292	36	1	0	272,291-	36-
1996	474,713	237,272	50	1,607	0	235,665-	50-
1997	634,392	271,629	43	2,561	0	269,068-	42-
1998	604,594	251,589	42	2,235	0	249,353-	41-
1999	577,281	280,444	49	1,363	0	279,081-	48-
2000	769,118	360,891	47	2,695	0	358,196-	47-
2001	758,487	590,727	78	2,429	0	588,299-	78-
2002	761,027	690,300	91	1,322	0	688,978-	91-
2003	875,521	378,740	43	1,763	0	376,977-	43-
2004	995,384	721,384-	72-		0	721,384	72
2005	560,561	1,079,726	193		0	1,079,726-	193-
2006	647,852	537,539	83		0	537,539-	83-
2007	637,998	351,280	55		0	351,280-	55-
2008	515,199	278,141	54		0	278,141-	54-
2009	1,102,820	469,567	43		0	469,567-	43-
2010	458,268	239,572	52		0	239,572-	52-
2011	953,208	495,262	52		0	495,262-	52-



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	1,080,801	559,308	52		0	559,308-	52-
2013	850,820	661,643	78		0	661,643-	78-
2014	793,609	634,337	80		0	634,337-	80-
2015	748,951	744,450	99		0	744,450-	99-
2016	1,258,296	1,200,459	95		0	1,200,459-	95-
2017	1,478,324	1,306,202	88		0	1,306,202-	88-
2018	1,752,714	1,271,596	73		0	1,271,596-	73-
2019	2,231,460	1,147,207	51		0	1,147,207-	51-
2020	3,276,395	1,983,395	61		0	1,983,395-	61-
2021	3,983,090	2,655,215	67		0	2,655,215-	67-
2022	8,067,959	12,959,332	161		0	12,959,332-	161-
2023	3,347,778	2,369,095	71		0	2,369,095-	71-
TOTAL	42,759,625	36,468,905	85	73,097	0	36,395,808-	85-

THREE-YEAR MOVING AVERAGES

69-71	28,124	19,435	69	7,102	25	12,333-	44-
70-72	31,819	19,709	62	6,710	21	12,999-	41-
71-73	34,491	25,140	73	6,408	19	18,732-	54-
72-74	31,442	28,679	91	6,307	20	22,372-	71-
73-75	27,672	31,718	115	5,853	21	25,865-	93-
74-76	23,766	34,615	146	5,265	22	29,350-	123-
75-77	28,352	30,599	108	5,055	18	25,544-	90-
76-78	33,896	26,505	78	4,293	13	22,212-	66-
77-79	37,329	22,989	62	2,338	6	20,651-	55-
78-80	41,697	48,139	115	386-	1-	48,525-	116-
79-81	43,463	77,694	179	461-	1-	78,155-	180-
80-82	48,513	104,537	215	263-	1-	104,800-	216-
81-83	44,946	103,259	230	629	1	102,630-	228-
82-84	41,939	105,801	252	638	2	105,163-	251-
83-85	37,440	109,708	293	5,459	15	104,250-	278-
84-86	60,344	135,063	224	4,794	8	130,269-	216-
85-87	59,994	150,467	251	4,931	8	145,536-	243-
86-88	61,805	158,151	256	177-	0	158,327-	256-
87-89	54,205	153,965	284	603-	1-	154,568-	285-
88-90	68,724	199,641	290	5,164-	8-	204,805-	298-
89-91	94,071	261,322	278	5,075-	5-	266,397-	283-
90-92	81,435	236,469	290	4,298-	5-	240,768-	296-
91-93	124,521	271,328	218	66	0	271,261-	218-
92-94	248,403	242,186	97	514	0	241,671-	97-
93-95	483,789	306,182	63	441	0	305,741-	63-
94-96	572,513	250,451	44	976	0	249,475-	44-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	619,653	260,398	42	1,390	0	259,008-	42-
96-98	571,233	253,497	44	2,135	0	251,362-	44-
97-99	605,422	267,887	44	2,053	0	265,834-	44-
98-00	650,331	297,641	46	2,098	0	295,543-	45-
99-01	701,629	410,687	59	2,162	0	408,525-	58-
00-02	762,877	547,306	72	2,148	0	545,157-	71-
01-03	798,345	553,256	69	1,838	0	551,418-	69-
02-04	877,311	115,885	13	1,028	0	114,857-	13-
03-05	810,489	245,694	30	588	0	245,106-	30-
04-06	734,599	298,627	41		0	298,627-	41-
05-07	615,470	656,182	107		0	656,182-	107-
06-08	600,350	388,987	65		0	388,987-	65-
07-09	752,006	366,329	49		0	366,329-	49-
08-10	692,096	329,093	48		0	329,093-	48-
09-11	838,099	401,467	48		0	401,467-	48-
10-12	830,759	431,381	52		0	431,381-	52-
11-13	961,610	572,071	59		0	572,071-	59-
12-14	908,410	618,430	68		0	618,430-	68-
13-15	797,793	680,143	85		0	680,143-	85-
14-16	933,619	859,749	92		0	859,749-	92-
15-17	1,161,857	1,083,703	93		0	1,083,703-	93-
16-18	1,496,445	1,259,419	84		0	1,259,419-	84-
17-19	1,820,833	1,241,668	68		0	1,241,668-	68-
18-20	2,420,190	1,467,399	61		0	1,467,399-	61-
19-21	3,163,648	1,928,606	61		0	1,928,606-	61-
20-22	5,109,148	5,865,981	115		0	5,865,981-	115-
21-23	5,132,943	5,994,547	117		0	5,994,547-	117-
FIVE-YEAR AVERAGE							
19-23	4,181,336	4,222,849	101		0	4,222,849-	101-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	62,143	5,712	9	10,143	16	4,431	7
1970	57,467	4,901	9	6,048	11	1,148	2
1971	49,004	5,047	10	6,781	14	1,734	4
1972	32,254	4,435	14	525-	2-	4,960-	15-
1973	21,448	3,180	15	10,060	47	6,879	32
1974				405-		405-	
1975	19,011	2,308	12	4,613	24	2,305	12
1976	12,838	3,873	30	12,619	98	8,746	68
1977	77,400	4,069	5		0	4,069-	5-
1978	36,556	4,285	12	29	0	4,256-	12-
1979	47,730	9,819	21	26	0	9,793-	21-
1980	53,094	10,505	20		0	10,505-	20-
1981	35,140	7,767	22		0	7,767-	22-
1982	65,354	1,859	3	138	0	1,721-	3-
1983	53,304	1,056	2	1,814	3	759	1
1984	53,698	371-	1-		0	371	1
1985	63,264	1,850-	3-	899	1	2,749	4
1986	92,274	56	0	9,246	10	9,190	10
1987	73,194		0	9,932	14	9,932	14
1988	69,492		0	5,903	8	5,903	8
1989	52,234	781	1	6,493	12	5,712	11
1990	63,650	4,237	7	7,546	12	3,309	5
1991	80,921	4,292	5	10,005	12	5,713	7
1992	95,093	3,730	4	9,168	10	5,438	6
1993	80,301	3,298	4		0	3,298-	4-
1994	133,315	6,187	5	2,758	2	3,429-	3-
1995	103,961	5,828	6	4,017	4	1,811-	2-
1996	83,689	7,137	9	653	1	6,484-	8-
1997	91,624	523	1	254	0	268-	0
1998	103,204		0	433	0	433	0
1999	125,820		0	350	0	350	0
2000				157		157	
2001	211,021		0	966	0	966	0
2002	220,188		0	525	0	525	0
2003	335,975		0	192	0	192	0
2004	281,724		0	13,445	5	13,445	5
2005	44,057		0	920-	2-	920-	2-
2006	20,532		0		0		0
2007	177,744		0		0		0
2008	156,470		0	9,930	6	9,930	6
2009	485,480	10,018-	2-	84,022	17	94,040	19
2010	242,092	1	0	7,582	3	7,581	3
2011	285,685	1,818	1		0	1,818-	1-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	232,999	877	0	10,951	5	10,074	4
2013	160,707	2,610-	2-	29,666	18	32,276	20
2014	162,431	1,413	1	3,303	2	1,890	1
2015	171,758	31	0		0	31-	0
2016	286,992		0	11,388	4	11,388	4
2017	319,276		0	5,267	2	5,267	2
2018	444,678		0	23,221	5	23,221	5
2019	445,718		0		0		0
2020	409,216		0		0		0
2021	428,419		0		0		0
2022	516,717		0		0		0
2023	2,591,097	69,895	3		0	69,895-	3-
TOTAL	10,619,452	164,072	2	318,697	3	154,624	1

THREE-YEAR MOVING AVERAGES

69-71	56,205	5,220	9	7,657	14	2,437	4
70-72	46,242	4,794	10	4,101	9	693-	1-
71-73	34,236	4,221	12	5,438	16	1,218	4
72-74	17,901	2,538	14	3,043	17	505	3
73-75	13,487	1,829	14	4,756	35	2,926	22
74-76	10,617	2,060	19	5,609	53	3,549	33
75-77	36,416	3,417	9	5,744	16	2,328	6
76-78	42,265	4,076	10	4,216	10	140	0
77-79	53,895	6,058	11	18	0	6,039-	11-
78-80	45,794	8,203	18	18	0	8,185-	18-
79-81	45,321	9,364	21	9	0	9,355-	21-
80-82	51,196	6,711	13	46	0	6,665-	13-
81-83	51,266	3,561	7	651	1	2,910-	6-
82-84	57,452	848	1	651	1	197-	0
83-85	56,755	388-	1-	904	2	1,293	2
84-86	69,745	721-	1-	3,382	5	4,103	6
85-87	76,244	598-	1-	6,692	9	7,290	10
86-88	78,320	19	0	8,361	11	8,342	11
87-89	64,973	260	0	7,443	11	7,182	11
88-90	61,792	1,673	3	6,648	11	4,975	8
89-91	65,602	3,104	5	8,015	12	4,911	7
90-92	79,888	4,086	5	8,907	11	4,820	6
91-93	85,438	3,773	4	6,391	7	2,618	3
92-94	102,903	4,405	4	3,975	4	430-	0
93-95	105,859	5,104	5	2,258	2	2,846-	3-
94-96	106,988	6,384	6	2,476	2	3,908-	4-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	93,091	4,496	5	1,642	2	2,854-	3-
96-98	92,839	2,553	3	447	0	2,106-	2-
97-99	106,882	174	0	346	0	172	0
98-00	76,341		0	313	0	313	0
99-01	112,280		0	491	0	491	0
00-02	143,736		0	549	0	549	0
01-03	255,728		0	561	0	561	0
02-04	279,295		0	4,721	2	4,721	2
03-05	220,585		0	4,239	2	4,239	2
04-06	115,438		0	4,175	4	4,175	4
05-07	80,778		0	307-	0	307-	0
06-08	118,248		0	3,310	3	3,310	3
07-09	273,231	3,339-	1-	31,317	11	34,657	13
08-10	294,680	3,339-	1-	33,845	11	37,184	13
09-11	337,752	2,733-	1-	30,535	9	33,268	10
10-12	253,592	898	0	6,178	2	5,279	2
11-13	226,464	28	0	13,539	6	13,511	6
12-14	185,379	107-	0	14,640	8	14,747	8
13-15	164,966	388-	0	10,990	7	11,378	7
14-16	207,061	481	0	4,897	2	4,416	2
15-17	259,342	10	0	5,552	2	5,541	2
16-18	350,316		0	13,292	4	13,292	4
17-19	403,224		0	9,496	2	9,496	2
18-20	433,204		0	7,740	2	7,740	2
19-21	427,784		0		0		0
20-22	451,451		0		0		0
21-23	1,178,744	23,298	2		0	23,298-	2-
FIVE-YEAR AVERAGE							
19-23	878,233	13,979	2		0	13,979-	2-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	3,097	1,349	44	96	3	1,253-	40-
1970	7,525	1,287	17	501	7	786-	10-
1971	16,814	1,485	9	218	1	1,267-	8-
1972	11,241	820	7	144	1	676-	6-
1973	4,754	652	14	14	0	639-	13-
1974	5,802	330	6	16	0	314-	5-
1975	5,554	705	13	694	12	11-	0
1976	7,602	571	8	137	2	434-	6-
1977	5,467	259	5	21	0	237-	4-
1978	5,648	470	8	150	3	320-	6-
1979	1,764	1,937	110	802	45	1,135-	64-
1980	1,784	740	41		0	740-	41-
1981	2,082	1,601	77	1	0	1,600-	77-
1982	2,253	2,617	116	580	26	2,037-	90-
1983	4,631	2,373	51	172	4	2,202-	48-
1984	6,942	2,431	35	118	2	2,313-	33-
1985	6,237	2,094	34	600	10	1,494-	24-
1986	10,763	2,842	26	417	4	2,425-	23-
1987	7,427	1,877	25	273	4	1,604-	22-
1988	6,043	697	12	373	6	324-	5-
1989	6,886	865	13	603	9	263-	4-
1990	7,122	631	9	55	1	575-	8-
1991	12,358	562	5	62	1	500-	4-
1992	2,548		0	277	11	277	11
1993	16,750	739	4	58	0	681-	4-
1994	4,375	1,714	39	58	1	1,656-	38-
1995	16,762	195	1	3	0	192-	1-
1996	46,091	521	1	33	0	488-	1-
1997	54,364	328	1	266	0	62-	0
1998	76,370	1,324	2	27	0	1,297-	2-
1999	40,447	1,044	3	178	0	867-	2-
2000	30,913	379	1	52	0	327-	1-
2001	26,401	4	0	295	1	291	1
2002	21,759	1	0	93	0	92	0
2003	62,815	472	1	117	0	355-	1-
2004	48,981	181	0	170	0	12-	0
2005	29,225	25,516	87		0	25,516-	87-
2006	33,948	107	0		0	107-	0
2007	46,912	16	0		0	16-	0
2008	75,055	25	0		0	25-	0
2009	83,716		0		0		0
2010	41,856	9	0		0	9-	0
2011	43,793		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	24,517		0		0		0
2013	1,181		0		0		0
2014							
2015							
2016	18,510		0		0		0
2017	12,855		0		0		0
2018	20,087		0		0		0
2019	18,272		0		0		0
2020	26,077		0		0		0
2021	32,228	563	2		0	563-	2-
2022	33,240		0		0		0
2023	48,231		0		0		0
TOTAL	1,188,074	62,336	5	7,671	1	54,664-	5-

THREE-YEAR MOVING AVERAGES

69-71	9,145	1,374	15	272	3	1,102-	12-
70-72	11,860	1,197	10	288	2	910-	8-
71-73	10,936	986	9	125	1	861-	8-
72-74	7,266	601	8	58	1	543-	7-
73-75	5,370	562	10	241	4	321-	6-
74-76	6,320	535	8	282	4	253-	4-
75-77	6,208	512	8	284	5	228-	4-
76-78	6,239	433	7	103	2	331-	5-
77-79	4,293	889	21	324	8	564-	13-
78-80	3,066	1,049	34	317	10	732-	24-
79-81	1,877	1,426	76	268	14	1,159-	62-
80-82	2,040	1,653	81	194	9	1,459-	72-
81-83	2,989	2,197	74	251	8	1,946-	65-
82-84	4,608	2,474	54	290	6	2,184-	47-
83-85	5,937	2,300	39	297	5	2,003-	34-
84-86	7,981	2,456	31	378	5	2,078-	26-
85-87	8,142	2,271	28	430	5	1,841-	23-
86-88	8,078	1,805	22	354	4	1,451-	18-
87-89	6,786	1,146	17	416	6	730-	11-
88-90	6,684	731	11	343	5	388-	6-
89-91	8,789	686	8	240	3	446-	5-
90-92	7,342	397	5	131	2	266-	4-
91-93	10,552	433	4	132	1	301-	3-
92-94	7,891	817	10	131	2	687-	9-
93-95	12,629	882	7	40	0	843-	7-
94-96	22,409	810	4	32	0	778-	3-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	39,072	348	1	101	0	247-	1-
96-98	58,941	724	1	109	0	616-	1-
97-99	57,060	899	2	157	0	742-	1-
98-00	49,243	916	2	86	0	830-	2-
99-01	32,587	476	1	175	1	301-	1-
00-02	26,358	128	0	147	1	19	0
01-03	36,992	159	0	168	0	9	0
02-04	44,518	218	0	127	0	91-	0
03-05	47,007	8,723	19	96	0	8,627-	18-
04-06	37,385	8,601	23	57	0	8,545-	23-
05-07	36,695	8,546	23		0	8,546-	23-
06-08	51,972	49	0		0	49-	0
07-09	68,561	14	0		0	14-	0
08-10	66,876	11	0		0	11-	0
09-11	56,455	3	0		0	3-	0
10-12	36,722	3	0		0	3-	0
11-13	23,164		0		0		0
12-14	8,566		0		0		0
13-15	394		0		0		0
14-16	6,170		0		0		0
15-17	10,455		0		0		0
16-18	17,151		0		0		0
17-19	17,071		0		0		0
18-20	21,479		0		0		0
19-21	25,526	188	1		0	188-	1-
20-22	30,515	188	1		0	188-	1-
21-23	37,900	188	0		0	188-	0
FIVE-YEAR AVERAGE							
19-23	31,610	113	0		0	113-	0



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	2,388	55	2	1,151	48	1,095	46
1970	2,528	43	2	1,902	75	1,858	74
1971	1,499		0	718	48	718	48
1972	1,647		0	1,006	61	1,006	61
1973	1,223		0	304	25	304	25
1974	1,460	256	18	115	8	140-	10-
1975	1,161	232	20	83	7	149-	13-
1976	2,145	590	27	334	16	255-	12-
1977	1,724	372	22	446	26	74	4
1978	2,370	230	10	346-	15-	577-	24-
1979	2,712	308	11	147	5	161-	6-
1980	2,975	230	8	227	8	3-	0
1981	4,175	690	17	640	15	49-	1-
1982	9,307	3,928	42	1,309	14	2,619-	28-
1983	7,595	2,809	37	775	10	2,034-	27-
1984	9,540	4,037	42	1,005	11	3,032-	32-
1985	10,709	2,049	19	264	2	1,785-	17-
1986	20,809	2,135	10	324-	2-	2,459-	12-
1987	7,894	2,077	26	23	0	2,054-	26-
1988	7,942	1,640	21	1,160	15	479-	6-
1989	7,806	1,036	13	601	8	435-	6-
1990	6,760	377	6	822-	12-	1,199-	18-
1991	8,381	877	10	215	3	662-	8-
1992	2,313	74	3	78	3	5	0
1993	13,067	983	8	59	0	923-	7-
1994	4,484	624	14	794	18	171	4
1995	3,921	49	1	7	0	42-	1-
1996	8,733	198	2	310	4	112	1
1997	8,699	33	0		0	33-	0
1998	13,835	91	1	1-	0	91-	1-
1999	5,000	67	1	156	3	89	2
2000	3,975	208	5	13	0	194-	5-
2001	2,607	49	2	544	21	495	19
2002	5,363		0	18	0	18	0
2003	6,449		0	615	10	615	10
2004	3,346	81-	2-	26	1	107	3
2005	3,551	13	0		0	13-	0
2006	3,783	25	1		0	25-	1-
2007	5,604		0		0		0
2008	7,981		0		0		0
2009	11,528		0		0		0
2010	4,245	9	0		0	9-	0
2011	4,306		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	3,520		0		0		0
2013							
2014							
2015							
2016	1,844		0		0		0
2017	1,224		0		0		0
2018	1,765		0		0		0
2019	2,057		0		0		0
2020	3,529		0		0		0
2021	4,147		0		0		0
2022	4,345		0		0		0
2023	6,869		0		0		0
TOTAL	276,837	26,312	10	13,558	5	12,754-	5-

THREE-YEAR MOVING AVERAGES

69-71	2,138	33	2	1,257	59	1,224	57
70-72	1,891	14	1	1,209	64	1,194	63
71-73	1,456		0	676	46	676	46
72-74	1,443	85	6	475	33	390	27
73-75	1,281	163	13	167	13	5	0
74-76	1,589	359	23	178	11	182-	11-
75-77	1,677	398	24	288	17	110-	7-
76-78	2,080	397	19	145	7	253-	12-
77-79	2,268	303	13	82	4	221-	10-
78-80	2,685	256	10	9	0	247-	9-
79-81	3,287	409	12	338	10	71-	2-
80-82	5,486	1,616	29	725	13	890-	16-
81-83	7,026	2,476	35	908	13	1,567-	22-
82-84	8,814	3,591	41	1,030	12	2,561-	29-
83-85	9,281	2,965	32	682	7	2,283-	25-
84-86	13,686	2,740	20	315	2	2,425-	18-
85-87	13,137	2,087	16	12-	0	2,099-	16-
86-88	12,215	1,951	16	287	2	1,664-	14-
87-89	7,880	1,584	20	595	8	990-	13-
88-90	7,502	1,018	14	313	4	704-	9-
89-91	7,649	764	10	2-	0	765-	10-
90-92	5,818	443	8	176-	3-	619-	11-
91-93	7,920	645	8	118	1	527-	7-
92-94	6,622	560	8	311	5	249-	4-
93-95	7,158	552	8	287	4	265-	4-
94-96	5,713	290	5	371	6	80	1

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	7,118	93	1	106	1	12	0
96-98	10,422	107	1	103	1	4-	0
97-99	9,178	63	1	52	1	12-	0
98-00	7,603	122	2	56	1	65-	1-
99-01	3,861	108	3	238	6	130	3
00-02	3,982	86	2	192	5	106	3
01-03	4,806	17	0	393	8	376	8
02-04	5,053	27-	1-	220	4	247	5
03-05	4,448	23-	1-	214	5	237	5
04-06	3,560	14-	0	9	0	23	1
05-07	4,313	13	0		0	13-	0
06-08	5,789	8	0		0	8-	0
07-09	8,371		0		0		0
08-10	7,918	3	0		0	3-	0
09-11	6,693	3	0		0	3-	0
10-12	4,024	3	0		0	3-	0
11-13	2,609		0		0		0
12-14	1,173		0		0		0
13-15							
14-16	615		0		0		0
15-17	1,023		0		0		0
16-18	1,611		0		0		0
17-19	1,682		0		0		0
18-20	2,450		0		0		0
19-21	3,244		0		0		0
20-22	4,007		0		0		0
21-23	5,120		0		0		0
FIVE-YEAR AVERAGE							
19-23	4,189		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	1,178	292	25	415	35	123	10
1970	689	543	79	241	35	302-	44-
1971	2,226	230	10	652	29	422	19
1972	1,246	71	6	21-	2-	93-	7-
1973	806	673	83		0	673-	83-
1974	532	104	20	69	13	35-	7-
1975	530	100	19	40	7	60-	11-
1976	1,000		0		0		0
1977	1,302		0		0		0
1978	1,613		0		0		0
1979	1,897		0		0		0
1980	1,648	50	3		0	50-	3-
1981	2,502		0		0		0
1982	5,669		0		0		0
1983	2,649		0		0		0
1984	3,147		0		0		0
1985	4,208		0		0		0
1986	8,429		0		0		0
1987	5,345		0		0		0
1988	5,245		0	50-	1-	50-	1-
1989	4,891		0		0		0
1990	4,139		0		0		0
1991	4,555		0		0		0
1992	1,022		0		0		0
1993	8,983	46	1		0	46-	1-
1994	2,017		0		0		0
1995	5,501	97	2	8	0	89-	2-
1996	14,880	225	2		0	224-	2-
1997	18,337	71	0		0	71-	0
1998	29,430	250	1		0	250-	1-
1999	13,904	88	1		0	88-	1-
2000	7,778	800	10		0	800-	10-
2001	6,389	222	3		0	222-	3-
2002	7,251		0		0		0
2003	3,031		0		0		0
2004	65	70	107		0	70-	107-
2005	22,964		0		0		0
2006	133,085		0		0		0
2007	31,296		0		0		0
2008	123,201-	24	0		0	24-	0
2009	30,520		0		0		0
2010	7,981	1	0		0	1-	0
2011	7,223		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019	172,463		0		0		0
2020							
2021							
2022							
2023							
TOTAL	466,368	3,958	1	1,353	0	2,605-	1-

THREE-YEAR MOVING AVERAGES

69-71	1,364	355	26	436	32	81	6
70-72	1,387	282	20	290	21	9	1
71-73	1,426	325	23	210	15	115-	8-
72-74	861	283	33	16	2	267-	31-
73-75	623	292	47	36	6	256-	41-
74-76	687	68	10	36	5	32-	5-
75-77	944	33	4	13	1	20-	2-
76-78	1,305		0		0		0
77-79	1,604		0		0		0
78-80	1,720	17	1		0	17-	1-
79-81	2,016	17	1		0	17-	1-
80-82	3,273	17	1		0	17-	1-
81-83	3,607		0		0		0
82-84	3,822		0		0		0
83-85	3,335		0		0		0
84-86	5,261		0		0		0
85-87	5,994		0		0		0
86-88	6,340		0	17-	0	17-	0
87-89	5,160		0	17-	0	17-	0
88-90	4,758		0	17-	0	17-	0
89-91	4,528		0		0		0
90-92	3,239		0		0		0
91-93	4,853	15	0		0	15-	0
92-94	4,007	15	0		0	15-	0
93-95	5,500	48	1	3	0	45-	1-
94-96	7,466	107	1	3	0	105-	1-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE		
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	
THREE-YEAR MOVING AVERAGES								
95-97	12,906	131	1	3	0	128-	1-	
96-98	20,882	182	1		0	182-	1-	
97-99	20,557	136	1		0	136-	1-	
98-00	17,037	379	2		0	379-	2-	
99-01	9,357	370	4		0	370-	4-	
00-02	7,140	341	5		0	341-	5-	
01-03	5,557	74	1		0	74-	1-	
02-04	3,449	23	1		0	23-	1-	
03-05	8,687	23	0		0	23-	0	
04-06	52,038	23	0		0	23-	0	
05-07	62,448		0		0		0	
06-08	13,727	8	0		0	8-	0	
07-09	20,462-	8	0		0	8-	0	
08-10	28,233-	8	0		0	8-	0	
09-11	15,241		0		0		0	
10-12	5,068		0		0		0	
11-13	2,408		0		0		0	
12-14								
13-15								
14-16								
15-17								
16-18								
17-19	57,488		0		0		0	
18-20	57,488		0		0		0	
19-21	57,488		0		0		0	
20-22								
21-23								
FIVE-YEAR AVERAGE								
19-23	34,493		0		0		0	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	4,399	672	15	1,256	29	584	13
1970	22,773	4,342	19	9,780	43	5,438	24
1971	25,135	4,197	17	13,522	54	9,325	37
1972	9,083	968	11	3,856	42	2,888	32
1973	7,805	1,164	15	3,601	46	2,436	31
1974	6,409	48	1	1,998-	31-	2,046-	32-
1975	8,153	705	9	2,035	25	1,329	16
1976	7,629	2,502	33	1,703	22	798-	10-
1977	2,651	159	6	2	0	157-	6-
1978	10,509	379	4	256	2	123-	1-
1979	5,697	485	9	114	2	371-	7-
1980	8,037	811-	10-	2,151	27	2,962	37
1981	10,187	551	5	481	5	70-	1-
1982	4,975	90-	2-	3,187	64	3,277	66
1983	11,659	2,508	22	2,786	24	278	2
1984	12,619	1,048	8	199	2	850-	7-
1985	6,964	671	10	155-	2-	826-	12-
1986	29,018	2,240	8	2,249	8	9	0
1987	17,825	1,749	10	691	4	1,058-	6-
1988	15,948	6,558	41	337	2	6,222-	39-
1989	5,159	1,737	34	10	0	1,726-	33-
1990	5,753	2,039	35	1,130	20	909-	16-
1991	4,856	948	20	5	0	943-	19-
1992	3,096	772	25	5	0	767-	25-
1993	39,438	231-	1-	10,477	27	10,708	27
1994	14,773	3,344	23	6	0	3,338-	23-
1995	37,665	2,521	7		0	2,521-	7-
1996	33,120	4,632	14		0	4,632-	14-
1997	23,607	1,083	5		0	1,083-	5-
1998	28,392	624	2	1,696	6	1,072	4
1999	23,983	2,516	10	1	0	2,516-	10-
2000	121,588	12,513	10		0	12,513-	10-
2001	27,180	2,012	7		0	2,012-	7-
2002	3,521	236	7		0	236-	7-
2003	57,867	2,202	4		0	2,202-	4-
2004	130,180	7,110	5		0	7,110-	5-
2005	107,077	4,407	4		0	4,407-	4-
2006	14,751	2,384	16		0	2,384-	16-
2007	43,360	3,682	8	1,475	3	2,207-	5-
2008	73,551	9,658	13		0	9,658-	13-
2009	38,322	12,147	32		0	12,147-	32-
2010	22,088	539	2		0	539-	2-
2011	63,482	3,479	5		0	3,479-	5-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	74,082	4,195	6		0	4,195-	6-
2013	88,829	8,025	9		0	8,025-	9-
2014	80,445	10,530	13		0	10,530-	13-
2015	69,338	10,173	15		0	10,173-	15-
2016	45,433	2,439	5		0	2,439-	5-
2017	33,677	23,348	69		0	23,348-	69-
2018	190,082	7,155	4		0	7,155-	4-
2019	30,951	119,245	385		0	119,245-	385-
2020	42,137	22,094	52		0	22,094-	52-
2021	312,211	226,072	72		0	226,072-	72-
2022	63,288	53,825	85		0	53,825-	85-
2023	178,581	41,328	23		0	41,328-	23-
TOTAL	2,359,340	638,827	27	60,855	3	577,972-	24-

THREE-YEAR MOVING AVERAGES

69-71	17,436	3,070	18	8,186	47	5,116	29
70-72	18,997	3,169	17	9,052	48	5,884	31
71-73	14,008	2,110	15	6,993	50	4,883	35
72-74	7,766	727	9	1,819	23	1,093	14
73-75	7,456	639	9	1,212	16	573	8
74-76	7,397	1,085	15	580	8	505-	7-
75-77	6,145	1,122	18	1,247	20	125	2
76-78	6,930	1,013	15	654	9	360-	5-
77-79	6,286	341	5	124	2	217-	3-
78-80	8,081	18	0	840	10	823	10
79-81	7,974	75	1	915	11	840	11
80-82	7,733	117-	2-	1,940	25	2,056	27
81-83	8,941	990	11	2,151	24	1,162	13
82-84	9,751	1,155	12	2,057	21	902	9
83-85	10,414	1,409	14	943	9	466-	4-
84-86	16,200	1,319	8	764	5	556-	3-
85-87	17,936	1,553	9	928	5	625-	3-
86-88	20,930	3,516	17	1,092	5	2,424-	12-
87-89	12,977	3,348	26	346	3	3,002-	23-
88-90	8,953	3,445	38	492	5	2,952-	33-
89-91	5,256	1,575	30	382	7	1,193-	23-
90-92	4,568	1,253	27	380	8	873-	19-
91-93	15,797	496	3	3,496	22	2,999	19
92-94	19,102	1,295	7	3,496	18	2,201	12
93-95	30,626	1,878	6	3,494	11	1,616	5
94-96	28,520	3,499	12	2	0	3,497-	12-



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	31,464	2,746	9		0	2,746-	9-
96-98	28,373	2,113	7	565	2	1,548-	5-
97-99	25,328	1,408	6	566	2	842-	3-
98-00	57,988	5,218	9	566	1	4,652-	8-
99-01	57,584	5,680	10		0	5,680-	10-
00-02	50,763	4,920	10		0	4,920-	10-
01-03	29,523	1,483	5		0	1,483-	5-
02-04	63,856	3,183	5		0	3,183-	5-
03-05	98,375	4,573	5		0	4,573-	5-
04-06	84,003	4,634	6		0	4,634-	6-
05-07	55,063	3,491	6	492	1	2,999-	5-
06-08	43,887	5,241	12	492	1	4,750-	11-
07-09	51,745	8,496	16	492	1	8,004-	15-
08-10	44,654	7,448	17		0	7,448-	17-
09-11	41,297	5,388	13		0	5,388-	13-
10-12	53,217	2,737	5		0	2,737-	5-
11-13	75,464	5,233	7		0	5,233-	7-
12-14	81,118	7,584	9		0	7,584-	9-
13-15	79,537	9,576	12		0	9,576-	12-
14-16	65,072	7,714	12		0	7,714-	12-
15-17	49,483	11,987	24		0	11,987-	24-
16-18	89,731	10,981	12		0	10,981-	12-
17-19	84,903	49,916	59		0	49,916-	59-
18-20	87,723	49,498	56		0	49,498-	56-
19-21	128,433	122,470	95		0	122,470-	95-
20-22	139,212	100,664	72		0	100,664-	72-
21-23	184,693	107,075	58		0	107,075-	58-
FIVE-YEAR AVERAGE							
19-23	125,433	92,513	74		0	92,513-	74-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	2,119	54	3		0	54-	3-
1970	1,567	30	2	300	19	270	17
1971	2,710	32	1	498	18	466	17
1972							
1973	519	17	3	372	72	355	68
1974	1,444	88	6	90	6	2	0
1975	12,219	687	6	33	0	654-	5-
1976							
1977	4,258	339	8	200	5	139-	3-
1978	3,169	97	3	320	10	223	7
1979							
1980	13,211	1,239	9	75	1	1,165-	9-
1981	4,438	71	2		0	71-	2-
1982	760	154	20		0	154-	20-
1983							
1984	840	371	44		0	371-	44-
1985	333		0		0		0
1986	601	130	22		0	130-	22-
1987	45,879	79	0		0	79-	0
1988	136		0		0		0
1989	9,676	624	6		0	624-	6-
1990	2,368	337	14		0	337-	14-
1991	49,708	628	1	4,040	8	3,412	7
1992	23,997	669	3		0	669-	3-
1993	730	844	116		0	844-	116-
1994							
1995							
1996	1,185		0		0		0
1997							
1998	12,557	2,992	24	123,716	985	120,723	961
1999	5,650	127	2		0	127-	2-
2000	9,936	1,230	12		0	1,230-	12-
2001							
2002							
2003							
2004	30,370	7,026	23		0	7,026-	23-
2005	49,606	2,722	5		0	2,722-	5-
2006							
2007							
2008	1,015-		0		0		0
2009							
2010							
2011	7,471		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012	12,213	727	6		0	727-	6-
2013	214,158		0		0		0
2014	47,886	9,383	20		0	9,383-	20-
2015	48,376		0		0		0
2016	109,782	2,329	2		0	2,329-	2-
2017	111,085	9,249	8		0	9,249-	8-
2018	36,296	955	3		0	955-	3-
2019	74,989	1,183	2		0	1,183-	2-
2020	160,282	16,331	10		0	16,331-	10-
2021	169,323	7,084	4		0	7,084-	4-
2022	677,848	9,766	1		0	9,766-	1-
2023	1,588,719	9,140	1		0	9,140-	1-
TOTAL	3,547,396	86,737	2	129,643	4	42,906	1

THREE-YEAR MOVING AVERAGES

69-71	2,132	39	2	266	12	227	11
70-72	1,426	21	1	266	19	245	17
71-73	1,076	17	2	290	27	274	25
72-74	654	35	5	154	24	119	18
73-75	4,727	264	6	165	3	99-	2-
74-76	4,554	258	6	41	1	217-	5-
75-77	5,492	342	6	78	1	264-	5-
76-78	2,476	145	6	173	7	28	1
77-79	2,476	145	6	173	7	28	1
78-80	5,460	445	8	131	2	314-	6-
79-81	5,883	437	7	25	0	412-	7-
80-82	6,136	488	8	25	0	463-	8-
81-83	1,733	75	4		0	75-	4-
82-84	533	175	33		0	175-	33-
83-85	391	124	32		0	124-	32-
84-86	591	167	28		0	167-	28-
85-87	15,604	70	0		0	70-	0
86-88	15,539	70	0		0	70-	0
87-89	18,564	234	1		0	234-	1-
88-90	4,060	320	8		0	320-	8-
89-91	20,584	530	3	1,347	7	817	4
90-92	25,358	545	2	1,347	5	802	3
91-93	24,812	714	3	1,347	5	633	3
92-94	8,242	504	6		0	504-	6-
93-95	243	281	116		0	281-	116-
94-96	395		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	395		0		0		0
96-98	4,580	997	22	41,239	900	40,241	879
97-99	6,069	1,040	17	41,239	680	40,199	662
98-00	9,381	1,450	15	41,239	440	39,789	424
99-01	5,195	453	9		0	453-	9-
00-02	3,312	410	12		0	410-	12-
01-03							
02-04	10,123	2,342	23		0	2,342-	23-
03-05	26,659	3,249	12		0	3,249-	12-
04-06	26,659	3,249	12		0	3,249-	12-
05-07	16,535	907	5		0	907-	5-
06-08	338-		0		0		0
07-09	338-		0		0		0
08-10	338-		0		0		0
09-11	2,490		0		0		0
10-12	6,561	242	4		0	242-	4-
11-13	77,947	242	0		0	242-	0
12-14	91,419	3,370	4		0	3,370-	4-
13-15	103,473	3,128	3		0	3,128-	3-
14-16	68,681	3,904	6		0	3,904-	6-
15-17	89,748	3,860	4		0	3,860-	4-
16-18	85,721	4,178	5		0	4,178-	5-
17-19	74,123	3,796	5		0	3,796-	5-
18-20	90,522	6,157	7		0	6,157-	7-
19-21	134,865	8,199	6		0	8,199-	6-
20-22	335,818	11,060	3		0	11,060-	3-
21-23	811,963	8,663	1		0	8,663-	1-
FIVE-YEAR AVERAGE							
19-23	534,232	8,701	2		0	8,701-	2-

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1975	212		0	71	33	71	33
1976							
1977							
1978							
1979							
1980							
1981	206		0		0		0
1982							
1983				50		50	
1984							
1985							
1986							
1987							
1988							
1989							
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997	1,616		0		0		0
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008	15,840		0		0		0
2009							
2010							
2011				17,226		17,226	
2012							
2013	65,597		0	4,093	6	4,093	6
2014	4,168		0	2,000	48	2,000	48
2015							
2016							
2017				38,050		38,050	

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2018							
2019							
2020							
2021							
2022							
2023							
TOTAL	87,639		0	61,490	70	61,490	70

THREE-YEAR MOVING AVERAGES

75-77	71		0	24	33	24	33
76-78							
77-79							
78-80							
79-81	69		0		0		0
80-82	69		0		0		0
81-83	69		0	17	24	17	24
82-84				17		17	
83-85				17		17	
84-86							
85-87							
86-88							
87-89							
88-90							
89-91							
90-92							
91-93							
92-94							
93-95							
94-96							
95-97	539		0		0		0
96-98	539		0		0		0
97-99	539		0		0		0
98-00							
99-01							
00-02							
01-03							
02-04							
03-05							
04-06							
05-07							
06-08	5,280		0		0		0

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
07-09	5,280		0		0		0
08-10	5,280		0		0		0
09-11				5,742		5,742	
10-12				5,742		5,742	
11-13	21,866		0	7,106	33	7,106	33
12-14	23,255		0	2,031	9	2,031	9
13-15	23,255		0	2,031	9	2,031	9
14-16	1,389		0	667	48	667	48
15-17				12,683		12,683	
16-18				12,683		12,683	
17-19				12,683		12,683	
18-20							
19-21							
20-22							
21-23							
FIVE-YEAR AVERAGE							
19-23							

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1969	4,120		0	1,031	25	1,031	25
1970	15,876		0	2,400	15	2,400	15
1971	21,697		0	5,734	26	5,734	26
1972	10,427		0	1,635	16	1,635	16
1973	26,260		0	1,428	5	1,428	5
1974							
1975	27,454		0	9,131	33	9,131	33
1976	4,600		0	850	18	850	18
1977	2,603		0	400	15	400	15
1978							
1979	4,692		0	900	19	900	19
1980							
1981							
1982							
1983	2,825		0	1,050	37	1,050	37
1984							
1985							
1986							
1987							
1988							
1989							
1990	44,237		0	24,845	56	24,845	56
1991							
1992	6,606		0	2,002	30	2,002	30
1993	6-		0		0		0
1994	18,150		0	2,028	11	2,028	11
1995	2,013		0		0		0
1996	115,296		0	36,333	32	36,333	32
1997	40,065		0		0		0
1998							
1999							
2000	7,831		0		0		0
2001							
2002	74,143		0	33,178	45	33,178	45
2003	16,476		0	3,730	23	3,730	23
2004	28,900		0	45,941	159	45,941	159
2005				5,465		5,465	
2006							
2007	27,614		0		0		0
2008				4,725		4,725	
2009	7,038		0	10,785	153	10,785	153
2010							
2011							



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2012							
2013	388,522		0		0		0
2014				14,900		14,900	
2015							
2016	5,120		0	21,775	425	21,775	425
2017	67,588		0	250	0	250	0
2018							
2019							
2020							
2021							
2022				19,012		19,012	
2023							
TOTAL	970,148		0	249,526	26	249,526	26

THREE-YEAR MOVING AVERAGES

69-71	13,898		0	3,055	22	3,055	22
70-72	16,000		0	3,256	20	3,256	20
71-73	19,461		0	2,932	15	2,932	15
72-74	12,229		0	1,021	8	1,021	8
73-75	17,905		0	3,520	20	3,520	20
74-76	10,685		0	3,327	31	3,327	31
75-77	11,553		0	3,460	30	3,460	30
76-78	2,401		0	417	17	417	17
77-79	2,432		0	433	18	433	18
78-80	1,564		0	300	19	300	19
79-81	1,564		0	300	19	300	19
80-82							
81-83	942		0	350	37	350	37
82-84	942		0	350	37	350	37
83-85	942		0	350	37	350	37
84-86							
85-87							
86-88							
87-89							
88-90	14,746		0	8,282	56	8,282	56
89-91	14,746		0	8,282	56	8,282	56
90-92	16,948		0	8,949	53	8,949	53
91-93	2,200		0	667	30	667	30
92-94	8,250		0	1,343	16	1,343	16
93-95	6,719		0	676	10	676	10
94-96	45,153		0	12,787	28	12,787	28

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
95-97	52,458		0	12,111	23	12,111	23
96-98	51,787		0	12,111	23	12,111	23
97-99	13,355		0		0		0
98-00	2,610		0		0		0
99-01	2,610		0		0		0
00-02	27,325		0	11,059	40	11,059	40
01-03	30,206		0	12,302	41	12,302	41
02-04	39,840		0	27,616	69	27,616	69
03-05	15,125		0	18,379	122	18,379	122
04-06	9,633		0	17,135	178	17,135	178
05-07	9,205		0	1,822	20	1,822	20
06-08	9,205		0	1,575	17	1,575	17
07-09	11,551		0	5,170	45	5,170	45
08-10	2,346		0	5,170	220	5,170	220
09-11	2,346		0	3,595	153	3,595	153
10-12							
11-13	129,507		0		0		0
12-14	129,507		0	4,967	4	4,967	4
13-15	129,507		0	4,967	4	4,967	4
14-16	1,707		0	12,225	716	12,225	716
15-17	24,236		0	7,342	30	7,342	30
16-18	24,236		0	7,342	30	7,342	30
17-19	22,529		0	83	0	83	0
18-20							
19-21							
20-22				6,337		6,337	
21-23				6,337		6,337	
FIVE-YEAR AVERAGE							
19-23				3,802		3,802	

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## **PART IX. DETAILED DEPRECIATION CALCULATIONS**

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1940	631.74	534	536	96	11.59	8
1946	26.12	21	21	5	14.00	
1949	318.25	253	254	64	15.37	4
1954	1,417.34	1,079	1,083	334	17.91	19
1955	645.29	487	489	156	18.45	8
1956	719.59	537	539	181	19.01	10
1957	307.00	227	228	79	19.58	4
1958	1,494.06	1,092	1,096	398	20.16	20
1959	1,468.93	1,063	1,067	402	20.75	19
1960	262.71	188	189	74	21.36	3
1961	636.06	450	452	184	21.98	8
1962	1,753.87	1,225	1,230	524	22.60	23
1963	3,172.75	2,190	2,198	975	23.24	42
1964	3,424.35	2,334	2,343	1,081	23.89	45
1965	706.66	475	477	230	24.55	9
1966	848.01	563	565	283	25.22	11
1967	488.18	320	321	167	25.89	6
1968	530.52	343	344	187	26.58	7
1969	525.72	334	335	191	27.28	7
1970	1,612.58	1,011	1,015	598	27.98	21
1971	964.42	595	597	367	28.70	13
1972	4,729.85	2,874	2,885	1,845	29.42	63
1974	2,820.09	1,659	1,665	1,155	30.89	37
1976	334.72	190	191	144	32.39	4
1977	502.91	281	282	221	33.15	7
1978	2,922.50	1,601	1,607	1,316	33.92	39
1980	3,039.01	1,601	1,607	1,432	35.49	40
1981	6,212.73	3,207	3,219	2,994	36.28	83
1982	9,762.89	4,936	4,955	4,808	37.08	130
1983	17,318.14	8,571	8,603	8,715	37.88	230
1984	33,629.96	16,277	16,339	17,291	38.70	447
1985	20,976.82	9,924	9,962	11,015	39.52	279
1986	24,833.25	11,476	11,519	13,314	40.34	330
1987	61,472.42	27,720	27,825	33,647	41.18	817
1988	23,203.80	10,203	10,242	12,962	42.02	308
1989	38,118.77	16,335	16,397	21,722	42.86	507
1990	15,601.41	6,507	6,532	9,069	43.72	207
1991	9,950.28	4,037	4,052	5,898	44.57	132
1992	7,297.89	2,876	2,887	4,411	45.44	97
1993	1,640.72	628	630	1,011	46.31	22
1994	50,580.17	18,762	18,833	31,747	47.18	673
1995	16,269.77	5,842	5,864	10,406	48.07	216
1997	22,942.04	7,693	7,722	15,220	49.85	305

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1998	7,537.57	2,438	2,447	5,091	50.74	100
1999	15,063.18	4,690	4,708	10,355	51.65	200
2000	27,537.06	8,239	8,270	19,267	52.56	367
2001	110,944.79	31,849	31,970	78,975	53.47	1,477
2002	15,890.64	4,367	4,384	11,507	54.39	212
2003	10,755.44	2,824	2,835	7,920	55.31	143
2004	16,873.25	4,221	4,237	12,636	56.24	225
2005	2,445.73	581	583	1,863	57.17	33
2007	1,986.50	422	424	1,562	59.05	26
2008	25,783.52	5,160	5,180	20,604	59.99	343
2009	48,492.88	9,091	9,125	39,368	60.94	646
2010	52,809.89	9,231	9,266	43,544	61.89	704
2011	14,602.00	2,367	2,376	12,226	62.84	195
2012	22,039.05	3,291	3,303	18,736	63.80	294
2013	23,242.14	3,173	3,185	20,057	64.76	310
2014	16,047.46	1,983	1,991	14,056	65.73	214
2016	85,167.03	8,335	8,366	76,801	67.66	1,135
2017	10,387.47	882	885	9,502	68.63	138
2018	121,639.57	8,742	8,775	112,865	69.61	1,621
2019	206,461.79	12,167	12,213	194,249	70.58	2,752
2020	1,237,014.56	56,742	56,957	1,180,058	71.56	16,490
2021	71,856.69	2,357	2,366	69,491	72.54	958
2022	234,368.30	4,624	4,641	229,727	73.52	3,125
2023	182,765.35	1,193	1,198	181,567	74.51	2,437
	2,957,826.15	367,490	368,882	2,588,944		39,405

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 65.7 1.33

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1900	7.64	7	8			
1905	4,639.41	4,463	4,639			
1906	453.46	436	453			
1908	509.81	488	510			
1910	32.76	31	33			
1911	39.25	37	39			
1912	166.79	159	167			
1913	39,647.24	37,625	39,647			
1914	440.81	417	441			
1915	17.37	16	17			
1916	3,714.53	3,505	3,715			
1917	2.52	2	2	1	4.68	
1918	222.02	209	222			
1920	8.85	8	9			
1921	4.00	4	4			
1922	550.17	512	550			
1927	574.78	528	575			
1928	7,615.83	6,976	7,616			
1929	9,365.20	8,552	9,365			
1930	293.53	267	294			
1931	75.68	69	76			
1932	11.42	10	11			
1933	121.75	110	122			
1934	38.48	35	38			
1936	42.73	38	43			
1937	147.11	131	147			
1938	291.95	258	292			
1939	54.17	48	54			
1940	1,406.23	1,231	1,391	15	9.95	2
1941	3,083.74	2,687	3,036	48	10.29	5
1942	82.48	72	81	1	10.64	
1943	178.77	154	174	5	11.00	
1944	55.72	48	54	2	11.38	
1945	35.21	30	34	1	11.77	
1946	55.44	47	53	2	12.17	
1947	388.45	327	370	18	12.59	1
1948	1,231.01	1,031	1,165	66	13.03	5
1949	2,790.90	2,321	2,623	168	13.48	12
1950	3,189.10	2,633	2,975	214	13.95	15
1951	7,892.84	6,469	7,310	583	14.43	40
1952	1,366.64	1,111	1,255	112	14.94	7
1953	4,099.22	3,307	3,737	362	15.46	23
1954	5,721.14	4,577	5,172	549	16.00	34

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1955	314.60	249	281	34	16.56	2
1956	1,907.97	1,499	1,694	214	17.14	12
1957	1,176.95	916	1,035	142	17.74	8
1958	21,005.37	16,185	18,289	2,716	18.36	148
1959	5,254.98	4,006	4,527	728	19.01	38
1960	6,002.69	4,527	5,115	888	19.67	45
1961	11,709.76	8,731	9,866	1,844	20.35	91
1962	3,663.44	2,700	3,051	612	21.05	29
1963	5,765.71	4,196	4,741	1,025	21.78	47
1964	3,606.15	2,591	2,928	678	22.52	30
1965	2,918.74	2,069	2,338	581	23.28	25
1966	27,810.21	19,446	21,973	5,837	24.06	243
1967	4,679.09	3,224	3,643	1,036	24.87	42
1968	5,001.45	3,395	3,836	1,165	25.69	45
1969	42,871.21	28,659	32,384	10,487	26.52	395
1970	28,515.31	18,756	21,194	7,321	27.38	267
1971	16,220.35	10,493	11,857	4,363	28.25	154
1972	27,985.97	17,796	20,109	7,877	29.13	270
1973	5,481.78	3,424	3,869	1,613	30.03	54
1974	1,658.65	1,017	1,149	510	30.94	16
1975	9,583.32	5,767	6,517	3,066	31.86	96
1976	5,163.94	3,047	3,443	1,721	32.80	52
1977	4,195.28	2,426	2,741	1,454	33.74	43
1978	2,876.24	1,629	1,841	1,035	34.69	30
1979	13,433.90	7,447	8,415	5,019	35.65	141
1980	12,768.07	6,923	7,823	4,945	36.62	135
1981	10,564.93	5,601	6,329	4,236	37.59	113
1982	1,162.68	602	680	483	38.57	13
1983	9,009.79	4,556	5,148	3,862	39.55	98
1984	68,733.35	33,903	38,310	30,423	40.54	750
1985	12,854.49	6,181	6,984	5,870	41.53	141
1986	32,815.46	15,374	17,372	15,443	42.52	363
1987	21,389.93	9,754	11,022	10,368	43.52	238
1988	97,331.04	43,178	48,790	48,541	44.51	1,091
1989	76,248.28	32,872	37,145	39,103	45.51	859
1990	86,482.89	36,203	40,908	45,575	46.51	980
1991	52,430.84	21,300	24,068	28,363	47.50	597
1992	60,042.13	23,642	26,715	33,327	48.50	687
1993	50,941.57	19,421	21,945	28,997	49.50	586
1994	214,025.02	78,922	89,180	124,845	50.50	2,472
1995	177,926.39	63,386	71,625	106,301	51.50	2,064
1996	30,598.73	10,518	11,885	18,714	52.50	356
1998	8,061.70	2,570	2,904	5,158	54.50	95

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
2000	10,513.30	3,088	3,489	7,024	56.50	124
2001	145,613.01	40,954	46,277	99,336	57.50	1,728
2002	1,125,585.22	302,501	341,820	783,765	58.50	13,398
2005	2,009.13	465	525	1,484	61.50	24
	2,666,577.16	1,027,095	1,156,299	1,510,278		29,379
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						51.4 1.10



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 56-R1						
NET SALVAGE PERCENT.. -30						
1928	485.03	569	510	121	5.43	22
1929	397.89	464	416	101	5.73	18
1930	175.90	204	183	46	6.03	8
1936	223.19	249	223	67	7.93	8
1937	24.89	28	25	7	8.25	1
1939	318.36	348	312	102	8.93	11
1940	414.34	449	403	136	9.27	15
1941	837.83	902	809	280	9.61	29
1943	38.93	41	37	14	10.32	1
1947	214.44	220	197	82	11.78	7
1948	61.16	62	56	24	12.16	2
1950	1,952.61	1,952	1,750	788	12.93	61
1951	4,822.91	4,778	4,283	1,987	13.32	149
1952	2,321.06	2,278	2,042	975	13.72	71
1953	2,951.41	2,869	2,572	1,265	14.12	90
1954	5,137.26	4,946	4,434	2,244	14.53	154
1955	3,459.47	3,297	2,956	1,541	14.94	103
1956	5,954.93	5,618	5,036	2,705	15.36	176
1957	3,043.21	2,841	2,547	1,409	15.78	89
1958	6,160.93	5,691	5,102	2,907	16.21	179
1959	5,585.68	5,102	4,574	2,687	16.65	161
1960	6,464.43	5,839	5,235	3,169	17.09	185
1961	398.15	356	319	199	17.53	11
1962	2,689.57	2,374	2,128	1,368	17.98	76
1963	2,587.90	2,256	2,022	1,342	18.44	73
1964	9,611.23	8,278	7,421	5,074	18.90	268
1965	6,083.01	5,173	4,637	3,271	19.37	169
1966	6,431.85	5,399	4,840	3,521	19.84	177
1967	2,588.14	2,144	1,922	1,443	20.32	71
1968	2,750.91	2,247	2,014	1,562	20.81	75
1970	12,218.15	9,700	8,696	7,188	21.80	330
1971	13,862.47	10,845	9,722	8,299	22.30	372
1972	7,169.41	5,522	4,950	4,370	22.82	191
1973	7,037.63	5,337	4,785	4,364	23.33	187
1974	2,226.85	1,661	1,489	1,406	23.86	59
1976	65.39	47	42	43	24.92	2
1978	3,260.89	2,270	2,035	2,204	26.01	85
1979	2,876.54	1,966	1,762	1,978	26.56	74
1980	11,500.46	7,710	6,912	8,039	27.12	296
1981	4,975.93	3,270	2,932	3,537	27.69	128
1982	44,317.42	28,539	25,585	32,028	28.26	1,133
1983	14,782.02	9,320	8,355	10,862	28.84	377
1984	32,885.04	20,283	18,183	24,568	29.43	835

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 56-R1						
NET SALVAGE PERCENT.. -30						
1985	55,968.56	33,755	30,261	42,498	30.02	1,416
1986	20,975.15	12,363	11,083	16,185	30.61	529
1987	101,704.98	58,506	52,450	79,766	31.22	2,555
1988	8,876.21	4,982	4,466	7,073	31.82	222
1989	3,576.10	1,956	1,754	2,895	32.44	89
1990	25,178.12	13,408	12,020	20,712	33.06	626
1991	4,350.98	2,254	2,021	3,635	33.68	108
1992	458.84	231	207	389	34.31	11
1993	342.42	167	150	295	34.94	8
1994	3,327.06	1,577	1,414	2,911	35.58	82
1995	8,429.84	3,869	3,468	7,491	36.23	207
1996	31,017.18	13,775	12,349	27,973	36.87	759
1997	1,904.74	817	732	1,744	37.53	46
1998	13,848.58	5,729	5,136	12,867	38.18	337
1999	6,771.06	2,697	2,418	6,384	38.84	164
2000	1,955.73	749	671	1,871	39.51	47
2001	34,293.66	12,602	11,298	33,284	40.17	829
2002	18,655.97	6,565	5,885	18,368	40.84	450
2003	1,447.21	486	436	1,445	41.52	35
2004	4,362.61	1,398	1,253	4,418	42.20	105
2005	5,198.99	1,585	1,421	5,338	42.87	125
2006	20,743.31	5,990	5,370	21,596	43.56	496
2007	27,457.41	7,496	6,720	28,975	44.24	655
2008	33,895.52	8,711	7,809	36,255	44.93	807
2009	15,253.81	3,676	3,295	16,535	45.62	362
2010	139,686.05	31,423	28,170	153,422	46.31	3,313
2011	111,213.86	23,211	20,808	123,770	47.01	2,633
2012	147,125.74	28,315	25,384	165,879	47.71	3,477
2013	172,054.86	30,316	27,178	196,493	48.41	4,059
2014	109,859.54	17,572	15,753	127,064	49.11	2,587
2015	512,186.16	73,482	65,876	599,966	49.82	12,043
2016	93,031.64	11,792	10,571	110,370	50.54	2,184
2017	97,275.92	10,726	9,616	116,843	51.25	2,280
2018	125,042.57	11,697	10,486	152,069	51.97	2,926
2019	125,315.68	9,600	8,606	154,304	52.70	2,928
2020	376,119.93	22,526	20,195	468,761	53.42	8,775
2021	20,614.88	885	793	26,006	54.15	480
2022	156,409.24	4,030	3,613	199,719	54.89	3,639
2023	121,820.58	1,047	939	157,428	55.63	2,830
	2,999,115.51	665,410	596,528	3,302,322		71,753

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.0 2.39

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PARIS AREA OFFICE - VINE STREET INTERIM SURVIVOR CURVE.. SQUARE PROBABLE RETIREMENT YEAR.. 6-2028 NET SALVAGE PERCENT.. 0						
1950	3,575.48	3,369	3,343	232	4.50	52
1974	502.19	460	457	46	4.50	10
1975	469.01	429	426	43	4.50	10
1977	2,458.15	2,241	2,224	234	4.50	52
1985	678.43	607	602	76	4.50	17
2001	23,425.95	19,522	19,374	4,052	4.50	900
	31,109.21	26,628	26,426	4,683		1,041

WINCHESTER SERVICE CENTER AND OFFICE  
INTERIM SURVIVOR CURVE.. SQUARE  
PROBABLE RETIREMENT YEAR.. 6-2042  
NET SALVAGE PERCENT.. 0

1992	560,605.00	353,181	350,505	210,100	18.50	11,357
2003	10,253.37	5,390	5,349	4,904	18.50	265
2009	4,308.86	1,893	1,879	2,430	18.50	131
2014	12,581.47	4,269	4,237	8,345	18.50	451
2016	61,809.21	17,829	17,694	44,115	18.50	2,385
2017	72,205.61	18,773	18,631	53,575	18.50	2,896
2018	5,960.77	1,366	1,356	4,605	18.50	249
2019	17,263.23	3,378	3,352	13,911	18.50	752
2023	24,498.72	645	640	23,859	18.50	1,290
	769,486.24	406,724	403,642	365,844		19,776

LEXINGTON HEADQUARTERS  
INTERIM SURVIVOR CURVE.. SQUARE  
PROBABLE RETIREMENT YEAR.. 6-2044  
NET SALVAGE PERCENT.. 0

1924	239.38	198	196	43	20.50	2
1949	748.22	587	583	166	20.50	8
1994	6,179,394.33	3,645,843	3,618,219	2,561,175	20.50	124,935
1998	26,669.93	14,784	14,672	11,998	20.50	585
2000	9,603.96	5,129	5,090	4,514	20.50	220
2001	126,272.90	66,074	65,573	60,700	20.50	2,961
2003	8,863.24	4,432	4,398	4,465	20.50	218
2005	36,210.95	17,177	17,047	19,164	20.50	935
2006	3,323.54	1,531	1,519	1,804	20.50	88

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
LEXINGTON HEADQUARTERS						
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2044						
NET SALVAGE PERCENT.. 0						
2009	6,157.10	2,551	2,532	3,625	20.50	177
2010	6,651.14	2,641	2,621	4,030	20.50	197
2011	15,565.37	5,896	5,851	9,714	20.50	474
2013	7,125.00	2,413	2,395	4,730	20.50	231
2014	176,824.83	55,995	55,571	121,254	20.50	5,915
2015	588,327.79	172,439	171,132	417,195	20.50	20,351
2016	232,044.92	62,156	61,685	170,360	20.50	8,310
2017	165,706.39	39,892	39,590	126,117	20.50	6,152
2018	307,736.59	65,099	64,606	243,131	20.50	11,860
2019	71,883.22	12,939	12,841	59,042	20.50	2,880
2020	26,989.65	3,936	3,906	23,083	20.50	1,126
2021	30,120.91	3,274	3,249	26,872	20.50	1,311
2022	77,934.42	5,314	5,274	72,661	20.50	3,544
2023	472,252.26	11,244	11,159	461,093	20.50	22,492
	8,576,646.04	4,201,544	4,169,710	4,406,936		214,972

OTHER BUILDINGS  
SURVIVOR CURVE.. IOWA 43-S2  
NET SALVAGE PERCENT.. 0

1951	1,184.61	1,114	1,106	79	2.57	31
1952	1,942.35	1,817	1,803	139	2.78	50
1953	627.88	584	580	48	3.00	16
1954	802.91	743	737	66	3.21	21
1955	908.64	836	830	79	3.43	23
1957	5,163.12	4,697	4,661	502	3.88	129
1958	3,138.49	2,839	2,817	321	4.11	78
1959	3,585.31	3,223	3,199	387	4.35	89
1960	2,487.10	2,222	2,205	282	4.59	61
1961	3,791.07	3,365	3,339	452	4.83	94
1962	120.00	106	105	15	5.09	3
1963	318.95	279	277	42	5.34	8
1965	1,496.16	1,292	1,282	214	5.86	37
1967	962.53	819	813	150	6.41	23
1968	5,311.35	4,484	4,450	861	6.70	129
1970	3,058.84	2,541	2,522	537	7.28	74
1972	478.16	390	387	91	7.90	12
1973	3,195.06	2,584	2,564	631	8.22	77
1985	1,278.71	898	891	388	12.81	30

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER BUILDINGS						
SURVIVOR CURVE.. IOWA 43-S2						
NET SALVAGE PERCENT.. 0						
1987	18,970.52	12,909	12,811	6,159	13.74	448
1988	4,679.99	3,131	3,107	1,573	14.23	111
1996	30,096.82	16,959	16,830	13,266	18.77	707
2000	8,591.08	4,296	4,263	4,328	21.50	201
2003	1,820.23	814	808	1,012	23.77	43
2009	11,426.93	3,758	3,730	7,697	28.86	267
2013	69.29	17	17	52	32.60	2
2015	45,449.58	8,942	8,874	36,575	34.54	1,059
2016	29,251.41	5,082	5,043	24,208	35.53	681
2018	5,170.88	660	655	4,516	37.51	120
	195,377.97	91,401	90,708	104,670		4,624
	9,572,619.46	4,726,297	4,690,486	4,882,133		240,413
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						20.3 2.51

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.80 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2022	132,125.04	4,317	10,827	121,298	43.53	2,787
	132,125.04	4,317	10,827	121,298		2,787
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						43.5 2.11

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BARE STEEL						
INTERIM SURVIVOR CURVE.. IOWA 67-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2043						
NET SALVAGE PERCENT.. -20						
1901	565.78	638	634	45	4.02	11
1905	5,989.31	6,645	6,607	580	5.05	115
1906	889.96	984	978	90	5.28	17
1908	51.12	56	56	6	5.73	1
1910	22.93	25	25	3	6.18	
1913	653.84	704	700	85	6.85	12
1914	206.46	222	221	27	7.07	4
1915	5,905.46	6,314	6,278	809	7.30	111
1920	1,975.29	2,073	2,061	309	8.39	37
1921	82.20	86	86	13	8.61	2
1923	1,168.10	1,212	1,205	197	9.04	22
1925	22.15	23	23	4	9.46	
1926	2,002.44	2,056	2,044	359	9.67	37
1927	5,547.25	5,674	5,641	1,015	9.87	103
1928	71,307.86	72,669	72,252	13,317	10.08	1,321
1929	54,116.95	54,961	54,646	10,295	10.27	1,002
1930	7,566.48	7,657	7,613	1,467	10.47	140
1931	6,371.36	6,425	6,388	1,257	10.66	118
1932	4,577.87	4,600	4,574	920	10.85	85
1933	265,803.09	266,153	264,626	54,338	11.04	4,922
1934	1,376.20	1,373	1,365	286	11.22	25
1935	15,874.11	15,787	15,696	3,352	11.40	294
1936	8,006.06	7,935	7,889	1,718	11.58	148
1937	27,120.68	26,791	26,637	5,908	11.75	503
1938	11,426.44	11,247	11,182	2,529	11.93	212
1939	19,592.66	19,220	19,110	4,401	12.10	364
1940	18,432.31	18,020	17,917	4,202	12.27	342
1941	19,732.33	19,224	19,114	4,565	12.44	367
1942	3,673.03	3,566	3,546	862	12.61	68
1943	3,029.70	2,931	2,914	721	12.77	56
1944	1,741.08	1,678	1,668	421	12.94	33
1945	9,652.28	9,272	9,219	2,364	13.10	180
1946	23,177.16	22,185	22,058	5,755	13.26	434
1947	20,132.39	19,200	19,090	5,069	13.42	378
1948	53,854.53	51,169	50,875	13,750	13.58	1,013
1949	69,554.76	65,839	65,461	18,004	13.74	1,310
1950	151,006.23	142,386	141,569	39,638	13.90	2,852
1951	254,762.27	239,317	237,944	67,771	14.05	4,824
1952	131,579.36	123,105	122,399	35,496	14.21	2,498
1953	358,435.53	334,033	332,117	98,006	14.36	6,825
1954	261,165.57	242,401	241,010	72,388	14.51	4,989

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BARE STEEL						
INTERIM SURVIVOR CURVE.. IOWA 67-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2043						
NET SALVAGE PERCENT.. -20						
1955	379,751.24	351,022	349,008	106,693	14.66	7,278
1956	500,476.47	460,753	458,110	142,462	14.80	9,626
1957	1,092,476.20	1,001,399	995,654	315,317	14.95	21,091
1958	991,048.07	904,538	899,349	289,909	15.09	19,212
1959	798,417.51	725,522	721,360	236,741	15.23	15,544
1960	729,560.03	659,966	656,180	219,292	15.37	14,268
1961	688,104.42	619,723	616,168	209,557	15.50	13,520
1962	605,804.89	542,993	539,878	187,088	15.64	11,962
1963	782,609.61	698,160	694,155	244,977	15.77	15,534
1964	945,558.37	839,576	834,760	299,910	15.89	18,874
1965	832,157.73	735,171	730,954	267,636	16.02	16,706
1966	1,283,560.64	1,128,342	1,121,869	418,404	16.14	25,923
1967	551,463.17	482,268	479,501	182,254	16.26	11,209
1968	811,339.49	705,758	701,709	271,898	16.38	16,599
1969	1,008,068.85	872,278	867,274	342,409	16.49	20,765
1970	426,750.94	367,233	365,126	146,975	16.60	8,854
1971	548,445.63	469,243	466,551	191,584	16.71	11,465
1972	545,178.23	463,818	461,157	193,057	16.81	11,485
1973	197,861.29	167,298	166,338	71,095	16.92	4,202
1974	127,199.31	106,912	106,299	46,340	17.01	2,724
1975	20,332.30	16,980	16,883	7,516	17.11	439
1976	20,585.83	17,077	16,979	7,724	17.21	449
1977	34,113.85	28,112	27,951	12,986	17.30	751
1978	203,699.27	166,729	165,773	78,667	17.38	4,526
1979	75,094.10	61,019	60,669	29,444	17.47	1,685
	16,097,808.02	14,407,746	14,325,095	4,992,275		320,466

COATED STEEL  
SURVIVOR CURVE.. IOWA 67-R1.5  
NET SALVAGE PERCENT.. -20

1951	4,539.51	3,897	3,875	1,573	19.07	82
1953	813.67	686	682	294	19.94	15
1955	654.43	541	538	247	20.84	12
1957	5,094.99	4,127	4,103	2,011	21.77	92
1958	1,877.28	1,505	1,496	756	22.25	34
1959	13,264.38	10,515	10,455	5,463	22.74	240
1960	18,181.85	14,253	14,171	7,647	23.23	329
1961	16,625.05	12,884	12,810	7,140	23.73	301



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COATED STEEL						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
1962	5,771.11	4,420	4,395	2,531	24.24	104
1963	898.54	680	676	402	24.76	16
1964	8,081.77	6,039	6,004	3,694	25.28	146
1965	22,336.14	16,478	16,383	10,420	25.81	404
1966	32,809.87	23,888	23,751	15,621	26.35	593
1967	19,753.98	14,188	14,107	9,598	26.90	357
1968	35,120.34	24,878	24,735	17,409	27.45	634
1969	38,137.24	26,632	26,479	19,285	28.01	689
1970	176,764.59	121,635	120,937	91,180	28.58	3,190
1971	207,819.31	140,847	140,039	109,344	29.16	3,750
1972	543,934.21	362,991	360,909	291,812	29.74	9,812
1973	243,726.19	160,029	159,111	133,360	30.34	4,396
1974	232,443.17	150,166	149,305	129,627	30.93	4,191
1975	249,666.35	158,563	157,653	141,946	31.54	4,501
1976	423,517.17	264,351	262,835	245,386	32.15	7,633
1977	347,917.89	213,302	212,078	205,423	32.77	6,269
1978	341,635.05	205,653	204,473	205,489	33.39	6,154
1979	500,748.13	295,786	294,089	306,809	34.02	9,018
1980	566,968.47	328,404	326,520	353,842	34.66	10,209
1981	1,205,458.98	684,407	680,481	766,070	35.30	21,702
1982	769,805.09	428,101	425,645	498,121	35.95	13,856
1983	945,891.51	514,845	511,892	623,178	36.61	17,022
1984	1,595,636.58	849,638	844,764	1,070,000	37.27	28,709
1985	525,801.25	273,667	272,097	358,864	37.94	9,459
1986	1,416,471.98	720,242	716,110	983,656	38.61	25,477
1987	6,918,462.53	3,433,605	3,413,908	4,888,247	39.29	124,415
1988	1,025,763.50	496,404	493,556	737,360	39.98	18,443
1989	760,025.00	358,419	356,363	555,667	40.67	13,663
1990	746,949.84	343,020	341,052	555,288	41.36	13,426
1991	760,045.59	339,503	337,555	574,499	42.06	13,659
1992	1,303,138.40	565,755	562,510	1,001,257	42.76	23,416
1993	1,186,328.77	499,952	497,084	926,511	43.47	21,314
1994	1,034,563.44	422,661	420,236	821,240	44.19	18,584
1995	624,966.02	247,262	245,844	504,116	44.91	11,225
1996	1,032,104.54	395,040	392,774	845,752	45.63	18,535
1997	1,358,699.47	502,273	499,392	1,131,048	46.36	24,397
1998	1,023,629.53	365,018	362,924	865,431	47.09	18,378
1999	3,729,206.55	1,280,401	1,273,056	3,201,992	47.83	66,945
2000	955,902.32	315,528	313,718	833,365	48.57	17,158
2001	860,400.05	272,606	271,042	761,438	49.31	15,442
2002	2,501,683.45	759,031	754,677	2,247,343	50.06	44,893
2003	558,760.63	162,023	161,094	509,419	50.81	10,026

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COATED STEEL						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
2004	426,760.32	117,939	117,262	394,850	51.57	7,657
2005	312,741.46	82,173	81,702	293,588	52.33	5,610
2006	4,533,024.98	1,129,322	1,122,844	4,316,786	53.09	81,311
2007	1,492,831.84	351,598	349,581	1,441,817	53.85	26,775
2008	2,215,133.80	491,175	488,357	2,169,803	54.62	39,725
2009	1,451,781.68	301,616	299,886	1,442,252	55.40	26,033
2010	1,088,893.22	211,210	209,998	1,096,673	56.17	19,524
2011	1,494,774.47	269,059	267,516	1,526,214	56.95	26,799
2012	1,272,703.72	211,080	209,869	1,317,375	57.74	22,816
2013	1,512,445.53	229,716	228,398	1,586,536	58.52	27,111
2014	1,202,060.71	165,351	164,402	1,278,070	59.32	21,545
2015	1,775,498.63	219,111	217,854	1,912,744	60.11	31,821
2016	2,002,884.10	218,475	217,222	2,186,239	60.91	35,893
2017	1,912,888.87	181,250	180,210	2,115,256	61.71	34,277
2018	2,206,423.37	177,423	176,405	2,471,303	62.51	39,535
2019	4,353,466.88	286,963	285,317	4,938,843	63.32	77,998
2020	4,674,188.45	240,291	238,913	5,370,114	64.13	83,738
2021	5,904,073.21	216,798	215,554	6,869,334	64.95	105,763
2022	3,177,283.11	70,002	69,600	3,743,139	65.77	56,913
2023	1,686,463.72	12,385	12,314	2,011,443	66.59	30,206
	81,595,117.77	21,979,676	21,853,588	76,060,553		1,464,365

PLASTIC  
SURVIVOR CURVE.. IOWA 67-R1.5  
NET SALVAGE PERCENT.. -20

1967	31,846.40	22,872	22,741	15,475	26.90	575
1968	139,529.29	98,837	98,270	69,165	27.45	2,520
1969	470,324.84	328,441	326,557	237,833	28.01	8,491
1970	218,475.64	150,337	149,475	112,696	28.58	3,943
1971	413,906.03	280,519	278,910	217,777	29.16	7,468
1972	254,985.22	170,163	169,187	136,795	29.74	4,600
1973	141,185.00	92,701	92,169	77,253	30.34	2,546
1974	128,470.01	82,996	82,520	71,644	30.93	2,316
1975	107,907.72	68,532	68,139	61,350	31.54	1,945
1976	185,065.03	115,514	114,851	107,227	32.15	3,335
1977	233,824.93	143,353	142,531	138,059	32.77	4,213
1978	532,380.11	320,476	318,638	320,219	33.39	9,590
1979	872,956.19	515,645	512,687	534,860	34.02	15,722
1980	1,143,970.49	662,620	658,819	713,946	34.66	20,599

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PLASTIC						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
1981	800,722.85	454,615	452,007	508,860	35.30	14,415
1982	1,426,493.74	793,296	788,745	923,047	35.95	25,676
1983	673,833.74	366,765	364,661	443,939	36.61	12,126
1984	1,172,159.95	624,147	620,567	786,025	37.27	21,090
1985	946,718.75	492,744	489,917	646,145	37.94	17,031
1986	1,821,528.69	926,204	920,891	1,264,944	38.61	32,762
1987	3,577,150.29	1,775,325	1,765,141	2,527,440	39.29	64,328
1988	2,788,701.54	1,349,553	1,341,811	2,004,631	39.98	50,141
1989	2,262,352.19	1,066,898	1,060,778	1,654,045	40.67	40,670
1990	2,044,295.09	938,798	933,413	1,519,742	41.36	36,744
1991	1,307,549.50	584,067	580,716	988,343	42.06	23,498
1992	1,323,098.92	574,421	571,126	1,016,593	42.76	23,774
1993	1,160,607.39	489,112	486,306	906,423	43.47	20,852
1994	1,126,983.71	460,418	457,777	894,604	44.19	20,244
1995	1,803,638.49	713,592	709,498	1,454,868	44.91	32,395
1996	1,329,361.62	508,816	505,897	1,089,337	45.63	23,873
1997	3,050,314.12	1,127,616	1,121,147	2,539,230	46.36	54,772
1998	2,788,799.45	994,464	988,759	2,357,800	47.09	50,070
1999	2,025,463.76	695,431	691,442	1,739,115	47.83	36,360
2000	2,742,674.77	905,313	900,120	2,391,090	48.57	49,230
2001	2,158,641.64	683,935	680,012	1,910,358	49.31	38,742
2002	2,244,428.52	680,978	677,072	2,016,243	50.06	40,277
2003	1,591,813.94	461,575	458,927	1,451,250	50.81	28,562
2004	1,228,006.72	339,372	337,425	1,136,183	51.57	22,032
2005	1,889,121.38	496,370	493,523	1,773,423	52.33	33,889
2006	1,888,447.53	470,473	467,774	1,798,363	53.09	33,874
2007	2,432,172.35	572,835	569,549	2,349,058	53.85	43,622
2008	5,490,853.15	1,217,520	1,210,536	5,378,488	54.62	98,471
2009	4,139,159.79	859,935	855,002	4,111,990	55.40	74,224
2010	3,025,501.14	586,850	583,483	3,047,118	56.17	54,248
2011	5,079,411.57	914,294	909,049	5,186,245	56.95	91,067
2012	9,528,348.82	1,580,296	1,571,231	9,862,788	57.74	170,814
2013	10,550,723.60	1,602,486	1,593,293	11,067,575	58.52	189,125
2014	11,137,327.81	1,532,006	1,523,218	11,841,576	59.32	199,622
2015	14,061,529.18	1,735,305	1,725,350	15,148,485	60.11	252,013
2016	16,986,816.31	1,852,922	1,842,293	18,541,887	60.91	304,414
2017	16,389,400.33	1,552,928	1,544,020	18,123,261	61.71	293,684
2018	19,209,833.20	1,544,701	1,535,840	21,515,960	62.51	344,200
2019	30,368,727.73	2,001,785	1,990,302	34,452,172	63.32	544,096
2020	27,589,650.29	1,418,329	1,410,193	31,697,388	64.13	494,268

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PLASTIC						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
2021	38,939,078.21	1,429,843	1,421,641	45,305,253	64.95	697,540
2022	43,720,143.15	963,242	957,716	51,506,455	65.77	783,130
2023	33,590,684.50	246,690	245,275	40,063,547	66.59	601,645
	344,287,096.32	43,639,271	43,388,931	369,755,585		6,171,473
	441,980,022.11	80,026,693	79,567,614	450,808,413		7,956,304
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						56.7 1.80

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R0.5						
NET SALVAGE PERCENT.. -20						
1923	81.77	98	98			
1928	497.51	597	597			
1929	214.22	257	257			
1933	374.99	450	450			
1937	33.87	41	41			
1939	50.59	61	61			
1940	224.93	270	270			
1941	824.49	989	989			
1944	28.44	34	34			
1946	140.09	168	168			
1948	36.11	43	43			
1949	442.88	521	416	115	0.74	115
1950	2,978.28	3,458	2,761	813	1.23	661
1951	1,505.02	1,725	1,377	429	1.70	252
1952	1,126.93	1,275	1,018	334	2.17	154
1953	1,990.25	2,222	1,774	614	2.64	233
1954	5,821.79	6,418	5,124	1,862	3.09	603
1955	6,398.75	6,963	5,559	2,120	3.54	599
1956	6,097.49	6,553	5,232	2,085	3.97	525
1957	2,041.07	2,166	1,729	720	4.40	164
1958	1,658.00	1,737	1,387	603	4.82	125
1959	4,819.10	4,987	3,981	1,802	5.23	345
1960	5,179.25	5,293	4,226	1,989	5.64	353
1961	3,489.15	3,521	2,811	1,376	6.04	228
1962	3,720.83	3,708	2,960	1,505	6.44	234
1963	3,608.55	3,551	2,835	1,495	6.84	219
1964	5,685.56	5,525	4,411	2,412	7.23	334
1965	5,358.60	5,139	4,103	2,327	7.63	305
1966	4,041.98	3,825	3,054	1,796	8.03	224
1967	4,915.63	4,592	3,666	2,233	8.42	265
1968	11,935.57	10,998	8,780	5,543	8.82	628
1969	11,068.26	10,059	8,031	5,251	9.22	570
1970	7,126.90	6,387	5,099	3,453	9.62	359
1971	21,109.96	18,646	14,886	10,446	10.03	1,041
1972	117,795.07	102,518	81,847	59,507	10.44	5,700
1973	16,564.11	14,201	11,338	8,539	10.85	787
1974	11,767.18	9,933	7,930	6,191	11.27	549
1975	12,878.32	10,700	8,542	6,912	11.69	591
1976	2,475.81	2,024	1,616	1,355	12.11	112
1977	559.58	450	359	312	12.54	25
1978	5,418.32	4,283	3,419	3,083	12.97	238
1979	4,556.56	3,538	2,825	2,643	13.41	197
1980	11,330.85	8,638	6,896	6,701	13.86	483

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R0.5						
NET SALVAGE PERCENT.. -20						
1981	43,791.18	32,760	26,154	26,395	14.31	1,845
1982	51,401.73	37,724	30,117	31,565	14.76	2,139
1983	45,980.74	33,063	26,396	28,781	15.23	1,890
1984	58,666.13	41,332	32,998	37,401	15.69	2,384
1985	121,439.20	83,716	66,836	78,891	16.17	4,879
1986	111,405.16	75,110	59,965	73,721	16.65	4,428
1987	357,878.72	235,861	188,303	241,151	17.13	14,078
1988	211,046.18	135,826	108,439	144,816	17.62	8,219
1989	159,737.87	100,282	80,061	111,624	18.12	6,160
1990	59,763.34	36,557	29,186	42,530	18.63	2,283
1991	69,107.11	41,159	32,860	50,069	19.14	2,616
1992	101,556.60	58,849	46,983	74,885	19.65	3,811
1993	171,184.63	96,332	76,908	128,514	20.18	6,368
1994	101,800.06	55,615	44,401	77,759	20.70	3,756
1995	188,688.36	99,865	79,729	146,697	21.24	6,907
1996	137,878.91	70,623	56,383	109,072	21.78	5,008
1997	151,279.21	74,907	59,803	121,732	22.32	5,454
1998	55,437.59	26,488	21,147	45,378	22.87	1,984
1999	31,510.09	14,498	11,575	26,237	23.43	1,120
2000	32,198.74	14,245	11,373	27,265	23.99	1,137
2001	197,180.79	83,751	66,864	169,753	24.55	6,915
2002	184,477.61	75,034	59,904	161,469	25.12	6,428
2004	110,817.85	41,049	32,772	100,209	26.27	3,815
2005	59,348.94	20,897	16,683	54,536	26.85	2,031
2006	42,053.66	14,024	11,196	39,268	27.44	1,431
2007	72,746.13	22,926	18,303	68,992	28.02	2,462
2008	148,767.02	44,114	35,219	143,301	28.61	5,009
2009	107,467.01	29,865	23,843	105,117	29.20	3,600
2010	40,774.05	10,558	8,429	40,500	29.80	1,359
2011	185,743.84	44,636	35,636	187,257	30.39	6,162
2012	637,142.18	141,040	112,601	651,970	30.99	21,038
2013	254,259.75	51,466	41,089	264,023	31.59	8,358
2014	418,606.24	76,801	61,315	441,012	32.19	13,700
2015	3,917,677.03	644,583	514,611	4,186,601	32.79	127,679
2016	272,116.51	39,528	31,558	294,982	33.40	8,832
2017	482,923.54	60,848	48,579	530,929	34.01	15,611
2018	1,805,598.06	193,293	154,318	2,012,400	34.61	58,145
2019	5,100,795.31	447,809	357,514	5,763,440	35.22	163,641
2020	7,478,523.57	510,095	407,241	8,566,987	35.84	239,034

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R0.5						
NET SALVAGE PERCENT.. -20						
2021	562,097.05	27,514	21,966	652,550	36.45	17,903
2022	816,949.71	23,989	19,152	961,188	37.07	25,929
2023	96,653.07	946	755	115,229	37.69	3,057
	25,562,443.08	4,248,140	3,392,165	27,282,767		845,823
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.3 3.31

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
NET SALVAGE PERCENT.. -20						
1929	20.64	25	25			
1935	168.99	200	203			
1936	95.41	112	114			
1965	522.68	500	579	48	9.12	5
1982	4,951.22	3,805	4,405	1,536	16.18	95
1983	1,594.90	1,204	1,394	520	16.70	31
1987	243,572.89	169,723	196,466	95,821	18.87	5,078
1992	1,609.59	994	1,151	781	21.84	36
2019	1,301,607.74	127,032	147,048	1,414,881	41.34	34,225
	1,554,144.06	303,595	351,385	1,513,588		39,470
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						38.3 2.54



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 37-R1						
NET SALVAGE PERCENT.. -75						
1957	19,444.00	31,654	23,436	10,591	2.58	4,105
1958	57.49	93	69	32	2.87	11
1959	120.03	192	142	68	3.17	21
1960	2,505.92	3,974	2,942	1,443	3.47	416
1961	10,015.53	15,741	11,654	5,873	3.77	1,558
1962	10,963.99	17,076	12,643	6,544	4.07	1,608
1963	35,423.93	54,653	40,464	21,528	4.38	4,915
1964	54,825.73	83,783	62,032	33,913	4.69	7,231
1965	103,395.39	156,441	115,827	65,115	5.01	12,997
1966	71,582.39	107,190	79,362	45,907	5.34	8,597
1967	116,985.19	173,352	128,347	76,377	5.67	13,470
1968	154,671.10	226,709	167,852	102,822	6.01	17,108
1969	112,178.90	162,622	120,403	75,910	6.35	11,954
1970	106,507.33	152,586	112,972	73,416	6.71	10,941
1971	102,611.06	145,257	107,546	72,023	7.07	10,187
1972	161,892.17	226,420	167,638	115,673	7.43	15,568
1973	59,515.85	82,196	60,857	43,296	7.80	5,551
1974	42,041.74	57,308	42,430	31,143	8.18	3,807
1975	36,877.87	49,588	36,714	27,822	8.57	3,246
1976	56,762.77	75,280	55,736	43,599	8.96	4,866
1977	133,702.79	174,790	129,412	104,568	9.36	11,172
1978	217,905.04	280,643	207,784	173,550	9.77	17,764
1979	381,617.42	483,903	358,275	309,555	10.19	30,378
1980	303,902.14	379,178	280,738	251,091	10.62	23,643
1981	234,515.36	287,835	213,109	197,293	11.05	17,855
1982	300,495.59	362,564	268,437	257,430	11.49	22,405
1983	208,740.59	247,415	183,182	182,114	11.94	15,252
1984	291,107.14	338,705	250,772	258,665	12.40	20,860
1985	348,515.72	397,754	294,491	315,412	12.87	24,508
1986	332,925.16	372,404	275,722	306,897	13.35	22,989
1987	355,905.96	390,032	288,774	334,061	13.83	24,155
1988	985,509.37	1,056,688	782,356	942,285	14.33	65,756
1989	1,989,750.19	2,086,417	1,544,752	1,937,311	14.83	130,635
1990	1,906,000.97	1,951,735	1,445,035	1,890,467	15.35	123,157
1991	1,623,207.38	1,622,217	1,201,065	1,639,548	15.87	103,311
1992	1,998,135.43	1,946,843	1,441,413	2,055,324	16.40	125,325
1993	2,262,246.40	2,146,374	1,589,143	2,369,788	16.94	139,893
1994	2,961,278.62	2,731,195	2,022,136	3,160,102	17.50	180,577
1995	2,891,505.11	2,590,232	1,917,769	3,142,365	18.06	173,996
1996	3,135,586.85	2,724,378	2,017,089	3,470,188	18.63	186,269
1997	3,045,131.19	2,562,227	1,897,035	3,431,945	19.21	178,654
1998	3,077,709.29	2,503,732	1,853,726	3,532,265	19.80	178,397
1999	2,711,158.48	2,129,913	1,576,956	3,167,571	20.39	155,349

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 37-R1						
NET SALVAGE PERCENT.. -75						
2000	3,056,483.81	2,313,002	1,712,512	3,636,335	21.00	173,159
2001	2,506,893.97	1,824,799	1,351,054	3,036,010	21.61	140,491
2002	2,299,510.86	1,605,312	1,188,549	2,835,595	22.24	127,500
2003	2,386,996.14	1,595,247	1,181,097	2,996,146	22.87	131,008
2004	2,899,160.38	1,851,128	1,370,548	3,702,983	23.50	157,574
2005	2,315,271.71	1,407,164	1,041,843	3,009,882	24.15	124,633
2006	2,367,052.38	1,365,854	1,011,258	3,131,084	24.80	126,253
2007	2,648,545.28	1,445,596	1,070,298	3,564,656	25.46	140,010
2008	3,000,145.62	1,543,837	1,143,034	4,107,221	26.12	157,244
2009	4,000,546.32	1,931,914	1,430,360	5,570,596	26.79	207,936
2010	3,283,352.69	1,481,514	1,096,891	4,648,976	27.46	169,300
2011	4,211,998.14	1,765,059	1,306,823	6,064,174	28.14	215,500
2012	5,287,238.02	2,045,580	1,514,517	7,738,150	28.82	268,499
2013	6,026,755.02	2,134,993	1,580,717	8,966,104	29.51	303,833
2014	6,833,951.69	2,197,901	1,627,293	10,332,122	30.20	342,123
2015	7,508,343.25	2,169,874	1,606,542	11,533,059	30.89	373,359
2016	8,283,528.47	2,119,631	1,569,343	12,926,832	31.59	409,206
2017	10,180,161.85	2,267,886	1,679,109	16,136,174	32.29	499,727
2018	11,800,296.06	2,232,528	1,652,930	18,997,588	33.00	575,684
2019	13,536,288.60	2,099,986	1,554,798	22,133,707	33.72	656,397
2020	15,784,094.47	1,911,178	1,415,008	26,207,157	34.44	760,951
2021	17,733,696.30	1,543,319	1,142,650	29,891,319	35.16	850,151
2022	18,509,082.09	971,727	719,452	31,671,442	35.89	882,459
2023	22,670,644.32	396,736	293,738	39,379,890	36.63	1,075,072
	212,084,968.01	73,811,054	54,648,601	316,500,093		10,978,526

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.8 5.18

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-R2						
NET SALVAGE PERCENT.. +1						
1987	57,866.37	44,146	25,344	31,944	7.57	4,220
1988	78,975.06	59,232	34,005	44,180	8.00	5,522
1989	182,531.79	134,489	77,210	103,496	8.44	12,263
1990	192,279.47	139,076	79,844	110,513	8.89	12,431
1991	79,050.54	56,039	32,172	46,088	9.37	4,919
1992	168,417.25	116,915	67,121	99,612	9.86	10,103
1993	53,659.86	36,430	20,915	32,208	10.37	3,106
1994	119,352.62	79,131	45,429	72,730	10.90	6,672
1995	0.23					
1996	427,488.20	269,062	154,469	268,744	12.02	22,358
1997	19,670.22	12,038	6,911	12,563	12.60	997
1998	389,313.50	231,252	132,762	252,658	13.20	19,141
1999	262,296.85	151,006	86,693	172,981	13.81	12,526
2000	25,710.78	14,308	8,214	17,240	14.45	1,193
2001	241,580.70	129,802	74,520	164,645	15.09	10,911
2002	152,262.05	78,749	45,210	105,529	15.76	6,696
2003	438,042.09	217,620	124,936	308,726	16.44	18,779
2004	524,075.31	249,513	143,246	375,589	17.13	21,926
2005	322,616.87	146,725	84,235	235,156	17.84	13,181
2006	285,112.90	123,512	70,909	211,353	18.56	11,388
2007	387,894.89	159,539	91,592	292,424	19.29	15,159
2008	366,901.40	142,652	81,897	281,335	20.04	14,039
2009	550,687.31	201,717	115,806	429,374	20.79	20,653
2010	308,195.34	105,679	60,671	244,442	21.57	11,332
2011	255,505.69	81,635	46,867	206,084	22.35	9,221
2012	399,607.56	118,205	67,862	327,749	23.14	14,164
2013	402,073.24	109,162	62,670	335,383	23.95	14,003
2014	411,959.50	101,711	58,392	349,448	24.77	14,108
2015	867,551.25	192,861	110,722	748,154	25.59	29,236
2016	603,730.18	118,995	68,315	529,378	26.43	20,029
2017	837,484.01	143,709	82,504	746,605	27.28	27,368
2018	667,249.22	97,488	55,968	604,609	28.13	21,493
2019	1,409,232.81	169,105	97,084	1,298,056	29.00	44,761
2020	1,007,036.50	94,562	54,288	942,678	29.87	31,559
2021	1,404,862.66	94,408	54,200	1,336,614	30.76	43,453
2022	2,345,767.94	95,006	54,543	2,267,767	31.65	71,651
2023	3,209,586.65	43,341	24,882	3,152,609	32.55	96,854
	19,455,628.81	4,358,820	2,502,408	16,758,665		697,415

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.0 3.58

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.10 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S2.5						
NET SALVAGE PERCENT.. 0						
2011	319,311.64	223,732	220,598	98,714	4.49	21,985
2012	363,072.68	241,563	238,179	124,894	5.02	24,879
2013	374,851.44	234,158	230,878	143,973	5.63	25,572
2014	6,793,196.33	3,940,054	3,884,864	2,908,332	6.30	461,640
2015	854,710.98	454,134	447,773	406,938	7.03	57,886
2016	51,071.35	24,412	24,070	27,001	7.83	3,448
2017	15,082.77	6,345	6,256	8,827	8.69	1,016
2018	403,222.65	145,160	143,127	260,096	9.60	27,093
2019	202,192.23	60,118	59,276	142,916	10.54	13,559
2020	125,341.37	29,079	28,672	96,669	11.52	8,391
2021	467,740.18	77,958	76,865	390,875	12.50	31,270
2022	311.13	31	31	280	13.50	21
2023	10,749.73	358	353	10,397	14.50	717
	9,980,854.48	5,437,102	5,360,942	4,619,912		677,477
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						6.8 6.79

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -5						
1952	6.13	6	6			
1955	10.84	11	11			
1956	1.28	1	1			
1957	61.65	61	62	3	2.32	1
1959	4,692.64	4,617	4,703	224	2.83	79
1960	12,564.20	12,286	12,515	677	3.09	219
1961	9,937.29	9,657	9,837	597	3.35	178
1962	10,982.14	10,609	10,807	724	3.60	201
1963	12,772.01	12,260	12,489	922	3.86	239
1964	21,577.45	20,582	20,966	1,690	4.12	410
1965	30,167.04	28,592	29,125	2,550	4.38	582
1966	25,771.33	24,264	24,716	2,344	4.65	504
1967	30,110.37	28,159	28,684	2,932	4.92	596
1968	53,745.66	49,899	50,830	5,603	5.21	1,075
1969	64,184.35	59,157	60,260	7,134	5.50	1,297
1970	59,422.98	54,352	55,366	7,028	5.80	1,212
1971	68,561.44	62,199	63,359	8,631	6.12	1,410
1972	97,920.05	88,056	89,698	13,118	6.46	2,031
1973	42,013.05	37,438	38,136	5,978	6.81	878
1974	4,054.71	3,578	3,645	612	7.18	85
1975	7,831.88	6,842	6,970	1,253	7.56	166
1976	13,582.25	11,736	11,955	2,306	7.97	289
1977	19,098.52	16,310	16,614	3,439	8.40	409
1978	20,978.44	17,695	18,025	4,002	8.85	452
1979	24,094.57	20,060	20,434	4,865	9.32	522
1980	30,839.71	25,322	25,794	6,588	9.81	672
1981	55,983.06	45,302	46,147	12,635	10.32	1,224
1982	50,953.87	40,602	41,359	12,143	10.85	1,119
1983	45,180.83	35,411	36,071	11,369	11.41	996
1984	62,222.63	47,941	48,835	16,499	11.98	1,377
1985	81,239.69	61,474	62,620	22,682	12.57	1,804
1986	84,102.55	62,424	63,588	24,720	13.19	1,874
1987	219,066.02	159,378	162,350	67,669	13.82	4,896
1988	240,419.36	171,324	174,519	77,921	14.46	5,389
1989	305,855.11	213,172	217,147	104,001	15.13	6,874
1990	337,127.78	229,619	233,901	120,083	15.81	7,595
1991	306,425.43	203,701	207,500	114,247	16.51	6,920
1992	368,163.60	238,642	243,092	143,480	17.22	8,332
1993	356,833.49	225,303	229,505	145,170	17.94	8,092
1994	398,887.49	244,971	249,539	169,293	18.68	9,063
1995	383,483.00	228,709	232,974	169,683	19.44	8,729
1996	452,013.11	261,564	266,442	208,172	20.20	10,306
1997	230,840.40	129,379	131,792	110,590	20.98	5,271

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -5						
1998	377,499.09	204,616	208,432	187,942	21.77	8,633
1999	262,549.01	137,408	139,971	135,705	22.57	6,013
2000	312,567.15	157,678	160,618	167,578	23.38	7,168
2001	227,230.44	110,229	112,285	126,307	24.21	5,217
2002	226,800.45	105,630	107,600	130,540	25.04	5,213
2003	269,071.37	119,980	122,217	160,308	25.89	6,192
2004	247,410.08	105,414	107,380	152,401	26.74	5,699
2005	125,079.76	50,753	51,699	79,635	27.61	2,884
2006	272,840.49	105,108	107,068	179,415	28.49	6,297
2007	231,577.21	84,455	86,030	157,126	29.37	5,350
2008	148,560.02	51,060	52,012	103,976	30.27	3,435
2009	138,691.84	44,755	45,590	100,036	31.17	3,209
2010	153,505.06	46,276	47,139	114,041	32.08	3,555
2011	129,507.36	36,263	36,939	99,044	33.00	3,001
2012	177,274.79	45,790	46,644	139,495	33.93	4,111
2013	164,828.95	38,998	39,725	133,345	34.86	3,825
2014	143,931.24	30,863	31,439	119,689	35.81	3,342
2015	517,247.98	99,568	101,425	441,685	36.75	12,019
2016	143,394.29	24,391	24,846	125,718	37.71	3,334
2017	122,137.90	18,040	18,376	109,869	38.67	2,841
2018	235,966.39	29,566	30,118	217,647	39.63	5,492
2019	111,434.05	11,441	11,654	105,352	40.60	2,595
2020	128,302.39	10,268	10,460	124,258	41.57	2,989
2021	192,586.71	11,009	11,214	191,002	42.55	4,489
2022	321,727.33	11,036	11,242	326,572	43.53	7,502
2023	577,164.01	6,600	6,723	599,299	44.51	13,464
	10,602,664.76	4,899,860	4,991,235	6,141,563		241,237

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.5 2.28

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. -5						
1950	235.47	240	242	5	1.41	4
1955	115.70	115	116	5	2.66	2
1960	65.64	63	63	6	3.95	2
1961	103.96	99	100	9	4.21	2
1962	288.72	274	276	27	4.47	6
1963	147.72	139	140	15	4.74	3
1964	150.22	141	142	16	5.01	3
1965	253.51	236	238	28	5.29	5
1966	444.59	411	414	53	5.57	10
1967	562.96	517	521	70	5.87	12
1968	11,653.62	10,627	10,701	1,535	6.18	248
1969	22,444.28	20,307	20,448	3,118	6.50	480
1970	23,387.08	20,983	21,129	3,427	6.84	501
1971	23,125.24	20,562	20,705	3,577	7.20	497
1972	30,956.74	27,269	27,458	5,047	7.57	667
1973	7,754.24	6,763	6,810	1,332	7.96	167
1974	2,756.95	2,379	2,396	499	8.37	60
1975	732.68	625	629	140	8.80	16
1976	6,609.40	5,574	5,613	1,327	9.25	143
1977	5,422.63	4,516	4,547	1,147	9.72	118
1978	9,466.92	7,781	7,835	2,105	10.21	206
1979	11,211.14	9,087	9,150	2,622	10.72	245
1980	10,048.83	8,026	8,082	2,469	11.25	219
1981	18,720.18	14,721	14,823	4,833	11.80	410
1982	33,318.04	25,777	25,956	9,028	12.37	730
1983	32,694.58	24,863	25,036	9,293	12.96	717
1984	36,267.08	27,086	27,274	10,806	13.57	796
1985	57,805.37	42,371	42,665	18,031	14.19	1,271
1986	58,522.76	42,060	42,352	19,097	14.83	1,288
1987	58,351.34	41,077	41,362	19,907	15.49	1,285
1988	44,534.59	30,683	30,896	15,865	16.16	982
1989	50,900.15	34,285	34,523	18,922	16.85	1,123
1990	51,724.86	34,031	34,267	20,044	17.55	1,142
1991	46,549.85	29,878	30,086	18,791	18.27	1,029
1992	59,847.43	37,436	37,696	25,144	19.00	1,323
1993	55,343.50	33,692	33,926	24,185	19.75	1,225
1994	44,844.30	26,549	26,733	20,354	20.50	993
1995	37,974.62	21,829	21,981	17,892	21.27	841
1996	73,467.90	40,950	41,235	35,906	22.05	1,628
1997	15,577.74	8,408	8,466	7,891	22.84	345
1998	7,306.78	3,813	3,839	3,833	23.64	162
1999	20,842.78	10,495	10,568	11,317	24.46	463
2000	14,561.20	7,066	7,115	8,174	25.28	323

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. -5						
2001	16,926.69	7,896	7,951	9,822	26.12	376
2002	37,688.04	16,873	16,990	22,582	26.96	838
2003	322,212.14	138,066	139,026	199,297	27.82	7,164
2004	702,316.91	287,444	289,442	447,991	28.68	15,620
2005	361,105.17	140,691	141,669	237,491	29.56	8,034
2006	400,167.13	148,045	149,074	271,101	30.44	8,906
2007	327,510.66	114,652	115,449	228,437	31.33	7,291
2008	361,806.56	119,386	120,216	259,681	32.23	8,057
2009	304,034.66	94,140	94,794	224,442	33.14	6,773
2010	506,507.65	146,424	147,441	384,392	34.06	11,286
2011	181,944.54	48,857	49,196	141,846	34.98	4,055
2012	340,566.59	84,378	84,964	272,631	35.91	7,592
2013	240,381.68	54,508	54,887	197,514	36.85	5,360
2014	192,707.18	39,607	39,882	162,461	37.80	4,298
2015	195,968.26	36,118	36,369	169,398	38.75	4,372
2016	174,161.69	28,403	28,600	154,270	39.70	3,886
2017	242,923.54	34,406	34,645	220,425	40.66	5,421
2018	211,826.33	25,413	25,590	196,828	41.63	4,728
2019	305,756.30	30,056	30,265	290,779	42.60	6,826
2020	195,987.17	15,018	15,123	190,664	43.57	4,376
2021	172,292.12	9,431	9,496	171,411	44.55	3,848
2022	342,975.23	11,265	11,344	348,780	45.53	7,660
2023	202,831.21	2,221	2,236	210,737	46.51	4,531
	7,327,690.74	2,317,102	2,333,203	5,360,872		162,990
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						32.9 2.22



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1973	216.76	180	187	30	7.96	4
1975	2,826.80	2,298	2,386	441	8.80	50
1976	21,094.53	16,943	17,590	3,505	9.25	379
1977	31,052.60	24,631	25,572	5,481	9.72	564
1978	37,691.51	29,504	30,631	7,061	10.21	692
1979	42,871.79	33,093	34,357	8,515	10.72	794
1980	40,766.03	31,008	32,192	8,574	11.25	762
1981	87,762.98	65,729	68,239	19,524	11.80	1,655
1982	81,396.17	59,974	62,264	19,132	12.37	1,547
1983	59,401.97	43,022	44,665	14,737	12.96	1,137
1984	64,964.67	46,208	47,973	16,992	13.57	1,252
1985	86,803.28	60,597	62,911	23,892	14.19	1,684
1986	69,271.47	47,414	49,225	20,046	14.83	1,352
1987	73,903.91	49,547	51,439	22,465	15.49	1,450
1988	63,444.69	41,631	43,221	20,224	16.16	1,251
1989	60,983.14	39,120	40,614	20,369	16.85	1,209
1990	63,537.01	39,812	41,332	22,205	17.55	1,265
1991	61,110.67	37,356	38,783	22,328	18.27	1,222
1992	83,216.78	49,576	51,469	31,748	19.00	1,671
1993	79,837.16	46,289	48,057	31,780	19.75	1,609
1994	122,269.98	68,939	71,572	50,698	20.50	2,473
1995	95,362.56	52,206	54,200	41,163	21.27	1,935
1996	145,436.70	77,205	80,153	65,284	22.05	2,961
1997	122,097.88	62,763	65,160	56,938	22.84	2,493
1998	129,614.44	64,421	66,881	62,733	23.64	2,654
1999	109,553.26	52,538	54,545	55,008	24.46	2,249
2000	40,904.07	18,903	19,625	21,279	25.28	842
2001	20,583.15	9,144	9,493	11,090	26.12	425
2002	92,533.60	39,454	40,961	51,573	26.96	1,913
2003	92,619.49	37,797	39,240	53,379	27.82	1,919
2015	1,929.60	339	352	1,578	38.75	41
	2,085,058.65	1,247,641	1,295,289	789,770		41,454

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.1 1.99

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. -20						
1949	98.34	118	118			
1950	98.10	118	118			
1951	40.66	49	49			
1955	152.38	183	183			
1956	12.76	15	15			
1957	1,022.57	1,227	1,227			
1958	51.97	62	62			
1959	3,518.63	4,222	4,222			
1960	258.58	310	310			
1961	1,242.03	1,490	1,490			
1962	1,440.54	1,729	1,729			
1963	665.05	798	798			
1964	3,791.82	4,520	1,972	2,578	0.20	2,578
1965	1,672.84	1,970	860	1,147	0.56	1,147
1966	4,217.29	4,906	2,141	2,920	0.92	2,920
1967	2,257.86	2,593	1,131	1,578	1.29	1,223
1968	7,657.76	8,681	3,788	5,401	1.66	3,254
1969	7,399.15	8,278	3,612	5,267	2.03	2,595
1970	16,970.07	18,735	8,174	12,190	2.40	5,079
1971	41,217.27	44,877	19,581	29,880	2.78	10,748
1972	5,013.44	5,384	2,349	3,667	3.15	1,164
1973	14,156.04	14,988	6,540	10,447	3.53	2,959
1974	6,822.53	7,117	3,105	5,082	3.92	1,296
1975	5,719.09	5,879	2,565	4,298	4.30	1,000
1976	1,319.85	1,336	583	1,001	4.69	213
1978	2,361.40	2,317	1,011	1,823	5.47	333
1980	13,633.60	12,946	5,649	10,711	6.26	1,711
1981	13,758.04	12,845	5,605	10,905	6.66	1,637
1982	11,967.49	10,981	4,791	9,570	7.06	1,356
1983	17,903.39	16,142	7,043	14,441	7.46	1,936
1984	44,093.21	39,031	17,030	35,882	7.87	4,559
1985	17,934.71	15,582	6,799	14,723	8.28	1,778
1986	25,144.13	21,423	9,347	20,826	8.70	2,394
1987	74,231.17	62,027	27,064	62,013	9.11	6,807
1988	150.95	124	54	127	9.54	13
1989	37,694.20	30,216	13,184	32,049	9.96	3,218
1990	8,429.06	6,612	2,885	7,230	10.39	696
1991	25,314.66	19,421	8,474	21,904	10.82	2,024
1992	31,503.13	23,615	10,304	27,500	11.26	2,442
1993	30,008.62	21,966	9,584	26,426	11.70	2,259
1994	39,445.04	28,164	12,288	35,046	12.15	2,884
1995	41,922.27	29,178	12,731	37,576	12.60	2,982
1996	50,519.66	34,232	14,936	45,688	13.06	3,498

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. -20						
1997	36,276.92	23,914	10,434	33,098	13.52	2,448
1998	179.05	115	50	165	13.99	12
1999	22,937.90	14,249	6,217	21,308	14.47	1,473
2000	44,497.83	26,788	11,688	41,709	14.95	2,790
2001	5,508.69	3,208	1,400	5,210	15.44	337
2002	105,898.28	59,600	26,005	101,073	15.93	6,345
2003	34,622.74	18,779	8,194	33,353	16.44	2,029
2004	113,912.20	59,462	25,944	110,751	16.95	6,534
2005	582,294.42	291,848	127,339	571,414	17.47	32,708
2006	3,676.25	1,765	770	3,642	18.00	202
2007	44,238.36	20,279	8,848	44,238	18.54	2,386
2008	37,401.36	16,322	7,122	37,760	19.09	1,978
2009	50,942.12	21,090	9,202	51,929	19.65	2,643
2010	20,271.16	7,930	3,460	20,865	20.22	1,032
2011	131,826.62	48,459	21,144	137,048	20.81	6,586
2012	116,133.30	39,903	17,410	121,950	21.41	5,696
2013	45,614.12	14,542	6,345	48,392	22.03	2,197
2014	91,751.75	26,939	11,754	98,348	22.66	4,340
2015	142,261.50	38,013	16,586	154,128	23.32	6,609
2016	240,414.38	57,795	25,217	263,280	23.99	10,975
2017	1,115,314.03	237,334	103,553	1,234,824	24.68	50,033
2018	313,869.14	57,751	25,198	351,445	25.40	13,836
2019	31,029.79	4,778	2,085	35,151	26.15	1,344
2020	334,278.06	41,048	17,910	383,224	26.93	14,230
2021	1,067,565.11	96,504	42,106	1,238,972	27.74	44,664
2022	525,334.84	29,421	12,837	617,565	28.60	21,593
2023	179,813.05	3,452	1,506	214,270	29.52	7,258
	6,050,694.32	1,787,695	785,825	6,475,008		330,981
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						19.6 5.47

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 24-S0						
NET SALVAGE PERCENT.. -5						
1984	52.48	48	36	19	3.17	6
1985	18,154.15	16,234	12,175	6,887	3.56	1,935
1986	35,201.12	30,893	23,170	13,791	3.94	3,500
1987	28,549.74	24,569	18,427	11,550	4.33	2,667
1988	42,502.30	35,832	26,874	17,753	4.73	3,753
1989	45,533.84	37,611	28,208	19,603	5.12	3,829
1990	37,481.93	30,288	22,716	16,640	5.53	3,009
1991	7,358.79	5,818	4,363	3,364	5.93	567
1992	39,155.62	30,252	22,689	18,424	6.34	2,906
1993	38,149.84	28,791	21,593	18,464	6.75	2,735
1994	234,074.14	172,352	129,264	116,514	7.17	16,250
1995	23,133.88	16,609	12,457	11,834	7.59	1,559
1996	77,653.43	54,323	40,742	40,794	8.01	5,093
1998	30,519.28	20,189	15,142	16,903	8.88	1,903
2000	838.23	522	391	489	9.77	50
2001	2,595.07	1,565	1,174	1,551	10.22	152
2002	212,465.89	123,814	92,860	130,229	10.68	12,194
2003	346,619.72	194,866	146,149	217,802	11.15	19,534
2004	270,441.63	146,477	109,858	174,106	11.62	14,983
2005	1,580.77	822	616	1,044	12.11	86
2006	9,676.05	4,826	3,620	6,540	12.60	519
2007	30,228.82	14,415	10,811	20,929	13.10	1,598
2010	4,796.70	1,958	1,469	3,568	14.67	243
2012	21,511.84	7,736	5,802	16,785	15.78	1,064
2013	118,686.38	39,723	29,792	94,829	16.35	5,800
2014	262,316.48	80,908	60,681	214,751	16.95	12,670
2015	257,339.51	72,505	54,379	215,827	17.56	12,291
2016	217,980.84	55,313	41,485	187,395	18.20	10,296
2017	168,370.65	37,935	28,451	148,338	18.85	7,869
2018	526,227.87	102,678	77,008	475,531	19.54	24,336
2019	114,748.61	18,826	14,120	106,366	20.25	5,253
2020	213,353.68	28,003	21,002	203,019	21.00	9,668
2021	997,372.21	96,870	72,652	974,589	21.78	44,747
2022	1,560,000.35	94,185	70,639	1,567,361	22.62	69,291
2023	933,929.73	19,613	14,710	965,916	23.52	41,068
	6,928,601.57	1,647,369	1,235,525	6,039,507		343,424

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.6 4.96

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L3						
NET SALVAGE PERCENT.. 0						
2017	238,072.69	138,796	104,097	133,976	4.17	32,129
	238,072.69	138,796	104,097	133,976		32,129
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						4.2 13.50

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	14,003.11	8,752	8,743	5,260	7.50	701
2013	22,550.07	11,839	11,827	10,723	9.50	1,129
2015	490,295.76	208,376	208,157	282,139	11.50	24,534
2016	35,870.72	13,452	13,438	22,433	12.50	1,795
2017	5,852.15	1,902	1,900	3,952	13.50	293
2018	11,759.06	3,234	3,231	8,528	14.50	588
2019	132,982.13	29,921	29,889	103,093	15.50	6,651
2020	22,213.56	3,887	3,883	18,331	16.50	1,111
2022	84,840.10	6,363	6,356	78,484	18.50	4,242
2023	103,149.67	2,579	2,576	100,574	19.50	5,158
	923,516.33	290,305	290,000	633,516		46,202
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.7 5.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2022	37,129.58	11,139	11,140	25,990	3.50	7,426
	37,129.58	11,139	11,140	25,990		7,426
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.5 20.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S3						
NET SALVAGE PERCENT.. +10						
1998	1,494.24	1,191	1,345			
2004	45,359.00	32,352	40,823			
2011	24,462.20	13,055	22,016			
2012	48,924.76	24,372	44,550		518-	
	120,240.20	70,970	108,734		518-	
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1996	259.08	259	259			
1998	16.51	17	17			
	275.59	276	276			
AMORTIZED						
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1999	22,959.67	22,500	22,460	500	0.50	500
2000	55,442.14	52,116	52,023	3,419	1.50	2,279
2001	57,333.67	51,600	51,508	5,826	2.50	2,330
2002	213,892.58	183,948	183,620	30,273	3.50	8,649
2003	19,351.62	15,868	15,840	3,512	4.50	780
2004	87,815.91	68,496	68,374	19,442	5.50	3,535
2006	21,390.02	14,973	14,946	6,444	7.50	859
2007	21,155.23	13,962	13,937	7,218	8.50	849
2008	195,331.69	121,106	120,890	74,442	9.50	7,836
2009	57,235.97	33,197	33,138	24,098	10.50	2,295
2010	96,292.90	51,998	51,905	44,388	11.50	3,860
2011	129,991.20	64,996	64,880	65,111	12.50	5,209
2012	161,998.60	74,519	74,386	87,613	13.50	6,490
2013	436,365.86	183,274	182,947	253,419	14.50	17,477
2014	223,303.32	84,855	84,704	138,600	15.50	8,942
2015	374,620.11	127,371	127,144	247,476	16.50	14,999
2016	341,898.74	102,570	102,387	239,512	17.50	13,686
2017	166,838.29	43,378	43,301	123,538	18.50	6,678
2018	250,778.62	55,171	55,073	195,706	19.50	10,036
2019	272,918.37	49,125	49,037	223,881	20.50	10,921
2020	415,512.92	58,172	58,068	357,445	21.50	16,625
2021	441,327.96	44,133	44,054	397,274	22.50	17,657
2022	486,385.96	29,183	29,131	457,255	23.50	19,458
2023	563,456.51	11,269	11,249	552,208	24.50	22,539
	5,113,597.86	1,557,780	1,555,000	3,558,598		204,489
	5,113,873.45	1,558,056	1,555,276	3,558,598		204,489
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						17.4 4.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 395.00 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	4,162.05	4,058	3,954	208	0.50	208
	4,162.05	4,058	3,954	208		208
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						1.0 5.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 19-S0.5						
NET SALVAGE PERCENT.. +20						
2002	83,056.36	46,162	66,445			
2004	102,490.64	53,425	105,493	23,500-		
	185,547.00	99,587	171,938	23,500-		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2023

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	20,748.53	20,057	19,731	1,018	0.50	1,018
2010	8,738.69	7,865	7,737	1,002	1.50	668
2011	46,730.80	38,942	38,310	8,421	2.50	3,368
2014	4,263.86	2,700	2,656	1,608	5.50	292
2016	11,920.76	5,960	5,863	6,058	7.50	808
2017	5,184.51	2,247	2,211	2,974	8.50	350
2020	4,100.00	957	941	3,159	11.50	275
2022	10,386.68	1,039	1,022	9,365	13.50	694
2023	35,954.37	1,198	1,179	34,775	14.50	2,398
	148,028.20	80,965	79,650	68,378		9,871

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 6.67

# Attachment JJS-3



## **2025 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO ELECTRIC AND COMMON PLANT AS  
OF DECEMBER 31, 2025**

*Prepared by:*



**GANNETT FLEMING**

**Excellence Delivered As Promised**

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## RESULTS OF STUDY

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2025

DEPRECIABLE PLANT	DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2025 (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE BOOK ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
<b>DISTRIBUTION PLANT</b>									
<b>DISTRIBUTION PLANT</b>									
374.40	LAND AND LAND RIGHTS	75-R3	0	3,329,394.14	452,433	2,876,961	44,279	1.33	65.0
374.50	LAND RIGHTS RIGHTS OF WAY	80-S4	0	2,666,577.16	1,214,963	1,451,614	29,374	1.10	49.4
	TOTAL ACCOUNT 374.00			5,995,971.30	1,667,396	4,328,575	73,653	1.23	
375.34	STRUCTURES AND IMPROVEMENTS MEASURING AND REGULATING	56-R1	(30)	4,586,610.15	328,465	5,634,128	112,731	2.46	50.0
375.70	OTHER DISTRIBUTION SYSTEM DISTRIBUTION SYSTEM STRUCTURES OTHER BUILDINGS	SQUARE 43-S2	0	9,615,964.20	5,076,438	4,539,526	248,460	2.58	18.3
	TOTAL ACCOUNT 375.70		0	193,420.44	97,965	95,455	4,273	2.21	22.3
375.80	COMMUNICATION	45-R3	0	9,809,384.64	5,174,403	4,634,981	252,733	2.58	41.6
	TOTAL ACCOUNT 375.80		0	132,125.04	16,403	115,722	2,784	2.11	
376.00	MAINS	67-R1.5	(20)	14,528,119.83	5,519,271	10,384,831	368,248	2.53	
	TOTAL ACCOUNT 376.00		(20)	15,674,732.39	14,450,145	4,359,534	306,605	1.96	14.2
	BARE STEEL	67-R1.5	(20)	87,267,270.59	23,897,801	80,822,924	1,564,226	1.79	51.7
	COATED STEEL	67-R1.5	(20)	401,908,179.10	55,809,634	426,481,181	7,163,493	1.78	59.5
	TOTAL ACCOUNT 376.00		0	504,850,182.08	94,156,580	511,663,639	9,034,324	1.79	
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	38-R0.5	(20)	31,415,085.47	2,273,034	35,425,069	1,061,872	3.38	33.4
379.10	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	45-R1.5	(20)	1,564,144.06	430,335	1,434,638	38,824	2.50	37.0
380.00	SERVICES	37-R1	(75)	239,348,847.55	62,696,460	386,164,023	12,245,981	5.12	29.1
381.00	METERS	33-R2	1	21,224,268.63	2,387,376	18,624,650	753,345	3.55	24.7
381.10	METERS - AMR	15-S2.5	0	9,980,854.48	6,716,342	3,264,512	588,718	5.90	5.5
382.00	METER INSTALLATIONS	45-R3	(5)	11,131,335.49	5,415,274	6,272,628	248,183	2.23	25.3
383.00	HOUSE REGULATORS	47-R3	(5)	8,117,662.12	2,657,893	5,865,652	179,279	2.21	32.7
384.00	HOUSE REGULATOR INSTALLATIONS	47-R3	0	2,085,385.57	1,378,281	707,105	39,835	1.91	17.8
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	30-S0	(20)	6,485,592.95	1,233,607	6,549,105	326,764	5.04	20.0
387.40	OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES	24-S0	(5)	8,040,620.76	1,027,893	7,414,759	391,442	4.87	18.9
387.50	OTHER EQUIPMENT - GPS PIPE LOCATORS	10-L3	0	238,072.69	168,377	69,696	21,056	8.84	3.3
	TOTAL DISTRIBUTION PLANT			864,996,142.98	187,728,119	968,168,882	25,371,534	2.93	
<b>GENERAL PLANT</b>									
391.10	OFFICE FURNITURE AND EQUIPMENT	20-SQ	0	921,741.33	381,000	540,741	46,123	5.00	11.7
391.12	FURNITURE INFORMATION SYSTEMS	5-SQ	0	37,129.58	25,992	11,138	7,425	20.00	1.5
	TOTAL ACCOUNT 391.00			958,870.91	406,992	551,879	53,548	5.58	
392.20	TRANSPORTATION EQUIPMENT - TRAILERS	20-S3	10	73,386.60	66,565	(517)	0	-	**



COLUMBIA GAS OF KENTUCKY, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2025

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE (3)	ORIGINAL COST AS OF DECEMBER 31, 2025 (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE BOOK ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
394.00 TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	7,741,443.06	1,944,666	5,796,777	309,810	4.00	18.7
396.00 POWER OPERATED EQUIPMENT	19-SQ.5	20	185,547.00	171,938	(23,500)	0	-	**
398.00 MISCELLANEOUS EQUIPMENT	15-SQ	0	118,540.98	66,647	51,894	7,905	6.67	6.6
<b>TOTAL GENERAL PLANT</b>			<b>9,077,788.55</b>	<b>2,656,808</b>	<b>6,376,533</b>	<b>371,263</b>	<b>4.09</b>	
<b>RESERVE ADJUSTMENT FOR AMORTIZATION</b>								
391.10 FURNITURE				(58,331)		58,331	***	
391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT				(6,312)		6,312	***	
391.12 INFORMATION SYSTEMS				(5,474)		5,474	***	
394.00 EQUIPMENT				14,133		(14,133)	***	
395.00 LABORATORY EQUIPMENT				33		(33)	***	
398.00 MISCELLANEOUS EQUIPMENT				(2,286)		2,286	***	
<b>TOTAL RESERVE ADJUSTMENT FOR AMORTIZATION</b>				<b>(58,237)</b>		<b>58,237</b>		
<b>TOTAL DEPRECIABLE PLANT</b>			<b>874,073,931.53</b>	<b>190,326,690</b>	<b>974,545,415</b>	<b>25,801,034</b>	<b>2.95</b>	
<b>AMORTIZABLE PLANT</b>								
303.00 MISCELLANEOUS INTANGIBLE PLANT			17,094,291.43	7,499,007	9,595,284	3,061,793	***	
303.99 MISCELLANEOUS INTANGIBLE PLANT - CLOUD			4,603,041.72	1,660,318	2,942,724	769,442	***	
375.71 STRUCTURES AND IMPROVEMENTS - LEASEHOLDS			880,994.59	872,807	8,188	8,188	***	
378.21 MEASURING AND REGULATING STATION EQUIPMENT - FMV			(771,902.82)	(252,347)	(519,556)	(25,903)	***	
<b>TOTAL AMORTIZABLE PLANT</b>			<b>21,806,424.92</b>	<b>9,779,785</b>	<b>12,026,640</b>	<b>3,813,520</b>		
<b>NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>								
301.00 ORGANIZATION			521.20					
374.10 LAND			205.40					
374.20 LAND			876,986.66	(522)				
375.90 LEASE			399,999.92	643,373				
376.02 MAINS - ARO				521,376				
376.03 MAINS - ARO				32,861				
<b>TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>			<b>1,277,713.18</b>	<b>1,196,888</b>	<b>986,572,055</b>	<b>29,614,554</b>		
<b>TOTAL GAS PLANT</b>			<b>897,158,069.63</b>	<b>201,303,363</b>	<b>986,572,055</b>	<b>29,614,554</b>		

\* INDICATES THE USE OF AN INTERIM SURVIVOR CURVE. EACH ASSET CLASS HAS A PROBABLE RETIREMENT DATE.  
\*\* ASSETS PLACED INTO SERVICE AS OF JANUARY 1, 2026 WILL UTILIZE ACCRUAL RATES REFLECTED BELOW BASED ON THE LIFE AND NET SALVAGE ESTIMATES IN COLUMNS 2 AND 3.

\*\*\* 1-YEAR AMORTIZATION OF UNRECOVERED RESERVE RELATED TO IMPLEMENTATION OF AMORTIZATION ACCOUNTING.  
\*\*\*\* ACCRUAL RATE BASED ON INDIVIDUAL ASSET AMORTIZATION.  
\*\*\*\*\* FAIR MARKET VALUE RECOVERED OVER 30 YEARS.

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 2. SUMMARY OF THE FORECASTED PLANT IN SERVICE FOR THE PERIOD ENDED DECEMBER 31, 2025

ACCOUNT (1)	ORIGINAL COST AS OF		2024		2025		ORIGINAL COST AS OF DECEMBER 31, 2025 (7)
	DECEMBER 31, 2023 (2)		ADDITIONS (3)	RETIREMENTS (4)	ADDITIONS (5)	RETIREMENTS (6)	
<b>DEPRECIABLE PLANT</b>							
<b>DISTRIBUTION PLANT</b>							
374.40	2,957,826.15		180,547.99		191,020.00		3,329,394.14
374.50	2,666,577.16						2,666,577.16
	5,624,403.31		180,547.99	0.00	191,020.00	0.00	5,995,971.30
375.34	2,999,115.51		513,043.70	(90,244.39)	1,413,293.69	(248,598.36)	4,586,610.15
375.70	9,377,241.49		116,622.70	(956.31)	122,100.01	(1,001.22)	9,615,964.20
	195,377.97						193,420.44
	9,572,619.46		116,622.70	(956.31)	0.00	(1,001.22)	9,809,384.64
	132,125.04						132,125.04
375.80	12,703,860.01		629,666.40	(91,200.70)	1,535,393.70	(249,599.58)	14,528,119.83
376.00	16,097,808.02		3,264,699.60	(188,033.61)	3,224,909.50	(235,042.02)	15,674,732.39
	81,595,117.77		29,382,296.41	(276,409.40)	29,024,185.54	(508,989.77)	87,267,270.99
	344,287,096.32						401,908,179.10
	441,980,022.11		32,646,996.01	(752,134.43)	32,249,095.04	(1,273,796.65)	504,850,182.08
378.00	25,562,443.08		3,737,418.24	(1,076,380.80)	4,612,145.89	(1,420,540.94)	31,415,085.47
379.10	1,554,144.06						1,554,144.06
380.00	212,084,968.01		19,827,360.98	(5,650,287.49)	16,216,318.99	(3,129,512.94)	239,348,847.55
381.00	19,455,628.81		2,401,017.89	(1,140,723.61)	988,461.69	(460,116.15)	21,224,268.63
381.10	9,980,854.48		0.00				9,980,854.48
382.00	10,602,664.76		358,212.00	(44,200.82)	239,628.88	(24,969.33)	11,131,335.49
383.00	7,327,690.74		397,853.98	(8,452.59)	409,329.64	(8,759.65)	8,117,662.12
384.00	2,085,058.65		158.96				2,085,385.57
385.00	6,050,694.32		287,802.89	(89,852.06)	344,501.00	(107,553.20)	6,485,592.95
387.40	6,928,601.57		745,250.02	(324,310.39)	1,265,250.02	(574,170.46)	8,040,620.76
387.50	238,072.69						238,072.69
	762,179,106.60		61,212,285.36	(9,177,542.89)	58,031,312.81	(7,249,018.90)	864,996,142.98
<b>GENERAL PLANT</b>							
391.10	923,516.33			(1,775.00)			921,741.33
391.12	37,129.58						37,129.58
	960,645.91		0.00	(1,775.00)	0.00	0.00	958,870.91

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 2. SUMMARY OF THE FORECASTED PLANT IN SERVICE FOR THE PERIOD ENDED DECEMBER 31, 2025

ACCOUNT (1)	ORIGINAL COST AS OF		2024		2025		ORIGINAL COST AS OF DECEMBER 31, 2025 (7)
	DECEMBER 31, 2023 (2)		ADDITIONS (3)	RETIREMENTS (4)	ADDITIONS (5)	RETIREMENTS (6)	
392.20							
394.00	120,240.20			(46,853.60)			73,386.60
395.00	5,113,873.45		300,000.00	(23,235.26)	2,406,247.01	(55,442.14)	7,741,443.06
396.00	4,162.05			(4,162.05)			0.00
398.00	185,547.00			(20,748.53)		(8,738.69)	185,547.00
	148,028.20						118,540.98
<b>TOTAL GENERAL PLANT</b>	<b>6,532,496.81</b>		<b>300,000.00</b>	<b>(96,774.44)</b>	<b>2,406,247.01</b>	<b>(64,180.83)</b>	<b>9,077,788.55</b>
<b>AMORTIZABLE PLANT</b>							
303.00							
303.99	13,199,898.62		2,916,795.00	(3,340,617.83)	5,502,385.25	(1,184,169.61)	17,094,291.43
375.71	2,060,025.96		216,165.54	(250,041.72)	2,724,597.63	(147,705.69)	4,603,041.72
378.21	880,994.59						880,994.59
	(771,902.82)						(771,902.82)
<b>TOTAL AMORTIZABLE PLANT</b>	<b>15,369,016.35</b>		<b>3,132,960.54</b>	<b>(3,590,659.55)</b>	<b>8,226,982.88</b>	<b>(1,331,875.30)</b>	<b>21,806,424.92</b>
<b>NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>							
301.00							
374.10	521.20						521.20
374.20	205.40						205.40
375.90	876,986.66						876,986.66
	399,999.92						399,999.92
<b>TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>	<b>1,277,713.18</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,277,713.18</b>
<b>TOTAL GAS PLANT</b>	<b>785,358,332.94</b>		<b>64,645,245.90</b>	<b>(12,864,976.88)</b>	<b>68,664,542.70</b>	<b>(8,645,075.03)</b>	<b>887,158,069.63</b>

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 3. SUMMARY OF BOOK RESERVE BRING FORWARD FROM DECEMBER 31, 2023 TO DECEMBER 31, 2025

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2023 (2)		JANUARY 2024 TO DECEMBER 2024 NET SALVAGE (3)		JANUARY 2025 TO DECEMBER 2025 NET SALVAGE (9)		BOOK RESERVE AS OF DECEMBER 31, 2025 (1)	
	ACCUMULATED	ADJUSTMENTS	RETIREMENTS	ADJUSTMENTS	RETIREMENTS	ADJUSTMENTS	RETIREMENTS	ADJUSTMENTS
<b>DEPRECIABLE PLANT</b>								
<b>DISTRIBUTION PLANT</b>								
374.40 LAND AND LAND RIGHTS	368,882	40,540		43,011			43,011	452,433
374.50 LAND RIGHTS RIGHTS OF WAY	1,156,289	29,332		29,332			29,332	1,214,963
TOTAL ACCOUNT 374.00	1,525,181	69,872	0	72,343	0	0	72,343	1,667,396
375.34 STRUCTURES AND IMPROVEMENTS MEASURING AND REGULATING	596,528	76,731	(90,244)	95,702	(248,598)	(74,580)		328,465
375.70 OTHER DISTRIBUTION SYSTEM DISTRIBUTION SYSTEM STRUCTURES OTHER BUILDINGS	4,599,778	236,832	(956)	239,828				5,076,438
TOTAL ACCOUNT 375.70	4,600,486	241,451	(856)	244,424	(1,001)	0	243,423	5,174,403
375.80 COMMUNICATION	10,827	2,788		2,788				16,403
TOTAL ACCOUNT 375.00	5,297,841	320,970	(81,201)	342,514	(249,600)	(74,580)	342,514	5,519,271
376.00 MAINS	14,925,095	318,475	(188,034)	314,265	(235,042)	(47,008)	314,265	14,456,145
COATED STEEL	21,853,588	1,487,119	(2,877,893)	1,527,983	(529,765)	(105,853)	1,527,983	23,887,801
PLASTIC	43,388,931	6,423,237	(2,764,403)	6,938,945	(598,980)	(101,798)	6,938,945	55,808,634
TOTAL ACCOUNT 376.00	79,567,614	8,228,909	(752,134)	8,791,174	(1,273,797)	(254,759)	8,791,174	94,156,950
378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	3,392,165	890,157	(1,076,381)	987,018	(1,420,541)	(284,108)	987,018	2,273,034
379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE SERVICES	351,385	39,475	(5,650,287)	39,475	(3,128,513)	(2,347,135)	39,475	430,335
380.00 METER	54,646,001	11,353,166	(4,237,716)	12,059,322	(460,116)	4,001	12,059,322	62,896,480
381.10 METERS - AMR	5,369,942	677,700	(11,140,724)	677,700			677,700	6,716,342
382.00 METER INSTALLATIONS	4,991,235	245,320	(44,201)	251,347	(24,969)	(1,248)	251,347	5,415,274
383.00 HOUSE REGULATORS	2,333,203	166,997	(8,453)	175,766	(8,760)	(438)	175,766	2,657,893
384.00 HOUSE REGULATOR INSTALLATIONS	1,295,289	336,387	(89,852)	348,281	(107,553)	(21,511)	348,281	1,376,281
385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	785,825	354,098	(324,310)	381,676	(574,170)	(28,709)	381,676	1,027,893
387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES	1,235,525	321,140		321,140			321,140	1,683,377
387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS	104,097							
TOTAL DISTRIBUTION PLANT	163,391,311	23,475,778	(8,177,543)	24,951,383	(7,249,019)	(3,007,887)	24,951,383	187,728,119
<b>GENERAL PLANT</b>								
391.10 OFFICE FURNITURE AND EQUIPMENT	290,000	46,131	(1,775)	46,087			46,087	381,000
391.12 FURNITURE INFORMATION SYSTEMS	11,140	7,426		7,426			7,426	25,992
TOTAL ACCOUNT 391.00	301,140	53,557	(1,775)	53,513	0	0	53,513	406,992
392.20 TRANSPORTATION EQUIPMENT - TRAILERS	108,734		(46,854)	4,685			4,685	66,565
394.00 TOOLS, SHOP AND GARAGE EQUIPMENT	1,555,276	210,090	(23,235)	262,642	(55,442)	(4,665)	262,642	1,944,666
395.00 LABORATORY EQUIPMENT	3,954	208	(4,162)					0
396.00 POWER OPERATED EQUIPMENT	171,938							171,938
398.00 MISCELLANEOUS EQUIPMENT	79,650	9,182	(20,749)	8,198	(8,739)	(895)	8,198	66,617
TOTAL GENERAL PLANT	2,220,692	273,037	(86,774)	324,353	(64,161)	(5,004)	324,353	2,656,008
<b>RESERVE ADJUSTMENT FOR AMORTIZATION</b>								
391.10 FURNITURE	(173,320)	57,773		57,773			57,773	(58,331)
391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT	(18,934)	6,311		6,311			6,311	(6,312)
391.12 INFORMATION SYSTEMS	(16,424)	5,475		5,475			5,475	(5,474)
394.00 LABORATORY EQUIPMENT	28,404	(9,468)		(9,468)			(9,468)	14,133
395.00 LABORATORY EQUIPMENT	89	(33)		(33)			(33)	33
398.00 MISCELLANEOUS EQUIPMENT	(9,546)	3,162		3,162			3,162	(2,286)
TOTAL RESERVE ADJUSTMENT FOR AMORTIZATION	(189,721)	63,240	0	63,240	0	0	63,240	(58,237)
TOTAL DEPRECIABLE PLANT	165,422,282	23,812,055	(8,274,317)	25,338,976	(7,313,200)	(3,007,887)	25,338,976	190,326,690

COLUMBIA GAS OF KENTUCKY, INC.

TABLE 3. SUMMARY OF BOOK RESERVE BRING FORWARD FROM DECEMBER 31, 2023 TO DECEMBER 31, 2025

ACCOUNT (1)	BOOK RESERVE AS OF DECEMBER 31, 2023 (2)			JANUARY 2024 TO DECEMBER 2024 NET SALVAGE (3)			JANUARY 2025 TO DECEMBER 2025 NET SALVAGE (9)			BOOK RESERVE AS OF DECEMBER 31, 2025 (1)		
	ACCRUAL (3)	RETIREMENTS (4)	ADJUSTMENTS (6)	ACCRUAL (3)	RETIREMENTS (4)	ADJUSTMENTS (6)	ACCRUAL (7)	RETIREMENTS (8)	ADJUSTMENTS (10)	ACCRUAL (7)	RETIREMENTS (8)	ADJUSTMENTS (10)
<b>AMORTIZABLE PLANT</b>												
303.00 MISCELLANEOUS INTANGIBLE PLANT	2,342,289	(3,340,616)		2,821,958	(1,184,169.61)		2,821,958	(1,184,169.61)		7,499,007		
303.99 MISCELLANEOUS INTANGIBLE PLANT - CLOUD	418,165	(250,042)		652,350	(147,706)		652,350	(147,706)		1,660,318		
375.71 STRUCTURES AND IMPROVEMENTS - LEASEHOLDS	56,922			56,922			56,922			872,807		
378.21 MEASURING AND REGULATING STATION EQUIPMENT - FMV	(200,541)			(25,903)			(25,903)			(252,342)		
<b>TOTAL AMORTIZABLE PLANT</b>	<b>2,791,473</b>	<b>(3,590,660)</b>	<b>0</b>	<b>3,505,327</b>	<b>(1,331,875)</b>	<b>0</b>	<b>3,505,327</b>	<b>(1,331,875)</b>	<b>0</b>	<b>9,779,785</b>		
<b>NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>												
374.20 LAND	(522)									(522)		
375.90 LEASE	643,373									643,373		
376.02 MAINS - ARO	521,376									521,376		
376.03 MAINS - ARO	32,661									32,661		
<b>TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED</b>	<b>1,196,888</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,196,888</b>		
<b>TOTAL GAS PLANT</b>	<b>175,024,691</b>	<b>(12,864,977)</b>	<b>(4,651,219)</b>	<b>26,603,528</b>	<b>(8,645,075)</b>	<b>0</b>	<b>28,844,303</b>	<b>(8,645,075)</b>	<b>0</b>	<b>3,007,887</b>	<b>0</b>	<b>0</b>

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## DETAILED DEPRECIATION CALCULATIONS

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1940	631.74	540	546	86	10.87	8
1946	26.12	22	22	4	13.14	
1949	318.25	257	260	58	14.44	4
1954	1,417.34	1,099	1,112	305	16.85	18
1955	645.29	496	502	143	17.37	8
1956	719.59	548	554	166	17.91	9
1957	307.00	231	234	73	18.45	4
1958	1,494.06	1,115	1,128	366	19.01	19
1959	1,468.93	1,085	1,098	371	19.58	19
1960	262.71	192	194	69	20.16	3
1961	636.06	460	465	171	20.75	8
1962	1,753.87	1,254	1,269	485	21.36	23
1963	3,172.75	2,243	2,269	904	21.98	41
1964	3,424.35	2,392	2,420	1,004	22.60	44
1965	706.66	488	494	213	23.24	9
1966	848.01	578	585	263	23.89	11
1967	488.18	328	332	156	24.55	6
1968	530.52	352	356	175	25.22	7
1969	525.72	344	348	178	25.89	7
1970	1,612.58	1,041	1,053	560	26.58	21
1971	964.42	614	621	343	27.28	13
1972	4,729.85	2,965	3,000	1,730	27.98	62
1974	2,820.09	1,714	1,734	1,086	29.42	37
1976	334.72	197	199	136	30.89	4
1977	502.91	291	294	209	31.64	7
1978	2,922.50	1,660	1,679	1,244	32.39	38
1980	3,039.01	1,665	1,685	1,354	33.92	40
1981	6,212.73	3,338	3,377	2,836	34.70	82
1982	9,762.89	5,143	5,203	4,560	35.49	128
1983	17,318.14	8,941	9,046	8,272	36.28	228
1984	33,629.96	17,003	17,203	16,427	37.08	443
1985	20,976.82	10,382	10,504	10,473	37.88	276
1986	24,833.25	12,019	12,160	12,673	38.70	327
1987	61,472.42	29,081	29,423	32,049	39.52	811
1988	23,203.80	10,723	10,849	12,355	40.34	306
1989	38,118.77	17,189	17,391	20,728	41.18	503
1990	15,601.41	6,860	6,941	8,660	42.02	206
1991	9,950.28	4,264	4,314	5,636	42.86	131
1992	7,297.89	3,044	3,080	4,218	43.72	96
1993	1,640.72	666	674	967	44.57	22
1994	50,580.17	19,935	20,169	30,411	45.44	669
1995	16,269.77	6,224	6,297	9,973	46.31	215
1997	22,942.04	8,238	8,335	14,607	48.07	304

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.40 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R3						
NET SALVAGE PERCENT.. 0						
1998	7,537.57	2,618	2,649	4,889	48.95	100
1999	15,063.18	5,051	5,110	9,953	49.85	200
2000	27,537.06	8,907	9,012	18,525	50.74	365
2001	110,944.79	34,540	34,946	75,999	51.65	1,471
2002	15,890.64	4,754	4,810	11,081	52.56	211
2003	10,755.44	3,088	3,124	7,631	53.47	143
2004	16,873.25	4,637	4,691	12,182	54.39	224
2005	2,445.73	642	650	1,796	55.31	32
2007	1,986.50	472	478	1,508	57.17	26
2008	25,783.52	5,806	5,874	19,910	58.11	343
2009	48,492.88	10,313	10,434	38,059	59.05	645
2010	52,809.89	10,569	10,693	42,117	59.99	702
2011	14,602.00	2,737	2,769	11,833	60.94	194
2012	22,039.05	3,852	3,897	18,142	61.89	293
2013	23,242.14	3,768	3,812	19,430	62.84	309
2014	16,047.46	2,396	2,424	13,623	63.80	214
2016	85,167.03	10,527	10,651	74,516	65.73	1,134
2017	10,387.47	1,151	1,165	9,222	66.69	138
2018	121,639.57	11,905	12,045	109,595	67.66	1,620
2019	206,461.79	17,535	17,741	188,721	68.63	2,750
2020	1,237,014.56	88,904	89,947	1,147,068	69.61	16,478
2021	71,856.69	4,235	4,285	67,572	70.58	957
2022	234,368.30	10,750	10,876	223,492	71.56	3,123
2023	182,765.35	5,995	6,065	176,700	72.54	2,436
2024	180,547.99	3,562	3,604	176,944	73.52	2,407
2025	191,020.00	1,247	1,262	189,758	74.51	2,547
	3,329,394.14	447,182	452,433	2,876,961		44,279
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						65.0 1.33



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1900	7.64	7	8			
1905	4,639.41	4,477	4,639			
1906	453.46	437	453			
1908	509.81	490	510			
1910	32.76	31	33			
1911	39.25	38	39			
1912	166.79	159	167			
1913	39,647.24	37,764	39,647			
1914	440.81	419	441			
1915	17.37	16	17			
1916	3,714.53	3,518	3,715			
1917	2.52	2	2	1	4.37	
1918	222.02	209	222			
1920	8.85	8	9			
1921	4.00	4	4			
1922	550.17	515	550			
1927	574.78	531	575			
1928	7,615.83	7,016	7,616			
1929	9,365.20	8,603	9,365			
1930	293.53	269	294			
1931	75.68	69	76			
1932	11.42	10	11			
1933	121.75	110	122			
1934	38.48	35	38			
1936	42.73	38	42	1	8.17	
1937	147.11	132	147			
1938	291.95	260	291	1	8.72	
1939	54.17	48	54			
1940	1,406.23	1,242	1,388	18	9.32	2
1941	3,083.74	2,713	3,032	52	9.63	5
1942	82.48	72	80	2	9.95	
1943	178.77	156	174	5	10.29	
1944	55.72	48	54	2	10.64	
1945	35.21	30	34	1	11.00	
1946	55.44	48	54	1	11.38	
1947	388.45	331	370	18	11.77	2
1948	1,231.01	1,044	1,167	64	12.17	5
1949	2,790.90	2,352	2,629	162	12.59	13
1950	3,189.10	2,670	2,984	205	13.03	16
1951	7,892.84	6,563	7,335	558	13.48	41
1952	1,366.64	1,128	1,261	106	13.95	8
1953	4,099.22	3,360	3,755	344	14.43	24
1954	5,721.14	4,653	5,200	521	14.94	35

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
1955	314.60	254	284	31	15.46	2
1956	1,907.97	1,526	1,705	203	16.00	13
1957	1,176.95	933	1,043	134	16.56	8
1958	21,005.37	16,505	18,446	2,559	17.14	149
1959	5,254.98	4,090	4,571	684	17.74	39
1960	6,002.69	4,625	5,169	834	18.36	45
1961	11,709.76	8,927	9,977	1,733	19.01	91
1962	3,663.44	2,763	3,088	575	19.67	29
1963	5,765.71	4,299	4,805	961	20.35	47
1964	3,606.15	2,657	2,969	637	21.05	30
1965	2,918.74	2,124	2,374	545	21.78	25
1966	27,810.21	19,982	22,332	5,478	22.52	243
1967	4,679.09	3,317	3,707	972	23.28	42
1968	5,001.45	3,497	3,908	1,093	24.06	45
1969	42,871.21	29,543	33,017	9,854	24.87	396
1970	28,515.31	19,358	21,635	6,880	25.69	268
1971	16,220.35	10,843	12,118	4,102	26.52	155
1972	27,985.97	18,408	20,573	7,413	27.38	271
1973	5,481.78	3,546	3,963	1,519	28.25	54
1974	1,658.65	1,055	1,179	480	29.13	16
1975	9,583.32	5,986	6,690	2,893	30.03	96
1976	5,163.94	3,167	3,539	1,625	30.94	53
1977	4,195.28	2,525	2,822	1,373	31.86	43
1978	2,876.24	1,697	1,897	979	32.80	30
1979	13,433.90	7,768	8,682	4,752	33.74	141
1980	12,768.07	7,232	8,082	4,686	34.69	135
1981	10,564.93	5,857	6,546	4,019	35.65	113
1982	1,162.68	630	704	459	36.62	13
1983	9,009.79	4,776	5,338	3,672	37.59	98
1984	68,733.35	35,596	39,782	28,951	38.57	751
1985	12,854.49	6,499	7,263	5,591	39.55	141
1986	32,815.46	16,186	18,090	14,725	40.54	363
1987	21,389.93	10,286	11,496	9,894	41.53	238
1988	97,331.04	45,600	50,963	46,368	42.52	1,090
1989	76,248.28	34,769	38,858	37,390	43.52	859
1990	86,482.89	38,366	42,878	43,605	44.51	980
1991	52,430.84	22,604	25,262	27,169	45.51	597
1992	60,042.13	25,135	28,091	31,951	46.51	687
1993	50,941.57	20,695	23,129	27,813	47.50	586
1994	214,025.02	84,272	94,182	119,843	48.50	2,471
1995	177,926.39	67,834	75,811	102,115	49.50	2,063
1996	30,598.73	11,283	12,610	17,989	50.50	356
1998	8,061.70	2,771	3,097	4,965	52.50	95

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 374.50 LAND AND LAND RIGHTS - RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 80-S4						
NET SALVAGE PERCENT.. 0						
2000	10,513.30	3,351	3,745	6,768	54.50	124
2001	145,613.01	44,594	49,838	95,775	55.50	1,726
2002	1,125,585.22	330,641	369,525	756,060	56.50	13,382
2005	2,009.13	515	576	1,433	59.50	24
	2,666,577.16	1,090,512	1,214,963	1,451,614		29,374
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						49.4 1.10

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 56-R1						
NET SALVAGE PERCENT.. -30						
1979	43.02	30	17	39	25.46	2
1980	3,561.71	2,480	1,395	3,235	26.01	124
1981	2,318.84	1,585	891	2,123	26.56	80
1982	24,574.79	16,476	9,266	22,681	27.12	836
1983	9,017.65	5,926	3,333	8,390	27.69	303
1984	21,486.90	13,837	7,782	20,151	28.26	713
1985	38,636.93	24,361	13,700	36,528	28.84	1,267
1986	15,134.93	9,335	5,250	14,425	29.43	490
1987	76,083.52	45,887	25,806	73,103	30.02	2,435
1988	6,845.15	4,035	2,269	6,630	30.61	217
1989	2,830.09	1,628	916	2,763	31.22	89
1990	20,371.90	11,435	6,431	20,052	31.82	630
1991	3,588.51	1,963	1,104	3,561	32.44	110
1992	384.88	205	115	385	33.06	12
1993	291.55	151	85	294	33.68	9
1994	2,870.66	1,445	813	2,919	34.31	85
1995	7,360.69	3,599	2,024	7,545	34.94	216
1996	27,376.15	12,977	7,298	28,291	35.58	795
1997	1,697.59	779	438	1,769	36.23	49
1998	12,452.41	5,530	3,110	13,078	36.87	355
1999	6,137.88	2,632	1,480	6,499	37.53	173
2000	1,786.03	739	416	1,906	38.18	50
2001	31,532.03	12,561	7,064	33,928	38.84	874
2002	17,261.03	6,607	3,716	18,723	39.51	474
2003	1,346.70	495	278	1,473	40.17	37
2004	4,081.11	1,436	808	4,497	40.84	110
2005	4,887.24	1,643	924	5,429	41.52	131
2006	19,586.48	6,275	3,529	21,933	42.20	520
2007	26,032.31	7,935	4,463	29,379	42.87	685
2008	32,257.43	9,315	5,239	36,696	43.56	842
2009	14,566.25	3,977	2,237	16,699	44.24	377
2010	133,804.41	34,386	19,338	154,608	44.93	3,441
2011	106,832.33	25,743	14,477	124,405	45.62	2,727
2012	141,691.45	31,874	17,926	166,273	46.31	3,590
2013	166,080.64	34,661	19,493	196,412	47.01	4,178
2014	106,265.04	20,451	11,501	126,644	47.71	2,654
2015	496,363.11	87,460	49,186	596,086	48.41	12,313
2016	90,310.63	14,445	8,124	109,280	49.11	2,225
2017	94,576.80	13,569	7,631	115,319	49.82	2,315
2018	121,747.21	15,431	8,678	149,593	50.54	2,960
2019	122,178.98	13,472	7,576	151,257	51.25	2,951
2020	367,187.52	34,350	19,318	458,026	51.97	8,813
2021	20,151.15	1,544	868	25,328	52.70	481

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 56-R1						
NET SALVAGE PERCENT.. -30						
2022	153,083.10	9,168	5,156	193,852	53.42	3,629
2023	119,374.59	5,127	2,883	152,304	54.15	2,813
2024	505,153.80	13,016	7,321	649,379	54.89	11,831
2025	1,405,407.03	12,077	6,792	1,820,237	55.63	32,720
	4,586,610.15	584,053	328,465	5,634,128		112,731
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						50.0 2.46

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PARIS AREA OFFICE - VINE STREET INTERIM SURVIVOR CURVE.. SQUARE PROBABLE RETIREMENT YEAR.. 6-2028 NET SALVAGE PERCENT.. 0						
1950	3,575.48	3,461	3,435	140	2.50	56
1974	502.19	479	475	27	2.50	11
1975	469.01	447	444	25	2.50	10
1977	2,458.15	2,338	2,320	138	2.50	55
1985	678.43	639	634	44	2.50	18
2001	23,425.95	21,257	21,097	2,329	2.50	932
	31,109.21	28,621	28,406	2,703		1,082
WINCHESTER SERVICE CENTER AND OFFICE INTERIM SURVIVOR CURVE.. SQUARE PROBABLE RETIREMENT YEAR.. 6-2042 NET SALVAGE PERCENT.. 0						
1992	560,605.00	375,605	372,780	187,825	16.50	11,383
2003	10,253.37	5,915	5,871	4,383	16.50	266
2009	4,308.86	2,154	2,138	2,171	16.50	132
2014	12,581.47	5,167	5,128	7,453	16.50	452
2016	61,809.21	22,584	22,414	39,395	16.50	2,388
2017	72,205.61	24,550	24,365	47,840	16.50	2,899
2018	5,960.77	1,863	1,849	4,112	16.50	249
2019	17,263.23	4,879	4,842	12,421	16.50	753
2023	24,498.72	3,224	3,200	21,299	16.50	1,291
	769,486.24	445,941	442,587	326,899		19,813
LEXINGTON HEADQUARTERS INTERIM SURVIVOR CURVE.. SQUARE PROBABLE RETIREMENT YEAR.. 6-2044 NET SALVAGE PERCENT.. 0						
1924	239.38	202	200	39	18.50	2
1949	748.22	603	598	150	18.50	8
1994	6,179,394.33	3,893,018	3,863,738	2,315,657	18.50	125,171
1998	26,669.93	15,944	15,824	10,846	18.50	586
2000	9,603.96	5,566	5,524	4,080	18.50	221
2001	126,272.90	71,947	71,406	54,867	18.50	2,966
2003	8,863.24	4,864	4,827	4,036	18.50	218
2005	36,210.95	19,034	18,891	17,320	18.50	936
2006	3,323.54	1,706	1,693	1,630	18.50	88

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
LEXINGTON HEADQUARTERS						
INTERIM SURVIVOR CURVE.. SQUARE						
PROBABLE RETIREMENT YEAR.. 6-2044						
NET SALVAGE PERCENT.. 0						
2009	6,157.10	2,903	2,881	3,276	18.50	177
2010	6,651.14	3,032	3,009	3,642	18.50	197
2011	15,565.37	6,839	6,788	8,778	18.50	474
2013	7,125.00	2,873	2,851	4,274	18.50	231
2014	176,824.83	67,782	67,272	109,553	18.50	5,922
2015	588,327.79	213,016	211,414	376,914	18.50	20,374
2016	232,044.92	78,731	78,139	153,906	18.50	8,319
2017	165,706.39	52,166	51,774	113,933	18.50	6,159
2018	307,736.59	88,770	88,102	219,634	18.50	11,872
2019	71,883.22	18,690	18,549	53,334	18.50	2,883
2020	26,989.65	6,185	6,138	20,851	18.50	1,127
2021	30,120.91	5,893	5,849	24,272	18.50	1,312
2022	77,934.42	12,399	12,306	65,629	18.50	3,548
2023	472,252.26	56,222	55,799	416,453	18.50	22,511
2024	116,622.70	8,747	8,681	107,941	18.50	5,835
2025	122,100.01	3,214	3,190	118,910	18.50	6,428
	8,815,368.75	4,640,346	4,605,445	4,209,924		227,565

OTHER BUILDINGS  
SURVIVOR CURVE.. IOWA 43-S2  
NET SALVAGE PERCENT.. 0

1951	1,118.64	1,062	1,083	36	2.16	17
1952	1,838.53	1,737	1,771	67	2.37	28
1953	595.38	560	571	24	2.57	9
1954	762.66	713	727	36	2.78	13
1955	864.55	804	820	45	3.00	15
1957	4,928.84	4,536	4,626	303	3.43	88
1958	3,000.84	2,745	2,799	202	3.66	55
1959	3,433.45	3,124	3,186	248	3.88	64
1960	2,385.41	2,157	2,200	186	4.11	45
1961	3,641.56	3,273	3,338	304	4.35	70
1962	115.44	103	105	10	4.59	2
1963	307.26	273	278	29	4.83	6
1965	1,445.38	1,266	1,291	154	5.34	29
1967	932.39	805	821	111	5.86	19
1968	5,151.64	4,416	4,503	648	6.14	106
1970	2,974.44	2,511	2,561	414	6.70	62
1972	466.10	387	395	71	7.28	10

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.70 STRUCTURES AND IMPROVEMENTS - OTHER DISTRIBUTION SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OTHER BUILDINGS						
SURVIVOR CURVE.. IOWA 43-S2						
NET SALVAGE PERCENT.. 0						
1973	3,118.07	2,568	2,619	499	7.59	66
1985	1,262.96	913	931	332	11.93	28
1987	18,766.94	13,176	13,437	5,330	12.81	416
1988	4,633.30	3,203	3,266	1,367	13.27	103
1996	29,946.79	17,745	18,096	11,851	17.52	676
2000	8,563.80	4,563	4,653	3,911	20.09	195
2003	1,816.35	877	894	922	22.23	41
2009	11,418.33	4,225	4,309	7,110	27.09	262
2013	69.27	20	20	49	30.70	2
2015	45,442.96	10,991	11,208	34,235	32.60	1,050
2016	29,248.49	6,414	6,541	22,708	33.57	676
2018	5,170.67	898	916	4,255	35.53	120
	193,420.44	96,065	97,965	95,455		4,273
	9,809,384.64	5,210,973	5,174,403	4,634,981		252,733
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						18.3 2.58



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 375.80 STRUCTURES AND IMPROVEMENTS - COMMUNICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. 0						
2022	132,125.04	10,071	16,403	115,722	41.57	2,784
	132,125.04	10,071	16,403	115,722		2,784
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						41.6 2.11

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BARE STEEL						
INTERIM SURVIVOR CURVE.. IOWA 67-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2043						
NET SALVAGE PERCENT.. -20						
1901	422.48	481	481	26	3.39	8
1905	5,213.88	5,831	5,833	424	4.56	93
1906	778.17	867	867	67	4.81	14
1908	45.04	50	50	4	5.28	1
1910	20.35	22	22	2	5.72	
1913	585.93	636	636	67	6.37	11
1914	185.54	201	201	22	6.58	3
1915	5,323.19	5,740	5,742	646	6.79	95
1920	1,804.05	1,913	1,914	251	7.80	32
1921	75.26	80	80	10	8.00	1
1923	1,074.47	1,128	1,128	161	8.40	19
1925	20.47	21	21	4	8.80	
1926	1,854.30	1,926	1,927	299	8.99	33
1927	5,147.84	5,329	5,330	847	9.18	92
1928	66,313.58	68,436	68,455	11,122	9.36	1,188
1929	50,427.55	51,866	51,880	8,633	9.55	904
1930	7,064.67	7,244	7,246	1,232	9.72	127
1931	5,960.51	6,092	6,094	1,059	9.90	107
1932	4,290.78	4,372	4,373	776	10.07	77
1933	249,596.30	253,519	253,588	45,927	10.24	4,485
1934	1,294.65	1,311	1,311	242	10.40	23
1935	14,960.10	15,102	15,106	2,846	10.57	269
1936	7,558.19	7,607	7,609	1,461	10.73	136
1937	25,647.04	25,738	25,745	5,031	10.88	462
1938	10,823.41	10,828	10,831	2,157	11.04	195
1939	18,588.64	18,541	18,546	3,760	11.19	336
1940	17,515.62	17,419	17,424	3,595	11.34	317
1941	18,779.63	18,620	18,625	3,910	11.49	340
1942	3,500.94	3,461	3,462	739	11.63	64
1943	2,891.94	2,850	2,851	620	11.78	53
1944	1,664.28	1,635	1,635	362	11.92	30
1945	9,239.45	9,051	9,053	2,034	12.06	169
1946	22,215.40	21,691	21,697	4,962	12.21	406
1947	19,321.82	18,810	18,815	4,371	12.34	354
1948	51,753.16	50,220	50,234	11,870	12.48	951
1949	66,923.95	64,731	64,749	15,560	12.62	1,233
1950	145,465.66	140,228	140,266	34,292	12.76	2,687
1951	245,701.42	236,092	236,157	58,685	12.89	4,553
1952	127,042.90	121,673	121,706	30,745	13.02	2,361
1953	346,460.18	330,635	330,725	85,027	13.16	6,461
1954	252,707.64	240,328	240,394	62,855	13.29	4,729

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BARE STEEL						
INTERIM SURVIVOR CURVE.. IOWA 67-R1.5						
PROBABLE RETIREMENT YEAR.. 12-2043						
NET SALVAGE PERCENT.. -20						
1955	367,832.80	348,653	348,748	92,651	13.41	6,909
1956	485,241.67	458,268	458,393	123,897	13.54	9,150
1957	1,060,263.44	997,801	998,074	274,242	13.66	20,076
1958	962,746.51	902,540	902,787	252,509	13.79	18,311
1959	776,302.59	725,026	725,224	206,339	13.91	14,834
1960	709,964.00	660,522	660,703	191,254	14.03	13,632
1961	670,213.60	621,216	621,386	182,871	14.14	12,933
1962	590,537.40	545,132	545,281	163,364	14.26	11,456
1963	763,476.57	701,962	702,154	214,018	14.37	14,893
1964	923,174.74	845,270	845,501	262,309	14.48	18,115
1965	813,049.00	741,267	741,470	234,189	14.59	16,051
1966	1,254,998.72	1,139,423	1,139,734	366,264	14.69	24,933
1967	539,576.47	487,645	487,778	159,713	14.80	10,791
1968	794,375.24	714,699	714,894	238,356	14.90	15,997
1969	987,613.76	884,444	884,686	300,451	15.00	20,030
1970	418,367.38	372,936	373,038	129,003	15.09	8,549
1971	537,998.86	477,265	477,395	168,203	15.18	11,081
1972	535,097.46	472,251	472,380	169,737	15.28	11,108
1973	194,313.39	170,648	170,695	62,481	15.36	4,068
1974	124,988.33	109,175	109,205	40,781	15.45	2,640
1975	19,989.41	17,367	17,372	6,616	15.53	426
1976	20,248.94	17,495	17,500	6,799	15.61	436
1977	33,572.33	28,840	28,848	11,439	15.69	729
1978	200,558.27	171,246	171,293	69,377	15.77	4,399
1979	73,971.13	62,780	62,797	25,968	15.84	1,639
	15,674,732.39	14,446,196	14,450,145	4,359,534		306,605

COATED STEEL  
SURVIVOR CURVE.. IOWA 67-R1.5  
NET SALVAGE PERCENT.. -20

1951	4,143.71	3,619	3,611	1,361	18.23	75
1953	774.11	665	664	265	19.07	14
1955	624.73	527	526	224	19.94	11
1957	4,879.24	4,034	4,025	1,830	20.84	88
1958	1,800.49	1,474	1,471	690	21.30	32
1959	12,740.67	10,321	10,299	4,990	21.77	229
1960	17,488.89	14,017	13,987	7,000	22.25	315
1961	16,013.51	12,694	12,667	6,550	22.74	288

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COATED STEEL						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
1962	5,566.28	4,364	4,355	2,325	23.23	100
1963	867.74	672	671	371	23.73	16
1964	7,814.67	5,985	5,972	3,405	24.24	140
1965	21,623.41	16,359	16,324	9,624	24.76	389
1966	31,799.98	23,762	23,711	14,449	25.28	572
1967	19,167.65	14,141	14,111	8,891	25.81	344
1968	34,113.63	24,837	24,784	16,153	26.35	613
1969	37,083.74	26,634	26,577	17,924	26.90	666
1970	172,048.64	121,872	121,610	84,848	27.45	3,091
1971	202,470.61	141,391	141,087	101,878	28.01	3,637
1972	530,429.82	364,997	364,212	272,304	28.58	9,528
1973	237,884.24	161,223	160,876	124,585	29.16	4,272
1974	227,072.75	151,536	151,210	121,277	29.74	4,078
1975	244,092.53	160,269	159,924	132,987	30.34	4,383
1976	414,394.98	267,712	267,136	230,138	30.93	7,441
1977	340,682.25	216,367	215,902	192,917	31.54	6,117
1978	334,771.37	208,958	208,509	193,217	32.15	6,010
1979	491,049.44	301,053	300,406	288,854	32.77	8,815
1980	556,349.64	334,905	334,185	333,435	33.39	9,986
1981	1,183,667.66	699,178	697,675	722,726	34.02	21,244
1982	756,354.67	438,102	437,160	470,466	34.66	13,574
1983	929,912.87	527,964	526,829	589,067	35.30	16,687
1984	1,569,612.13	872,886	871,009	1,012,525	35.95	28,165
1985	517,505.73	281,676	281,070	339,937	36.61	9,285
1986	1,394,886.90	742,744	741,147	932,717	37.27	25,026
1987	6,816,424.63	3,547,785	3,540,157	4,639,553	37.94	122,287
1988	1,011,124.44	514,133	513,028	700,322	38.61	18,138
1989	749,536.11	371,992	371,192	528,251	39.29	13,445
1990	736,960.09	356,642	355,875	528,477	39.98	13,219
1991	750,224.76	353,797	353,036	547,233	40.67	13,455
1992	1,286,815.53	590,942	589,671	954,507	41.36	23,078
1993	1,171,933.62	523,489	522,363	883,957	42.06	21,017
1994	1,022,403.32	443,874	442,920	783,964	42.76	18,334
1995	617,836.60	260,374	259,814	481,590	43.47	11,079
1996	1,020,706.05	416,999	416,102	808,745	44.19	18,302
1997	1,344,139.72	531,795	530,652	1,082,316	44.91	24,100
1998	1,012,989.95	387,724	386,890	828,698	45.63	18,161
1999	3,691,592.42	1,364,678	1,361,744	3,068,167	46.36	66,181
2000	946,532.78	337,526	336,800	799,039	47.09	16,968
2001	852,222.06	292,605	291,976	730,691	47.83	15,277
2002	2,478,560.07	818,133	816,374	2,157,898	48.57	44,429
2003	553,749.23	175,448	175,071	489,428	49.31	9,926

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COATED STEEL						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
2004	423,040.95	128,354	128,078	379,571	50.06	7,582
2005	310,090.42	89,916	89,723	282,386	50.81	5,558
2006	4,495,713.41	1,242,435	1,239,764	4,155,092	51.57	80,572
2007	1,480,872.32	389,102	388,265	1,388,781	52.33	26,539
2008	2,197,893.20	547,566	546,389	2,091,083	53.09	39,388
2009	1,440,800.35	339,343	338,613	1,390,347	53.85	25,819
2010	1,080,883.99	239,671	239,156	1,057,905	54.62	19,368
2011	1,484,095.99	308,330	307,667	1,473,248	55.40	26,593
2012	1,263,855.54	245,148	244,621	1,272,006	56.17	22,646
2013	1,502,234.87	270,402	269,821	1,532,861	56.95	26,916
2014	1,194,168.81	198,055	197,629	1,235,373	57.74	21,395
2015	1,764,174.60	267,950	267,374	1,849,636	58.52	31,607
2016	1,990,483.42	273,803	273,214	2,115,366	59.32	35,660
2017	1,901,367.56	234,644	234,139	2,047,502	60.11	34,063
2018	2,193,528.07	239,270	238,756	2,393,478	60.91	39,295
2019	4,328,729.25	410,156	409,274	4,785,201	61.71	77,543
2020	4,648,389.42	373,786	372,982	5,205,085	62.51	83,268
2021	5,872,457.81	387,089	386,257	6,660,693	63.32	105,191
2022	3,160,750.07	162,488	162,139	3,630,761	64.13	56,616
2023	1,677,956.42	61,615	61,483	1,952,065	64.95	30,055
2024	3,251,966.53	71,647	71,493	3,830,867	65.77	58,246
2025	3,220,377.53	23,650	23,599	3,840,854	66.59	57,679
	87,267,270.59	23,949,294	23,897,801	80,822,924		1,564,226

PLASTIC  
SURVIVOR CURVE.. IOWA 67-R1.5  
NET SALVAGE PERCENT.. -20

1967	31,718.74	23,400	24,137	13,925	25.81	540
1968	139,032.23	101,224	104,413	62,426	26.35	2,369
1969	468,671.06	336,605	347,210	215,195	26.90	8,000
1970	217,716.20	154,221	159,080	102,180	27.45	3,722
1971	412,480.71	288,047	297,122	197,855	28.01	7,064
1972	254,119.61	174,864	180,373	124,570	28.58	4,359
1973	140,711.27	95,365	98,369	70,484	29.16	2,417
1974	128,042.39	85,448	88,140	65,511	29.74	2,203
1975	107,554.41	70,619	72,844	56,221	30.34	1,853
1976	184,464.28	119,170	122,924	98,433	30.93	3,182
1977	233,073.55	148,025	152,689	127,000	31.54	4,027
1978	530,695.96	331,250	341,686	295,149	32.15	9,180

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PLASTIC						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
1979	870,213.93	533,511	550,319	493,937	32.77	15,073
1980	1,140,425.81	686,500	708,128	660,383	33.39	19,778
1981	798,271.03	471,529	486,385	471,541	34.02	13,861
1982	1,422,164.99	823,758	849,711	856,887	34.66	24,723
1983	671,816.15	381,428	393,445	412,734	35.30	11,692
1984	1,168,685.65	649,925	670,401	732,022	35.95	20,362
1985	943,946.58	513,786	529,973	602,763	36.61	16,464
1986	1,816,252.32	967,111	997,580	1,181,923	37.27	31,712
1987	3,566,912.52	1,856,492	1,914,981	2,365,314	37.94	62,344
1988	2,780,802.18	1,413,971	1,458,519	1,878,444	38.61	48,652
1989	2,256,012.55	1,119,650	1,154,925	1,552,290	39.29	39,509
1990	2,038,650.19	986,576	1,017,658	1,428,722	39.98	35,736
1991	1,303,964.29	614,934	634,308	930,450	40.67	22,878
1992	1,319,523.27	605,962	625,053	958,375	41.36	23,172
1993	1,157,505.84	517,044	533,334	855,673	42.06	20,344
1994	1,123,993.28	487,979	503,353	845,439	42.76	19,772
1995	1,798,938.03	758,123	782,008	1,376,718	43.47	31,671
1996	1,325,923.12	541,693	558,759	1,032,349	44.19	23,362
1997	3,042,506.52	1,203,737	1,241,661	2,409,347	44.91	53,648
1998	2,781,769.67	1,064,728	1,098,273	2,239,851	45.63	49,087
1999	2,020,396.81	746,884	770,415	1,654,061	46.36	35,679
2000	2,735,902.09	975,601	1,006,338	2,276,745	47.09	48,349
2001	2,153,375.75	739,349	762,642	1,821,409	47.83	38,081
2002	2,239,013.37	739,062	762,346	1,924,470	48.57	39,623
2003	1,588,012.41	503,139	518,991	1,386,624	49.31	28,121
2004	1,225,111.49	371,709	383,420	1,086,714	50.06	21,708
2005	1,884,720.66	546,509	563,727	1,697,938	50.81	33,417
2006	1,884,085.98	520,686	537,090	1,723,813	51.57	33,427
2007	2,426,643.44	637,605	657,693	2,254,279	52.33	43,078
2008	5,478,476.68	1,364,864	1,407,864	5,166,308	53.09	97,312
2009	4,129,932.93	972,698	1,003,343	3,952,576	53.85	73,400
2010	3,018,858.78	669,390	690,479	2,932,151	54.62	53,683
2011	5,068,334.18	1,052,977	1,086,151	4,995,850	55.40	90,178
2012	9,507,888.68	1,844,226	1,902,329	9,507,138	56.17	169,257
2013	10,528,314.96	1,895,097	1,954,802	10,679,175	56.95	187,518
2014	11,113,887.37	1,843,260	1,901,332	11,435,332	57.74	198,049
2015	14,032,379.92	2,131,294	2,198,441	14,640,415	58.52	250,178
2016	16,951,917.72	2,331,838	2,405,303	17,936,998	59.32	302,377
2017	16,356,162.95	2,018,481	2,082,074	17,545,322	60.11	291,887
2018	19,171,344.08	2,091,210	2,157,094	20,848,519	60.91	342,284
2019	30,308,567.34	2,871,797	2,962,274	33,408,007	61.71	541,371
2020	27,535,585.01	2,214,191	2,283,950	30,758,752	62.51	492,061

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 376.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PLASTIC						
SURVIVOR CURVE.. IOWA 67-R1.5						
NET SALVAGE PERCENT.. -20						
2021	38,863,681.80	2,561,738	2,642,446	43,993,972	63.32	694,788
2022	43,636,724.22	2,243,277	2,313,952	50,050,117	64.13	780,448
2023	33,527,038.11	1,231,113	1,269,900	38,962,546	64.95	599,885
2024	29,337,834.45	646,371	666,735	34,538,666	65.77	525,143
2025	29,007,429.59	213,031	219,743	34,589,173	66.59	519,435
	401,908,179.10	54,104,072	55,808,634	426,481,181		7,163,493
	504,850,182.08	92,499,562	94,156,580	511,663,639		9,034,324
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					56.6	1.79

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 38-R0.5						
NET SALVAGE PERCENT.. -20						
1986	29,381.79	20,700	11,085	24,173	15.69	1,541
1987	178,376.72	122,966	65,849	148,203	16.17	9,165
1988	126,407.92	85,225	45,638	106,052	16.65	6,369
1989	104,866.18	69,112	37,010	88,829	17.13	5,186
1990	41,582.52	26,762	14,331	35,568	17.62	2,019
1991	50,155.35	31,487	16,861	43,325	18.12	2,391
1992	76,182.61	46,600	24,955	66,464	18.63	3,568
1993	131,952.24	78,589	42,085	116,258	19.14	6,074
1994	80,305.14	46,534	24,919	71,447	19.65	3,636
1995	151,867.13	85,462	45,765	136,476	20.18	6,763
1996	112,955.58	61,709	33,046	102,501	20.70	4,952
1997	125,906.80	66,637	35,684	115,404	21.24	5,433
1998	46,799.48	23,971	12,837	43,322	21.78	1,989
1999	26,944.28	13,342	7,145	25,188	22.32	1,128
2000	27,856.54	13,310	7,128	26,300	22.87	1,150
2001	172,415.65	79,329	42,481	164,418	23.43	7,017
2002	162,887.25	72,064	38,591	156,874	23.99	6,539
2004	99,536.38	40,485	21,680	97,764	25.12	3,892
2005	53,708.88	20,879	11,181	53,270	25.69	2,074
2006	38,320.35	14,194	7,601	38,383	26.27	1,461
2007	66,707.28	23,488	12,578	67,471	26.85	2,513
2008	137,206.86	45,754	24,502	140,146	27.44	5,107
2009	99,640.20	31,402	16,816	102,752	28.02	3,667
2010	37,985.97	11,264	6,032	39,551	28.61	1,382
2011	173,796.55	48,297	25,863	182,693	29.20	6,257
2012	598,511.69	154,983	82,994	635,220	29.80	21,316
2013	239,689.21	57,600	30,845	256,782	30.39	8,450
2014	395,870.52	87,631	46,927	428,118	30.99	13,815
2015	3,715,439.35	752,064	402,734	4,055,793	31.59	128,389
2016	258,723.70	47,468	25,419	285,049	32.19	8,855
2017	460,198.86	75,717	40,547	511,692	32.79	15,605
2018	1,724,184.97	250,455	134,120	1,934,902	33.40	57,931
2019	4,880,061.80	614,888	329,276	5,526,798	34.01	162,505
2020	7,167,678.83	767,314	410,900	8,190,315	34.61	236,646
2021	539,654.96	47,377	25,371	622,215	35.22	17,667
2022	785,614.48	53,585	28,695	914,042	35.84	25,503
2023	93,090.87	4,557	2,440	109,269	36.45	2,998
2024	3,634,325.22	106,718	57,148	4,304,042	37.07	116,106
2025	4,568,295.36	44,733	23,955	5,457,999	37.69	144,813
	31,415,085.47	4,244,652	2,273,034	35,425,069		1,061,872

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.4 3.38



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 379.10 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R1.5						
NET SALVAGE PERCENT.. -20						
1929	20.64	25	25			
1935	168.99	203	203			
1936	95.41	114	114			
1965	522.68	509	598	29	8.48	3
1982	4,951.22	3,937	4,622	1,319	15.18	87
1983	1,594.90	1,247	1,464	450	15.68	29
1987	243,572.89	176,930	207,727	84,560	17.76	4,761
1992	1,609.59	1,046	1,228	704	20.62	34
2019	1,301,607.74	182,574	214,354	1,347,575	39.74	33,910
	1,554,144.06	366,585	430,335	1,434,638		38,824
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						37.0 2.50

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 37-R1						
NET SALVAGE PERCENT.. -75						
1969	14,616.79	21,660	16,474	9,105	5.67	1,606
1970	38,445.81	56,352	42,860	24,420	6.01	4,063
1971	49,311.85	71,486	54,370	31,926	6.35	5,028
1972	90,196.25	129,219	98,280	59,563	6.71	8,877
1973	35,973.99	50,925	38,732	24,222	7.07	3,426
1974	27,012.00	37,779	28,734	18,537	7.43	2,495
1975	24,881.24	34,363	26,136	17,406	7.80	2,232
1976	39,866.29	54,342	41,331	28,435	8.18	3,476
1977	97,214.19	130,721	99,423	70,702	8.57	8,250
1978	163,064.56	216,259	164,480	120,883	8.96	13,491
1979	292,984.21	383,019	291,313	221,409	9.36	23,655
1980	238,492.24	307,157	233,615	183,746	9.77	18,807
1981	187,664.16	237,964	180,989	147,423	10.19	14,467
1982	244,648.13	305,247	232,162	195,972	10.62	18,453
1983	172,579.16	211,817	161,102	140,912	11.05	12,752
1984	244,052.78	294,463	223,960	203,132	11.49	17,679
1985	295,846.75	350,660	266,702	251,030	11.94	21,024
1986	285,866.20	332,607	252,971	247,295	12.40	19,943
1987	308,789.69	352,415	268,037	272,345	12.87	21,161
1988	863,260.55	965,628	734,429	776,277	13.35	58,148
1989	1,758,306.36	1,926,902	1,465,547	1,611,489	13.83	116,521
1990	1,698,008.94	1,820,648	1,384,733	1,586,783	14.33	110,732
1991	1,456,969.78	1,527,753	1,161,965	1,387,732	14.83	93,576
1992	1,806,042.52	1,849,379	1,406,585	1,753,989	15.35	114,266
1993	2,058,049.15	2,056,794	1,564,339	2,037,247	15.87	128,371
1994	2,710,322.80	2,640,749	2,008,478	2,734,587	16.40	166,743
1995	2,661,375.90	2,525,060	1,920,489	2,736,919	16.94	161,565
1996	2,901,216.34	2,675,799	2,035,136	3,041,993	17.50	173,828
1997	2,831,384.62	2,536,376	1,929,095	3,025,828	18.06	167,543
1998	2,874,772.46	2,497,768	1,899,731	3,131,121	18.63	168,069
1999	2,543,324.22	2,139,998	1,627,621	2,823,196	19.21	146,965
2000	2,878,710.75	2,341,846	1,781,141	3,256,603	19.80	164,475
2001	2,369,933.20	1,861,843	1,416,065	2,731,318	20.39	133,954
2002	2,181,424.75	1,650,799	1,255,551	2,561,942	21.00	121,997
2003	2,271,746.50	1,653,633	1,257,706	2,717,850	21.61	125,768
2004	2,767,489.82	1,932,012	1,469,433	3,373,674	22.24	151,694
2005	2,216,271.52	1,481,151	1,126,521	2,751,954	22.87	120,330
2006	2,271,710.53	1,450,499	1,103,208	2,872,285	23.50	122,225
2007	2,547,855.37	1,548,523	1,177,762	3,280,985	24.15	135,859
2008	2,892,413.11	1,669,002	1,269,395	3,792,328	24.80	152,916
2009	3,864,566.70	2,109,309	1,604,280	5,158,712	25.46	202,620
2010	3,177,542.75	1,635,124	1,243,629	4,317,071	26.12	165,278
2011	4,083,084.61	1,971,773	1,499,674	5,645,724	26.79	210,740

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 380.00 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 37-R1						
NET SALVAGE PERCENT.. -75						
2012	5,133,140.69	2,316,176	1,761,618	7,221,378	27.46	262,978
2013	5,859,236.10	2,455,342	1,867,463	8,386,200	28.14	298,017
2014	6,652,341.91	2,573,725	1,957,502	9,684,096	28.82	336,020
2015	7,317,415.26	2,592,213	1,971,563	10,833,914	29.51	367,127
2016	8,081,788.11	2,599,224	1,976,896	12,166,233	30.20	402,855
2017	9,942,900.43	2,873,449	2,185,464	15,214,612	30.89	492,542
2018	11,537,331.22	2,952,230	2,245,382	17,944,948	31.59	568,058
2019	13,248,098.72	2,951,345	2,244,709	20,939,464	32.29	648,481
2020	15,463,581.89	2,925,594	2,225,123	24,836,145	33.00	752,610
2021	17,390,437.55	2,697,909	2,051,953	28,381,313	33.72	841,676
2022	18,168,289.13	2,199,862	1,673,152	30,121,354	34.44	874,604
2023	22,273,947.80	1,938,446	1,474,327	37,505,082	35.16	1,066,697
2024	19,586,153.13	1,028,273	782,075	33,493,693	35.89	933,232
2025	16,156,896.07	282,746	215,049	28,059,519	36.63	766,026
	239,348,847.55	82,433,357	62,696,460	356,164,023		12,245,991
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						29.1 5.12

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 33-R2						
NET SALVAGE PERCENT.. +1						
1988	7,058.96	5,470	2,901	4,087	7.17	570
1989	44,554.70	33,991	18,028	26,081	7.57	3,445
1990	68,306.92	51,230	27,171	40,453	8.00	5,057
1991	34,788.00	25,632	13,595	20,845	8.44	2,470
1992	85,187.74	61,617	32,680	51,656	8.89	5,811
1993	29,954.10	21,234	11,262	18,393	9.37	1,963
1994	71,798.14	49,842	26,435	44,645	9.86	4,528
1995	0.15					
1996	287,490.55	190,607	101,094	183,522	10.90	16,837
1997	13,835.35	8,945	4,744	8,953	11.45	782
1998	284,997.54	179,378	95,138	187,010	12.02	15,558
1999	199,062.56	121,826	64,614	132,458	12.60	10,513
2000	20,156.23	11,973	6,350	13,605	13.20	1,031
2001	194,994.78	112,259	59,540	133,505	13.81	9,667
2002	126,151.19	70,203	37,234	87,656	14.45	6,066
2003	371,446.29	199,579	105,852	261,880	15.09	17,355
2004	453,625.94	234,613	124,434	324,656	15.76	20,600
2005	284,352.03	141,267	74,925	206,584	16.44	12,566
2006	255,323.84	121,560	64,473	188,298	17.13	10,992
2007	352,235.45	160,195	84,964	263,749	17.84	14,784
2008	337,247.11	146,097	77,487	256,388	18.56	13,814
2009	511,577.86	210,410	111,597	394,865	19.29	20,470
2010	288,971.23	112,353	59,589	226,493	20.04	11,302
2011	241,508.01	88,464	46,919	192,174	20.79	9,244
2012	380,384.64	130,433	69,179	307,402	21.57	14,251
2013	385,096.05	123,039	65,257	315,988	22.35	14,138
2014	396,699.99	117,345	62,237	330,496	23.14	14,282
2015	839,386.91	227,892	120,869	710,124	23.95	29,650
2016	586,569.69	144,822	76,810	503,894	24.77	20,343
2017	816,675.37	181,551	96,291	712,218	25.59	27,832
2018	652,785.34	128,663	68,240	578,017	26.43	21,870
2019	1,382,634.69	237,256	125,835	1,242,973	27.28	45,564
2020	990,529.94	144,721	76,757	903,868	28.13	32,132
2021	1,384,923.84	166,188	88,142	1,282,933	29.00	44,239
2022	2,317,035.56	217,573	115,396	2,178,469	29.87	72,932
2023	3,175,781.40	213,416	113,191	3,030,833	30.76	98,532
2024	2,384,609.76	96,579	51,223	2,309,541	31.65	72,971
2025	966,530.78	13,052	6,923	949,942	32.55	29,184
	21,224,268.63	4,501,275	2,387,376	18,624,650		753,345

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.7 3.55

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 381.10 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S2.5						
NET SALVAGE PERCENT.. 0						
2011	319,311.64	243,102	258,057	61,255	3.58	17,110
2012	363,072.68	266,252	282,631	80,442	4.00	20,110
2013	374,851.44	262,647	278,804	96,047	4.49	21,391
2014	6,793,196.33	4,519,717	4,797,753	1,995,443	5.02	397,499
2015	854,710.98	533,912	566,756	287,955	5.63	51,147
2016	51,071.35	29,621	31,443	19,628	6.30	3,116
2017	15,082.77	8,014	8,507	6,576	7.03	935
2018	403,222.65	192,740	204,597	198,626	7.83	25,367
2019	202,192.23	85,056	90,288	111,904	8.69	12,877
2020	125,341.37	45,123	47,899	77,442	9.60	8,067
2021	467,740.18	139,073	147,628	320,112	10.54	30,371
2022	311.13	72	76	235	11.52	20
2023	10,749.73	1,792	1,903	8,847	12.50	708
	9,980,854.48	6,327,121	6,716,342	3,264,512		588,718
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						5.5 5.90

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -5						
1956	0.83	1	1			
1957	57.34	58	60			
1959	4,401.51	4,383	4,518	104	2.32	45
1960	11,829.20	11,711	12,071	350	2.57	136
1961	9,390.29	9,240	9,524	336	2.83	119
1962	10,413.87	10,184	10,497	438	3.09	142
1963	12,149.45	11,807	12,170	587	3.35	175
1964	20,589.98	19,890	20,502	1,117	3.60	310
1965	28,868.75	27,712	28,565	1,747	3.86	453
1966	24,730.21	23,589	24,315	1,652	4.12	401
1967	28,965.35	27,453	28,298	2,116	4.38	483
1968	51,828.69	48,797	50,299	4,121	4.65	886
1969	62,033.48	58,014	59,799	5,336	4.92	1,085
1970	57,547.95	53,429	55,073	5,352	5.21	1,027
1971	66,534.67	61,323	63,210	6,651	5.50	1,209
1972	95,193.97	87,071	89,750	10,204	5.80	1,759
1973	40,915.22	37,118	38,260	4,701	6.12	768
1974	3,954.97	3,557	3,666	487	6.46	75
1975	7,650.98	6,818	7,028	1,006	6.81	148
1976	13,287.10	11,725	12,086	1,865	7.18	260
1977	18,707.27	16,343	16,846	2,797	7.56	370
1978	20,575.92	17,778	18,325	3,280	7.97	412
1979	23,658.13	20,204	20,826	4,015	8.40	478
1980	30,314.95	25,571	26,358	5,473	8.85	618
1981	55,086.74	45,862	47,273	10,568	9.32	1,134
1982	50,186.61	41,208	42,476	10,220	9.81	1,042
1983	44,540.61	36,042	37,151	9,617	10.32	932
1984	61,392.63	48,920	50,425	14,037	10.85	1,294
1985	80,224.30	62,877	64,812	19,424	11.41	1,702
1986	83,111.00	64,034	66,005	21,262	11.98	1,775
1987	216,645.45	163,936	168,981	58,497	12.57	4,654
1988	237,925.47	176,596	182,030	67,792	13.19	5,140
1989	302,876.42	220,353	227,134	90,886	13.82	6,576
1990	334,047.34	238,043	245,368	105,382	14.46	7,288
1991	303,803.64	211,742	218,258	100,736	15.13	6,658
1992	365,220.35	248,753	256,408	127,073	15.81	8,038
1993	354,154.02	235,429	242,674	129,188	16.51	7,825
1994	396,100.60	256,751	264,652	151,254	17.22	8,784
1995	380,977.65	240,548	247,950	152,077	17.94	8,477
1996	449,257.31	275,904	284,394	187,326	18.68	10,028
1997	229,530.66	136,892	141,105	99,902	19.44	5,139
1998	375,505.42	217,292	223,979	170,302	20.20	8,431
1999	261,263.00	146,430	150,936	123,390	20.98	5,881

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -5						
2000	311,140.19	168,648	173,838	152,859	21.77	7,022
2001	226,275.10	118,424	122,068	115,521	22.57	5,118
2002	225,914.80	113,965	117,472	119,739	23.38	5,121
2003	268,099.61	130,055	134,057	147,448	24.21	6,090
2004	246,588.33	114,846	118,380	140,538	25.04	5,613
2005	124,695.94	55,602	57,313	73,618	25.89	2,843
2006	272,071.97	115,921	119,488	166,188	26.74	6,215
2007	230,976.67	93,722	96,606	145,920	27.61	5,285
2008	148,208.52	57,095	58,852	96,767	28.49	3,397
2009	138,390.26	50,470	52,023	93,287	29.37	3,176
2010	153,200.27	52,654	54,274	106,586	30.27	3,521
2011	129,273.71	41,716	43,000	92,737	31.17	2,975
2012	176,982.39	53,354	54,996	130,836	32.08	4,078
2013	164,582.54	46,084	47,502	125,310	33.00	3,797
2014	143,736.22	37,127	38,270	112,653	33.93	3,320
2015	516,615.41	122,229	125,991	416,455	34.86	11,947
2016	143,235.16	30,714	31,659	118,738	35.81	3,316
2017	122,016.25	23,488	24,211	103,906	36.75	2,827
2018	235,755.30	40,102	41,336	206,207	37.71	5,468
2019	111,344.18	16,446	16,952	99,959	38.67	2,585
2020	128,210.33	16,064	16,558	118,063	39.63	2,979
2021	192,463.01	19,760	20,368	181,718	40.60	4,476
2022	321,543.76	25,733	26,525	311,096	41.57	7,484
2023	576,870.19	32,975	33,990	571,724	42.55	13,437
2024	358,091.40	12,284	12,663	363,333	43.53	8,347
2025	239,604.68	2,740	2,824	248,761	44.51	5,589
	11,131,335.49	5,253,606	5,415,274	6,272,628		248,183
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						25.3 2.23

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. -5						
1950	221.15	228	232			
1955	111.14	111	113	4	2.16	2
1960	63.66	62	63	4	3.44	1
1961	100.99	98	100	6	3.69	2
1962	280.91	270	275	20	3.95	5
1963	143.92	138	140	11	4.21	3
1964	146.56	139	141	13	4.47	3
1965	247.66	234	238	22	4.74	5
1966	434.85	408	415	42	5.01	8
1967	551.23	514	523	56	5.29	11
1968	11,423.32	10,573	10,755	1,239	5.57	222
1969	22,024.31	20,237	20,585	2,541	5.87	433
1970	22,971.34	20,948	21,309	2,811	6.18	455
1971	22,734.27	20,570	20,924	2,947	6.50	453
1972	30,460.60	27,329	27,800	4,184	6.84	612
1973	7,636.43	6,790	6,907	1,111	7.20	154
1974	2,717.14	2,393	2,434	419	7.57	55
1975	722.62	630	641	118	7.96	15
1976	6,523.41	5,630	5,727	1,123	8.37	134
1977	5,355.79	4,571	4,650	974	8.80	111
1978	9,356.02	7,890	8,026	1,798	9.25	194
1979	11,086.66	9,234	9,393	2,248	9.72	231
1980	9,943.00	8,172	8,313	2,127	10.21	208
1981	18,533.62	15,022	15,281	4,179	10.72	390
1982	33,002.88	26,358	26,812	7,841	11.25	697
1983	32,402.28	25,481	25,920	8,102	11.80	687
1984	35,959.78	27,820	28,299	9,459	12.37	765
1985	57,342.59	43,607	44,358	15,852	12.96	1,223
1986	58,079.69	43,376	44,123	16,861	13.57	1,243
1987	57,934.11	42,465	43,196	17,635	14.19	1,243
1988	44,233.67	31,790	32,337	14,108	14.83	951
1989	50,575.91	35,603	36,216	16,889	15.49	1,090
1990	51,414.70	35,424	36,034	17,951	16.16	1,111
1991	46,286.53	31,177	31,714	16,887	16.85	1,002
1992	59,528.68	39,166	39,840	22,665	17.55	1,291
1993	55,066.67	35,344	35,953	21,867	18.27	1,197
1994	44,633.87	27,920	28,401	18,465	19.00	972
1995	37,806.94	23,016	23,412	16,285	19.75	825
1996	73,163.79	43,315	44,061	32,761	20.50	1,598
1997	15,517.51	8,920	9,074	7,219	21.27	339
1998	7,280.33	4,058	4,128	3,516	22.05	159
1999	20,772.05	11,212	11,405	10,406	22.84	456
2000	14,515.11	7,575	7,705	7,536	23.64	319



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 383.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. -5						
2001	16,876.95	8,498	8,644	9,077	24.46	371
2002	37,584.57	18,237	18,551	20,913	25.28	827
2003	321,386.69	149,918	152,499	184,957	26.12	7,081
2004	700,651.64	313,681	319,082	416,602	26.96	15,453
2005	360,312.09	154,392	157,050	221,278	27.82	7,954
2006	399,349.94	163,446	166,260	253,057	28.68	8,823
2007	326,889.61	127,360	129,553	213,681	29.56	7,229
2008	361,177.23	133,620	135,921	243,315	30.44	7,993
2009	303,545.83	106,262	108,091	210,632	31.33	6,723
2010	505,754.46	166,885	169,758	361,284	32.23	11,210
2011	181,695.03	56,259	57,228	133,552	33.14	4,030
2012	340,141.23	98,330	100,023	257,125	34.06	7,549
2013	240,105.20	64,475	65,585	186,525	34.98	5,332
2014	192,503.39	47,694	48,515	153,614	35.91	4,278
2015	195,779.01	44,394	45,158	160,410	36.85	4,353
2016	174,009.01	35,764	36,380	146,329	37.80	3,871
2017	242,728.67	44,736	45,506	209,359	38.75	5,403
2018	211,671.12	34,521	35,115	187,140	39.70	4,714
2019	305,554.01	43,277	44,022	276,810	40.66	6,808
2020	195,869.87	23,499	23,904	181,759	41.63	4,366
2021	172,198.41	16,927	17,218	163,590	42.60	3,840
2022	342,806.52	26,269	26,722	333,225	43.57	7,648
2023	202,741.79	11,097	11,288	201,591	44.55	4,525
2024	397,732.38	13,063	13,288	404,331	45.53	8,881
2025	409,289.78	4,482	4,559	425,195	46.51	9,142
	8,117,662.12	2,612,904	2,657,893	5,865,652		179,279

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.7 2.21

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-R3						
NET SALVAGE PERCENT.. 0						
1973	216.76	184	194	23	7.20	3
1975	2,826.80	2,348	2,471	356	7.96	45
1976	21,094.53	17,338	18,244	2,851	8.37	341
1977	31,052.60	25,239	26,558	4,495	8.80	511
1978	37,691.51	30,273	31,855	5,837	9.25	631
1979	42,871.79	34,005	35,782	7,090	9.72	729
1980	40,766.03	31,910	33,578	7,188	10.21	704
1981	87,762.98	67,745	71,286	16,477	10.72	1,537
1982	81,396.17	61,913	65,149	16,247	11.25	1,444
1983	59,401.97	44,489	46,814	12,588	11.80	1,067
1984	64,964.67	47,867	50,369	14,596	12.37	1,180
1985	86,803.28	62,868	66,154	20,649	12.96	1,593
1986	69,271.47	49,271	51,846	17,425	13.57	1,284
1987	73,903.91	51,592	54,288	19,616	14.19	1,382
1988	63,444.69	43,426	45,696	17,749	14.83	1,197
1989	60,983.14	40,885	43,022	17,961	15.49	1,160
1990	63,537.01	41,691	43,870	19,667	16.16	1,217
1991	61,110.67	39,202	41,251	19,860	16.85	1,179
1992	83,216.78	52,144	54,869	28,348	17.55	1,615
1993	79,837.16	48,803	51,354	28,483	18.27	1,559
1994	122,269.98	72,841	76,648	45,622	19.00	2,401
1995	95,362.56	55,290	58,180	37,183	19.75	1,883
1996	145,436.70	82,002	86,287	59,150	20.50	2,885
1997	122,097.88	66,842	70,335	51,763	21.27	2,434
1998	129,614.44	68,806	72,402	57,212	22.05	2,595
1999	109,553.26	56,315	59,258	50,295	22.84	2,202
2000	40,904.07	20,330	21,393	19,511	23.64	825
2001	20,583.15	9,871	10,387	10,196	24.46	417
2002	92,533.60	42,763	44,998	47,536	25.28	1,880
2003	92,619.49	41,147	43,297	49,322	26.12	1,888
2015	1,929.60	417	439	1,491	36.85	40
2024	158.96	5	5	154	45.53	3
2025	167.96	2	2	166	46.51	4
	2,085,385.57	1,309,824	1,378,281	707,105		39,835

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.8 1.91

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. -20						
1959	136.51	164	164			
1960	69.92	84	84			
1961	514.63	618	618			
1962	733.49	880	880			
1963	383.55	460	460			
1964	2,379.55	2,855	2,855			
1965	1,116.54	1,340	1,340			
1966	2,950.93	3,517	2,151	1,390	0.20	1,390
1967	1,640.11	1,931	1,181	787	0.56	787
1968	5,734.57	6,670	4,079	2,802	0.92	2,802
1969	5,682.95	6,526	3,991	2,829	1.29	2,193
1970	13,315.92	15,095	9,230	6,749	1.66	4,066
1971	32,940.29	36,853	22,535	16,993	2.03	8,371
1972	4,070.99	4,494	2,748	2,137	2.40	890
1973	11,656.80	12,692	7,761	6,227	2.78	2,240
1974	5,687.95	6,109	3,736	3,090	3.15	981
1975	4,820.88	5,104	3,121	2,664	3.53	755
1976	1,123.64	1,172	717	631	3.92	161
1978	2,044.95	2,070	1,266	1,188	4.69	253
1980	11,975.78	11,751	7,186	7,185	5.47	1,314
1981	12,161.18	11,743	7,181	7,412	5.86	1,265
1982	10,640.04	10,104	6,178	6,590	6.26	1,053
1983	16,003.53	14,941	9,136	10,068	6.66	1,512
1984	39,612.53	36,349	22,227	25,308	7.06	3,585
1985	16,187.95	14,595	8,925	10,501	7.46	1,408
1986	22,795.21	20,178	12,339	15,015	7.87	1,908
1987	67,575.57	58,710	35,901	45,190	8.28	5,458
1988	137.95	118	72	94	8.70	11
1989	34,575.72	28,891	17,667	23,824	9.11	2,615
1990	7,758.76	6,350	3,883	5,428	9.54	569
1991	23,378.99	18,741	11,460	16,595	9.96	1,666
1992	29,186.28	22,894	13,999	21,025	10.39	2,024
1993	27,885.66	21,394	13,082	20,381	10.82	1,884
1994	36,760.33	27,556	16,850	27,262	11.26	2,421
1995	39,177.08	28,678	17,536	29,476	11.70	2,519
1996	47,337.01	33,799	20,668	36,136	12.15	2,974
1997	34,078.55	23,719	14,504	26,390	12.60	2,094
1998	168.61	114	70	132	13.06	10
1999	21,652.69	14,273	8,728	17,255	13.52	1,276
2000	42,102.02	26,962	16,487	34,035	13.99	2,433
2001	5,223.82	3,245	1,984	4,285	14.47	296
2002	100,641.58	60,587	37,048	83,722	14.95	5,600
2003	32,974.33	19,204	11,743	27,826	15.44	1,802

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. -20						
2004	108,715.17	61,185	37,414	93,044	15.93	5,841
2005	556,865.08	302,044	184,697	483,541	16.44	29,412
2006	3,522.78	1,839	1,125	3,102	16.95	183
2007	42,475.82	21,289	13,018	37,953	17.47	2,172
2008	35,981.48	17,271	10,561	32,617	18.00	1,812
2009	49,103.15	22,509	13,764	45,160	18.54	2,436
2010	19,577.00	8,543	5,224	18,268	19.09	957
2011	127,556.66	52,808	32,292	120,776	19.65	6,146
2012	112,587.22	44,044	26,932	108,173	20.22	5,350
2013	44,306.52	16,287	9,959	43,209	20.81	2,076
2014	89,295.51	30,682	18,762	88,393	21.41	4,129
2015	138,725.08	44,226	27,044	139,426	22.03	6,329
2016	234,906.43	68,969	42,174	239,714	22.66	10,579
2017	1,091,989.26	291,784	178,423	1,131,964	23.32	48,540
2018	307,951.94	74,030	45,269	324,273	23.99	13,517
2019	30,511.32	6,493	3,970	32,644	24.68	1,323
2020	329,446.01	60,617	37,067	358,268	25.40	14,105
2021	1,054,720.26	162,423	99,320	1,166,344	26.15	44,602
2022	520,391.54	63,902	39,076	585,394	26.93	21,738
2023	178,657.22	16,150	9,875	204,514	27.74	7,373
2024	286,968.81	16,071	9,827	334,536	28.60	11,697
2025	344,343.35	6,611	4,043	409,169	29.52	13,861
	6,485,592.95	2,013,307	1,233,607	6,549,105		326,764

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.0 5.04

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.40 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 24-S0						
NET SALVAGE PERCENT.. -5						
1993	4,884.17	3,861	2,518	2,610	5.93	440
1994	83,385.70	64,426	42,013	45,542	6.34	7,183
1995	11,266.49	8,503	5,545	6,285	6.75	931
1996	44,419.19	32,706	21,328	25,312	7.17	3,530
1998	20,679.24	14,466	9,434	12,279	8.01	1,533
2000	622.08	412	269	384	8.88	43
2001	1,988.40	1,277	833	1,255	9.32	135
2002	167,143.05	104,058	67,858	107,642	9.77	11,018
2003	278,805.25	168,086	109,612	183,134	10.22	17,919
2004	221,718.59	129,207	84,258	148,547	10.68	13,909
2005	1,317.69	741	483	901	11.15	81
2006	8,184.83	4,433	2,891	5,703	11.62	491
2007	25,907.27	13,477	8,789	18,414	12.11	1,521
2010	4,246.79	1,930	1,259	3,200	13.61	235
2012	19,387.83	7,914	5,161	15,196	14.67	1,036
2013	107,840.80	41,424	27,013	86,220	15.22	5,665
2014	240,198.81	86,381	56,331	195,878	15.78	12,413
2015	237,402.37	79,456	51,815	197,457	16.35	12,077
2016	202,551.47	62,474	40,741	171,938	16.95	10,144
2017	157,565.92	44,394	28,950	136,494	17.56	7,773
2018	495,937.17	125,846	82,067	438,667	18.20	24,103
2019	108,911.85	24,539	16,002	98,355	18.85	5,218
2020	203,970.49	39,799	25,954	188,215	19.54	9,632
2021	960,718.04	157,618	102,786	905,968	20.25	44,739
2022	1,514,843.51	198,823	129,656	1,460,930	21.00	69,568
2023	915,150.62	88,884	57,963	902,945	21.78	41,458
2024	738,174.48	44,567	29,063	746,020	22.62	32,981
2025	1,263,398.66	26,531	17,301	1,309,268	23.52	55,666
	8,040,620.76	1,576,233	1,027,893	7,414,759		391,442

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.9 4.87

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 387.50 OTHER EQUIPMENT - GPS PIPE LOCATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 10-L3						
NET SALVAGE PERCENT.. 0						
2017	238,072.69	159,271	168,377	69,696	3.31	21,056
	238,072.69	159,271	168,377	69,696		21,056
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.3 8.84

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	12,228.11	8,865	8,856	3,372	5.50	613
2013	22,550.07	14,094	14,080	8,470	7.50	1,129
2015	490,295.76	257,405	257,157	233,139	9.50	24,541
2016	35,870.72	17,039	17,022	18,849	10.50	1,795
2017	5,852.15	2,487	2,485	3,367	11.50	293
2018	11,759.06	4,410	4,406	7,353	12.50	588
2019	132,982.13	43,219	43,177	89,805	13.50	6,652
2020	22,213.56	6,109	6,103	16,111	14.50	1,111
2022	84,840.10	14,847	14,833	70,007	16.50	4,243
2023	103,149.67	12,894	12,881	90,269	17.50	5,158
	921,741.33	381,369	381,000	540,741		46,123
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						11.7 5.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 391.12 OFFICE FURNITURE AND EQUIPMENT - INFORMATION SYSTEMS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2022	37,129.58	25,991	25,992	11,138	1.50	7,425
	37,129.58	25,991	25,992	11,138		7,425
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						1.5 20.00



COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-S3						
NET SALVAGE PERCENT.. +10						
2004	14,495.41	10,815	13,046			
2011	18,884.31	11,277	16,996			
2012	40,006.88	22,684	36,523		517-	
	73,386.60	44,776	66,565		517-	
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2001	57,333.67	56,187	55,973	1,361	0.50	1,361
2002	213,892.58	201,059	200,293	13,600	1.50	9,067
2003	19,351.62	17,416	17,350	2,002	2.50	801
2004	87,815.91	75,522	75,234	12,582	3.50	3,595
2006	21,390.02	16,684	16,620	4,770	5.50	867
2007	21,155.23	15,655	15,595	5,560	6.50	855
2008	195,331.69	136,732	136,211	59,121	7.50	7,883
2009	57,235.97	37,776	37,632	19,604	8.50	2,306
2010	96,292.90	59,702	59,474	36,819	9.50	3,876
2011	129,991.20	75,395	75,108	54,883	10.50	5,227
2012	161,998.60	87,479	87,146	74,853	11.50	6,509
2013	436,365.86	218,183	217,351	219,015	12.50	17,521
2014	223,303.32	102,720	102,328	120,975	13.50	8,961
2015	374,620.11	157,340	156,740	217,880	14.50	15,026
2016	341,898.74	129,922	129,427	212,472	15.50	13,708
2017	166,838.29	56,725	56,509	110,329	16.50	6,687
2018	250,778.62	75,234	74,947	175,832	17.50	10,048
2019	272,918.37	70,959	70,689	202,229	18.50	10,931
2020	415,512.92	91,413	91,064	324,449	19.50	16,638
2021	441,327.96	79,439	79,136	362,192	20.50	17,668
2022	486,385.96	68,094	67,835	418,551	21.50	19,467
2023	563,456.51	56,346	56,131	507,326	22.50	22,548
2024	300,000.00	18,000	17,931	282,069	23.50	12,003
2025	2,406,247.01	48,125	47,942	2,358,305	24.50	96,257
	7,741,443.06	1,952,107	1,944,666	5,796,777		309,810

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 4.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
 RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 19-S0.5						
NET SALVAGE PERCENT.. +20						
2002	83,056.36	48,854	66,445			
2004	102,490.64	56,963	105,493	23,500-		
	185,547.00	105,817	171,938	23,500-		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

COLUMBIA GAS OF KENTUCKY, INC.

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2025

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	46,730.80	45,173	43,728	3,003	0.50	3,003
2014	4,263.86	3,269	3,164	1,100	3.50	314
2016	11,920.76	7,550	7,308	4,613	5.50	839
2017	5,184.51	2,938	2,844	2,341	6.50	360
2020	4,100.00	1,503	1,455	2,645	9.50	278
2022	10,386.68	2,424	2,347	8,040	11.50	699
2023	35,954.37	5,993	5,801	30,153	12.50	2,412
	118,540.98	68,850	66,647	51,894		7,905

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.6 6.67

TAB 22

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Vincent Rea

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

In the matter of:	)	
	)	
	)	Case No. 2024-00092
ELECTRONIC APPLICATION OF	)	
COLUMBIA GAS OF KENTUCKY, INC.	)	
FOR AN ADJUSTMENT OF RATES;	)	
APPROVAL OF DEPRECIATION STUDY;	)	
APPROVAL OF TARIFF REVISIONS; AND	)	
OTHER RELIEF	)	

---



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**PREPARED DIRECT TESTIMONY OF  
VINCENT V. REA  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

---



---

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**May 16, 2024**

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

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
)
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF ) Case No. 2024-00092
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

VERIFICATION OF VINCENT V. REA

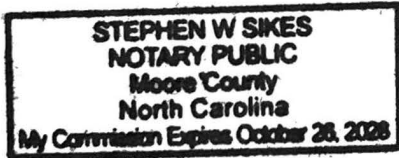
STATE OF NORTH CAROLINA )
)
COUNTY OF MOORE )

Vincent V. Rea, CRRA, Managing Director, Regulatory Finance Associates, LLC, consultant for Columbia Gas of Kentucky, Inc., being duly sworn, states that he has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

[Handwritten signature of Vincent V. Rea]
Vincent V. Rea, CRRA

The foregoing Verification was signed, acknowledged and sworn to before me this 3 day of May, 2024, by Vincent V. Rea, CRRA.

[Handwritten signature of Stephen W. Sikes]



Notary Commission No. 201829900061

Commission expiration: 10-26-28

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**V. APPENDICES**

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## ACRONYMS AND DEFINED TERMS

<u>ACRONYM</u>	<u>DEFINED TERM</u>
$\beta$	Beta
CAPM	Capital Asset Pricing Model
CKY	Columbia Gas of Kentucky, Inc.
DCF	Discounted Cash Flow Model
EBITDA	Earnings before interest, taxes, depreciation and amortization
FFO	Funds from Operations
FOMC	Federal Open Markets Committee
$g$	Growth Rate (perpetual)
GDP	Gross Domestic Product
M&M	Modigliani and Miller
PUHCA	Public Utility Holding Company Act of 2005
QE	Quantitative Easing
$R_f$	Risk-Free Rate of Return
$R_m$	Expected return for the overall stock market
ROE	Return on Equity
RPM	Risk Premium Method

**ACRONYM**

**DEFINED TERM**

SMRP

Safety Modernization and Replacement Program

S&P

Standard & Poor's

SURFA

Society of Utility and Regulatory Financial Analysts

WACC

Weighted average cost of capital

1 **I. INTRODUCTION**

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

3 A: My name is Vincent V. Rea. I currently serve as Managing Director of Regulatory  
4 Finance Associates, LLC, an independent financial and regulatory consulting firm.  
5 My business address is 80 Blake Boulevard, #4572, Pinehurst, NC 28374.

6 **Q: Please describe your professional experience.**

7 A: Prior to moving into my current position, I served as Director, Regulatory Finance  
8 and Economics for NiSource Corporate Services Company. In this position, I  
9 provided expert testimony and other regulatory support on behalf of NiSource's  
10 utility subsidiaries with regard to the cost of equity, overall fair rate of return, and  
11 ratemaking capital structure. Prior to serving as Director, Regulatory Finance and  
12 Economics, I served as Assistant Treasurer for both Columbia Gas of Kentucky,  
13 Inc. ("Columbia" or "the Company") and its ultimate parent company, NiSource.  
14 In the capacity of Assistant Treasurer, I was responsible for the external capital  
15 raising activities and banking activities for NiSource, for inter-company financing  
16 activities among all NiSource subsidiaries (including Columbia), and also  
17 provided regulatory support and testimony for utility rate proceedings and  
18 financing petitions. My educational background, professional experience and  
19 other qualifications are presented in greater detail in Attachment VVR-1, which  
20 follows my direct testimony.

1 **Q: Please describe your educational background.**

2 A: I hold an M.B.A. in Finance from Indiana University, Bloomington, Indiana, and a  
3 B.A. with honors distinction in Business Administration from Lake Forest College,  
4 Lake Forest, Illinois.

5 **Q: Do you hold any professional designations?**

6 A: Yes. I have been awarded the designation of Certified Rate of Return Analyst  
7 (“CRRA”) by the Society of Utility and Regulatory Financial Analysts (“SURFA”),  
8 and I am also a registered Certified Public Accountant (“CPA”) in the State of  
9 Illinois.

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

11 A: My direct testimony presents supporting evidence, analysis and a  
12 recommendation concerning the appropriate rate of return on common equity and  
13 overall rate of return that the Public Service Commission of Kentucky (the  
14 “Commission”) should establish for Columbia in relation to its revenue  
15 requirement calculation. My recommendations are supported by the detailed  
16 financial information and comprehensive analyses presented within my  
17 testimony.

18 **Q: Are you sponsoring any attachments through your direct testimony?**

19 A: Yes. The table below lists the attachments that I am sponsoring through my  
20 testimony, and includes a brief description of each attachment:

1

<b>Attachment</b>	<b>Description</b>
Attachment VVR-1	Professional Qualifications of Vincent V. Rea
Attachment VVR-2	W.A.C.C. and Fair Rate of Return
Attachment VVR-3	Comparative Risk Assessment
Attachment VVR-4	Analysis of Regulatory Mechanisms
Attachment VVR-5	Capitalization and Capital Structure Ratios
Attachment VVR-6	Embedded Cost of Long-Term Debt
Attachment VVR-7	DCF Method - Gas LDC Group
Attachment VVR-8	DCF Method - Combination Utility Group
Attachment VVR-9	DCF Method - Non-Regulated Group
Attachment VVR-10	Book vs. Market Value Capital Structures
Attachment VVR-11	Capital Asset Pricing Model
Attachment VVR-12	Risk Premium Method

2

3

I am also sponsoring Filing Requirements KAR 5:001 Sections 16(7)(c), 167(h),

4

16(7)(h)11, 16(7)(j), 16(8)(j), and 16(8)(k).

5

**Q: Were these attachments and Filing Requirements prepared either by you or someone working under your supervision?**

6

7

A: Yes.

8

**II. SUMMARY OF RECOMMENDATIONS**

9

**Q: Based upon your comprehensive analyses and supporting evidence, what have you concluded with respect to the appropriate rate of return for Columbia in this proceeding?**

10

11

12

A: Based upon my comprehensive evaluation, I have concluded that Columbia's cost of common equity is presently in the range of 10.55 percent to 11.05 percent. In view of this range estimate, it is my opinion that a reasonable point estimate of

13

14

1 Columbia's cost of equity in the current market environment is 10.80 percent.

2 Based upon this finding, and as reflected in Attachment VVR-2, I have also  
3 determined that the Company's weighted average cost of capital is 8.01 percent,  
4 which is based upon Columbia's thirteen-month average capital structure and cost  
5 of debt for the fully forecasted test period ending December 31, 2025, as reflected  
6 within Attachment VVR-5 and Attachment VVR-6, respectively. This resulting  
7 overall cost of capital, if adopted by the Commission, will allow Columbia to earn  
8 the prevailing opportunity cost of capital, maintain its financial integrity, and  
9 attract capital at reasonable terms.

10 **Q: What general approach have you taken in determining the cost of common**  
11 **equity in this proceeding?**

12 A: To properly estimate Columbia's cost of equity, I have analyzed market-derived  
13 data and other financial information for each of the companies comprising three  
14 separate proxy groups. Considering that investors utilize this very same  
15 information in assessing risk and making investment decisions, it provides a  
16 reliable basis for estimating the cost of equity for Columbia. In total, I evaluated  
17 the market and financial data of 26 companies, including six companies  
18 comprising the Gas LDC Group, nine companies comprising the Combination  
19 Utility Group, and eleven companies comprising the Non-Regulated Group. I will  
20 discuss the selection criteria I utilized in developing each of these proxy groups

1 later in my testimony.

2 During the course of my evaluation, I applied three well-recognized  
3 analytical models to the market and/or financial data of the selected proxy group  
4 companies. These models include the Discounted Cash Flow (“DCF”) model,  
5 Capital Asset Pricing Model (“CAPM”), and the Risk Premium Model (“RPM”). I  
6 have also evaluated two other model variants of the CAPM, specifically, the  
7 CAPM with size adjustment, and the Empirical CAPM (“ECAPM”), both of which  
8 have been validated by empirical research. Using the multi-faceted analytical  
9 approach described above, my evaluation resulted in 15 individual estimates of  
10 the cost of equity for Columbia, thereby ensuring a thorough and comprehensive  
11 analysis.

12 **Q: Specifically, how did you complete your cost of equity analyses using the**  
13 **market-derived data and other financial information for the three respective**  
14 **proxy groups?**

15 A: With respect to the DCF analyses, I evaluated the proxy group companies on an  
16 individual basis, which resulted in a separate cost of equity estimate for each  
17 company. By taking this approach, the analyst can identify anomalous or “outlier”  
18 results at the individual company level which do not pass fundamental tests of  
19 reasonableness and economic logic. I generally will eliminate these outlier results  
20 from further consideration, based upon both “high-end” and “low-end” outlier



1 thresholds established by regulatory precedent.<sup>1</sup> The fundamental advantage of  
2 employing this approach is that it removes the effects of anomalous results from  
3 the cost of equity evaluation process. In my judgment, this approach is clearly  
4 preferable to the “total group approach,” which simply averages the data of all  
5 proxy group companies, irrespective of whether outlier results are included or not.  
6 As such, the total group approach effectively “blends in” the effects of anomalous  
7 results into the cost of equity evaluation process.

8 **Q: In conducting your cost of equity evaluation, have you considered the concerns**  
9 **expressed by the Commission in its Order from Columbia’s 2021 rate**  
10 **proceeding (Case No. 2021-00183) with respect to the elimination of outlier**  
11 **results?**

12 **A:** Yes, I have. In Columbia’s last rate order (Case No. 2021-00183) the Commission  
13 cautioned all parties against “unreasonably removing or ignoring ‘outlier’ data  
14 due to a perception of being ‘too high’ or ‘too low’”, and further indicated that  
15 “results based upon excluded data without adequate support will be given less

---

<sup>1</sup> See FERC Opinion No. 569, 169 FERC ¶, 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020).

1 weight in Commission determinations”.<sup>2</sup> It is important to note that the  
2 elimination of outlier results would typically only apply to the cost of equity  
3 estimates developed under a DCF model analysis. While I agree that the  
4 Commission’s concerns in this regard are well-founded, I would also note that the  
5 primary responsibility of the cost of capital witness is to develop cost of equity  
6 estimates which pass fundamental tests of reasonableness and economic logic,  
7 whereby the risk-and-return trade-off proposition, as reflected in the expectations  
8 of investors, is appropriately recognized. Therefore, to the extent that the cost of  
9 equity analytical models (and most specifically the DCF model) produce estimates  
10 that are comparable to the utility’s bond yields, or even more problematic, produce  
11 *negative* cost of equity estimates, it is reasonable to conclude that a prudent  
12 investor would reject such investments and seek alternative investment options  
13 that appropriately recognize the risk-and-return investment principle.

14 It is a well-established in the finance literature that when the risk profile of  
15 a given investment increases, investors will demand a commensurately higher rate  
16 of return. This classic “risk-and-return” relationship explains why investors  
17 demand a higher return for investing in common stocks versus investing in

---

<sup>2</sup> Case No. 2021-00183, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; Issuance of a Certificate of Public Convenience and Necessity; and Other Relief* (Ky. PSC, Dec. 28, 2021), Order at 33.

1 corporate or utility debt securities. In those circumstances where the equity risk  
2 premium offered by a given stock investment does not provide sufficient  
3 compensation for bearing the additional risks associated with common stocks,  
4 investors will seek a superior risk-return tradeoff elsewhere by either investing in  
5 the company's fixed-income securities, or in another company's common stock.  
6 This is the case because investors cannot reasonably be expected to invest in  
7 common stocks if they are unable to earn a minimally sufficient equity risk  
8 premium as compensation for the additional risks they bear, vis-à-vis fixed income  
9 securities. Under these circumstances, investors would clearly show a preference  
10 for either holding the company's fixed-income securities or another company's  
11 common stock, making it more difficult for the company to attract new equity  
12 capital.

13 For the above stated reasons, and to recognize the concerns expressed by  
14 the Commission in Case No. 2021-00183, I have developed my DCF-based cost of  
15 equity estimates showing the DCF results yielded both with and without the  
16 additional step of eliminating outlier results. This can be seen in Attachment VVR-  
17 7 (pp. 1-2), Attachment VVR-8 (pp. 1-2) and Attachment VVR-9 (pp. 1-2) to my  
18 direct testimony. Although my overall cost of equity recommendations in this  
19 proceeding were developed on the basis of only those estimates which, in my  
20 judgment, pass fundamental tests of reasonableness and economic logic, the

1           aforementioned attachments do also reflect DCF-based estimates of the cost of  
2           equity where all of the estimates have been included.<sup>3</sup>

3   **Q: Did you identify a large number of low-end and/or high-end outlier estimates in**  
4   **conducting your DCF model analyses for the respective proxy groups that you**  
5   **evaluated?**

6   A: No. My DCF analysis for the Gas LDC Group, which is my core proxy group in  
7   this proceeding, did not identify any outlier estimates either on the low side or the  
8   high side. With respect to the complementary proxy groups I evaluated, my DCF  
9   analysis for the Combination Utility Group did identify a small number of outlier  
10   estimates on the low side. However, as can be seen in Attachment VVR-8 (pp. 1-2),  
11   after removing these outlier estimates from my evaluation, the average results for  
12   the Combination Utility Group were highly consistent with the median value  
13   estimates, another measure of central tendency, which included all of the estimates  
14   in the calculation. My DCF analysis for the Non-Regulated Group also identified a  
15   small number of outlier estimates, both on the low side and the high side. Once  
16   again, as can be seen in Attachment VVR-9 (pp. 1-2), on an overall basis, after  
17   removing these outlier estimates from my evaluation, the average results for the

---

<sup>3</sup> This includes cost of equity estimates that are more in line with currently available returns on fixed-income securities or estimates that are lower than the returns currently available on fixed income securities.

1 Non-Regulated Group are only marginally lower than the median value estimates,  
2 which included all of the estimates in the calculation.

3 Notwithstanding the foregoing, with respect to the CAPM and RPM  
4 analyses, the respective proxy groups were evaluated on a group average basis  
5 rather than on an individual company basis. This is necessary because virtually  
6 all of the input variables into these two analytical models are non-company  
7 specific variables (i.e. risk-free rate of return, corporate bond yields for a certain  
8 credit rating, market rate of return, etc.), with the sole exception of beta, meaning  
9 that under these two approaches, company-specific input anomalies will have less  
10 of an impact on the cost of equity estimate as compared to the other analytical  
11 methods.

12 **Q: What are the results of your cost of equity evaluation for the proxy sources, and**  
13 **how did you derive the cost of equity for Columbia using these proxy group**  
14 **results?**

15 A: I developed my cost of equity recommendation after carefully evaluating 15  
16 individual cost-of-equity estimates, which were derived from applying the  
17 various analytical models to the market and financial data of the proxy group  
18 companies. Using a variety of analytical models in conjunction with multiple  
19 comparable-risk proxy groups ensures that a diversity of investor perspectives is  
20 incorporated into my evaluation, and provides a solid foundation upon which the

1 analyst can apply his/her informed judgment in making a cost of equity  
 2 recommendation. Initially, cost of equity estimates were derived for the respective  
 3 proxy groups by applying a total of five different analytical models/methods to  
 4 the market and/or financial data of the proxy group companies (my evaluation  
 5 included two additional variants of the traditional CAPM model). This resulted  
 6 in a total of 15 individual estimates of the cost of equity among the three proxy  
 7 groups, which I have summarized in Table VVR-1 below. Further support for the  
 8 15 individual estimates of the cost of equity reflected in Table VVR-1 below can be  
 9 found in Table VVR-7, Table VVR-8, Table VVR-9, Table VVR-12 and Table VVR-  
 10 13, which appear later in my testimony.

<b>Table VVR-1</b>			
<b>Indicated Cost of Equity for the Proxy Groups</b>			
<b>Method/Model</b>	<b>Gas LDC Group</b>	<b>Combination Utility Group</b>	<b>Non-Reg. Group</b>
DCF	10.44%	10.14%	11.15%
Traditional CAPM	11.02%	11.10%	10.80%
CAPM (w/size adj.)	11.66%	11.56%	10.74%
ECAPM	11.14%	11.20%	10.98%
Risk Premium	10.93%	11.01%	11.38%

11  
 12 Considering that Columbia is fundamentally a local gas distribution company, I  
 13 have placed a primary emphasis on the analytical model results that I developed  
 14 for the Gas LDC Group in forming my overall cost of equity recommendations.  
 15 As reflected in Table VVR-2 below, an analysis of the above results for the Gas

1 LDC Group yielded the following measures of central tendency for each of the  
2 analytical methods employed.

3

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<b>Table VVR-2 Cost of Equity Estimates for CKY Measures of Central Tendency For the Gas LDC Group</b>	
Median DCF Result	10.44%
Average DCF Result	10.44%
Median CAPM Result	11.14%
Average CAPM Result	11.27%
Median RPM Result	10.93%
Average RPM Result	10.93%

10 Based upon these measures of central tendency, my results for the Gas LDC Group  
11 indicate that Columbia's cost of common equity is presently in the range of 10.55  
12 percent to 11.05 percent, with a midpoint estimate of 10.80 percent.

13 It is further instructive to evaluate a broader array of cost of equity  
14 estimates developed by referencing complementary proxy groups, such as the  
15 Combination Utility Group and the Non-Regulated Group. I will further discuss  
16 the rationale for evaluating these complementary proxy groups later in my direct  
17 testimony, but in essence they provide a useful adjunctive analysis that  
18 incorporates a broader array of investor perspectives into the cost of equity  
19 evaluation process. Therefore, as reflected in Table VVR-3 below, I have also  
20 presented the composite results for all three of the proxy groups I evaluated, which

1 yielded the following measures of central tendency for each of the analytical  
2 methods employed.

<b>Table VVR-3 Cost of Equity Estimates for CKY Measures of Central Tendency All Three Proxy Groups</b>	
Median DCF Result	10.44%
Average DCF Result	10.58%
Median CAPM Result	11.10%
Average CAPM Result	11.13%
Median RPM Result	11.01%
Average RPM Result	11.11%

3  
4 As can be seen in Table VVR-3 above, the composite results for the three proxy  
5 groups combined, as based on measures of central tendency, indicates that  
6 Columbia's cost of common equity is presently in the range of 10.65 percent to  
7 11.15 percent, with a midpoint estimate of 10.90 percent. These broader results for  
8 the three proxy groups combined are slightly higher than the results yielded for  
9 the Gas LDC Group on an individual basis. However, in view of the fact that the  
10 Gas LDC Group constitutes my core proxy group in this proceeding, and that both  
11 of the aforementioned approaches yield very similar results, it is my opinion that  
12 a reasonable point estimate of Columbia's cost of equity in the current market  
13 environment is 10.80 percent.



1 **III. FUNDAMENTAL ANALYSIS**

2 **A. Background**

3 **Q: What background information have you considered in evaluating Columbia's**  
4 **cost of common equity and overall required rate of return?**

5 A: Columbia provides natural gas services to over 135,000 residential, commercial,  
6 and transportation customers across 30 counties in central and eastern Kentucky.  
7 During 2023, the Company's total gas throughput<sup>4</sup> was divided among the  
8 following customer classes: 19.3 percent residential; 12.7 percent commercial,  
9 industrial and other; and 68.0 percent transportation customers. Considering that  
10 approximately 80.7 percent of the Company's gas throughput volumes relate to  
11 serving commercial, industrial and transportation customers, a very high  
12 proportion of Columbia's gas throughput is susceptible to downturns in the U.S.  
13 economic cycle. Moreover, approximately 66.2 percent of Columbia's gas  
14 throughput to transportation customers is concentrated among just five  
15 customers, which exposes Columbia to a higher level of business risk.  
16 Additionally, Columbia's significantly higher allocation of gas throughput to  
17 industrial and transportation customers, as well as the Company's high customer  
18 concentration level, also causes the Company to be more vulnerable to the threat

---

<sup>4</sup> Total gas throughput, as based on billed revenues.

1 of bypass.

2 The Company is a wholly-owned subsidiary of NiSource Gas Distribution  
3 Group, Inc., which, in turn, is a subsidiary of NiSource, a holding company under  
4 the Public Utility Holding Company Act of 2005. NiSource's headquarters are  
5 located in Merrillville, Indiana, and its core operating companies engage in natural  
6 gas distribution, as well as electric generation, transmission and distribution.  
7 NiSource operating companies deliver energy to nearly 4.0 million gas and electric  
8 customers in six states.

9 **B. Overview of Current Economic and Capital Markets Conditions**

10 **Q: Please provide a brief overview of recent trends in the U.S. economy and capital**  
11 **markets.**

12 **A:** In spite of the Fed's best efforts over the past few years to slow down the U.S.  
13 economy in an effort to rein-in the recent marked increase in the U.S. inflation rate,  
14 the U.S. economy nevertheless continued to expand at a fairly robust pace during  
15 Q4, 2023. The U.S. Bureau of Economic Analysis (the "BEA") recently reported  
16 that the real GDP growth rate for Q4, 2023 was 3.3 percent on an annualized basis,  
17 while the real GDP growth rate for calendar-year 2023 was 2.5 percent. Despite  
18 much discussion among market observers concerning the prospects of a U.S.  
19 economic recession, there was no indication of a looming recession in the Q4, 2023  
20 GDP data. Meanwhile, although the Q1, 2024 real GDP growth rate has not been

1 released as of this writing, the GDPNow forecast, which is disseminated by the  
2 Federal Reserve Bank of Atlanta, is currently reflecting a model estimate for real  
3 GDP growth (seasonally adjusted annual rate) of 2.5 percent for Q1, 2024, which  
4 is consistent with the GDP growth rate recorded during calendar-year 2023.

5 With regard to the U.S. inflation rate, the U.S. Labor Department recently  
6 reported that for the period ending March 2024, the 12-month change in the  
7 Consumer Price Index (CPI) was 3.5 percent, while the 12-month change in the  
8 core CPI, which excludes volatile food and energy prices, was 3.8 percent. The  
9 March 2024 data reflected a rate of inflation that was higher than most economists  
10 expected, thus suggesting that the Fed still has additional work to do in moving  
11 the U.S. inflation rate downward toward the central bank's targeted rate of 2.0  
12 percent. Nevertheless, when viewed from a recent historical perspective, the  
13 March 2024 inflation data continues to reflect an overall trend line moderation in  
14 the U.S. inflation rate, particularly when compared to the 40-year high level of  
15 inflation<sup>5</sup> recorded during the summer of 2022.

16 Meanwhile, the U.S. unemployment rate remains near historically low  
17 levels, registering a 3.8 percent rate during March 2024. The continuing strength

---

<sup>5</sup> For example, during June 2022, the annualized consumer price index (CPI) rose to a 40-year high level of 9.1 percent.

1 in the U.S. labor market is clearly manifested in the strong wage gains made by  
2 U.S. workers over the past year, as workers' average hourly earnings increased by  
3 4.1 percent on a year-over-year basis through March 2024.

4 **Q: What specific monetary policy actions has the Fed taken since March 2022, when**  
5 **the central bank first began to implement its monetary policy shift towards a**  
6 **more restrictive stance?**

7 Since the Fed first initiated its monetary policy shift during March 2022, the central  
8 bank has increased the Federal Funds target rate on *eleven* occasions in a series of  
9 Federal Open Market Committee ("FOMC") meetings, as follows:

10 March 17, 2022 – 25 basis point increase.

11 May 5, 2022 – 50 basis point increase.

12 June 16, 2022 – 75 basis point increase.

13 July 27, 2022 – 75 basis point increase.

14 September 21, 2022 – 75 basis point increase.

15 November 2, 2022 – 75 basis point increase.

16 December 14, 2022 – 50 basis point increase.

17 February 1, 2023 – 25 basis point increase.

18 March 22, 2023 – 25 basis point increase.

19 May 3, 2023 – 25 basis point increase.

20 July 26, 2023 – 25 basis point increase

1 As reflected above, the Fed's most recent increase in the Federal Funds target rate  
2 occurred during its July 25-26, 2023 FOMC meeting, where the Fed increased the  
3 target rate from the previous level of 5.00-5.25 percent to 5.25-5.50 percent. As  
4 noted earlier, this was the eleventh time that the Fed raised the target rate since  
5 March 2022, in its continuing effort to rein-in the U.S. inflation rate. It is further  
6 noteworthy that the Fed's monetary policy tightening activities over the past few  
7 years has represented the most aggressive tightening cycle that the Fed has  
8 implemented over the past 40+ years. In the aggregate, since the Fed began to  
9 implement its policy shift during March 2022, the central bank has raised the Fed  
10 Funds target rate by a cumulative amount of 525 basis points (from a starting point  
11 of 0.00-0.25 percent to the current level of 5.25-5.50 percent). Meanwhile, the Fed  
12 has continued to gradually liquidate its holdings of U.S. Treasury and mortgage-  
13 backed securities (at a combined amount of \$95 billion per month), which further  
14 supports the Fed's objective of monetary policy normalization, and which has the  
15 effect of putting additional upward pressure on intermediate-term and long-term  
16 interest rates.

17 **Q: Has the Fed elected to reduce the Federal Funds target rate any further since the**  
18 **July 25-26, 2023 FOMC meeting?**

19 **A:** No. In the six subsequent FOMC meetings occurring since July 2023, the Fed did  
20 not make any further adjustments to the Federal Funds target rate. In this regard,

1 the Fed has indicated that the extent of additional monetary policy tightening  
2 would be determined by the Fed's *"ongoing assessments of the incoming data and the*  
3 *evolving outlook and risks."*<sup>6</sup>

4 **Q: What actions did the Fed take during the March 19-20, 2024 FOMC meeting?**

5 A: During the March 19-20, 2024 FOMC meeting, the Fed once again left the Federal  
6 Funds target rate unchanged at 5.25 percent - 5.50 percent, but left the door open  
7 for several reductions in the Federal Funds target rate during the remainder of  
8 2024. In this regard, the Fed's most recent "dot-plot", which is included in the  
9 Fed's *Summary of Economic Projections*, indicates that the median projection of the  
10 FOMC participants for the Federal Funds target rate at the end of 2024 is now 4.50  
11 percent - 4.75 percent, which, to the extent that this median projection turns out to  
12 be accurate, suggests that the Fed will reduce the Federal Funds target rate by  
13 approximately 75 basis points by the end of 2024. Nevertheless, considering that  
14 the March 2024 inflation report reflected a higher U.S. inflation rate than market  
15 observers anticipated, it remains to be seen whether the Fed will ultimately delay  
16 or even reduce the number of rate reductions that it will implement during the  
17 remainder of 2024. In any event, after the March 19-20, 2024 FOMC meeting, the  
18 Fed also reiterated its plans to continue its gradual liquidation of its holdings of

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<sup>6</sup> Transcript of Chair Powell's Press Conference, September 20, 2023, at 1.  
<https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230920.pdf>

1 U.S. Treasury and mortgage-backed securities (at a combined amount of \$95  
2 billion per month).

3 **Q. What actions did the Fed take during the April 30-May 1, 2024 FOMC meeting?**

4 A. During the April 30-May 1, 2024 FOMC meeting, the Fed once again left the  
5 Federal Funds target rate unchanged at 5.25 - 5.50 percent, citing "a lack of further  
6 progress"<sup>7</sup> in bringing the inflation rate downward towards the Fed's targeted  
7 level of 2.0 percent. As a result of the Fed's decision to maintain the Fed Funds  
8 target rate at the current level (5.25%-5.50%), as well as comments made by the  
9 Fed in its press release after the FOMC meeting, many market observers now  
10 believe that only one rate increase is likely for the remainder of 2024. Furthermore,  
11 during the April 30-May 1, 2024 FOMC meeting, the Fed also elected to reduce the  
12 pace at which the central bank will liquidate its \$7.4 trillion portfolio of security  
13 holdings going forward, a process often referred to as Quantitative Tightening.  
14 Prior to the April 30-May 1, 2024 FOMC meeting, the Fed's stated policy was to  
15 allow \$95.0 billion of maturing U.S. Treasury securities and mortgage-backed  
16 securities to roll-off of the Fed's balance sheet each month, but effective as of June  
17 1, 2024, the Fed will reduce the amount to \$60.0 billion each month.

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<sup>7</sup> *Federal Reserve Issues FOMC Statement*, May 1, 2024, at 1.

<https://www.federalreserve.gov/newsevents/pressreleases/monetary20240501a.htm>

1 **Q: After evaluating the recent trends in the U.S. economy and capital markets, what**  
2 **conclusions have you arrived at, particularly as it relates to the Company's long-**  
3 **term capital costs for purposes of the instant proceeding?**

4 A: There is no question that long-term capital costs in the U.S. have increased  
5 significantly over the past few years. Most recently, both the 10-year and 30-year  
6 U.S. Treasury security yields continued to climb steadily higher during the first  
7 ten months of calendar-year 2023 (through October 2023). The 10-year Treasury  
8 yield rose to 4.98 percent during late October 2023, its highest level in more than  
9 16 years (since July 2007), while the 30-year Treasury yield rose to 5.11 percent  
10 during mid-October 2023, its highest level in more than 17 years (since July 2006).  
11 However, both the 10-year and 30-year Treasury yields have declined somewhat  
12 since October 2023, as the U.S. inflation rate has generally continued to trend  
13 downward from its recent 40-year high levels. Nevertheless, it remains important  
14 to recognize that longer-term Treasury security yields remain well-above the  
15 levels recorded during the time of Columbia's 2021 gas rate proceeding.<sup>8</sup> The same  
16 is true of utility bonds yields, which are also significantly higher in the current  
17 market environment as compared to the time of Columbia's 2021 rate proceeding.  
18 This strongly suggests that other long-term capital costs, including the Company's

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<sup>8</sup> Order of the Commission, *Electronic Application Of Columbia Gas Of Kentucky, Inc. For An Adjustment Of Rates; Approval Of Depreciation Study; Approval Of Tariff Revisions; Issuance Of A Certificate Of Public Convenience And Necessity; And Other Relief*, Case No. 2021-00183 (December 28, 2021).



1 cost of equity, have also risen significantly since the Company's last base rate  
2 proceeding in 2021.

3 **Q: To what extent have longer-term interest rates increased over the past several**  
4 **years, and do they remain higher now than at the time of the Company's 2021**  
5 **rate proceeding?**

6 A: There is no question that longer-term U.S. interest rates have trended higher over  
7 the past several years and remain higher today than at the time of Columbia's 2021  
8 rate proceeding.<sup>9</sup> For example, since the fourth quarter of calendar-year 2021, the  
9 30-year U.S. Treasury bond yield, which is a proxy for long-term capital costs, has  
10 increased by 278 basis points, from 1.95 percent<sup>10</sup> to 4.73 percent as of early-May  
11 2024. Meanwhile, the 10-year U.S. Treasury note yield has risen by 304 basis points  
12 since the fourth quarter of calendar-year 2021, from 1.54 percent<sup>11</sup> to 4.58 percent  
13 as of early-May 2024.

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<sup>9</sup> The Commission issued its Order in Case No. 2021-00183 on December 28, 2021. I have therefore referenced the average bond yields recorded during the fourth quarter of calendar year 2021 for purposes of this comparison.

<sup>10</sup> Three-month average 30-year U.S. Treasury bond yield for October 1, 2021 - December 31, 2021 ([www.federalreserve.gov](http://www.federalreserve.gov)).

<sup>11</sup> Three-month average 10-year U.S. Treasury bond yield for October 1, 2021 - December 31, 2021 ([www.federalreserve.gov](http://www.federalreserve.gov)).

1 **Q: Have long-term utility bond yields also trended upward since the end of**  
2 **calendar-year 2021?**

3 A: Yes. The average “A-rated” long-term utility bond yield has increased from 3.08  
4 percent<sup>12</sup> during the fourth quarter of 2021 to 5.84 percent as of early-May 2024,  
5 thus reflecting an increase of 276 basis points. During this same period, the  
6 average “Baa-rated” long-term utility bond yield increased from 3.31 percent<sup>13</sup> to  
7 6.07 percent as of early-May 2024, thus reflecting an increase of 276 basis points.

8 **Q: Are economists currently forecasting that U.S. Treasury and corporate bond**  
9 **yields will remain near recent levels over the next 3-5 years?**

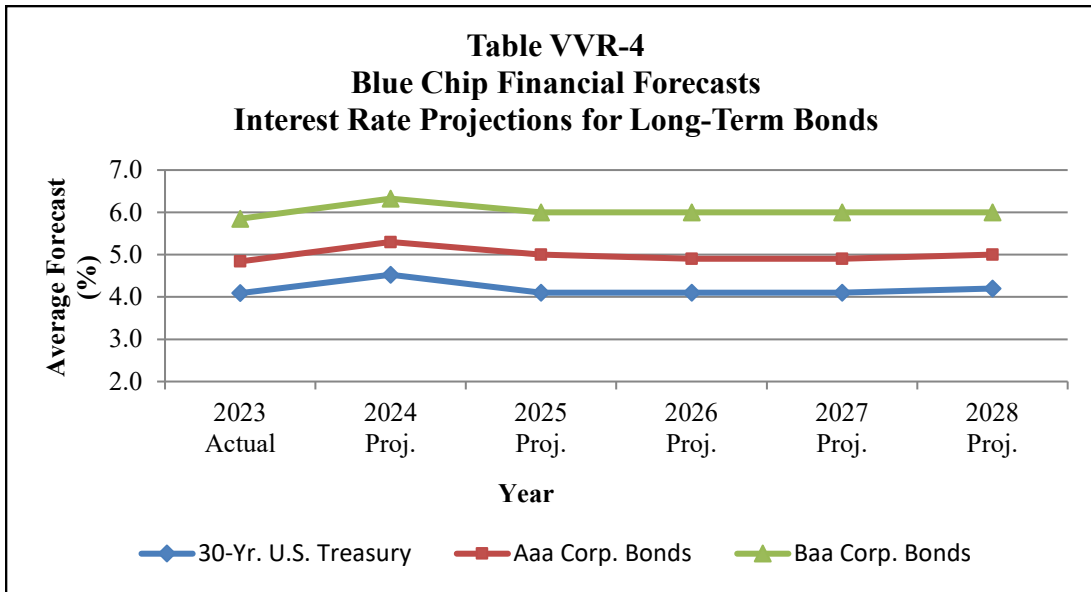
10 A: Yes. Prominent economists widely expect that intermediate and long-term interest  
11 rates will remain near recently recorded levels over the next 3-5 years. As reflected  
12 in Table VVR-4 below, the consensus estimates of prominent economists, as  
13 reflected in the Blue Chip Financial Forecasts,<sup>14</sup> are currently projecting that long-  
14 term interest rates will remain near recent levels over the 3-5 year forecast horizon.

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<sup>12</sup> Three-month average long-term “A” rated utility bond yield for October 1, 2021 - December 31, 2021 (Mergent Bond Record, January 2024, at 101).

<sup>13</sup> Three-month average long-term “Baa” rated utility bond yield for October 1, 2021 - December 31, 2021 (Mergent Bond Record, January 2024, at 101).

<sup>14</sup> *Blue Chip Financial Forecasts*, Volume 42, No. 12 (December 1, 2023).



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Therefore, considering that 30-year U.S. Treasury, corporate and utility bond yields are a widely-accepted proxy for long-term capital costs, it is reasonable to conclude that the cost of equity for regulated utilities, which has also increased over the past few years, will remain at these higher levels over the near-to-intermediate term horizon.

7

**C. Comparative Risk Assessment of Proxy Groups**

8

**Q: Why is it necessary to analyze groups of proxy companies to estimate the cost of equity for Columbia?**

9

10

**A:** The cost of equity is an opportunity cost concept, which is determined in the financial markets based upon the relative risk assessments of investors. Simply stated, in order to attract sufficient capital to support their public service obligations, regulated utilities must offer investors a rate of return that is commensurate with returns available on alternative investments bearing similar

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1 risks. Thus, the use of proxy groups is useful in estimating a utility's cost of equity,  
2 since each company comprising the proxy group represents an alternative  
3 investment opportunity of comparable risk vis-à-vis the subject utility. Regardless  
4 of whether the subject utility is publicly-traded or not, proxy group analyses  
5 ensure that fair rate of return principles, including comparable earnings,  
6 corresponding risks, and the opportunity cost of capital are all considered when  
7 estimating a utility's cost of equity.<sup>15</sup> Nonetheless, it should be noted that when  
8 the various cost of equity models are applied to the market and financial data of  
9 proxy group companies, various model inputs and/or assumptions are required,  
10 which contributes to the risk of observation error. For this reason, when possible,  
11 the use of larger proxy groups or even multiple proxy groups is recommended to  
12 mitigate these effects and to ensure a higher level of confidence in the reliability of  
13 the analytical results.

14 **Q: What criteria did you apply in selecting the companies included in your gas**  
15 **utility proxy group?**

16 **A:** In selecting a gas utility proxy group, my objective was to identify a group of

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<sup>15</sup> These fair rate of return principles were articulated by the U.S. Supreme Court in various landmark case decisions, including *Willcox et. al., Constituting the Public Service Commission of New York v. Consolidated Gas Co.*, 212 U.S. 19 (1909); *Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia*, 262 U.S. 679 (1923) (*Bluefield*); and *Federal Power Commission et al. v. Hope Natural Gas Company*, 320 U.S. 591 (1944) (*Hope*). Although the *Hope* and *Bluefield* cases are widely-referenced with regard to fair rate of return standards, the *Consolidated Gas* case was actually the first case where the Supreme Court addressed principles surrounding a fair rate of return for public utility companies.

1 publicly-traded natural gas distribution companies with risk characteristics  
2 similar to Columbia, which is not a publicly-traded company. Accordingly, I  
3 applied the following selection criteria in making this determination: (i) Value  
4 Line Investment Survey Industry Classification as a Natural Gas Utility; (ii) Value  
5 Line Safety Rank of "1," "2" or "3"; (iii) S&P corporate credit rating no lower than  
6 BBB-, or Moody's long-term issuer rating of no lower than Baa3 ; (iv) operating  
7 income from the company's regulated gas distribution operations equals or  
8 exceeds 50 percent of the company's consolidated operating income; (v) company  
9 must currently pay dividends and must not have discontinued or reduced its  
10 dividend during the previous five years (2019-2023); (vi) company must have  
11 significant revenue stabilization mechanisms in place; and (vii) company is not,  
12 and has not recently been, an acquisition target. Applying the above selection  
13 criteria yielded a core proxy group that is comprised of the following six publicly-  
14 traded natural gas distribution holding companies:<sup>16</sup>

15 Atmos Energy Corp.

16 New Jersey Resources Corp.

17 NiSource Inc.

18 Northwest Natural Gas Co.

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<sup>16</sup> Note that Value Line classifies each of the above holding companies as Natural Gas Utility holding companies.

1 ONE Gas, Inc.

2 Spire, Inc.

3 Throughout the remainder of my testimony, I will refer to this proxy group as the  
4 "Gas LDC Group."

5 **Q: Why is it necessary to complete a comparative risk assessment between**  
6 **Columbia and the Gas LDC Group?**

7 A: Considering that market-derived information for the Gas LDC Group companies  
8 will be used to estimate Columbia's cost of equity, it is critical that the Gas LDC  
9 Group is risk-comparable to the Company. If material differences in risk are  
10 identified, the analyst must apply his/her informed judgment in determining  
11 whether further adjustments are required to the cost of equity estimates indicated  
12 by application of the various analytical models. Because Columbia itself is not  
13 publicly-traded, market-based financial information is not available for the  
14 Company. Therefore, in conducting my comparative risk assessment, I have  
15 instead analyzed various widely-recognized business and financial risk metrics,  
16 none of which are dependent upon stock prices or other market-based  
17 information.

1 **Q: Do a utility's credit ratings provide insight into its risk profile, cost of debt and**  
2 **cost of equity?**

3 A: Yes. Credit ratings reflect the risk of default with respect to a company's debt  
4 obligations, and are therefore strongly correlated with a company's borrowing  
5 costs. For example, companies with a lower risk of default are assigned higher  
6 credit ratings and therefore benefit from lower borrowing costs. Conversely,  
7 companies with a high risk of default are assigned lower credit ratings and  
8 consequently incur higher borrowing costs. A firm with higher borrowing costs  
9 will also have a higher cost of equity, since investors invariably demand an equity  
10 risk premium above and beyond the firm's cost of debt as compensation for  
11 bearing the additional risks inherent in common stocks. Although the credit rating  
12 agencies do not currently issue ratings for Columbia itself, the Company's  
13 ultimate parent company, NiSource, is currently rated BBB+ by Standard and  
14 Poor's and Baa2 by Moody's.

15 Presently, S&P has assigned an average corporate credit rating of "A-" for  
16 the companies comprising the Gas LDC Group, while Moody's has assigned an  
17 average long-term issuer rating of "A3" for the Gas LDC Group companies. Both  
18 the S&P and Moody's ratings reflect the overall credit worthiness of the issuing  
19 company, rather than the risk of default for a specific debt issue. Additional

1 information on the Gas LDC Group's average credit ratings can be found on page  
2 7 of Attachment VVR-7.

3 **Q: When evaluating Columbia versus the Gas LDC Group, how do their business  
4 and financial risk metrics compare?**

5 A: The results of my comparative risk assessment for Columbia and the Gas LDC  
6 Group are presented on pages 1 and 2 of Attachment VVR-3, respectively. Pages  
7 3 and 4 of Attachment VVR-3 provide additional information on the capitalization  
8 ratios for each of the six companies comprising the Gas LDC Group. Within this  
9 attachment, I have evaluated the five-year historical period of 2019-2023, along  
10 with the five-year historical averages. My findings are summarized by individual  
11 risk metric as presented below:

#### 12 1. Relative Size

13 Based on a total book capitalization of \$565.5 million, Columbia is  
14 approximately 1/19<sup>th</sup> the size of the average company within the Gas LDC Group  
15 (\$10.5 billion). It is well-documented in the finance literature that small  
16 capitalization companies have a higher risk profile as compared to large  
17 capitalization companies, and therefore earn higher relative returns. This is  
18 known as the "size effect" and is often attributed to the greater relative impact that  
19 significant (negative) events can have on smaller firms, vis-à-vis larger firms.



1 Morin summarizes the size effect in *Modern New Regulatory Finance*, a widely-  
2 referenced authoritative guide on utility cost of capital matters, as follows:

3 Investment risk increases as company size diminishes, all else  
4 remaining constant. Small companies have very different returns  
5 than large ones, and on average they have been higher.

6 ....

7 The size phenomenon is well-documented in the finance  
8 literature.

9 ....

10 The relationship between firm size and return cuts across the  
11 entire size spectrum but is most evident among smaller  
12 companies that have higher returns than larger firms on average.

13 ....

14 Size is a significant factor that increases both business risk and  
15 financial risk and, therefore, the cost of capital.<sup>17</sup>

16 Furthermore, in multiple academic papers, distinguished researchers Fama and  
17 French identified company size as a significant factor in explaining equity returns.  
18 As a result of their research, Fama and French developed an enhanced CAPM,  
19 known as the “Three Factor Model,” which recognized that the “size premium” is  
20 an essential component in estimating the cost of equity for small capitalization  
21 firms.<sup>18</sup>

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<sup>17</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books LLC, 2021), at 213, 214 and 218.

<sup>18</sup> See Eugene F. Fama and Kenneth R. French, “Industry Costs of Equity,” *Journal of Financial Economics*, 43 (1997): 153-193; and Eugene F. Fama and Kenneth R. French, “The Capital Asset Pricing Model: Theory and Evidence,” *The Journal of Economic Perspectives*, 18 (Summer 2004), at 25-46.

## 2. Volatility of Return on Book Equity

In the absence of observable market data, both the standard deviation and coefficient of variation of a time series of annual book ROEs can serve as suitable risk measurement substitutes for beta. Although standard deviation is a measure of total risk, while beta is a measure of non-diversifiable systematic risk, these two risk measures have been shown to be highly correlated. The coefficient of variation is calculated as the ratio of the standard deviation of ROE to the mean ROE, which facilitates a comparison of the degree of variation from one data series to another (i.e., Columbia vs. Gas LDC Group), even if the respective mean ROEs differ significantly. Higher calculated values for the standard deviation and coefficient of variation indicate greater volatility in achieved ROEs, which corresponds to a higher overall level of investment risk. For the period 2019-2023, the standard deviation of achieved ROEs was 1.61 percent for Columbia, and 0.85 percent for the Gas LDC Group. For the same period, the coefficient of variation was 0.197 for Columbia and 0.081 for the Gas LDC Group, reflecting a significantly higher relative volatility in achieved ROEs for Columbia.

## 3. Equity Capitalization Ratio

All else being equal, a company with a higher equity capitalization weighting has a lower level of financial risk, while a company with a lower equity capitalization weighting has a higher level of financial risk. This is because

1 companies which rely more heavily on debt capital to finance their operations are  
2 subject to a higher level of contractual obligations in the form of periodic principal  
3 and interest payments. Increasing levels of fixed-payment obligations constrain a  
4 company's financial flexibility, especially during economic downturns, and  
5 therefore increase a company's financial risk profile. For this reason, the debt-to-  
6 capitalization ratio, which is the complement of the equity capitalization ratio,  
7 serves as an important financial metric that is routinely used by the rating agencies  
8 to assess a company's credit quality and overall financial risk profile. The 5-year  
9 average equity capitalization ratio for Columbia was 54.3 percent based upon  
10 permanent capitalization, and 50.0 percent based upon total capitalization. The 5-  
11 year average equity capitalization ratio for the Gas LDC Group was 48.5 percent  
12 based upon permanent capitalization, and 43.6 percent based upon total  
13 capitalization. As outlined in Attachment VVR-5, the Company is proposing a  
14 52.64 percent common equity ratio for rate-setting purposes in this proceeding,  
15 which consistent with Commission precedent, is based upon total capitalization  
16 and therefore includes short-term debt.

#### 17 4. EBITDA-to-Interest Coverage

18 The EBITDA-to-Interest Coverage ratio is a key analytical metric routinely  
19 used by the rating agencies to evaluate whether a company's earnings and cash  
20 flow are sufficient enough to adequately cover its debt service obligations. Higher

1 coverage ratios generally imply lower levels of financial risk and higher credit  
2 quality. The 5-year average EBITDA-to-Interest Coverage ratio for the years 2019-  
3 2023 was 5.25x for Columbia and 6.97x for the Gas LDC Group.

#### 5. FFO-to-Adjusted Total Debt

6 The FFO-to-Adjusted Debt ratio is another important analytical metric used  
7 by the rating agencies and expresses a company's annual operating cash flows as  
8 a percentage of its total adjusted debt. The reciprocal of the FFO-to-Adjusted Debt  
9 ratio provides an approximate estimate of the total number of years of annual cash  
10 flows that would be required to retire a company's adjusted debt obligations. The  
11 5-year average FFO-to-Adjusted Total Debt ratios for the years 2019-2023 was 17.5  
12 percent for Columbia and 14.8 percent for the Gas LDC Group.

13 **Q: What conclusions have you drawn from your comparative risk assessment**  
14 **between Columbia and the Gas LDC Group?**

15 **A:** Columbia's investment risk metrics indicate that, on an overall basis, the Company  
16 has a somewhat higher risk profile as compared to the Gas LDC Group. In  
17 particular, the business risk metrics I evaluated suggest that the Company has a  
18 higher risk profile compared to the Gas LDC Group, as demonstrated by the  
19 Company's: (1) significantly smaller size compared to the average company in the  
20 Gas LDC Group; and (2) markedly higher variability of book returns on equity, as

1 measured by both the standard deviation and the coefficient of variation. In  
2 addition, as noted earlier, Columbia's higher relative allocation of gas throughput  
3 to industrial and transportation customers, as well as its high customer  
4 concentration level among the Company's top five transportation customers, also  
5 has the effect of increasing Columbia's business risk profile. At the same time,  
6 however, the financial risk metrics<sup>19</sup> I evaluated suggest that on an overall basis,  
7 Columbia has a slightly lower financial risk profile as compared to the Gas LDC  
8 Group.

9 Therefore, on an overall basis, the results of my comparative risk  
10 assessment suggests that Columbia's overall investment risk profile is marginally  
11 higher than that of the Gas LDC Group. However, it is my opinion that this risk  
12 differential is not significant enough to justify a further upward adjustment to the  
13 Gas LDC Group's indicated cost of equity. For this reason, I have relied entirely  
14 upon the cost of equity estimates yielded by applying the analytical models to the  
15 market and financial data of the proxy group companies I analyzed, without any  
16 further need to make an additional risk adjustment to these estimates.

---

<sup>19</sup> These financial risk metrics include the Equity Capitalization ratio, EBITDA-to-Interest Coverage ratio, and the FFO-to-Adjusted Total Debt ratio, as presented in Attachment VVR-3.

1 **Q: Have you considered any other complementary proxy groups in estimating the**  
2 **cost of equity for Columbia?**

3 A: Yes, I have. As previously stated, the use of multiple comparable-risk proxy  
4 groups ensures a higher level of confidence in the statistical reliability of the  
5 analytical results when estimating a utility's cost of equity. The importance of  
6 evaluating complementary proxy groups has become particularly evident in  
7 recent years, as recent merger and acquisition activity in the regulated utility  
8 sector has reduced the number of gas utility holding companies to select from in  
9 developing a gas utility proxy group. Therefore, to ensure a robust sample size  
10 that will obviate potential distortions caused by observation errors in the various  
11 financial model inputs, I have also evaluated a proxy group of nine combination  
12 gas and electric utility companies, and a proxy group of 11 non-rate-regulated  
13 companies (i.e., the Combination Utility Group and the Non-Regulated Group,  
14 respectively). Both of these proxy groups have risk profiles which are similar to  
15 the Gas LDC Group. Considering that Columbia is not publicly-traded, the  
16 analysis of comparative risk metrics discussed earlier was necessary to establish  
17 the relative risk relationship between the Company and the Gas LDC Group. In  
18 order to facilitate a comparison of the risk profiles of the Combination Utility  
19 Group and the Non-Regulated Group to Columbia, this was accomplished  
20 indirectly through a comparative risk assessment of the three proxy groups, as

1 based upon published risk indicators. I will discuss the relative risk relationships  
2 between the three proxy groups and Columbia later in my testimony.

3 **Q: Why is it appropriate to evaluate a proxy group of combination gas and electric**  
4 **utility companies?**

5 A: Considering the relatively small size of the Gas LDC Group, evaluating a proxy  
6 group of combination gas and electric utility companies serves as a useful  
7 adjunctive analysis that provides additional perspective on the return expectations  
8 of equity investors. This approach is also consistent with the comparable earnings  
9 standard established in *Hope* and *Bluefield*, since gas utilities are entitled to earn a  
10 rate of return commensurate with returns offered by other companies having  
11 “corresponding risks,” including combination gas and electric utility companies.  
12 Morin provides additional support for this approach in *Modern Regulatory Finance*,  
13 where he argues that a proxy group of combination electric and gas utilities is a  
14 suitable complement to a proxy group of gas utilities, where he states:

15 This procedure is reasonable given that the natural gas distribution  
16 business possesses an investment risk profile that is similar in risk  
17 to that of investment-grade combination electric and gas utilities.  
18 The latter possess economic characteristics similar to those of  
19 natural gas distribution utilities as they are both involved in the  
20 distribution of energy services products at regulated rates in a  
21 cyclical and weather-sensitive market. They both employ a capital-  
22 intensive network with similar physical characteristics. They are  
23 both subject to rate of return regulation.<sup>20</sup>

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<sup>20</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books LLC, 2021), at 445.

1 Accordingly, the Combination Utility Group that I have referenced represents a  
2 reasonable and useful complement to the Gas LDC Group.

3 **Q: Can you provide any additional evidence that your proxy group of combination**  
4 **gas and electric utility companies possesses a risk profile which is comparable**  
5 **to a proxy group of gas-only utilities, and therefore represents a suitable**  
6 **complement to your Gas LDC Group in estimating Columbia's cost of equity?**

7 A: Yes. Substantial evidence suggests that to the extent combination gas and electric  
8 utilities may be perceived as riskier than pure-play gas utilities, the risk  
9 differential is likely overstated. This is demonstrated by the difference in the  
10 national averages of authorized ROEs granted to gas versus electric utilities over  
11 the past 43 years (1981 to 2023), which have been approximately 11 basis points<sup>21</sup>  
12 higher for electric utilities. However, more recently, gas utilities have, on average,  
13 been granted higher authorized ROEs than electric utilities. For example, during  
14 the past 5-year period (2019 to 2023), the national average of authorized ROEs for  
15 gas utilities was approximately six basis points<sup>22</sup> higher than the average of  
16 authorized ROEs for electric utilities (including both vertically-integrated and  
17 distribution-only electric utilities). If state regulatory commissions nationwide

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<sup>21</sup> *The Cost of Capital – A Practitioner's Guide*, D. Parcell, Society of Utility and Regulatory Financial Analysts, (2020), quoting Regulatory Research Associates, at 93; and *RRA Regulatory Focus, Major Energy Rate Case Decisions in the U.S. - January-December 2023*, Regulatory Research Associates, S&P Global Market Intelligence, February 6, 2024, at Table 1.

<sup>22</sup> *RRA Regulatory Focus, Major Energy Rate Case Decisions in the U.S. - January-December 2023*, Regulatory Research Associates, S&P Global Market Intelligence, February 6, 2024, at Table 1.



1 believed that the risk differential between gas and electric utilities was more  
2 significant, this would have been demonstrated by a greater disparity in  
3 historically authorized ROEs between gas and electric utilities.

4 **Q: What criteria did you use to select the companies included in your Combination**  
5 **Utility Group?**

6 A: In developing the Combination Utility Group, my objective was to identify a  
7 group of publicly-traded combination gas and electric utility companies with risk  
8 characteristics similar to the Gas LDC Group, and by extension, Columbia.  
9 Accordingly, I applied the following screening criteria in selecting companies for  
10 inclusion in the Combination Utility Group: (i) Value Line Investment Survey  
11 Industry Classification as an Electric Utility; (ii) Value Line Safety Rank of "1", "2"  
12 or "3"; (iii) S&P corporate credit rating no lower than BBB-, or Moody's long-term  
13 issuer rating of no lower than Baa3; (iv) company must have been engaged in both  
14 the natural gas distribution and electric distribution businesses for at least the past  
15 five years; (v) company must *not* currently operate nuclear power generation  
16 facilities or be a significant independent power producer; (vi) company must  
17 currently pay dividends and must not have discontinued or reduced their  
18 dividend payments during the previous five years (2019-2023); and (vii) company  
19 must not have recently been an acquisition target. Applying the above selection  
20 criteria yielded a proxy group consisting of the following nine publicly-traded

1 combination gas and electric utility companies:<sup>23</sup>

2 Alliant Energy Corp.

3 Avista Corp.

4 Black Hills Corp.

5 CMS Energy Corp.

6 Consolidated Edison, Inc.

7 Eversource Energy

8 MGE Energy Inc.

9 Northwestern Corp.

10 WEC Energy Group

11 I will refer to this group throughout my testimony as the Combination Utility  
12 Group.

13 **Q: Why is it also appropriate to evaluate a proxy group of non-rate-regulated U.S.**  
14 **companies when estimating Columbia's cost of equity?**

15 **A:** Under the fair rate of return standards established in *Hope* and *Bluefield*, the U.S.  
16 Supreme Court determined that regulated utilities are entitled to earn a rate of  
17 return commensurate with other companies having comparable risks, irrespective

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<sup>23</sup> Note that Value Line classifies each of the following holding companies as Electric Utility holding companies.

1 of their business activities or the extent to which they are regulated. For example,  
2 in *Bluefield*, the Supreme Court concluded:

3 A public utility is entitled to such rates as will permit it to earn a  
4 return on the value of the property which it employs for the  
5 convenience of the public equal to that generally being made at the  
6 same time and in the same general part of the country on  
7 investments in other business undertakings which are attended by  
8 corresponding risks and uncertainties<sup>24</sup>.

9 It is important to note that within its *Bluefield* opinion, the Supreme Court  
10 specifically stated that public utilities should be permitted to earn a return that is  
11 equal to the returns on “*investments in other business undertakings*,” provided they  
12 have corresponding risks. By virtue of its reference to “*other business undertakings*,”  
13 the Supreme Court implicitly endorsed the use of non-utility proxy groups in the  
14 determination of a fair rate of return for utilities. Furthermore, in the *Hope*  
15 decision, the Supreme Court concluded:

16 By that standard the return to the equity owner should be  
17 commensurate with returns on investments in other enterprises  
18 having corresponding risks.<sup>25</sup>

19 It is clear then, based upon the decisions of the Supreme Court in these landmark  
20 cases, that the use of non-rate-regulated proxy companies in the determination of  
21 a utility’s cost of equity is a sound practice, and is consistent with the comparable

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<sup>24</sup> *Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia*, 262 U.S. 679, 692 (1923).

<sup>25</sup> *Federal Power Commission et.al. v. Hope Natural Gas Company*, 320 U.S. 591, 603 (1944).

1 earnings standard established in these cases. After all, utilities do not only  
2 compete with other utility companies for investor capital. They must also compete  
3 with an entire universe of risk-comparable companies, irrespective of industry  
4 classification and level of regulatory oversight. Therefore, in order to attract  
5 sufficient capital to support its public service obligations, and consistent with the  
6 concept of opportunity cost, Columbia must provide a return to its investors that  
7 is similar to the returns offered by non-rate-regulated companies of comparable  
8 risk. Otherwise, over the long run, investor capital will simply flow to its most  
9 productive use elsewhere.

10 It is also important to note that cost-of-service ratemaking is intended to be  
11 a substitute for competition. That is, the objective of rate regulation is to produce  
12 the same results that would be achieved under the forces of market competition.  
13 In particular, it is the phenomenon of “competitive equilibrium” that rate  
14 regulation is intended to replicate, where, in the long run, market forces limit  
15 companies to earning returns that are no greater than, but also no less than,  
16 investors’ minimum required rate of return. Expressed in microeconomic terms,  
17 long-run equilibrium is achieved where firms only earn minimally-required levels  
18 of “normal profits,” while excessive profits, often referred to as “economic  
19 profits,” are by definition equal to zero. Accordingly, the returns of regulated  
20 utilities should be no lower than the returns of comparable risk companies which

1 operate under the constraints of market competition. The 11 companies included  
2 in the Non-Regulated Group are stable, lower-risk companies which operate in the  
3 consumer staple, food and beverage, chemicals processing, home improvement,  
4 and waste management sectors of the economy. Considering that this proxy  
5 group is demonstrably comparable on a total risk basis to the Gas LDC Group, its  
6 use is consistent with the fair rate of return standards established in *Hope* and  
7 *Bluefield*.

8 **Q: What criteria did you use to select the companies included in the Non-Regulated**  
9 **Group?**

10 A: In selecting the Non-Regulated Group, my objective was to identify a large group  
11 of publicly-traded domestic companies with a risk profile either equivalent to, or  
12 preferably lower than, the Gas LDC Group. This approach is designed to ensure  
13 a conservative analysis when applying the various cost of equity models to the  
14 market and financial data of the Non-Regulated Group companies. To achieve  
15 this objective, I applied the following screening criteria in selecting companies for  
16 inclusion in the Non-Regulated Group: (i) Value Line Investment Survey  
17 Classification as a Conservative Stock, which is defined as stocks having a Value  
18 Line Safety Rank of no lower than "1" (Highest Rank for Relative Safety); (ii) Value  
19 Line beta ranging between 0.75 and 0.95; (iii) Value Line Financial Strength Rating  
20 of "A" or higher; (iv) S&P corporate credit rating that is no lower than BBB-, or

1 Moody's long-term issuer rating of no lower than Baa3; (v) company shall not be  
2 in the gas and/or electric distribution business, and shall not be an investment,  
3 financial services, pharmaceutical, life sciences, medical technology,  
4 hardware/software, or defense contracting company; (vi) the company must  
5 currently pay dividends and must not have discontinued or reduced their  
6 dividend payments during the previous five years (2019-2023); and (vii) the  
7 company must have at least one consensus earnings estimate published by an  
8 information service provider such as Thomson Reuters or Zacks. Applying these  
9 highly-selective criteria yielded the Non-Regulated Group, which is comprised of  
10 the following 11 companies:

11 Air Products and Chemicals, Inc.

12 Brown-Forman Corp.

13 Coca-Cola Co.

14 Hershey Company

15 Home Depot Inc.

16 McCormick & Co.

17 McDonald's Corp.

18 Mondelez International

19 Republic Services, Inc.

20 Sherwin-Williams Co.

1  
2 **Q: How does the Combination Utility Group compare on a total risk basis to the**  
3 **Gas LDC Group?**

4 A: To facilitate a comparative risk assessment between the respective proxy groups,  
5 I have compared the three groups on the basis of six well-recognized measures of  
6 investment risk. The first of these measures is the Value Line "beta," which  
7 measures a stock's non-diversifiable or systematic risk. The second measure is the  
8 Value Line "Safety Rank," which is Value Line's proprietary measure of the total  
9 risk of a stock and is determined based upon an equal weighting between Value  
10 Line's Financial Strength rating and Stock Price Stability rating. I have also  
11 considered the Value Line Financial Strength and Stock Price Stability ratings on  
12 an individual basis, which are presented as risk measures three and four. The fifth  
13 and sixth measures of investment risk I have evaluated are the long-term credit  
14 ratings assigned by S&P and Moody's, respectively. Considering that credit  
15 ratings are the product of a comprehensive, multi-dimensional analysis which  
16 considers a utility's business risk (including regulatory risk) and financial risk,  
17 they provide a useful perspective into the overall investment risk profile of the  
18 respective proxy groups.

19 The summarized results of my comparative risk assessment are presented  
20 in Table VVR-5 below. Based upon my evaluation of the aforementioned risk

1 measures, I have concluded, that taken on an overall basis, the Combination Utility  
2 Group has a similar investment risk profile as compared to the Gas LDC Group.  
3 This conclusion is based upon the fact that the Combination Utility Group and the  
4 Gas LDC Group have equivalent risk ratings with respect to the Value Line Safety  
5 Rank ("2") and their respective long-term credit ratings from S&P ("A-").  
6 Although the Combination Utility Group's remaining risk indicators do reflect a  
7 slightly higher level of investment risk as compared to the Gas LDC Group, these  
8 differences are not significant enough to suggest that, on an overall basis, the  
9 Combination Utility Group has a materially higher level of investment risk when  
10 compared to the Gas LDC Group. Based upon these findings, I have concluded  
11 that the Combination Utility Group and the Gas LDC Group are of comparable  
12 risk.

13 **Q: How does the Non-Regulated Group compare on a total risk basis to the Gas**  
14 **LDC Group?**

15 **A:** Based upon my evaluation of the aforementioned risk measures, and as  
16 summarized in Table VVR-5 below, I have concluded that the Non-Regulated  
17 Group has a marginally lower investment risk profile as compared to the Gas LDC  
18 Group. My conclusion is based on the fact that, as reflected in Table VVR-5 below,



1 four of the six risk measures<sup>26</sup> I evaluated indicate a lower level of investment risk  
 2 for the Non-Regulated Group as compared to the Gas LDC Group. For this reason,  
 3 the Non-Regulated Group provides a conservative basis for estimating the  
 4 Columbia’s cost of equity in the current market environment.

<b>Table VVR-5 Comparative Risk Assessment of Proxy Groups</b>			
<b>Risk Measure</b>	<b>Gas LDC Group</b>	<b>Comb. Utility Group</b>	<b>Non-Reg. Group</b>
Value Line Beta	0.88	0.89	0.85
Value Line Safety Rank	2	2	1
Value Line Fin. Strength Rating	A	B++	A+
Value Line Stock Price Stability Rating	90	89	96
S&P Long-Term Debt Rating	A-	A-	A-
Moody’s Long-Term Debt Rating	A3	Baa1	A3

5  
6

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<sup>26</sup> Including the Value Line Beta, Value Line Safety Rank, Value Line Financial Strength Rating and the Value Line Stock Price Stability rating).

1           **D.     Analysis of Regulatory Mechanisms**

2   **Q:     In view of the fact that Columbia utilizes a Weather Normalization Adjustment**  
3           **(“WNA”) mechanism, would it be appropriate to apply a downward adjustment**  
4           **to Columbia’s cost of equity under the premise that the Company’s WNA**  
5           **mechanism has risk-reducing effects on the Company’s overall investment risk**  
6           **profile?**

7   **A:**    No, because an adjustment of this type would be clearly redundant and therefore  
8            inappropriate. Considering that a majority of the utility proxy group companies I  
9            reference in my quantitative evaluations already utilize similar revenue  
10           stabilization mechanisms, any theoretical risk reduction and/or theoretical  
11           reduction in the cost of equity resulting from these mechanisms would already be  
12           reflected within the market prices of the proxy group companies. In other words,  
13           since investors are already aware of the stabilization mechanisms employed by the  
14           proxy group companies, they have already incorporated these mechanisms into  
15           their risk perceptions and rate of return expectations. Therefore, a downward  
16           adjustment to Columbia’s cost of equity is not necessary or appropriate, since on  
17           an overall basis, the extent to which the proxy group companies already employ  
18           revenue stabilization mechanisms is generally equal to, or more comprehensive  
19           than, Columbia’s WNA mechanism. Accordingly, any theoretical reduction in  
20           ROE would already be reflected in the indicated cost of equity for each of the proxy

1 group companies.

2 **Q: Have you completed a comparative evaluation to determine the extent to which**  
3 **the companies comprising your proxy groups also employ revenue stabilization**  
4 **mechanisms?**

5 A: Yes, I have. My evaluation of the revenue stabilization mechanisms employed by  
6 each of the companies comprising the Gas LDC Group and the Combination Utility  
7 Group is presented within Attachment VVR-4. Using information available from  
8 Securities and Exchange Commission filings and company-prepared investor  
9 presentations, my evaluation identified, for each state jurisdiction in which the  
10 proxy group companies have utility operations, the specific types of revenue  
11 stabilization mechanisms employed in each of those jurisdictions. During the  
12 course of my evaluation, I determined that a wide range of revenue stabilization  
13 mechanisms are employed by the majority of companies comprising the two utility  
14 proxy groups, including full decoupling, revenue normalization, weather  
15 normalization, rate stabilization, straight fixed-variable rate design, modified  
16 fixed-variable rate design, and lost revenue/lost margin recovery mechanisms.

17 **Q: Based upon your evaluation of the revenue stabilization mechanisms**  
18 **employed by the proxy group companies, what conclusions have you drawn?**

19 A: Again, I have determined that the clear majority of companies comprising the two  
20 utility proxy groups utilize rate designs that are either fully or partially non-

1 volumetric in nature. More specifically, and as reflected in Attachment VVR-4, my  
2 evaluation determined that all six of the companies comprising the Gas LDC  
3 Group, and that seven of the nine companies comprising the Combination Utility  
4 Group, employ various forms of revenue stabilization mechanisms. Attachment  
5 VVR-4 demonstrates that, on balance, the revenue stabilization mechanisms  
6 employed by the proxy group companies share many of the same characteristics,  
7 and are therefore generally comparable, to Columbia's WNA program. As a result,  
8 my cost of equity evaluation, which relies upon the market and financial data of  
9 the proxy group companies, already incorporates the effects of these revenue  
10 stabilization programs on the risk perceptions and rate of return expectations of  
11 investors. Accordingly, an adjustment to Columbia's cost of equity to compensate  
12 for any such theoretical reduction of risk is clearly not warranted, since to the  
13 extent such risk reduction was to actually occur, its effect on Columbia's cost of  
14 equity will have already been captured within the market data of the proxy group  
15 companies.

16 **Q: Based upon your evaluation of the infrastructure cost recovery mechanisms**  
17 **employed by the utility proxy group companies, what conclusions have you**  
18 **drawn?**

19 A: As noted earlier, in determining the extent to which the proxy group companies  
20 utilize infrastructure cost recovery mechanisms, I employed the same approach

1 that investors typically employ in conducting their relative risk assessments  
2 among various investment alternatives. That is, I reviewed each company's SEC  
3 public filings (i.e. 10-Ks and 10-Qs) and investor conference presentations. This is  
4 an important observation since investors will generally form their risk perceptions  
5 with respect to the impacts of infrastructure cost recovery mechanisms largely on  
6 the basis of the information contained within a company's public filings and/or  
7 other publicly-disseminated information.

8 As presented in Attachment VVR-4, I have determined that the overriding  
9 majority of the utility proxy group companies (13 out of 15) employ infrastructure  
10 cost recovery mechanisms or forward test years that provide similar cost recovery  
11 attributes as compared to Columbia's SMRP program. More specifically, within  
12 the Gas LDC Group, all six of the proxy group companies employ infrastructure  
13 mechanisms or forward test years, while within the Combination Utility Group,  
14 seven of the nine companies utilize these mechanisms or forward test years.  
15 Therefore, in the aggregate, the market-based data of the utility proxy group  
16 companies would already capture a significant portion of any theoretical risk  
17 reduction resulting from the reduced regulatory lag associated with such cost  
18 recovery mechanisms. For the above stated reasons, it would be inappropriate to  
19 apply a downward adjustment to Columbia's proposed ROE due to the presence  
20 of the Company's SMRP program, since such an adjustment would be redundant

1 to the effects that would already be incorporated within the market data of the  
2 proxy group companies.

3 **Q: What is the current authorized rate of return for Columbia's SMRP rider?**

4 A: In Columbia's most recent rate case (Case No. 2021-00183), the Commission  
5 approved an authorized ROE of 9.275% for the SMRP rider. This is compared to  
6 the 9.35% authorized ROE granted for base rates.

7 **Q: Is Columbia proposing a change to the way SMRP is addressed in this  
8 proceeding as compared to the Company's previous rate proceedings?**

9 A: Yes. As outlined in the Direct Testimony of Judy Cooper and Jeffery Gore,  
10 Columbia is not requesting to include SMRP invested capital through the  
11 forecasted test year in base rates. In previous cases, this action has been taken and  
12 the SMRP rider balance has been reduced to zero.

13 **Q: Does this change the nature of the SMRP rider?**

14 A: As explained more thoroughly in the Direct Testimony of Jeffery Gore, the SMRP  
15 rider will no longer be a mechanism solely devoted to the accelerated recovery of  
16 infrastructure investments between rate cases. Instead, the SMRP rider will also  
17 encompass historic investments in a manner similar to base rates.

18

19

1 **Q: Does this change to the SMRP justify an ROE that is equal to the ROE applied**  
2 **to base rates?**

3 A: Yes. Going forward a substantial portion of the SMRP Rider revenue requirement  
4 balance will encompass historic investments that would have previously been  
5 rolled into Columbia's traditional rate base. Therefore, from a cost recovery  
6 timing standpoint, this portion of the Company's SMRP Rider revenue  
7 requirement will now reflect similar characteristics as Columbia's traditional cost  
8 recovery through base rates and will not receive any benefit from accelerated cost  
9 recovery. For this reason, the ROE applied to the SMRP Rider should equal the  
10 return applied to base rates. For a more detailed explanation of the difference in  
11 the SMRP Rider as proposed, please see the Direct Testimony of Columbia Witness  
12 Judy Cooper.

13 **E. Rate-Setting Capital Structure**

14 **Q: What capital structure are you recommending for rate-setting purposes in this**  
15 **proceeding?**

16 A: Attachment VVR-5 presents Columbia's capitalization as of February 28, 2024,  
17 which corresponds to the actual data in the base period for the Company. The  
18 August 31, 2024 capital structure is estimated at the end of the base period, and  
19 consists of six-months of actual data and six-months of projected data.  
20 Considering that the rate-setting process is prospective in nature, the Company's

1 authorized rate of return should incorporate known and foreseeable changes  
2 expected to occur during the fully forecasted test period, including those changes  
3 impacting the Company's capital structure.

4 As further outlined in Attachment VVR-6, after the base period, and  
5 through the end of the fully forecasted test period, the Columbia plans to issue a  
6 total of \$41.0 million in new long-term debt to NiSource. Therefore, Columbia's  
7 fully forecasted test period capital structure is estimated as of December 31, 2025,  
8 and incorporates the Company's planned financing activities as outlined above.

9 As further reflected in Attachment VVR-5, the Company is recommending  
10 that Columbia's thirteen-month average capital structure through the fully  
11 forecasted test period, ending December 31, 2025, be referenced for rate-setting  
12 purposes in the instant proceeding. As reflected in both Attachment VVR-2 and  
13 Attachment VVR-5, Columbia's capital structure ratios of 45.53 percent long-term  
14 debt, 1.83 percent short-term debt, and 52.64 percent common equity, are  
15 recommended.

16 Each of these ratios are based upon the thirteen-month average balance for  
17 the 2025 fully-forecasted test year.

18 To confirm the reasonableness of the Company's fully-forecasted test year-  
19 end capital structure, I have compared it to the capital structure ratios of the utility  
20 operating subsidiaries of the Gas LDC Group companies. As reflected in Table



1 VVR-6 below, the respective equity capitalization ratios for the Gas LDC Group  
2 operating subsidiaries range from 44.2 percent to 62.2 percent, and reflect median  
3 and average equity capitalization ratios of 55.4 percent and 55.5 percent,  
4 respectively.

<b>Table VVR-6 Common Equity Capital Ratios of the Utility Operating Subsidiaries of the Gas LDC Group<sup>27</sup></b>		
<b>Utility Operating Company</b>	<b>Parent</b>	<b>Common Equity Ratio</b>
Atmos Energy - Colorado	ATO	58.0%
Atmos Energy - Kansas	ATO	56.3%
Atmos Energy - Kentucky	ATO	54.5%
Atmos Energy - Tennessee	ATO	62.2%
Atmos Energy - Texas	ATO	60.1%
Atmos Energy – Mid-Tex Division	ATO	60.2%
Atmos Energy – Regulated Energy	ATO	59.8%
New Jersey Natural Gas	NJR	54.0%
Columbia Gas of Maryland	NI	53.0%
Columbia Gas of Ohio	NI	50.6%
Columbia Gas of Pennsylvania	NI	54.2%
Columbia Gas of Virginia	NI	44.2%
Northwest Natural Gas - Oregon	NWN	50.0%
Northwest Natural Gas – Wash.	NWN	49.0%
Kansas Gas Service Co.	OGS	58.4%
Oklahoma Natural Gas Co.	OGS	58.6%
Texas Gas Service Co.	OGS	59.7%
Missouri Gas Energy (Spire)	SR	54.2%
Spire Alabama, Inc.	SR	61.2%
Spire Gulf, Inc.	SR	51.6%
Utility Operating Co. - Minimum	-	44.2%
Utility Operating Co. - Maximum	-	62.2%
Utility Operating Co. - Median	-	55.4%
Utility Operating Co. - Average	-	55.5%

<sup>27</sup> Source: S&P Global Market Intelligence. Reflects the most recent rate case order where an equity capitalization ratio was disclosed in the final order. The ratio was otherwise derived from the utility operating subsidiary's financial statements.

CKY's Rate-Setting Cap. Structure	-	52.64%
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1 As can be seen in Table VVR-6 above, the Company's equity capitalization ratio of  
2 52.64 percent is well-within the range of what is typical and customary for other  
3 gas utility operating companies, and particularly the operating utilities  
4 constituting the Gas LDC Group.

5 **F. Embedded Cost of Debt**

6 **Q: What debt cost rate did you apply to the long-term debt and short-term debt**  
7 **components of Columbia's capital structure?**

8 A: Attachment VVR-6 presents Columbia's embedded cost of long-term debt at  
9 February 28, 2024, and estimated cost of long-term debt at August 31, 2024 and  
10 December 31, 2025. Attachment VVR-6 also presents Columbia's estimated  
11 average cost of long-term debt for the thirteen-month period ending December 31,  
12 2025, which reflects an average debt cost rate of 4.88 percent. With respect to the  
13 Company's future planned issuances of long-term debt, I have referenced an  
14 estimated debt cost rate of 6.25 percent for the issuances expected to occur during  
15 the remainder of 2024, and a debt cost rate of 6.00 percent for those issuances  
16 expected to occur during 2025. The Company anticipates that these future debt  
17 issuances will be made on an intercompany basis to NiSource.

18 With regard to the short-term debt component of Columbia's capital  
19 structure, I have used a cost rate of 5.25 percent, which represents the Company's

1 estimate for the fully forecasted test period. The Company obtains its short-term  
2 debt financing through the NiSource money pool, which is supported by  
3 NiSource's commercial paper program and a revolving credit facility that  
4 NiSource has in place with a syndicate of banks. The interest rate estimate was  
5 determined based on the 1-month Secured Overnight Financing Rate ("SOFR"  
6 rate), plus an applicable margin, as reflected within the pricing grid in NiSource's  
7 revolving credit facility agreement]. Accordingly, for rate-setting purposes, I will  
8 adopt 4.88 percent as Columbia's cost of long-term debt, and 5.25 percent as  
9 Columbia's cost of short-term debt.

#### 10 **IV. COST OF EQUITY ESTIMATES**

##### 11 **A. Cost of Equity - General Approach**

12 **Q: Please describe the general approach you have taken in estimating the cost of**  
13 **equity for Columbia.**

14 **A:** In order to facilitate a thorough analysis of Columbia's cost of equity, I first  
15 conducted a comparative risk assessment to establish the risk relationships  
16 between Columbia and the three respective proxy groups. I then determined the  
17 indicated cost of equity for each of the respective proxy groups by applying three  
18 widely-recognized cost of equity models to the market and/or financial data of the  
19 proxy group companies. To estimate Columbia's cost of equity, I started with the  
20 indicated cost of equity for the respective proxy groups for each of the analytical

1 methods employed, and then determined if any further return adjustments were  
2 necessary based upon the results of my comparative risk assessment.

3 It should be noted that although the cost of equity cannot be directly  
4 observed, it can be estimated using a variety of analytical models, each of which  
5 attempt to explain and/or predict investor behavior. However, since investor  
6 expectations often differ and investors rely on a variety of information sources and  
7 financial models to make their investment decisions, no single analytical model  
8 can possibly capture the broader universe of investor expectations. Moreover,  
9 each financial model has its own practical shortcomings, either in the form of rigid  
10 underlying assumptions or required model inputs which are dependent upon the  
11 subjective judgment of the analyst. For these reasons, in *Risk and Return for*  
12 *Regulated Industries*, Villadsen, Vilbert, Harris and Kolbe present a compelling  
13 argument for the use of a variety of analytical methods in estimating a utility's cost  
14 of equity, and caution against overreliance on any one particular model, where the  
15 authors state:

16 It is important to recognize explicitly at the outset that models are  
17 imperfect. All models are simplifications of reality, and this is perhaps  
18 especially true of financial models. Because they cannot and do not  
19 capture all the dynamics and complexities of financial markets, asset  
20 pricing models can never perfectly determine or explain the actual  
21 prices we observe....There is no single, widely accepted, best pricing  
22 model – just as there is no consensus on some fundamental issues, such  
23 as the efficient market hypothesis (EMH). Analysts have a dizzying  
24 array of potential models at their disposal, and it must be  
25 acknowledged that cost of capital estimation continues to include art,

1 not just science. The generally recommended “best practice” is  
2 therefore to look at a totality of information from alternative  
3 methodologies.<sup>28</sup>

4 Parcell makes similar observations in *The Cost of Capital - A Practitioner’s Guide*,  
5 where he maintains the following:

6 Investor expectations differ and it is apparent that all investors do not  
7 rely upon the same information and models in making investment  
8 decisions. Consequently, no single model and model variant can be  
9 demonstrated to capture all investor expectations. Furthermore, no  
10 single model is so inherently precise that it can be relied on solely to the  
11 exclusion of other theoretically sound models....Each model has its  
12 own way of examining investor behavior, its own premises, and its own  
13 set of simplifications of reality....Investors clearly do not subscribe to  
14 any singular method, nor does the stock price reflect the application of  
15 any one single method by investors. Therefore, it is essential that  
16 estimates of investors’ required rate of return produced by one method  
17 be compared with those produced by other methods, and that all cost  
18 of equity estimates be required to pass fundamental tests of  
19 reasonableness and economic logic.<sup>29</sup>

20 **Q: Has the Commission historically supported the use of multiple analytical**  
21 **models in estimating a utility’s cost of equity?**

22 A: Yes. In its Order in Columbia’s 2021 rate proceeding (Case No. 2021-00183), the  
23 Commission stated the following:

24 Most recently in Case Nos. 2019-00271, 2020-00174 and 2020-  
25 00349/350, the Commission has discussed that it believes it is  
26 appropriate for utilities to present, and for the Commission to

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<sup>28</sup> Bente Villadsen, Michael J. Vilbert, Dan Harris and A. Lawrence Kolbe, *Risk and Return for Regulated Industries*, Academic Press, Elsevier Inc. (2017), at 38.

<sup>29</sup> David C. Parcell, *The Cost of Capital - A Practitioner’s Guide* (Society of Utility and Regulatory Financial Analysts, 2020 Edition, Copyrighted 2022), at 86.

1 evaluate, multiple methodologies to estimate ROEs. Each approach  
2 has its own strengths and limiting assumptions. As demonstrated in  
3 the respective ROE testimonies in this proceeding, there is  
4 considerable variation in both data and application within each  
5 modeling approach, which can lead to very different results. The  
6 Commission's role is to conduct a balanced analysis of all presented  
7 models, while giving weight to current economic conditions and  
8 trends.<sup>30</sup>

9 Therefore, consistent with the foregoing arguments and the Commission's stated  
10 preference, to ensure a thorough evaluation of Columbia's cost of equity, I have  
11 applied a variety of analytical models to the market and/or financial data of the  
12 proxy group companies.

13 **B. Discounted Cash Flow ("DCF") Analysis**

14 **Q: Please provide an overview of the DCF approach used to estimate the cost of**  
15 **equity.**

16 **A:** The DCF approach is a commonly-used valuation model, which is based on the  
17 fundamental premise that investors value financial assets on the basis of their  
18 expected future cash flows, discounted by an appropriate risk-adjusted rate of  
19 return. The model maintains that the market-determined price of a share of  
20 common stock or other financial asset will continually adjust until investors are

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<sup>30</sup> Case No. 2021-00183, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; Issuance of a Certificate of Public Convenience and Necessity; and Other Relief* (Ky. PSC, Dec. 28, 2021), Order at 33.

1 sufficiently compensated for the level of investment risk they bear. It is only at the  
2 point that investors have realized their required rate of return that valuation  
3 equilibrium will have been achieved. The objective of the DCF approach is to  
4 reproduce this iterative market valuation process in the form of a financial model.  
5 Considering that the price of a given share of common stock can be directly  
6 observed in the equity market, and that the stock's future dividends and capital  
7 gains can be estimated, the DCF model can be successfully rearranged to solve for  
8 the cost of common equity. It is this "rearranged" version of the DCF model that  
9 is commonly used in utility rate proceedings, as I will discuss later in my  
10 testimony.

11 **Q: What is the underlying theoretical basis for employing the DCF approach to**  
12 **value financial assets, and how has the DCF approach evolved over the years?**

13 A: The theoretical underpinnings of the DCF approach are consistent with classical  
14 valuation theory, which states that the intrinsic value of any security is a function  
15 of its future earnings power. Specifically, intrinsic value can be quantified as the  
16 present value of the security's future cash flows discounted at the appropriate risk-  
17 adjusted rate of return. This concept was first formally advanced by Fisher in *The*  
18 *Rate of Interest*<sup>31</sup>, and was further elaborated upon in his subsequent work, *The*  
19 *Theory of Interest*, wherein Fisher maintained:

---

<sup>31</sup> Irving Fisher, *The Rate of Interest*, (The Macmillan Company 1907).



1 Capital, in the sense of capital value, is simply future income  
2 discounted or, in other words, capitalized. The value of any  
3 property, or rights to wealth, is its value as a source of income and is  
4 found by discounting that expected income<sup>32</sup>.

5  
6 Fisher's seminal valuation concept, which was first articulated over a century ago,  
7 laid the foundation for modern versions of the DCF approach, which both  
8 investors and academics continue to rely upon today.

9 Almost a decade after *The Theory of Interest* was published, John Burr  
10 Williams expanded upon Fisher's earlier work in valuation theory in his classic  
11 publication, *The Theory of Investment Value* (1938). It was here that Williams first  
12 expressed in modern economic terms a fully developed DCF equation, which was  
13 intended to serve as a valuation model for common stocks. Although Williams  
14 emphasized that his DCF equation was a *dividend* discounting model rather than  
15 an earnings-based model, he also acknowledged that over the long run, the two  
16 approaches would produce equivalent valuation results. Indeed, upon  
17 introducing his DCF equation in *The Theory of Investment Value*, Williams explains:

18 Let us define the investment value of a stock as the present worth of  
19 all the dividends to be paid upon it....

20 ...

21 Most people will object at once to the foregoing formula for stocks  
22 by saying that it should be the present worth of future *earnings*, not  
23 future *dividends*. But should not earnings and dividends both give  
24 the same answer under the implicit assumptions of our critics? If  
25 earnings not paid out in dividends are all successfully reinvested at

---

<sup>32</sup> Irving Fisher, *The Theory of Interest*, (The Macmillan Company 1930), Part I, Chapter I, Section 7.

1 compound interest for the benefit of the stockholder, as the critics  
2 imply, then these earnings should produce dividends later; if not,  
3 then they are money lost....

4 ...

5 On analysis, therefore, it will be seen that no contradiction really  
6 exists between our formula using dividends and the common  
7 precept regarding earnings. How to estimate the future dividends  
8 for use in our formula is, of course, the difficulty<sup>33</sup>.

9 The DCF approach introduced by Williams included a general “long-form”  
10 equation, which reflected an ongoing series of dividend payments extending into  
11 the indefinite future, and a simplified constant growth version of the equation,  
12 which was later refined by Gordon and Shapiro<sup>34</sup>.

13 In subsequent years, Williams’ long-form DCF equation was adjusted to  
14 accommodate various forms of future cash flows, rather than only dividends, and  
15 evolved into a general purpose valuation model. This so-called “general DCF  
16 model” continues to be used today in a variety of applications extending beyond  
17 security valuation, including corporate finance decision support, real estate  
18 development, and other financial applications. However, when the general DCF  
19 model is employed to value common stocks, the following equation is utilized:

20 
$$P_0 = D_1/(1+K) + D_2/(1+K)^2 + D_3/(1+K)^3 + \dots + D_n/(1+K)^n \quad (\text{Equation 1.1})$$

---

<sup>33</sup> John Burr Williams, *The Theory of Investment Value*, (Cambridge, MA, Harvard University Press, 1938) 55, 57-58.

<sup>34</sup> Myron J. Gordon and Eli Shapiro, “Capital Equipment Analysis: The Required Rate of Profit,” *Management Science*, 3 (October 1956) 102-110.

1           Where:        $P_0$  = current market price of the stock,  
2  
                           $D_1$  = expected dividend at end of year 1, year 2, year 3, etc.,  
3  
                           $n$  = infinity,  
4  
                           $K$  = investors' expected return on common equity (the discount  
5  
                          rate).

6   **Q:    What form of the DCF model is used to estimate the cost of common equity in**  
7           **utility regulatory proceedings?**

8   A:    In practice, the general DCF model can be challenging to apply to common stock  
9           valuation, since the model requires that discrete dividend payments be estimated  
10          well into the distant future. However, if investors assume that future dividend  
11          payments will increase at a constant growth rate each year into perpetuity, the  
12          valuation process can be greatly simplified. Drawing upon the constant growth  
13          model developed by Williams, and later refined by Gordon and Shapiro, the  
14          following constant growth equation can be utilized in valuing common stocks:

15                            $P_0 = D_1 / (K - g)$            (Equation 1.2)

1           Where:        $P_0$  = current market price of the stock,  
2                            $D_1$  = expected dividends over the next year,  
3                            $K$  = investors' expected return on common equity (the discount  
4                           rate),  
5                            $g$  = expected dividend growth rate into perpetuity.

6           This simplified equation states that a company's stock price is determined by the  
7           present value of dividend payments occurring over the next year, plus all  
8           subsequent dividend payments growing at a constant annual rate, as discounted  
9           by the expected return on common equity. Although the constant growth model  
10          is conceptually viable and simplifies the process of estimating future dividend  
11          payments, the model is also premised upon strict underlying assumptions,<sup>35</sup>  
12          which are not always observed in reality.

13                   The constant growth equation reflected above can be rearranged to solve  
14          for " $K$ ," which yields the standard DCF formulation for estimating the cost of  
15          common equity, which is expressed as follows:

16

---

<sup>35</sup> The strict assumptions underlying the constant growth DCF model include: (i) dividends and earnings grow at the same constant growth rate (or constant average growth trend); (ii) book value per share and the stock price also grow at the same constant growth rate; (iii) investors expect the same rate of return (" $K$ ") in all future periods, implying no changes in risk and a flat yield curve; (iv) the discount rate, " $K$ ," must exceed the expected constant growth rate, " $g$ "; (v) a fixed dividend payout ratio will be maintained; (vi) a fixed price-earnings (" $P/E$ ") multiple will be maintained; (vii) dividends are only paid at the end of each year; and (viii) no external financing occurs, as growth is financed strictly through the retention of earnings (or alternatively, any new sales of stock only occur at book value). Despite the fact that these assumptions are not always reflective of reality, the constant growth model maintains its usefulness due in its ability to adequately explain investor behavior and the stock market valuation process.

1 
$$K = D_1/P_0 + g \quad (\text{Equation 1.3})$$

2 Where: Variables are as previously defined.

3 It is this standard form of the DCF model that is commonly used in utility rate  
4 proceedings. The model is intuitive in that it states that common stock investors  
5 have a total return requirement (“K”) which is comprised of a forward looking  
6 dividend yield component ( $D_1/P_0$ ), plus the expected growth rate of dividends  
7 (and/or stock price appreciation) into perpetuity (“g”). Considering that both  
8 components of the dividend yield ( $D_1$  and  $P_0$ ) can be readily observed through a  
9 variety of publicly-available sources, and that the investor expected growth rate  
10 can be estimated using a variety of approaches, the analyst can infer “K,” the  
11 required return on common equity.

12 **Q: What steps are involved in implementing the constant-growth DCF model for**  
13 **estimating the cost of common equity?**

14 A: Implementing the DCF model involves three essential steps. The first step is to  
15 determine the expected dividend yield component ( $D_1/P_0$ ), which is defined as  
16 dividends expected to be paid over the next twelve months ( $D_1$ ) divided by the  
17 current stock price ( $P_0$ ). From an investor’s perspective, the dividend yield  
18 represents *current income*. The second step is to estimate the long-term growth  
19 expectations of investors, or “g,” relative to the security’s future dividends and/or  
20 price appreciation. From the investor’s perspective, whether realized in the form

1 of higher future dividend payments, or in the form of stock price appreciation, the  
2 growth component represents *future income*. Considering that a strict  
3 interpretation of constant-growth theory requires that a *perpetual* growth rate be  
4 estimated, while the available sources of forward-looking growth estimates are  
5 limited in their forecast horizons, determining an appropriate growth estimate is  
6 the most challenging and controversial aspect of the DCF approach. The third and  
7 final step is simply to sum together the expected dividend yield component with  
8 the expected long-term growth component, to determine “K,” the investor  
9 required cost of common equity.

10 A detailed discussion of the steps I took in implementing the DCF constant  
11 growth model can be found in Appendix A to my testimony. Additionally,  
12 Appendix B discusses the treatment of “outlier” DCF results which do not meet  
13 threshold tests of reasonableness and economic logic. Appendix C discusses the  
14 importance of applying a financial risk adjustment to DCF estimates whenever the  
15 market-value equity capitalization level of the proxy group companies is  
16 materially different than the corresponding book-value capitalization levels.  
17 Finally, Appendix D discusses the importance of applying a flotation cost  
18 adjustment to the “baseline” cost of equity results under the DCF model.

1 **Q: What cost of equity estimates are indicated for the Gas LDC Group using the**  
2 **DCF approach?**

3 A: A detailed presentation of DCF results for each member of the Gas LDC Group is  
4 presented on pages 1 and 2 of Attachment VVR-7, and is also summarized in Table  
5 VVR-7 below. The average unadjusted DCF estimate for the Gas LDC Group  
6 ranged from 9.90 percent to 10.30 percent. The three unadjusted DCF estimates  
7 based upon earnings growth forecasts demonstrate a central tendency of  
8 approximately 10.15 percent. The DCF estimate based upon the 5-year and 10-  
9 year historical average earnings growth rate indicates an unadjusted cost of equity  
10 of 9.90 percent. On an overall basis, an unadjusted DCF estimate of 10.10 percent  
11 is indicated for the Gas LDC Group. As reflected in Table VVR-7, after making the  
12 required leverage and flotation cost adjustments to the unadjusted DCF estimate  
13 referenced above, the results of my analysis indicate a cost of equity of 10.44  
14 percent for the Gas LDC Group.

<b>Table VVR-7 Average DCF Estimates - Gas LDC Group</b>	
<b>Calculation Method</b>	<b>Cost of Equity</b>
Earnings Forecast	
Yahoo Finance	10.10%
Zacks	10.00%
Value Line	10.30%
Historical Earnings Growth Rate	9.90%
Unadjusted DCF Estimate	10.10%
Flotation Cost Adjustment (4 basis points)	x 1.0042%
Subtotal	10.14%
Plus: Market Value-Book Value Financial Risk Adjustment*	0.30%
Indicated DCF Estimate	= 10.44%

1

2 **Q: In conducting your cost of equity evaluation, have you considered the concerns**  
3 **expressed by the Commission in its Order from Columbia’s 2021 rate**  
4 **proceeding (Case No. 2021-00183) with respect to financial risk adjustments and**  
5 **flotation cost adjustments?**

6 **A:** Yes, I have. In Columbia’s last rate order (Case No. 2021-00183) the Commission  
7 indicated that it has previously rejected financial risk and flotation cost  
8 adjustments in utility rate proceedings in the Commonwealth. While I do  
9 understand the Commission’s concerns regarding these adjustments, it is my  
10 opinion that these adjustments are entirely necessary to properly reflect the return  
11 expectations of utility stock investors. I will discuss the rationale for a financial



1 risk and flotation cost adjustment in Appendix C and Appendix D to my direct  
2 testimony, respectively. However, in recognition of the Commission's stated  
3 concerns with regard to these adjustments, I have presented my DCF estimates of  
4 the cost of equity on both an adjusted basis and an unadjusted basis for all three  
5 of the proxy groups I evaluated, as is reflected in Table VVR-7, Table VVR-8 and  
6 Table VVR-9, respectively.

7 **Q: What cost of equity estimates were indicated for the Combination Utility Group**  
8 **using the DCF approach?**

9 A: DCF estimates for each member of the Combination Utility Group are presented  
10 on pages 1 and 2 of Attachment VVR-8, and are summarized in Table VVR-8  
11 below. The unadjusted DCF estimates for the Combination Utility Group ranged  
12 from 9.50 percent to 10.00 percent. The three unadjusted DCF estimates based  
13 upon earnings growth forecasts demonstrate a central tendency of approximately  
14 9.75 percent. The DCF estimate based upon the 5-year and 10-year historical  
15 average earnings growth rate indicates an unadjusted cost of equity of 10.00  
16 percent. On an overall basis, an unadjusted DCF estimate of 9.80 percent is  
17 indicated for the Combination Utility Group. After making the required leverage  
18 and flotation cost adjustments to the unadjusted DCF estimate, the results of my  
19 analysis indicate a cost of equity of 10.14 percent for the Combination Utility  
20 Group.

1

<b>Table VVR-8</b> <b>Average DCF Estimates</b> <b>Combination Utility Group</b>	
<b>Calculation Method</b>	<b>Cost of Equity</b>
Earnings Forecast	
Yahoo Finance	9.80%
Zacks	10.00%
Value Line	9.50%
Historical Earnings Growth Rate	10.00%
Unadjusted DCF Estimate	9.80%
Flotation Cost Adjustment (4 basis points)	x 1.0042%
Subtotal	9.84%
Plus: Market Value-Book Value Financial Risk Adjustment*	0.30%
Indicated DCF Estimate	= 10.14%

2

3 **Q: What cost of equity estimates were indicated for the Non-Regulated Group**  
4 **using the DCF approach?**

5 **A:** DCF estimates for each member of the Non-Regulated Group are presented on  
6 pages 1 and 2 of Attachment VVR-9, and are summarized in Table VVR-9 below.

7 After eliminating both low-end and high-end outlier results, the unadjusted DCF

8 estimates for the Non-Regulated Group ranged from 10.40 percent to 11.70

9 percent. The three unadjusted DCF estimates based upon earnings growth

10 forecasts demonstrate a central tendency of approximately 10.70 percent. The DCF

11 estimate based upon the 5-year and 10-year historical average earnings growth

1 rate indicates an unadjusted cost of equity of 11.70 percent. On an overall basis, an  
 2 unadjusted DCF estimate of 10.80 percent is indicated for the Non-Regulated  
 3 Group. After making the required leverage and flotation cost adjustments to this  
 4 estimate, the results of my DCF analysis indicate a cost of equity of 11.15 percent  
 5 for the Non-Regulated Group.

6

<b>Table VVR-9</b>	
<b>Average DCF Estimates – Non-Regulated Group</b>	
<b>Calculation Method</b>	<b>Cost of Equity</b>
Earnings Forecast	
Yahoo Finance	10.40%
Zacks	10.70%
Value Line	11.00%
Historical Earnings Growth Rate	11.70%
Unadjusted DCF Estimate	10.80%
Flotation Cost Adjustment (5 basis points)	x 1.0042%
Subtotal	10.85%
Plus: Market Value-Book Value Financial Risk Adjustment*	0.30%
Indicated DCF Estimate	= 11.15%

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20 Consistent with established regulatory principles, authorized returns for  
 21 regulated utilities should be similar to returns offered by comparable-risk firms  
 22 operating in the competitive marketplace, the latter of which is demonstrated in  
 23 Table VVR-9 above.

1           **C.     Capital Asset Pricing Model (“CAPM”) Analysis**

2   **Q:     Please provide an overview of the CAPM and the theoretical basis for using it**  
3           **to estimate a utility’s cost of equity.**

4   **A:**     The CAPM is a market-based risk and return investment model which derives its  
5           theoretical underpinnings from both Capital Market Theory and Modern Portfolio  
6           Theory (“MPT”).<sup>36</sup> Originally developed by William Sharpe in the early 1960s for  
7           investment analysis purposes, the CAPM is considered an ex-ante, forward-  
8           looking model which recognizes that investors are generally risk-averse and will  
9           demand higher returns in exchange for assuming higher levels of investment risk.

10          The traditional CAPM equation is expressed as follows:

11  
12                           
$$K = R_F + \beta(R_M - R_F) \qquad \text{(Equation 1.4)}$$
  
13

14  
15          Where:        K = Required rate of return for a stock;  
16                           R<sub>F</sub> = Expected risk-free rate of return;  
17                           β = Beta, or systematic risk of a stock; and  
18                           R<sub>M</sub> = Expected return for the overall stock market.  
19

20          The investor required rate of return (K) indicated by the CAPM is equal to the  
21          expected risk-free rate of return (R<sub>F</sub>) plus a risk premium which is proportional to

---

<sup>36</sup> MPT, which was developed by Harry Markowitz in the early 1950’s, heavily influenced William Sharpe’s development of the CAPM. MPT advanced the concept of an “efficient frontier” of dominating investment portfolios, which provided the highest rate of return possible for a given level of investment risk, as measured by the portfolio’s covariance of returns. Essential concepts from MPT which influenced the development of the CAPM included the risk and return tradeoff relationship, and the value of diversification for eliminating firm-specific investment risk. Markowitz and Sharpe both earned the Nobel Prize in Economics in 1990 for their body of work relative to these classic financial theories.

1 the level of systematic risk implicit in the security being evaluated. Systematic  
2 risk, also referred to as market risk, is the sole risk element found within the  
3 CAPM, and refers to the variability of overall stock market returns, which are  
4 largely influenced by socioeconomic and political trends. It is only this systematic  
5 risk which commands a return premium within the CAPM, as a critical  
6 assumption underlying the model is that investors have already eliminated firm-  
7 specific investment risk in their investment portfolios via diversification.

8           Within the CAPM framework, an individual stock's contribution to the  
9 systematic risk of a given portfolio is indicated by the stock's beta ( $\beta$ ) coefficient.  
10 In essence, the beta coefficient measures the co-variability of the price movements  
11 of an individual stock versus the price movements of the total market portfolio.  
12 The beta of the market portfolio is equal to 1.0, which reflects a level of variability  
13 consistent with the overall stock market. Stocks with beta values *lower* than 1.0  
14 have a lower expected variability and therefore less systematic risk than the  
15 overall market, while stocks with betas *higher* than 1.0 have a higher expected  
16 variability and thus greater systematic risk than the overall market. To determine  
17 the investor-required risk premium for an individual stock, the difference between  
18 the expected market return ( $R_M$ ) and the expected risk-free rate of return ( $R_F$ ),  
19 which is defined as the market risk premium ( $R_M - R_F$ ), is proportionately adjusted  
20 based upon the stock's beta. Lastly, the investor required rate of return ( $K$ ) is

1 determined by adding the expected risk-free rate of return to the stock-specific risk  
2 premium.

3 Much like other analytical models including the DCF model, the CAPM is  
4 premised upon strict underlying assumptions, which are not always observed in  
5 reality.<sup>37</sup> Nonetheless, the model still possesses useful explanatory and predictive  
6 abilities, as it has been consistently demonstrated that beta is both positively and  
7 linearly correlated to security returns. At the same time, as I will discuss later in  
8 my testimony, empirical studies have also demonstrated that the risk-return  
9 relationship indicated by the CAPM, as graphically depicted by the Security  
10 Market Line (“SML”), is in reality not as steeply sloped as the model implies. In  
11 fact, the empirical evidence has shown that the implied y-axis intercept of the SML  
12 is actually higher, while the slope of the SML is actually flatter than what is  
13 predicted by the traditional CAPM. The implication of these findings is that cost  
14 of equity estimates derived from the traditional CAPM will tend to underestimate  
15 the investor-required rate of return for lower beta stocks, including gas utility  
16 stocks, absent an adjustment to the traditional model.

---

<sup>37</sup> The strict assumptions underlying the CAPM include: (i) security markets are highly efficient and consistently reflect the true value of a given security; (ii) investors will always pursue their own best economic self-interest, including the maximization of profit and end-of-period wealth; (iii) all investors have the same rate of return expectations; (iv) all investors hold diversified investment portfolios; and (v) investors are not subject to taxes, transaction costs, short-selling restrictions or borrowing restrictions.

1 **Q: Is the CAPM commonly used to estimate the cost of equity, and does it**  
2 **influence the return expectations of investors?**

3 A: Yes, the CAPM is a widely-referenced method for estimating the cost of equity  
4 among investment professionals, academics, and corporate finance departments  
5 and, therefore, influences the return expectations of investors. According to the  
6 *Ibbotson® SBBI® Valuation Yearbook*:

7 The capital asset pricing model (CAPM) is a simple and elegant  
8 model that describes the expected (future) rate of return on any  
9 security or portfolio of securities. It is among the most widely used  
10 techniques to estimate the cost of equity<sup>38</sup>.

11 Further evidence of the CAPM's popularity as a cost of equity analytical model is  
12 found in *Corporate Finance: A Focused Approach*, where Ehrhardt and Brigham state:

13 Recent surveys found that the CAPM approach is by far the most  
14 widely used method. Although most firms use more than one  
15 method, almost 74% of respondents in one survey, and 85% in the  
16 other, used the CAPM<sup>39</sup>.

17 Considering the widespread acceptance of the CAPM in both investment  
18 management and academic settings, there can be no doubt that the CAPM exerts  
19 significant influence over the return expectations of investors.

20

21

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<sup>38</sup> *Ibbotson® SBBI® 2013 Valuation Yearbook* (Morningstar, Inc.) at 43.

<sup>39</sup> Michael Ehrhardt and Eugene Brigham, *Corporate Finance: A Focused Approach*, (South-Western Cengage Learning, 2008) at 303.

1 **Q: In structuring your CAPM analysis, what approach did you take in estimating**  
2 **the market risk premium expectations of investors?**

3 A: To ensure a thorough and comprehensive evaluation of the risk premium  
4 expectations of investors, I have completed market risk premium analyses on both  
5 a prospective basis and on a historical basis. With regard to my prospective  
6 analysis, I have evaluated forward-looking indicators of the market return  
7 expectations of investors, along with time-horizon matched forecasts of the risk-  
8 free rate of return. As for my historical analysis, I have relied upon the widely-  
9 referenced historical returns data reported by the Kroll *Cost of Capital Navigator* for  
10 the period between 1926 and 2023.

11 **Q: What approach did you take in estimating the prospective market return**  
12 **expectations of investors?**

13 A: To estimate the prospective market return expectations of investors, or “R<sub>M</sub>,” I  
14 have completed forward-looking DCF analyses for both the S&P 500 Index and the  
15 Value Line 1,700 stock universe. The results of these DCF analyses, which have  
16 been consistently applied to the Gas LDC Group, Combination Utility Group and  
17 Non-Regulated Group, are presented on page 1 of Attachment VVR-11. These  
18 results are also summarized as follows:

19 DCF Estimate of Market Return for the S&P 500 Index

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21 1.66% (D/P) + 10.84% (g) = 12.51% (R<sub>M</sub>)(subject to rounding)



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Where: D/P = expected dividend yield over the next 12 months;  
g = long-term earnings growth rate estimate;  
R<sub>M</sub> = expected return of the market portfolio.

The DCF results for the Value Line 1,700 stock universe are summarized as follows:

DCF Estimate of Market Return for the Value Line 1,700 Stock Universe

$$2.22\% (D/P) + 8.34\% (g) = 10.55\% (R_M) \text{ (subject to rounding)}$$

Based upon the average results of the above DCF analyses for the S&P 500 Index and the Value Line 1,700 stock universe, an 11.53 percent prospective market rate of return is indicated, which I have applied to each of the respective proxy groups.

**Q: What approach did you take in estimating the prospective risk-free rate of return expectations of investors?**

A: When discussing appropriate proxies for the risk-free rate of return in *Modern Regulatory Finance*, a widely-referenced authoritative guide on utility cost of capital matters, Roger A. Morin makes the following observations:

...investors price securities on the basis of long-term expectations, including interest rates. Cost of capital models are prospective (i.e., forward-looking) in nature and must take into account current market expectations for the future because investors price securities on the basis of long-term expectations, including interest rates. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using data that reflects the expectations of actual investors in the market. While investors examine

1 history as a guide to the future, it is the expectations of future events  
2 that influence security values and the cost of capital.

3 ....

4 The empirical evidence demonstrates that stock prices do indeed reflect  
5 prospective financial input data. Moreover, forecasted interest rates  
6 are more relevant than current spot rates since in a regulatory setting  
7 rates are being set for the future. In the same way that one relies on  
8 forecast growth rates in DCF analyses as we shall see in subsequent  
9 chapters, one should rely on interest rate forecasts as proxies for the  
10 risk-free rate in the CAPM analysis<sup>40</sup>

11 Indeed, considering that since the time of the 2008-09 financial crisis, the interest  
12 rate environment in the U.S. has been heavily influenced by the Fed's  
13 unprecedented monetary policy interventions<sup>41</sup>, the importance of expectational  
14 inputs (i.e., interest rate forecasts) is more evident than ever. This has recently  
15 become more apparent in view of the recent marked increase in U.S. interest rates  
16 during 2022 and 2023, over which time the U.S. inflation rate reached its highest  
17 level in the past 41 years (since 1981). Meanwhile, in an effort to rein-in the multi-  
18 decade high U.S. inflation rate, the Federal Reserve Board has raised the Federal  
19 Funds target rate on eleven occasions since March 2022 (from 0.00%-0.25% to  
20 5.25%-5.50%), and also continues to gradually liquidate its security holdings that  
21 were acquired under its quantitative easing initiatives.

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<sup>40</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books LLC, 2021) at 171-172.

<sup>41</sup> As has been widely-reported by the financial media in recent years, the Fed's unprecedented monetary policy interventions, including the Fed's quantitative easing programs, were intentionally designed to put downward pressure on long-term interest rates in order to provide a further stimulus to U.S. economic activity.

1           Moreover, the use of interest rate forecasts appropriately synchronizes the  
2           time horizon of the expected risk-free rate of return with the prospective market  
3           return I have employed within my analysis. Therefore, as a proxy for the risk-free  
4           rate of return, I have evaluated short-to-intermediate term forecasts of the 30-year  
5           U.S. Treasury Bond yield from the Blue Chip Financial Forecasts, a highly  
6           reputable source of interest rate forecasts. In selecting the appropriate “risk-free”  
7           security to evaluate, it should be noted that despite the credit rating downgrades  
8           that have been implemented by both Fitch Ratings (2023) and Standard & Poor’s  
9           (2011) for the long-term sovereign debt rating of the United States (from AAA to  
10          AA+), U.S. Treasury securities remain the closest thing to a risk-free financial asset.  
11          This is largely due to the U.S. government’s taxing authority and ability to create  
12          new currency. From a duration or tenor standpoint, 30-year Treasury Bonds most  
13          closely parallel the investment characteristics of common stock, since both are  
14          considered long-term, if not permanent, capital. Furthermore, in the absence of  
15          market anomalies, 30-year Treasury yields, like common stocks, reflect the long-  
16          term inflation expectations of investors, and are subject to less volatility than  
17          shorter-dated Treasury securities. Based upon an evaluation of interest rate  
18          forecasts available from the Blue Chip Financial Forecasts, my analyses reference  
19          a rate of return of 4.21 percent as a reasonable proxy for the prospective risk-free  
20          rate of return.

1 **Q: What prospective market risk premium is indicated by your analysis?**

2 A: Based upon a prospectively determined market rate of return of 11.53 percent and  
3 a risk-free rate of return of 4.21 percent, a prospective market risk premium of 7.32  
4 percent is indicated ( $11.53\% - 4.21\% = 7.32\%$ ).

5 **Q: What average historical market risk premium is indicated by your analysis?**

6 A: Based upon historical returns data published in the Kroll *Cost of Capital Navigator*  
7 for the period 1926-2023, a 7.17 percent historical market risk premium is  
8 indicated.

9 **Q: Based upon your informed judgment, what level of market risk premium have**  
10 **you applied to your CAPM analysis?**

11 A: As previously stated, to ensure a thorough and comprehensive evaluation of the  
12 risk premium expectations of investors, I have conducted market risk premium  
13 analyses on both a prospective basis and a historical basis. Therefore, by using the  
14 historical average risk premium as reported by the Kroll *Cost of Capital Navigator*  
15 in combination with the prospectively determined risk premium discussed above,  
16 I have taken a balanced approach in estimating the risk premium expectations of  
17 investors. Accordingly, the expected market risk premium indicated by my  
18 analysis is 7.25 percent ( $(7.32\% + 7.17\%) / 2 = 7.25\%$ ).

19 **Q: How did you derive the beta values employed within your CAPM analysis?**

20 A: In determining the appropriate betas to use for each of the respective proxy

1 groups, I initially evaluated published betas from the Value Line Investment  
2 Survey, a widely-referenced source of beta values in utility regulatory  
3 proceedings. As illustrated in Table VVR-10 below, the average Value Line betas  
4 for the Gas LDC Group, Combination Utility Group and Non-Regulated Group  
5 are 0.88, 0.89 and 0.85, respectively. However, published betas from sources such  
6 as Value Line should not be directly applied to the CAPM, unless the resulting  
7 cost of equity estimate will be applied to a market value-based capital structure.  
8 This is because published betas are derived from the market value price  
9 movements of individual stocks and total market indices, and thus reflect the level  
10 of financial risk associated with a market value-based capitalization. In the utility  
11 regulatory setting, published betas must be adjusted to reflect the higher relative  
12 financial risk associated with a book value capital structure, which is typically  
13 utilized for rate-setting purposes. In order to derive betas and a CAPM-based cost  
14 of equity that is relevant to Columbia's book-value based rate-setting capital  
15 structure, I have utilized a beta-adjustment technique known as the Hamada  
16 method.<sup>42</sup>

17 Using the Hamada equation, I first "unlevered" the average Value Line beta

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<sup>42</sup> See, Robert S. Hamada, The Effect of the Firm's Capital Structure on the Systematic Risk of Common Stocks," *The Journal of Finance*, 27 (May 1972) at 435-452.

1 for the Gas LDC Group using the group's average market value capital structure<sup>43</sup>,  
 2 which yielded an unlevered beta possessing only a business risk component.  
 3 Next, I "re-levered" the unlevered beta based upon the Company's book-value  
 4 based rate-setting capital structure<sup>44</sup>, thereby reintroducing an appropriate level  
 5 of financial risk into the beta. The Hamada equation and results of my beta  
 6 adjustment analysis are as follows:

$$\beta_L = \beta_U [1 + D/E (1 - t) + P/E] \quad \text{(Equation 1.5)}$$

8 Where:  $\beta_L$  = levered beta;  
 9  $\beta_U$  = unlevered beta;  
 10 D = debt/capital ratio;  
 11 E = common equity/capital ratio;  
 12 P = preferred stock/capital ratio;  
 13 t = income tax rate.

14 **Gas LDC Group**

15 Value Line Beta 0.88 = .58206 [1 + (40.0%/59.0%)(1-0.27) + (1.0%/59.0%)]  
 16 Re-Levered Beta 0.935 = .58206 [1 + (45.4%/54.6%)(1-0.27)]  
 17  
 18

---

<sup>43</sup> Reflects permanent capitalization, which excludes short-term debt and current maturities of long-term debt.

<sup>44</sup> As adjusted to reflect permanent capitalization, which excludes short-term debt and current maturities of long-term debt.

1            **Combination Utility Group**

2            Value Line Beta      0.89 = .58867 [1 + (40.0%/59.0%)(1-0.27) + (1.0%/59.0%)]

3            Re-Levered Beta      0.946 = .58867 [1 + (45.4%/54.6%)(1-0.27)]

4            **Non-Regulated Group**

5            Value Line Beta      0.85 = .56222 [1 + (40.0%/59.0%)(1-0.27) + (1.0%/59.0%)]

6            Re-Levered Beta      0.903 = .56222 [1 + (45.4%/54.6%)(1-0.27)]

7

<b>Table VVR-10</b>			
<b>Summary of Results – Hamada Method</b>			
	<b>Gas LDC Group</b>	<b>Comb. Utility Group</b>	<b>Non-Reg. Group</b>
Value Line Beta	0.88	0.89	0.85
Unlevered Beta	0.582	0.589	0.562
Re-Levered Beta	0.935	0.946 <sup>45</sup>	0.903 <sup>46</sup>

8

9            In order to derive cost of equity estimates which are relevant to Columbia’s book-

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<sup>45</sup> The magnitude of the difference between the average market value capital structure and the average book value capital structure for both the Combination Utility Group and the Non-Regulated Group is significantly greater than the difference between the average market value and book value capital structures of the Gas LDC Group. As such, under the Hamada equation, the required upward beta adjustment for the Combination Utility Group and the Non-Regulated Group would be significantly greater than that of the Gas LDC Group. To recognize this disparity and make the Hamada method adjustment relevant to a typical gas utility company capital structure, I have applied the Hamada equation to both the Combination Utility Group and the Non-Regulated Group’s average Value Line beta using the average capital structure ratios of the Gas LDC Group, which yielded a re-levered beta of 0.946 and 0.903, respectively. Utilizing this approach ensures a more conservative analysis.

<sup>46</sup> Id.

1 value based rate-setting capital structure, I have applied the above re-levered betas  
2 to my CAPM analyses. Specifically, I have applied re-levered betas of 0.935, 0.946,  
3 and 0.903 for the Gas LDC Group, Combination Utility Group and Non-Regulated  
4 Group, respectively.

5 **Q: When applying the CAPM, what variants of the CAPM should be evaluated to**  
6 **fully reflect the return expectations of investors?**

7 A: Multiple academic studies have advocated the use of a size-premium adjustment  
8 to the traditional CAPM.<sup>47</sup> These studies have revealed that small capitalization  
9 stocks have historically earned returns that are materially higher than the returns  
10 predicted by the CAPM. Indeed, the empirical research strongly suggests that  
11 beta, or systematic risk alone, does not fully explain the higher relative returns  
12 earned by small capitalization stocks. The *2023 SBBI Yearbook* explains the size  
13 phenomenon as follows:

14 One of the most remarkable discoveries of modern finance is the  
15 finding of a relationship between company size and return,  
16 generally referred to as the “size effect”. The size effect is based on  
17 the empirical observation that companies of smaller size tend to have  
18 higher returns than do larger companies.

19 ....

20 The company size phenomenon is remarkable in several ways. First,  
21 the greater risk of small-cap stocks does not, in the context of the  
22 capital asset pricing model, fully account for their higher returns  
23 over the long term. In the capital asset pricing model (CAPM) only

---

<sup>47</sup> See Michael Annin, “Equity and the Small-Stock Effect,” *Public Utilities Fortnightly*, October 15, 1995, 42-43; and, Eugene F. Fama and Kenneth R. French, “The Cross-Section of Expected Stock Returns,” *The Journal of Finance*, 48 (June 1992), at 427-465.



1 systematic, or beta risk, is rewarded; small-cap stock returns have  
2 exceeded those implied by their betas.

3 ....

4 The increased risk faced by investors in small stocks is quite real<sup>48</sup>.

5  
6 Therefore, to correct for the inherent deficiencies of the CAPM relative to smaller  
7 capitalization stocks, another Kroll LCC product offering, the *Cost of Capital*  
8 *Navigator*, reports size premiums, which can be used in conjunction with the  
9 CAPM to more accurately estimate the return expectations of investors relative to  
10 small and mid-capitalization stocks. As reflected in the *Cost of Capital Navigator*,  
11 based upon an average market capitalization of \$6.7 billion, the Gas LDC Group  
12 would be classified as a Decile 4 portfolio and assigned a size premium of 0.64  
13 percent. Based on an average market capitalization of \$16.7 billion, the  
14 Combination Utility Group would be classified as a Decile 2 portfolio, and  
15 assigned an average size premium of 0.46 percent. Lastly, based upon an average  
16 market capitalization of \$112.3 billion, the Non-Regulated Group would be  
17 classified as a large-cap, Decile 1 Portfolio, and assigned a size premium of *negative*  
18 -0.06 percent. In the absence of these size premium adjustments, the results  
19 indicated by the traditional CAPM for the Gas LDC Group and the Combination  
20 Utility Group would *understate* the return expectations of investors, while with

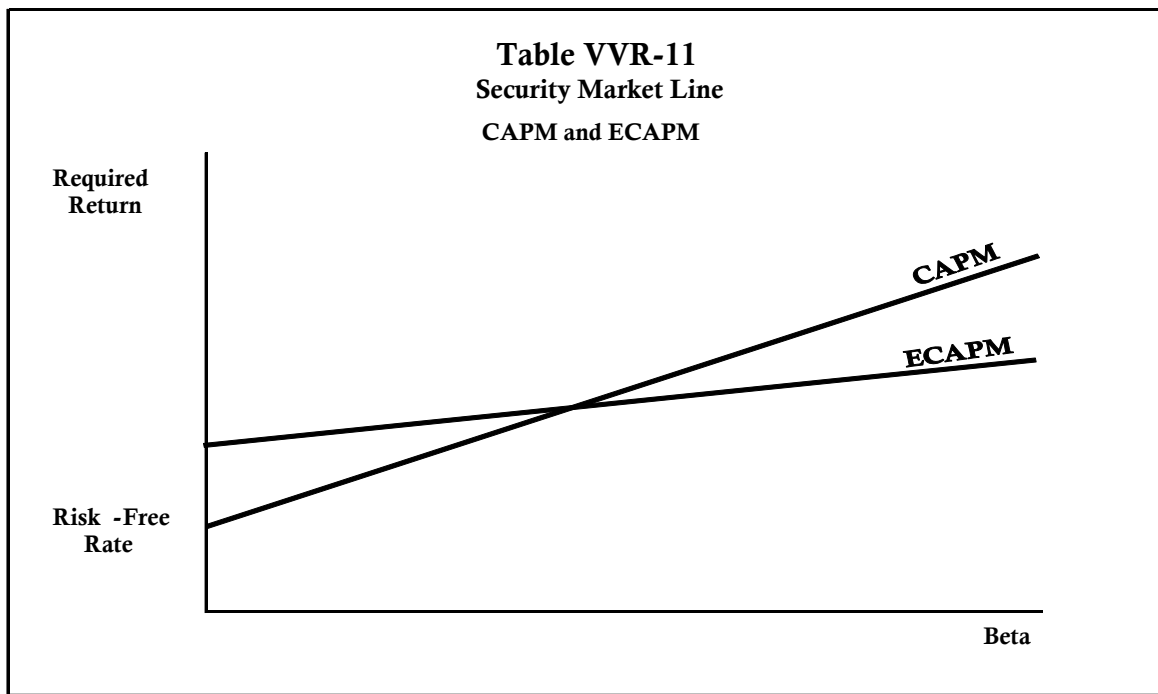
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<sup>48</sup> 2023 SBBI Yearbook, (Kroll LLC), at 143, 145 and 147.

1 respect to the Non-Regulated Group, the traditional CAPM would have the  
2 tendency to *overstate* the return expectations of investors.

3 **Q: Have you considered any other variants of the CAPM?**

4 **A:** Yes. I have also considered the ECAPM within my evaluation. The ECAPM model  
5 is based upon extensive empirical evidence that the risk-return relationship  
6 between beta and stock returns, as graphically depicted by the Security Market  
7 Line reflected in Table VVR-11 below, is actually flatter than what is predicted by  
8 the traditional CAPM.



19

20 In a 1989 empirical study conducted by Morin, a simplified version of the ECAPM

1 was derived and is expressed as follows:<sup>49</sup>

$$2 \quad K = R_F + 0.25 (R_M - R_F) + 0.75 \beta (R_M - R_F)$$

3 In essence, the ECAPM places a 25 percent weighting on the overall market risk  
4 premium and a 75 percent weighting on the company specific, beta-adjusted risk  
5 premium. The use of similar forms of the ECAPM has been recognized by state  
6 public service commissions, including the Montana Public Service Commission,  
7 New York Public Service Commission and the Regulatory Commission of Alaska.  
8 The results of my ECAPM analysis for the Gas LDC Group, Combination Utility  
9 Group and Non-Regulated Group are presented in pages 2, 3 and 4 of Attachment  
10 VVR-11, respectively, and are also summarized in Table VVR-12 below.

11 **Q: What were the results of your application of the CAPM, including the variants**  
12 **of the model you evaluated?**

13 A: A detailed presentation of the results of my CAPM analysis for the Gas LDC  
14 Group, Combination Utility Group and Non-Regulated Group are presented in  
15 Attachment VVR-11, and are also summarized in Table VVR-12 below. Although  
16 substantial empirical evidence supports the use of both the CAPM with size  
17 adjustments and the ECAPM, I have incorporated all three model variants into my  
18 evaluation, including the traditional CAPM, in determining the CAPM-indicated

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<sup>49</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books, LLC), at 220-222.

1 cost of equity for each of the respective proxy groups.

2

<b>Table VVR-12 CAPM Results by Model Variant</b>			
<b>Model Variant</b>	<b>Gas LDC Group</b>	<b>Comb. Utility Group</b>	<b>Non-Reg. Group</b>
Traditional CAPM	10.98%	11.06%	10.75%
+ Flotation adjustment	0.04%	0.04%	0.05%
Traditional CAPM	11.02%	11.10%	10.80%
CAPM (with size adj.)	11.62%	11.52%	10.69%
+ Flotation adjustment	0.04%	0.04%	0.05%
CAPM (with size adj.)	11.66%	11.56%	10.74%
Empirical CAPM	11.10%	11.16%	10.93%
+ Flotation adjustment	0.04%	0.04%	0.05%
Empirical CAPM	11.14%	11.20%	10.98%

3 These results, which incorporate the appropriate flotation cost adjustment,  
4 indicate a CAPM-derived cost of equity having a central tendency of around 11.25  
5 percent for the Gas LDC Group, 11.30 percent for the Combination Utility Group,  
6 and 10.85 percent for the Non-Regulated Group.

7 **D. Risk Premium Method (“RPM”) Analysis**

8 **Q: Please provide an overview of the RPM and the theoretical basis for using it to**  
9 **estimate a utility’s cost of equity.**

10 **A: The RPM is based upon the fundamental premise that a company’s cost of**

1 common equity is greater than its prospective cost of debt, due to the additional  
2 risks associated with investing in common stocks. The most important of these  
3 risks is residual claim risk, which arises due to the subordinated position of  
4 common stockholders relative to bondholders and preferred stockholders. In  
5 essence, common shareholders stand “last in line” with respect to the distribution  
6 of a company’s earnings, since common stock dividends are paid only after  
7 contractually required debt service payments and discretionary preferred  
8 dividend payments have been made. The same priority of claims also applies to  
9 asset-sale proceeds in the event of a bankruptcy liquidation scenario, where  
10 common shareholders typically only recover a small fraction, if any, of their  
11 original investment. As compensation for bearing these additional risks, common  
12 stock investors demand an equity risk premium over and above a company’s cost  
13 of debt. Considering that the equity risk premium is a forward-looking concept,  
14 it must be estimated on the basis of investor expectations, and cannot be directly  
15 observed. Once the expected risk premium has been estimated, it can be added to  
16 the company’s prospective cost of debt to estimate the cost of common equity, as  
17 follows:

$$K = C_D + P_R$$

19  
20 Where:  $K$  = expected cost of common equity;  
21  $C_D$  = company’s prospective cost of debt;

1  $P_R$  = expected equity risk premium.

2 **Q: Is the RPM commonly used to estimate the cost of equity and does it influence**  
3 **the return expectations of investors?**

4 A: Yes, the RPM is a widely-referenced cost of equity model among investors,  
5 analysts and academics, and therefore influences investor return expectations.  
6 Evidence of the popularity of the RPM is found in *Corporate Finance: A Focused*  
7 *Approach*, where Ehrhardt and Brigham state that “three methods typically are  
8 used” in estimating the cost of common equity, one of which is the RPM<sup>50</sup>.

9 **Q: How did you approach your RPM analysis?**

10 A: In applying the RPM to the three respective proxy groups, I employed a virtually  
11 identical approach, as only a few minor adjustments were required for the Non-  
12 Regulated Group. In essence, my approach involved estimating the prospective  
13 long-term bond yields ( $C_D$ ) for each of the proxy groups based upon their average  
14 credit ratings, and then estimating the appropriate equity risk premium ( $P_R$ ) for  
15 each of the three groups. Once these two components were derived for each of the  
16 proxy groups, they were simply added together to arrive at the RPM-indicated  
17 cost of equity. My comprehensive RPM analysis is presented within Attachment  
18 VVR-12. Summary results for the Gas LDC Group, Combination Utility Group and

---

<sup>50</sup> M. Ehrhardt and E. Brigham, *Corporate Finance: A Focused Approach* (South-Western Cengage Learning, 2008), at 294.

1 the Non-Regulated Group are presented on pages 1, 7 and 9 of Attachment VVR-  
2 12, respectively. A detailed discussion of the RPM results for the Gas LDC Group  
3 is presented herein. Quantitative results for the Combination Utility Group and  
4 Non-Regulated Group are presented within pages 7-10 of Attachment VVR-12.

5 **Q: How did you derive the 5.82 percent prospective bond yield for the Gas LDC**  
6 **Group?**

7 A: The bond yields referenced in the RPM must appropriately reflect the forward-  
8 looking return expectations of investors. For this reason, in determining the “CD”  
9 component of the RPM equation, I have employed a forward-looking long-term  
10 bond yield for the Gas LDC Group based upon the Group’s average long-term  
11 credit ratings of “A-” from S&P, and “A3” from Moody’s. As reflected on page 1  
12 of Attachment VVR-12, this was accomplished by first evaluating forecasted bond  
13 yields for Aaa rated corporate bonds, and then making the necessary credit spread  
14 adjustments to reflect the higher level of default risk associated with “A-/A3” rated  
15 utility bonds.

16 As reflected on pages 1 and 2 of Attachment VVR-12, the Blue Chip  
17 Financial Forecasts consensus forecast for Aaa corporate bond yields is 5.02  
18 percent for the 2024-2028 period. An upward adjustment of 0.70 percent was  
19 required to reflect the credit spread differential between Aaa rated corporate  
20 bonds and A rated utility bonds, both of which reflect Moody’s generic ratings

1 categories. A further upward adjustment of 0.10 percent was also required to  
2 reflect the credit spread differential between the generic rating category of "A"  
3 and the more precise "A-" rating from S&P and "A3" rating from Moody's.  
4 Additional information supporting both of these credit spread adjustments can be  
5 found within pages 1 and 3 of Attachment VVR-12. The prospective bond yield  
6 for the Gas LDC Group was derived by adding both of the aforementioned credit  
7 spread adjustments to the prospective Aaa corporate bond yield, which resulted  
8 in a 5.82 percent prospective bond yield.

9 **Q: What general approach have you taken in estimating the expected equity risk**  
10 **premium for the Gas LDC Group?**

11 A: Consistent with established practices, I have conducted equity risk premium  
12 analyses using both the total market approach and the public utility index  
13 approach. The total market approach is considered an "indirect" approach, since  
14 an equity risk premium is initially estimated for the overall market portfolio, and  
15 is subsequently adjusted to reflect the specific risk profile of the applicable proxy  
16 group. Within the framework of the total market approach, I have conducted  
17 separate risk premium analyses on both a historical basis and a prospective basis,  
18 as reflected on page 4 of Attachment VVR-12. In contrast, the public utility index  
19 approach is considered a "direct" approach, since the expected equity risk  
20 premium is estimated by comparing average historical holding period returns for



1 the S&P 500 Utility Index to historical yields on long-term public utility bonds,  
2 without the need for any further risk adjustments. The results of my public utility  
3 index approach analysis are presented on page 5 of Attachment VVR-12.

4 **Q: In applying the total market approach to the Gas LDC Group, how did you**  
5 **arrive at the indicated equity risk premium of 5.80 percent?**

6 A: As previously discussed, in applying the total market approach, I conducted both  
7 historical and prospective risk premium analyses, each of which brings different  
8 strengths and perspectives into the evaluation process.

#### 9 1. Historical Risk Premium Analysis

10 To facilitate a historical risk premium analysis under the total market  
11 approach, I have relied upon the historical holding period returns information  
12 published by the *SBBI Yearbook* for both large company stocks (S&P 500 Index) and  
13 for high-grade, long-term corporate bonds. When the average historical risk  
14 premium is used as a proxy for the prospective risk premium, its predictive value  
15 is enhanced when the longest possible historical period is evaluated. Accordingly,  
16 I have utilized the average historical holding period returns for the entire 97-year  
17 period (1926-2022) for which data is available from the *2023 SBBI Yearbook*. The  
18 arbitrary use of shorter time periods would subject the risk premium analysis to  
19 greater potential volatility from short-term market trends and/or aberrations,  
20 which would not reflect the long-term expectations of investors. Moreover, use of

1 the longest possible historical period for which data is available will incorporate a  
2 greater number of business and interest rate cycles into the analysis, further  
3 enhancing its predictive value. Indeed, Morin provides support for this approach  
4 in *Modern Regulatory Finance* where he maintains:

5 To estimate the MRP, one should rely on returns realized over long  
6 time periods rather than returns realized over more recent time  
7 periods because realized returns can be substantially different from  
8 prospective returns anticipated by investors, especially when  
9 measured over short time periods. But over very long periods,  
10 investor expectations coincide with realizations; otherwise, investors  
11 would never invest any money. A risk premium study should  
12 consider the longest possible period for which data are available.  
13 Short-run periods during which investors earned a lower risk  
14 premium than they expected are offset by short-run periods during  
15 which investors earned a higher risk premium than they expected.  
16 Moreover, the use of the entire study period in estimating the  
17 appropriate market risk premium minimizes subjective judgment  
18 and encompasses many diverse regimes of inflation, interest rate  
19 cycles, and economic cycles. There is no compelling reason to weigh  
20 recent returns more heavily than distant returns because of the  
21 random behavior of the market risk premium.

22 ...Clearly, the accuracy of the realized risk premium as an estimator  
23 of the prospective risk premium is enhanced by increasing the  
24 number of years used to estimate it in the same way that one can  
25 predict with a good deal of confidence that approximately 50 heads  
26 will appear in 100 tosses of a coin.<sup>51</sup>

27 Therefore, based upon the *SBB* *Yearbook* holding period returns for the entire  
28 historical period for which data is available (from 1926 to 2022), a 5.90 percent  
29 historical equity risk premium is indicated using the total market approach. As

---

<sup>51</sup> Roger A. Morin *Modern Regulatory Finance* (PUR Books LLC, 2021), at 180.

1 shown on page 4 of Attachment VVR-12, this result is based upon the arithmetic  
2 average annual return of 12.00 percent for large company stocks (S&P 500 Index),  
3 and the arithmetic average annual return of 6.10 percent for high-grade, long-term  
4 corporate bonds. Use of the arithmetic average risk premium is appropriate since  
5 it best reflects the forward-looking risk premium expectations of investors and the  
6 potential variability of expected returns. In contrast, the geometric mean is more  
7 suitable for reporting past investment performance, since it reflects a consistently  
8 compounded or “smoothed” rate of growth over a given historical period.

9 Further support for using the arithmetic average equity risk premium is also found  
10 in the *2023 SBBI Yearbook*, a widely-cited investment guide, which states the  
11 following:

12 The equity risk premium data presented in this book are arithmetic  
13 average risk premiums as opposed to geometric average risk  
14 premiums. The arithmetic average equity risk premium can be  
15 demonstrated to be most appropriate when discounting future cash  
16 flows. For use as the expected equity risk premium in either the  
17 CAPM or the building-block approach, the arithmetic mean or the  
18 simple difference of the arithmetic means of stock market returns  
19 and riskless rates is the relevant number. This is because both the  
20 CAPM and the building-block approach are additive models, in  
21 which the cost of capital is the sum of its parts. The geometric  
22 average is more appropriate for reporting past performance because  
23 it represents the compound average return.<sup>52</sup>

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<sup>52</sup> 2023 *SBBI Yearbook* (Kroll, LLC), at 193.

1                   2. Prospective Risk Premium Analysis

2                   A prospective risk premium analysis is also required to fully capture the  
3 forward-looking return expectations of investors. Indeed, it is often maintained  
4 that prospective risk premiums bear the greatest relevance to the cost of equity  
5 estimation process, since they incorporate both historical trends and changes  
6 expected to occur in the future. To facilitate a prospective risk premium analysis  
7 using the total market approach, it was necessary to estimate both the prospective  
8 market return expectations of investors and the prospective corporate bond yield  
9 on a time horizon matched basis. As previously referenced in the CAPM section  
10 of my testimony, and as illustrated on page 1 of Attachment VVR-11, I have  
11 estimated the prospective market return expectations of investors by completing  
12 DCF analyses for both the S&P 500 Index and the Value Line 1,700 stock universe.  
13 The results of these analyses are as follows:

14                   DCF Estimate of Market Return for the S&P 500 Index

15                                    $1.66\% (D/P) + 10.84\% (g) = 12.51\% (R_M)(\text{subject to rounding})$

16  
17                   DCF Estimate of Market Return for the Value Line 1,700 Stock Universe

18                                    $2.22\% (D/P) + 8.34\% (g) = 10.55\% (R_M)(\text{subject to rounding})$

19  
20                   Based upon these DCF results, an 11.53 percent  $((12.51\% + 10.55\%)/2 = 11.53\%)$   
21 prospective market return is indicated. As a proxy for the prospective corporate  
22 bond yield, I have relied upon the Blue Chip consensus forecast for Aaa rated

1 corporate bonds, which indicates a 5.02 percent average yield for the 2024-2028  
2 period, as further illustrated on pages 1 and 2 of Attachment VVR-12. Based upon  
3 these values, a 6.51 percent prospective total market equity risk premium is  
4 indicated ( $11.53\% - 5.02\% = 6.51\%$ ).

### 5 3. Total Market Equity Risk Premium and Risk Adjustment

6 To ensure a balanced approach in assessing the risk premium expectations  
7 of investors, I have placed equal emphasis on the historical risk premium and  
8 prospective risk premium results indicated above. Using this balanced approach,  
9 a 6.21 percent total market risk premium is indicated ( $(5.90\% + 6.51\%) / 2 = 6.21\%$ ).  
10 Considering that this result must be adjusted to recognize the risk differential  
11 between the overall market index and the Gas LDC Group, I have applied a re-  
12 levered beta value of 0.935 to the indicated market risk premium to derive a risk  
13 premium which is applicable to the Gas LDC Group. Consistent with my findings  
14 in the preceding CAPM analysis, a re-levered beta of 0.935 is appropriate for the  
15 Gas LDC Group, since it reflects the higher level of financial risk associated with  
16 the rate-setting capital structure to which the RPM-estimated cost of equity will be  
17 applied. Therefore, as reflected on page 4 of Attachment VVR-12, the indicated  
18 equity risk premium for the Gas LDC Group was determined to be 5.80 percent

1 (6.21% x 0.935 = 5.80%<sup>53</sup>).

2 **Q: In applying the public utility index approach to the Gas LDC Group, how did**  
3 **you arrive at the indicated equity risk premium of 4.33 percent?**

4 A: The results of my public utility index approach analysis are presented on page 5  
5 of Attachment VVR-12. As a proxy for the total return expectations of investors  
6 relative to utility stocks, I have evaluated both the average historical holding  
7 period returns for the S&P 500 Utilities Index, as well as the currently-implied  
8 equity risk premium for the same index. With regard to the average historical  
9 holding period returns, for the 98-year period covering 1926-2023, the average  
10 annual total return for this index was 10.62 percent. During this same period, the  
11 average annual yield for long-term utility bonds bearing an "A" rating from  
12 Moody's was 6.23 percent. Historical yields on "A" rated utility bonds were  
13 selected for evaluation since "A" rated bonds represent the mid-point credit rating  
14 among the historical utility bond yields that have been reported by Moody's and  
15 Mergent (historical yields on three credit ratings have been reported: "Aa," "A"  
16 and "Baa"). A detailed breakdown of these historical returns is presented on page  
17 6 of Attachment VVR-12. Based upon the foregoing historical returns, a 4.40

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<sup>53</sup> Subject to rounding differences.

1 percent historical equity risk premium is indicated for the Gas LDC Group (10.62%  
2 - 6.23% = 4.40%<sup>54</sup>).

3 As further detailed in the bottom section of page 5 of Attachment VVR-12,  
4 I have also evaluated the currently-implied equity risk premium in the prevailing  
5 market environment, by conducting an analysis of the expected equity return for  
6 the S&P Utilities Index, which yielded an expected return of 10.18 percent. I then  
7 compared the recent yields on "A" rated utility bonds (5.91 percent) to the  
8 expected equity return, which yielded a currently-implied equity risk premium of  
9 4.27 percent (10.18%-5.91%=4.27%). Lastly, to ensure a balanced estimate of the  
10 equity risk premium under the Public Utility Index Approach, I referenced the  
11 average of the equity risk premium estimates derived under the historical  
12 approach and the currently-implied approach, which yielded an indicated equity  
13 risk premium of 4.33 percent  $((4.40\% + 4.27\%)/2 = 4.33\%)$ .

14 **Q: Based upon your RPM analysis using both the total market approach and the**  
15 **public utility index approach, what level of equity risk premium and cost of**  
16 **equity are indicated for the Gas LDC Group?**

17 **A:** Consistent with established practices, I have placed equal emphasis on the total  
18 market approach and the public utility index approach, and have concluded that

---

<sup>54</sup> Subject to rounding differences.

1 5.07 percent is a reasonable estimate of the investor-expected equity risk premium  
2 for the Gas LDC Group. Based upon an expected risk premium of 5.07 percent,  
3 and a 5.82 percent prospective long-term bond yield for the Gas LDC Group, I  
4 have also concluded that the unadjusted RPM-indicated cost of equity for the Gas  
5 LDC Group is 10.89 percent (5.82%+5.07%=10.89%). Consistent with the other  
6 market-based analytical models, to this result I added the required flotation cost  
7 adjustment of 0.04 percent, which yielded an adjusted RPM-indicated cost of  
8 equity of 10.93 percent for the Gas LDC Group.

9 **Q: Under the RPM, what cost of equity was indicated for the Combination Utility**  
10 **Group and the Non-Regulated Group?**

11 A: As reflected on page 7 of Attachment VVR-12, the unadjusted RPM-indicated cost  
12 of equity for the Combination Utility Group was determined to be 10.97 percent.  
13 Consistent with the other market-based analytical models, I added the required  
14 0.04 percent flotation cost adjustment to this result, which yielded an adjusted  
15 RPM-indicated cost of equity of 11.01 percent for the Combination Utility Group.  
16 Lastly, as reflected on page 9 of Attachment VVR-12, the unadjusted RPM-  
17 indicated cost of equity for the Non-Regulated Group was determined to be 11.33  
18 percent. Consistent with the other market-based analytical models, I added the  
19 required 0.05 percent flotation cost adjustment to this result, which yielded an  
20 adjusted RPM-indicated cost of equity of 11.38 percent for the Non-Regulated



1 Group. The results of my RPM evaluation are summarized in Table VVR-13  
2 below.

<b>Table VVR-13</b>			
<b>Risk Premium Method Results</b>			
<b>Model Variant</b>	<b>Gas LDC Group</b>	<b>Comb. Utility Group</b>	<b>Non-Reg. Group</b>
Risk Prem. Method	10.89%	10.97%	11.33%
+ Flotation cost adjust.	0.04%	0.04%	0.05%
Risk Premium Method	10.93%	11.01%	11.38%

3 **Q: Can you please summarize the results of the various cost of equity analytical**  
4 **models you evaluated, as well as your proposed ROE recommendation in the**  
5 **instant proceeding?**

6 **A:** Yes, I present Table VVR-1, Table VVR-2 and Table VVR-3 below, which were also  
7 presented earlier in my testimony, and which summarize the results of my cost of  
8 equity evaluation and ROE recommendations. My quantitative evaluation  
9 resulted in a total of 15 individual estimates of the cost of equity across the three  
10 proxy groups, which I have summarized in Table VVR-1 below.

<b>Table VVR-1</b>			
<b>Indicated Cost of Equity for the Proxy Groups</b>			
<b>Method/Model</b>	<b>Gas LDC Group</b>	<b>Combination Utility Group</b>	<b>Non-Reg. Group</b>
DCF	10.44%	10.14%	11.15%
Traditional CAPM	11.02%	11.10%	10.80%
CAPM (w/size adj.)	11.66%	11.56%	10.74%
ECAPM	11.14%	11.20%	10.98%
Risk Premium	10.93%	11.01%	11.38%

1

2

Considering that Columbia is fundamentally a local gas distribution company, I

3

have placed a primary emphasis on the analytical model results that I developed

4

for the Gas LDC Group in forming my overall cost of equity recommendations.

5

As reflected in Table VVR-2 below, an analysis of the above results for the Gas

6

LDC Group yielded the following measures of central tendency for each of the

7

analytical methods employed.

8

9

10

<b>Table VVR-2</b>	
<b>Cost of Equity Estimates for CKY</b>	
<b>Measures of Central Tendency</b>	
<b>For the Gas LDC Group</b>	
Median DCF Result	10.44%
Average DCF Result	10.44%
Median CAPM Result	11.14%
Average CAPM Result	11.27%
Median RPM Result	10.93%
Average RPM Result	10.93%

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16

1 Based upon these measures of central tendency, my results for the Gas LDC Group  
2 indicate that Columbia’s cost of common equity is presently in the range of 10.55  
3 percent to 11.05 percent, with a midpoint estimate of 10.80 percent.

4 My quantitative evaluation also considered a broader array of cost of equity  
5 estimates developed by referencing two complementary proxy groups, including  
6 the Combination Utility Group and the Non-Regulated Group. As reflected in  
7 Table VVR-3 below, the composite results for all three of the proxy groups I  
8 evaluated yielded the following measures of central tendency for each of the  
9 analytical methods employed.

<b>Table VVR-3 Cost of Equity Estimates for CKY Measures of Central Tendency All Three Proxy Groups</b>	
Median DCF Result	10.44%
Average DCF Result	10.58%
Median CAPM Result	11.10%
Average CAPM Result	11.13%
Median RPM Result	11.01%
Average RPM Result	11.11%

10 As can be seen in Table VVR-3 above, the composite results for the three proxy  
11 groups, as based on measures of central tendency, indicates that Columbia’s cost  
12 of common equity is presently in the range of 10.65 percent to 11.15 percent, with  
13 a midpoint estimate of 10.90 percent. These broader composite results for the three  
14

1 proxy groups are slightly higher than the results yielded for the Gas LDC Group  
2 on an individual basis. Therefore, in view of the fact that the Gas LDC Group  
3 constitutes my core proxy group in this proceeding, and that both of the  
4 aforementioned approaches yield very similar results, it is my opinion that a  
5 reasonable point estimate of Columbia's cost of equity in the current market  
6 environment is 10.80 percent.

7 **Q: Does this conclude your Prepared Direct Testimony?**

8 A: Yes, it does. However, I reserve the right to submit rebuttal or other supplemental  
9 testimony in this proceeding.

# Appendix A

Appendix A

DCF Analysis - Detailed Discussion

1                   1. Determination of the Dividend Yield Component

2  
3                   Since the DCF model recognizes that investors value securities on the basis of  
4                   prospective cash flows, it is essential that the analyst determine the amount of  
5                   dividend payments ( $D_1$ ) which are expected to be received over the next twelve  
6                   months. Utilizing the current dividend amount ( $D_0$ ) would not be appropriate  
7                   under DCF principles, since current dividends are not forward-looking and could  
8                   potentially underestimate the cost of equity. For this reason, estimates of  
9                   dividends to be paid over the next twelve months by each company comprising  
10                  the Gas LDC Group, Combination Utility Group, and Non-Regulated Group were  
11                  obtained from the Value Line Summary and Index, and serve as the expected  
12                  dividend payment ( $D_1$ ) within these respective DCF analyses.

13                  In selecting the appropriate stock price ( $P_0$ ) to utilize in calculating the dividend  
14                  yield, it is important to remember that under the iterative market valuation  
15                  process, price equilibrium only occurs when investors have realized their expected  
16                  rate of return, or "K." In other words, the current stock price ( $P_0$ ) has embedded  
17                  within it the current forward-looking return expectations of investors, although

1 the latter cannot be directly observed. Therefore, to properly estimate the expected  
2 cost of equity, it is essential that the current stock price ( $P_0$ ) be used when  
3 calculating the dividend yield component, since the "P" and "K" components of  
4 the model are simultaneously determined upon reaching equilibrium, and thus  
5 have a time dependency on one another. Consistent with the semi-strong version  
6 of the Efficient Market Hypothesis, use of the current stock price is appropriate,  
7 since it incorporates all relevant publicly-available information and thus captures  
8 the current forward-looking growth expectations of investors.

9 In contrast, using an average of stock prices over some historical period, such as  
10 six to twelve months, would reflect outdated market information and investor  
11 growth expectations, which would not be representative of current market  
12 conditions. Therefore, such an approach would be inconsistent with the core  
13 tenets of the Efficient Market Hypothesis. Moreover, using past averages of stock  
14 prices would also create a time period mismatch among the components of the  
15 DCF model, since the dividend yield component would be based upon past stock  
16 prices which reflect previous growth expectations, while the growth component  
17 ("g") of the model would reflect the current forward-looking growth expectations  
18 of investors.

1 Notwithstanding these valid arguments, simply referencing the most recent day's  
2 closing stock price can present a different challenge in the form of temporary price  
3 aberrations, which may be attributable to volatile market conditions, the  
4 unanticipated release of company information, or short-term supply and demand  
5 imbalances. Therefore, with respect to the companies comprising the Gas LDC  
6 Group, Combination Utility Group, and Non-Regulated Group, I have defined the  
7 current stock price ( $P_0$ ) as an average closing stock price that is calculated on the  
8 basis of the composite average of the 30-day average, 60-day average and 90-day  
9 average stock prices. This approach places the most emphasis on the 30-day  
10 average stock price, but also provides some weighting to the 60-day average and  
11 90-day average stock prices. More specifically, this approach places a one-half  
12 weighting on the 30-day average stock price, a one-third weighting on the 60-day  
13 average stock price, and a one-sixth weighting on the 90-day average stock price.  
14 Taking this approach mitigates the effects of short-term price aberrations for the  
15 companies comprising these three proxy groups, while still recognizing the basic  
16 tenets of the Efficient Markets Hypothesis.

17 Finally, to determine the expected dividend yield for the companies comprising  
18 the Gas LDC Group, Combination Utility Group, and Non-Regulated Group, the



1 expected dividend ( $D_1$ ) was simply divided by the current stock price ( $P_0$ ) as  
2 defined above.

### 3 2. Growth Component – General Approach

4  
5 There is no question that discerning the long-term growth expectations of  
6 investors is the most difficult and controversial aspect of implementing the DCF  
7 constant growth model, as it requires the analyst to get inside the “collective  
8 psyche” of a large universe of investors. Considering that the DCF model is  
9 technically focused on the growth of dividends into perpetuity, a reliable forecast  
10 of sequential dividend payments into the distant future would provide an  
11 appropriate indication of investors’ long-term growth expectations. However,  
12 dividend forecasts for multi-decade periods are simply not available, so to  
13 implement the DCF model, the analyst must rely upon other available indicators  
14 which are likely to influence the growth expectations of investors. As such, in the  
15 initial stages of my DCF analysis, I evaluated a variety of historical and forward-  
16 looking growth indicators, each of which could potentially influence investor  
17 expectations.

18 Recognizing that historical growth trends can influence the future growth  
19 expectations of investors, rate of return analysts often consider historical trends

1 when estimating the growth component of the DCF model. In so doing, the  
2 presumption is that investors extrapolate past growth patterns in forming their  
3 future expectations. In my judgment, evaluating historical growth indicators is a  
4 reasonable first step in the DCF growth rate evaluation process, particularly for  
5 companies with a history of stable performance. Nevertheless, while historical  
6 growth trends clearly provide a valuable point of reference, the analyst must  
7 guard against placing too much emphasis upon them, as they may no longer  
8 reflect the current growth expectations of investors. Indeed, the growth  
9 expectations of investors today may be very different from average growth rates  
10 realized in the past due to structural changes within the utility industry, changes  
11 in operating costs and expected profitability, and/or changes in general economic  
12 conditions. Also, it is often argued that historical growth trends are already  
13 factored into forward-looking growth projections, including analyst earnings  
14 forecasts, and that care should therefore be taken to ensure that historical data is  
15 not inadvertently double-counted.

16 Lastly, when evaluating historical growth trends, the analyst generally finds that  
17 the strict assumptions required under constant growth theory have not held true  
18 or been maintained, as is often reflected in differing historical growth rates  
19 between DPS, EPS and BVPS. Thus, while the analyst implicitly accepts the strict

1 assumptions of the constant growth model on a prospective basis, this is rarely the  
2 case in retrospect, which may call into question the usefulness of historical  
3 indicators in deriving the constant growth rate assumption.

4 Considering these multiple shortcomings, historical growth indicators should  
5 never be relied upon exclusively and significant emphasis should also be placed  
6 on forward-looking growth indicators. Therefore, consistent with accepted  
7 practices, I have evaluated both historical and forward-looking growth indicators  
8 for several key variables, including EPS, DPS, and BVPS. More specifically, with  
9 regard to historical growth rates, for each member of the Gas LDC Group and  
10 Combination Utility Group, I have completed a traditional analysis of the 5-year  
11 and 10-year average historical growth rates for EPS, DPS, and BVPS. All 5-year  
12 and 10-year historical growth rate information was sourced from the Value Line  
13 Investment Survey. The results of my historical growth rate analysis for EPS, DPS  
14 and BVPS for the Gas LDC Group and Combination Utility Group are presented  
15 on page 5 of Attachment VVR-7 and Attachment VVR-8, respectively.

16 With regard to projected growth rates, for each member of the Gas LDC Group  
17 and Combination Utility Group, I have analyzed forward-looking projections for  
18 EPS, DPS, and BVPS. Growth projections for each of these variables were derived

1 from the Value Line Investment Survey, which publishes 3-to-5 year growth rate  
2 projections. In addition, EPS consensus estimate growth rates were sourced from  
3 Yahoo/Thomson Reuters and Zacks, both of which publish 5-year earnings growth  
4 estimates. The results of my projected growth rate analyses for EPS, DPS and  
5 BVPS for the Gas LDC Group and Combination Utility Group are presented on  
6 pages 1 and 5 of Attachment VVR-7 and Attachment VVR-8, respectively.

7 With regard to the Non-Regulated Group, I have focused my analysis on projected  
8 growth rates for EPS, as well as historical EPS growth rates. Growth projections  
9 for EPS were sourced from the Value Line Investment Survey, while EPS  
10 consensus estimate growth rates were sourced from Yahoo/Thomson Reuters and  
11 Zacks. Historical EPS growth rates were sourced from Value Line. With respect  
12 to the Non-Regulated Group, the results of my projected growth rate analyses are  
13 presented within page 1 of Attachment VVR-9, while the results of my historical  
14 EPS growth rate analysis are presented on page 2 of Attachment VVR-9.

15 3. Growth Component  
16 Dividend Growth Forecasts vs. Earnings Growth Forecasts  
17

18  
19 Notwithstanding the fact that the DCF model is conceptually a dividend-based  
20 model, in practice there exists a fundamental challenge in attempting to reference

1 dividend forecasts to estimate the growth expectations of investors. Simply stated,  
2 dividend forecasts are not widely-referenced by investors, and for this reason, they  
3 are only published by a limited number of information service providers. In  
4 contrast, earnings growth forecasts are widely-available from a variety of internet-  
5 based and print media sources. As I will discuss later, earnings forecasts are  
6 widely-referenced by investors and are available to the general public from a  
7 variety of sources. It should also be noted that even Williams, who originally  
8 developed the long-form and constant growth versions of the DCF model, found  
9 “no contradiction” between his DCF formula which emphasized dividends, and  
10 the “common precept” that earnings constitute the source of value for stocks.  
11 Indeed, over the long-run, either valuation approach would be expected to  
12 produce the same end result. Lastly, Williams also recognized the challenges  
13 associated with developing long-term dividend forecasts, when he concluded in  
14 *The Theory of Investment Value*: “How to estimate the future dividends for use in  
15 our formula is, of course, the difficulty<sup>1</sup>”.

---

<sup>1</sup> John Burr Williams, *The Theory of Investment Value* (Cambridge, MA, Harvard University Press, 1938) at 58.



1 investors. For example, In “Using Analysts’ Growth Forecasts to Estimate  
2 Shareholder Required Rates of Return,” Harris concludes:

3 ...a growing body of knowledge shows that analysts’ earnings  
4 forecasts are indeed reflected in stock prices.....Notions of  
5 shareholder required rates of return and risk premia are based  
6 in theory on investors’ expectations about the future. Research  
7 has demonstrated the usefulness of financial analysts’ forecasts  
8 for such expectations<sup>2</sup>.

9 Similarly, in “Investor Growth Expectations: Analysts vs. History,” Vander Weide  
10 and Carleton concluded:

11 [First] we found overwhelming evidence that the consensus  
12 analysts’ forecast of future growth is superior to historically  
13 oriented growth measures in predicting the firm’s stock price.  
14 ...Our results also are consistent with the hypothesis that  
15 investors use analysts’ forecasts, rather than historically oriented  
16 growth calculations, in making stock buy-and-sell decisions<sup>3</sup>.

17 In *Modern Regulatory Finance*, Morin sums up the academic literature on this topic  
18 very effectively where he states:

19 Because of the dominance of institutional investors and their  
20 influence on individual investors, analysts’ forecasts of long-run  
21 growth rates provide a sound basis for estimating required  
22 returns. Financial analysts exert a strong influence on the  
23 expectations of many investors who do not possess the resources  
24 to make their own forecasts, that is, they are the cause of g.<sup>4</sup>

---

<sup>2</sup> Robert S. Harris, “Using Analysts’ Growth Forecasts to Estimate Shareholder Required Rates of Return,” *Financial Management*, (Spring 1986), at 59, 66.

<sup>3</sup> James H. Vander Weide and William T. Carleton, “Investor Growth Expectations: Analysts vs. History,” *The Journal of Portfolio Management* (Spring 1988), at 4.

<sup>4</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books LLC, 2021), at 371.

1  
2 Clearly then, a substantial amount of academic research supports the use of  
3 analyst earnings forecasts as an appropriate proxy for the expected growth rate  
4 component of the DCF constant growth model. For these reasons, I have given  
5 considerable weight to the 5-year consensus earnings estimates available from  
6 Yahoo/Thomson Reuters and Zacks, along with Value Line's EPS growth forecasts,  
7 in deriving my estimates of long-term investor growth expectations.

8  
9 5. Growth Component – Market-Based Evidence  
10 The Influence of Analyst Estimates on Investor Growth Expectations  
11

12  
13 Analyst earnings forecasts are widely available through a variety of sources and  
14 are frequently referenced by both institutional and individual investors and the  
15 financial press. Without question, a robust market exists for earnings estimates,  
16 which is driven by strong investor demand for such information. Considering that  
17 there is a significant monetary cost associated with producing these forecasts,  
18 investment firms would not continue to produce them if they were not valued by  
19 investors. This is further demonstrated by the ongoing success of the various  
20 information service providers who summarize analyst earnings forecasts into  
21 "consensus estimates" for the benefit of investors. These information service



1 providers include Thomson Reuters, I/B/E/S, and FactSet, each of which are  
2 widely-referenced by institutional investors.

3 Moreover, the availability of consensus estimates to the general public through  
4 freely-accessible websites, such as Yahoo Finance, Zacks and Reuters.com, further  
5 demonstrates the pervasive influence that analyst forecasts have on market  
6 expectations, including those of individual investors. Lastly, it is important to note  
7 that, to date, investors have not demanded earnings forecasts for periods  
8 extending beyond five years. If investors had expressed a desire for such  
9 information, the robust information services marketplace would have certainly  
10 delivered longer-term forecasts by now. This strongly suggests that investors are  
11 reasonably confident that the 5-year earnings forecasts they presently utilize  
12 already provides a reasonably reliable longer-term growth estimate.

13  
14 6. Growth Component

15 Earnings Growth Rates Currently Projected by Equity Analysts  
16

17  
18 Forecasts of EPS growth and the corresponding cost of equity estimates for each  
19 member of the Gas LDC Group, Combination Utility Group and Non-Regulated  
20 Group are presented on page 1 of Attachment VVR-7, Attachment VVR-8 and  
21 Attachment VVR-9, respectively.

# Appendix B

1 Appendix B

2  
3 DCF Estimates - Determination of "Outlier" Results

4  
5 1. General Approach in Determining the "Low-End" Threshold for  
6 Outlier Results

7  
8  
9 While applying the DCF constant-growth model to the individual proxy group  
10 companies, I found both "low-end" and "high-end" outlier results which did not  
11 pass fundamental tests of economic logic. Therefore, to ensure logical and credible  
12 analytical results, I have eliminated unreasonably high and unreasonably low DCF  
13 estimates from my analysis, as further discussed herein.

14 It is a well-established financial principle that when the risk profile of a given  
15 investment increases, investors will demand a commensurately higher rate of  
16 return. This classic "risk-and-return" relationship explains why investors demand  
17 a higher return for investing in common stocks versus investing in corporate debt  
18 securities. Indeed, equity investors are not only compensated for the default risk  
19 inherent in fixed-income securities, but they must also be compensated for the  
20 residual claim risk they bear. Residual claim risk arises for two primary reasons.  
21 First, since common stock is the lowest ranking or most junior capital within a  
22 firm's capital structure, common stock investors are always positioned "last in

1 line" behind fixed income investors and preferred stockholders to recover their  
2 investment in the event of a financial distress scenario. Second, common stock  
3 investors are also in a subordinated position relative to periodic cash distributions,  
4 since common stock dividends can only be paid after contractually-required debt  
5 service payments and preferred dividend payments have been made. Considering  
6 their junior position in the capital structure, common stock investors require  
7 additional compensation for bearing this residual claim risk, through what is  
8 known as an equity risk premium.

9 However, in those circumstances where the equity risk premium offered does not  
10 provide sufficient compensation for bearing the additional risks associated with  
11 common stocks, investors will seek a superior risk-return tradeoff elsewhere by  
12 either investing in the company's fixed-income securities, or in another company's  
13 common stock. Therefore, consistent with the risk-and-return investment  
14 principle and fundamental tests of economic logic, DCF estimates which are lower  
15 than, or only marginally higher than, yields available on corporate debt securities  
16 have been eliminated from my analysis. This is because investors cannot  
17 reasonably be expected to invest in common stocks if they are unable to earn a  
18 minimally sufficient equity risk premium as compensation for the additional risks  
19 they bear, vis-à-vis fixed income securities. Under these circumstances, investors

1 would clearly show a preference for either holding the company's fixed-income  
2 securities or another company's stock, making it difficult for the company to  
3 attract new equity capital.

4 2. Regulatory Precedents Establishing the Minimum Equity Risk  
5 Premium for Setting the "Low-End" Outlier Threshold  
6

7  
8 In recent years, the FERC has compared DCF estimates to yields available on long-  
9 term corporate bonds and has excluded proxy group companies whose DCF  
10 estimates did not exceed a company's bond yield by a sufficient margin. In *Pioneer*  
11 *Transmission* (2009), the FERC ruled that low-end ROEs falling within about 100  
12 basis points of the cost of debt should be excluded from cost of equity estimates.

13 Specifically, in its Pioneer order, the FERC stated:

14 .....the Commission will exclude from the proxy group companies  
15 whose low-end ROE is within about 100 basis points above the cost  
16 of debt, taking into account the extent to which the excluded low-  
17 end ROE's are outliers from the low-end ROEs of other proxy  
18 group companies<sup>1</sup>.

19 Previously, in Opinion 445, the Commission had determined that:

20 .....investors generally cannot be expected to purchase stock if  
21 debt, which has less risk than stock, yields essentially the same  
22 return<sup>2</sup>.

---

<sup>1</sup> *Pioneer Transmission, LLC*, 126 FERC ¶ 61,281 at P 94 (March 27, 2009).

<sup>2</sup> *Southern California Edison Co.*, 92 FERC ¶ 61,266 (20f00) (Opinion No. 445).

1 Furthermore, in *Southern California Edison*, the FERC reaffirmed its previous  
2 decisions concerning the treatment of low-end outliers, by stating:

3 We find that, consistent with *Pioneer*, it is reasonable to exclude any  
4 company whose low-end ROE fails to exceed the average bond  
5 yield by about 100 basis points or more<sup>3</sup>.

6  
7 Most recently, in *Opinion No. 569*, the FERC revised the methodology it employs  
8 in the determination of both low-end and high-end outlier estimates of the cost of  
9 equity under the DCF method. The FERC's revised low-end methodology no  
10 longer references a generic 100 basis point add-on to the cost of corporate debt, but  
11 instead now recognizes the dynamic nature of the equity risk premium, which is  
12 dependent upon ever-changing investor risk sentiments. The FERC will now  
13 reference Baa-rated corporate bond yields as the corporate bond component of the  
14 low-end outlier equation, but will now determine the minimally-required equity  
15 risk premium above the corporate bond yield by applying a 20 percent weighting  
16 factor to the market risk premium determined under the FERC's CAPM analysis.

17 The FERC explained the rationale for these changes as follows:

18 We will adjust the low-end outlier test to include a risk premium  
19 instead of the generic 100 basis points proposed in the Briefing  
20 Order, as discussed below. In particular, we will adopt a revised  
21 low-end outlier test that eliminates proxy group ROE results that are

---

<sup>3</sup> *Southern California Edison Co.*, 131 FERC ¶ 61020 at P 55 (April 15, 2010).

1 less than the yields of generic corporate Baa bonds plus 20 percent  
2 of the CAPM risk premium.

3 ....

4 We find that 20 percent of the risk premium from the CAPM analysis  
5 described above is a reasonable risk premium to apply to the low-  
6 end outlier test. Because the risk premium that investors demand  
7 changes over time, it is imprecise to simply add 100 basis points to  
8 the bond yield. The methodology that we adopting in this order  
9 captures such changes because the risk premium from the CAPM  
10 analysis reflects investors' required risk premium under the  
11 prevailing market conditions<sup>4</sup>.

12  
13 In a subsequent Order<sup>5</sup>, the FERC reaffirmed its approach of referencing 20 percent  
14 of the CAPM risk premium when conducting its low-end outlier evaluations.

15  
16 In my judgment, the FERC's revised low-end outlier methodology for DCF  
17 estimates is an improvement over its previous approach, as it now better captures  
18 the dynamic nature of the market risk premium, thus enabling the cost of capital  
19 analyst to appropriately apply fundamental tests of economic logic to his/her  
20 preliminary DCF results.

21  
22 3. Applying the FERC's Revised Approach in  
23 Determining the "Low-End" Outlier Threshold  
24  
25

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<sup>4</sup> *Association of Businesses Advocating Tariff Equity, et al., v. Midcontinent Independent System Operator, Inc., et al.*, 169 FERC ¶ 61,129, Opinion No. 569, at P 387 and P 388 (November 21, 2019).

<sup>5</sup> *Association of Businesses Advocating Tariff Equity, et al., v. Midcontinent Independent System Operator, Inc., et al.*, 171 FERC ¶ 61,154, Opinion No. 569-A, at P 161-162 (May 21, 2020).

1 As further described within page 6 of Attachment VVR-7, after applying the  
2 FERC's revised low-end outlier methodology as outlined above, I have  
3 determined that a reasonable low-end outlier threshold to apply to my  
4 preliminary DCF results is 7.00 percent. I have therefore eliminated outlier  
5 estimates falling below this minimum threshold level. Consistent with the risk-  
6 and-return investment principle, investors cannot reasonably be expected to  
7 accept equity returns below this threshold, since on a risk-adjusted basis, fixed-  
8 income securities would likely offer investors a superior investment alternative.

9  
10 4. Regulatory Precedents for Determining the "High-End"  
11 Threshold for Outlier Results  
12

13  
14 In *Opinion No. 569*, the FERC also adopted a revised high-end outlier test, whereby  
15 companies having DCF estimates in excess of 150 percent of the median value of  
16 the initial proxy group results would be excluded from the final group. In a  
17 subsequent Order<sup>6</sup>, the FERC elected to modify this approach by instead  
18 referencing 200 percent of the median value of the initial proxy group results, and

---

<sup>6</sup> *Association of Businesses Advocating Tariff Equity, et al., v. Midcontinent Independent System Operator, Inc., et al.*, 171 FERC ¶ 61,154, Opinion No. 569-A, at P 154 (May 21, 2020).



1 the FERC subsequently reaffirmed this decision in yet another Order<sup>7</sup>. I have taken  
2 a similar approach in identifying high-end outlier results in my DCF analyses, but  
3 have eliminated individual high-end estimates, rather than fully eliminating the  
4 company from the proxy group. In my judgment, this approach is appropriate in  
5 view of the relatively small number of regulated utility holding companies to  
6 choose from in forming a utility proxy group, which is largely attributable to  
7 recent merger and acquisition activity in the utility industry.

8 To further screen my DCF results for high-end outlier estimates, I have also  
9 considered the FERC's previous high-end outlier methodology in my DCF  
10 analyses. Specifically, in *ISO New England*,<sup>8</sup> the FERC determined that proxy  
11 group companies with DCF estimates in excess of 17.7 percent should be excluded  
12 from DCF analyses. Accordingly, as a further check on the high-end outlier  
13 threshold applied within my DCF analyses, I have also given some consideration  
14 to the 17.7 percent high-end threshold established in the *ISO New England* case.  
15 The results of the high-end outlier screens for my DCF analyses can be found on

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<sup>7</sup> *Association of Businesses Advocating Tariff Equity, et al., v. Midcontinent Independent System Operator, Inc., et al.*, 173 FERC ¶ 61,159, Opinion No. 569-B, at P 140 (November 19, 2020).

<sup>8</sup> *ISO New England, Inc. et al.*, 109 FERC ¶ 61,147 at P 205 (November 3, 2004).

1 pages 1 and 2 of Attachment VVR-7, Attachment VVR-8, and Attachment VVR-9,  
2 respectively.  
3

# Appendix C

1 Appendix C

2  
3 Financial Risk Adjustments to DCF Results  
4 Recognizing Differences in Market Value vs. Book Value Capitalization Levels

5  
6  
7 1. Circumstances Under Which a Financial Risk Adjustment is Required for DCF  
8 Results  
9

10 A financial risk or “leverage” adjustment to DCF results is required whenever the  
11 average market value equity capitalization of the proxy companies being analyzed  
12 is materially higher than the corresponding book value equity capitalization.  
13 Stated alternatively, a leverage adjustment is required whenever the average per-  
14 share market-to-book ratio of the group materially exceeds 1.0. Whenever a  
15 significant market-to-book value disparity exists for a utility, the level of financial  
16 risk implicit in the respective market value and book value capital structures can  
17 differ substantially. In particular, the market value based capital structure will  
18 reflect a higher relative equity capitalization, a lower relative debt capitalization,  
19 and therefore less financial risk as compared to the book value capital structure.  
20 In contrast, the book value capital structure will reflect a lower relative equity  
21 capitalization and a higher relative debt capitalization, thereby indicating a higher  
22 degree of financial risk.

1 To understand the need for a leverage adjustment, it must first be emphasized that  
2 DCF cost of equity estimates are market-based estimates which are derived by  
3 referencing the stock prices of comparable risk companies as direct inputs into the  
4 DCF model. DCF estimates therefore reflect the return expectations of investors  
5 based upon the level of financial risk embedded within the corresponding market  
6 value capital structure, as indicated by the current stock price. Equity investors  
7 are predominately concerned with a firm's market value capital structure, since it  
8 reflects the current value of their investment and therefore provides the basis for  
9 assessing a company's financial risk profile. To the extent that a book value based  
10 capital structure will be utilized in the rate-setting process, equity investors will  
11 expect an additional return premium to be compensated for the additional  
12 financial risk inherent within a book value capital structure. Multiple academic  
13 studies have demonstrated that a strong positive correlation exists between the  
14 amount of leverage in a firm's capital structure and its cost of equity capital, which  
15 Morin discusses in *Modern Regulatory Finance*, a widely-recognized authoritative  
16 guide on utility cost of capital matters, as follows:

17 .....the one inescapable conclusion from the research is that debt  
18 affects the cost of equity and that a company has a different cost  
19 of equity at a different capital structure, with the cost of equity  
20 rising as leverage increases. Therefore, the capital structure used

1 to estimate the cost of equity is an integral inseparable part of that  
2 estimate.<sup>1</sup>

3  
4 Therefore, if market-based DCF estimates of the cost of equity are applied to a  
5 utility's book value capital structure in determining the utility's weighted average  
6 cost of capital, a leverage adjustment is required to recognize the increase in  
7 financial risk resulting from the use of the book value capital structure, rather than  
8 the market-value capital structure. It is clear that this adjustment is necessary,  
9 since as Morin explains above, "*a company has a different cost of equity at a different*  
10 *capital structure.*" Absent this leverage adjustment, the DCF results will be  
11 incorrectly specified, since they will reflect the lower level of financial risk  
12 associated with a market value based capital structure, rather than the higher risk  
13 associated with the book value capital structure, to which the DCF results will be  
14 applied.

15 2. Regulatory Precedents Supporting the Use of Financial Risk Adjustments  
16 Based on Differences in Market-Value and Book-Value Capitalization Levels

17  
18 On a number of occasions, the Pennsylvania Public Utility Commission has  
19 allowed upward adjustments to the cost of equity to recognize the difference in  
20 financial risk between market value based capital structures, which are the basis

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<sup>1</sup> Roger A. Morin, *Modern Regulatory Finance* (PUR Books LLC, 2021), at 521.

1 of DCF estimates, and the book value capital structures used for rate-setting  
2 purposes.

3  
4 3. Determining the Appropriate Financial Risk or “Leverage” Adjustment  
5 Utilizing Modigliani and Miller’s Classic Financial Theorems  
6

7  
8 In formulating my proposed leverage adjustments, I have referenced the classic  
9 financial theorems of Nobel laureates Modigliani and Miller (M&M), which  
10 demonstrated the relationship between a firm’s capital structure, its valuation, and  
11 its cost of capital.<sup>2</sup> Based on the M&M equation for the cost of equity, the market  
12 value based capital structure ratios for the Gas LDC Group, and Columbia’s rate-  
13 setting book value based capital structure ratios, the required financial risk or  
14 “leverage” adjustments was determined to be as reflected in Table C-1 below:  
15  
16  
17  
18  
19

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<sup>2</sup> Franco Modigliani and Merton H. Miller, “Taxes and the Cost of Capital: A Correction,” *American Economic Review*, 53 (June 1963), 433-443; Franco Modigliani and Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investments*, *American Economic Review* 48 (June 1958) at 261-297.

1

Table C-1	
Required Financial Leverage Adjustments	
Gas LDC Group	0.30%
Combination Utility Group	0.30% <sup>3</sup>
Non-Regulated Group	0.30% <sup>4</sup>

2

3 Supporting calculations for the recommended leverage adjustment is as follows:

4 
$$K_e = p + (p-i) (1-T) (B/S) + (p-d) P/S$$
 (Equation C.1)

5 Where:

6  $K_e$  = Estimated cost of equity

7  $p$  = Cost of equity for a firm financed with 100% equity capital

8  $i$  = Long-term debt borrowing cost

9  $T$  = Marginal corporate income tax rate

10  $B$  = Debt to total capitalization ratio

11  $S$  = Common stock to total capitalization ratio

12  $d$  = Preferred stock dividend yield

---

<sup>3</sup> For both the Combination Utility Group and the Non-Regulated Group, the magnitude of the difference between the average market value capital structures of these two proxy groups and Columbia's rate-setting book value based capital structure is significantly greater than the difference between the average market value capital structure of the Gas LDC Group and Columbia's rate-setting book value based capital structure. . As such, under the M&M equation, the required leverage adjustment for the Combination Utility Group and the Non-Regulated Group would be significantly greater than that of the Gas LDC Group. To recognize this disparity and make the leverage adjustment relevant to a typical gas utility capital structure, I have applied the same adjustment that I applied to the Gas LDC Group (0.30%) to both the Combination Utility Group and the Non-Regulated Group. Utilizing this approach ensures a more conservative analysis

<sup>4</sup> Id.



1 P = Preferred stock to total capitalization ratio

2

3 **Gas LDC Group**

4  $K_e = p + (p-i) (1-T) (B/S) + (p-d) P/S$  (Equation C.1)

5  $10.10\% = 8.6338\% + (8.6338\% - 5.74\%) (1-0.27)(40.0/59.0) + (8.6338\% - 6.64\%)$

6  $(1.0/59.0)$

7  $10.39\% = 8.6338\% + (8.6338\% - 5.74\%) (1-0.27)(45.4/54.6)$

8 Leverage adjustment =  $10.39\% - 10.10\% = 0.29\%$  (rounded to 0.30%)

# Appendix D

1 Appendix D

2  
3 Flotation Costs

4  
5 1. Adjusting the "Bare Bones" Cost of Equity for Flotation Costs

6 When common equity is employed to finance a utility's rate base, it is either  
7 derived from new stock sales or from the retention of undistributed earnings. In  
8 cases where a utility or its parent company "floats" a new equity issuance,  
9 significant issuance or flotation costs may be incurred, including underwriting  
10 discounts, legal fees, accounting fees and printing costs. After subtracting these  
11 out-of-pocket costs from the transaction's gross proceeds, the company is left with  
12 net proceeds which are materially lower than the amount invested by the  
13 company's equity investors. Considering that only net proceeds can be invested  
14 into a company's rate base, the amount invested by equity investors which funds  
15 flotation related costs will never earn a fair return for those investors unless an  
16 appropriate adjustment is made to the cost of equity. As such, if a flotation cost  
17 adjustment is not applied to the "bare-bones" cost of equity determined by the  
18 various market-based analytical models, the company's equity investors will not  
19 earn a fair return on their entire investment, thereby understating the company's  
20 legitimate revenue requirement. This is contrary to established regulatory practice

1 for debt issuance costs, which are typically capitalized at the time of issuance and  
2 amortized over the life of the outstanding debt, therefore being fully recoverable  
3 through the cost of service ratemaking process.

4 2. Flotation Costs – Multiple of Cost of Equity Approach

5 Numerous adjustment methods have been proposed to incorporate equity  
6 issuance costs into rate proceedings, several of which have been accepted by state  
7 regulatory commissions, including the DCF formula approach, multiple of cost of  
8 equity approach, basis point approach, and the actual costs approach. For  
9 purposes of this proceeding, I have relied upon the “multiple of cost of equity”  
10 approach in determining the appropriate flotation cost adjustment for each of the  
11 three proxy groups.

12 In contrast to debt capital, equity capital is considered to have an infinite life, and  
13 it would therefore be inappropriate to amortize a company’s flotation costs over a  
14 finite number of years. As such, rather than seeking a “return of” its flotation costs  
15 over some arbitrarily selected amortization period, it is more appropriate for a  
16 utility to seek a “return on” its flotation costs, as these costs constitute a permanent  
17 equity contribution by investors. Columbia’s ultimate parent company, NiSource  
18 Inc., has completed a number of equity offerings over the past twenty-plus years

1 which have benefitted NiSource's utility subsidiaries. Specifically, NiSource  
2 completed a \$734.9 million equity offering during November, 2002 with an  
3 underwriting discount of 3.00 percent; a \$348.0 million equity offering during  
4 September, 2010 with an underwriting discount of 3.25 percent; and a \$606.0  
5 million private placement of common equity during May 2018, with associated  
6 placement fees of approximately 1.00 percent.

7 In addition, on April 19, 2021, NiSource completed the sale of 8.625 million Series  
8 A Equity Units, initially consisting of Series A Corporate Units, each with a stated  
9 amount of \$100. The equity offering generated net proceeds of \$835.5 million, after  
10 underwriting and issuance expenses. The underwriting and issuance expenses  
11 associated with the transaction were approximately \$27.0 million, which  
12 constitutes approximately 3.00 percent of the gross proceeds from the transaction.

13 Furthermore, during the years 2017-2022, NiSource issued additional shares of  
14 common stock under the company's "at-the market" (or "ATM") equity issuance  
15 program, which resulted in \$1.4 billion of cumulative net proceeds during the  
16 2017-2022 period.<sup>1</sup> Most recently, on February 22, 2024, NiSource announced that  
17 it had entered into a new two-year \$900 million ATM equity issuance program.

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<sup>1</sup> NiSource did not issue any additional common equity shares under its ATM program during 2023.

1 The new program allows NiSource to sell shares of its common stock having an  
2 aggregate gross sale price of up to \$900 million for the two-year period through  
3 December 31, 2025. To date, the distribution fees payable to the equity distribution  
4 agents facilitating these “at-the-market” transactions have approximated 1.00  
5 percent of the notional value of these transactions. Additional supporting details  
6 on NiSource’s ATM and block equity transactions can be found within NiSource’s  
7 SEC filings, including its 10-K, 10-Q and Prospectus Supplement filings.

8  
9 After considering both NiSource’s past and future anticipated equity issuances as  
10 discussed above, I have concluded that a reasonable overall flotation cost value to  
11 reference for purposes of the instant proceeding should reflect a composite of the  
12 equity underwriting and placement fees paid by NiSource over the past twenty-  
13 plus years, and have therefore referenced a composite value of 1.50 percent.

14 Considering that the contributed capital component of Columbia’s common  
15 equity account has recently been in the range of 28 percent of the Company’s total  
16 common equity balance, it is appropriate to apply a flotation cost adjustment to  
17 Columbia’s cost of equity that is based on this 28 percent weighting, since the  
18 remaining 72 percent weighting allocated to undistributed retained earnings  
19 would not be subject to underwriting costs. Accordingly, in deriving my

1 recommended flotation cost adjustment, I have applied a 28 percent weighting to  
2 the 1.50 percent composite flotation cost value previously discussed, which yields  
3 a flotation cost factor of 0.42 percent ( $1.50\% \times 28\% = 0.42\%$ ). To properly apply this  
4 level of flotation costs to Columbia's cost of equity under the "multiple of cost of  
5 equity" approach, the 0.42 percent flotation cost factor must be added to 100  
6 percent of Columbia's pre-adjusted cost of equity, which is derived in  
7 mathematical terms as follows:  $(1+.0042=1.0042\%)$ . Therefore, based upon the  
8 above approach, I have applied a 1.0042 percent multiple to the *pre-adjusted*  
9 indicated cost of equity for each of the proxy groups.

# Attachment VVR-1



**Vincent V. Rea, CRRA**  
**Professional Qualifications and Expert Testimony Listing**

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**Testimony and Regulatory Litigation Support**

Mr. Rea has provided expert testimony in utility regulatory proceedings before state commissions and the Federal Energy Regulatory Commission in connection with rate cases, financing applications, and various other financing-related matters. His testimony has focused on a number of topics, including the cost of equity (ROE), overall cost of capital and fair rate of return, appropriate ratemaking capital structure, embedded cost of debt, rating agency matters, utility recapitalizations, and various other financial-related matters. Mr. Rea has collaborated with utility company regulatory staff and outside counsel in the development of litigation strategies supporting rate proceedings, including testimony development, responding to discovery requests from intervenors and commission staff, appearing at evidentiary hearings, and in the preparation of legal briefs. Mr. Rea currently serves as Managing Director, Regulatory Finance Associates, LLC, and independent financial and regulatory consulting firm serving the utility industry. He previously held the positions of Director, Regulatory Finance and Economics for NiSource Inc., and Assistant Treasurer and Director of Corporate Finance for NiSource Inc. A detailed listing of the docketed proceedings where testimony and/or subject matter support has been provided by Mr. Rea can be found in Addendum A.

**Capital Markets Expertise**

Mr. Rea acquired broad-based capital markets experience supporting the utility industry over a period of 15 years while serving in the capacity as Financial Officer for NiSource Inc., NiSource Finance Corp., and each of NiSource's six utility subsidiaries. Mr. Rea's extensive capital markets experience in the utility industry is a distinguishing factor that uniquely qualifies him to opine on the cost of capital for regulated utilities. In the capacity as Assistant Treasurer, Mr. Rea led or co-led over twenty debt and equity financing transactions completed in both the public and private capital markets, with an aggregate principal value in excess of \$10.0 billion. Mr. Rea also led or co-led numerous bank loan syndication, commercial paper and structured finance transactions having an aggregate value in excess of \$11.0 billion. He was responsible for NiSource's enterprise-wide activities in the areas of debt liability management, including multiple tender offer transactions; interest rate risk management; derivative transactions; banking and capital market relationships; rating agency relationships; pension fund management; and oversight of the Company's treasury operations. A detailed listing of Mr. Rea's transactional experience in the capital markets supporting the utility industry is provided in Addendum B.

**Professional Background**

Managing Director, Regulatory Finance Associates, LLC (2020-present)

Director, Regulatory Finance and Economics, NiSource Inc. (2015-2020)

Assistant Treasurer and Corporate Officer, NiSource Inc. (2009-2015)

Assistant Treasurer, NiSource Finance Corp. and NiSource utility subsidiaries (2001-2015)

Director, Corporate Finance, NiSource Inc. (2001-2009)

**Vincent V. Rea, CRRA**  
**Professional Qualifications and Testimony Listing**

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**Educational Background**

M.B.A. in Finance, Indiana University, Bloomington, Indiana

B.A. with Honors in Business and Accounting, Lake Forest College, Lake Forest, Illinois

**Certifications**

Certified Rate of Return Analyst (CRRA), Society of Utility and Regulatory Financial Analysts

Certified Public Accountant (CPA), State of Illinois

Series 65 Uniform Investment Adviser Law Examination

**Seminars/Conferences**

- Society of Utility and Regulatory Financial Analysts Financial Forum (52<sup>nd</sup> Annual, 2021)
- Society of Utility and Regulatory Financial Analysts Financial Forum (51<sup>st</sup> Annual, 2019)
- Society of Utility and Regulatory Financial Analysts Financial Forum (50<sup>th</sup> Annual, 2018)
- Society of Utility and Regulatory Financial Analysts Financial Forum (49<sup>th</sup> Annual, 2017)
- Society of Utility and Regulatory Financial Analysts Financial Forum (48<sup>th</sup> Annual, 2016)
- Advanced Regulatory Studies Program, Institute of Public Utilities, Michigan State University (2015)
- Society of Utility and Regulatory Financial Analysts Financial Forum (47<sup>th</sup> Annual, 2015)
- American Gas Association (AGA) Financial Forum (2014)
- Society of Utility and Regulatory Financial Analysts Financial Forum (46<sup>th</sup> Annual, 2014)
- Essentials of Regulatory Finance, SNL Financial, Primary Instructor: Roger A. Morin, Ph.D. (2013)
- Society of Utility and Regulatory Financial Analysts Financial Forum (45<sup>th</sup> Annual, 2013)
- Society of Utility and Regulatory Financial Analysts Financial Forum (44<sup>th</sup> Annual, 2012)
- NARUC Utility Rate School (39<sup>th</sup> Annual Eastern), Committee on Water of NARUC (2011)
- Society of Utility and Regulatory Financial Analysts Financial Forum (43<sup>th</sup> Annual, 2011)
- Southern Gas Association (SGA) Ratemaking School (2011)
- Edison Electric Institute (EEI) Financial Conference (46<sup>th</sup> Annual, 2011)
- Edison Electric Institute (EEI) Financial Conference (45<sup>th</sup> Annual, 2010)

**Vincent V. Rea, CRRA**  
**Professional Qualifications and Testimony Listing**

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**Memberships/Associations**

Society of Utility and Regulatory Financial Analysts (SURFA).

**Presentations**

*“Do Cost of Equity Models (e.g. DCF Model) Understate the Cost of Equity?”*, Society of Utility and Regulatory Financial Analysts Financial Forum (52<sup>nd</sup> Annual, 2021), Panel Presentation.

*“Financial Engineering in the Utility Sector and its Impact on the Cost of Capital”*, Society of Utility and Regulatory Financial Analysts Financial Forum (47<sup>th</sup> Annual, 2015), Presentation and Panel Moderator.

*“Ratemaking Capital Structure: Holding Company vs. Operating Company”*, Society of Utility and Regulatory Financial Analysts Financial Forum (45<sup>th</sup> Annual, 2013), Presentation and Panel Moderator.

**Vincent V. Rea**  
**Testimony in Utility Regulatory Proceedings**

<b>Applicant</b>	<b>Date</b>	<b>Docket/Type of Case</b>	<b>Subject</b>
<b>Testimony before the Massachusetts Department of Public Utilities (D.P.U.)</b>			
NSTAR Electric Company d/b/a Eversource Energy	01/2022	D.P.U. 22-22 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	04/2018	D.P.U. 18-45 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	09/2015	D.P.U. 15-139 Financing Petition	Financing Authority (\$95.0 million)
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	04/2015	D.P.U. 15-50 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	08/2013	D.P.U. 13-129 Financing Petition	Financing Authority (\$50.0 million)
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	04/2013	D.P.U. 13-75 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	04/2012	D.P.U. 12-25 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Bay State Gas Company, d/b/a Columbia Gas of Massachusetts	05/2011	D.P.U. 11-41 Financing Petition	Financing Authority (\$100.0 million)
Bay State Gas Company	08/2004	D.T.E. 04-80 Financing Petition	Financing Authority (\$120.0 million)
Bay State Gas Company	11/2002	D.T.E. 02-73 Financing Petition	Financing Authority (\$50.0 million)
Bay State Gas Company	09/2001	D.T.E. 01-75 Participation in Intra-System Financing Vehicle	Participation in NiSource Money Pool System

**Vincent V. Rea**  
**Testimony in Utility Regulatory Proceedings**

Applicant	Date	Docket/Type of Case	Subject
<b>Testimony before the Connecticut Public Utilities Regulatory Authority (PURA)</b>			
Connecticut Light and Power Co. d/b/a Eversource Energy	05/2021	Docket No. 17-12-03RE11 PURA Investigation into Dist. System Planning - New Rate Designs and Rates Review	Cost of Capital (ROE) Capital Structure
<b>Testimony before the Indiana Utility Regulatory Commission (IURC)</b>			
Northern Indiana Public Service Company	10/2023	Cause No. 45967 Base Rate Proceeding (Gas)	Cost of Capital (ROE)
Northern Indiana Public Service Company	09/2022	Cause No. 45772 Base Rate Proceeding (Electric)	Cost of Capital (ROE)
Northern Indiana Public Service Company	09/2021	Cause No. 45621 Base Rate Proceeding (Gas)	Cost of Capital (ROE)
Northern Indiana Public Service Company	09/2021	Cause No. 45330-TDSIC-1 TDSIC Proceeding (Gas)	Cost of Capital (ROE) Capital Structure
Northern Indiana Public Service Company	10/2018	Cause No. 45159 Base Rate Proceeding (Electric)	Cost of Capital (ROE) Capital Structure
Northern Indiana Public Service Company	06/2018	Cause No. 45113 Financing Petition	Financing Authority (\$470.0 million)
Northern Indiana Public Service Company	09/2017	Cause No. 44988 Base Rate Proceeding (Gas)	Cost of Capital (ROE) Capital Structure
Northern Indiana Public Service Company	12/2017	Cause No. 45020 Amendment to Financing Petition	Financing Authority (\$700.0 million)
Northern Indiana Public Service Company	06/2016	Cause No. 44796 Financing Petition	Financing Authority (\$500.0 million)
Northern Indiana Public Service Company	10/2015	Cause No. 44688 Base Rate Proceeding (Electric)	Overall Cost of Capital Capital Structure Credit Ratings

**Vincent V. Rea**  
**Testimony in Utility Regulatory Proceedings**

<b>Applicant</b>	<b>Date</b>	<b>Docket/Type of Case</b>	<b>Subject</b>
<b>Testimony before the Indiana Utility Regulatory Commission (IURC) (continued)</b>			
Northern Indiana Public Service Company	11/2010	Cause No. 43969 Base Rate Proceeding (Electric)	Financing Activities Credit Ratings Cost of Debt
Northern Indiana Public Service Co., Kokomo Gas & Fuel Co., Northern Indiana Fuel & Light Co.	09/2010	Cause No. 43941 Merger Petition and Transfer of Franchise	Benefits of Proposed Merger
Northern Indiana Public Service Company	05/2010	Cause No. 43894 Base Rate Proceeding (Gas)	Financing Activities Credit Ratings Cost of Debt
Northern Indiana Public Service Company	08/2008	Cause No. 43563 Financing Petition	Financing Authority for CCGT Generation (\$120.0 million)
Northern Indiana Public Service Company	06/2008	Cause No. 43526 Base Rate Proceeding (Electric)	Financing Activities Credit Ratings Cost of Debt
<b>Testimony before the Kentucky Public Service Commission (PSC)</b>			
Columbia Gas of Kentucky	05/2021	Case No. 2021-00183 Base Rate Proceeding (Gas)	Cost of Capital (ROE) Capital Structure
<b>Testimony before the Maryland Public Service Commission (PSC)</b>			
Columbia Gas of Maryland	05/2023	Case No. 9701 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	05/2022	Case No. 9680 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	05/2021	Case No. 9664 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	05/2020	Case No. 9644 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	05/2019	Case No. 9609 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	04/2018	Case No. 9480 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	04/2017	Case No. 9447 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure

**Vincent V. Rea**  
**Testimony in Utility Regulatory Proceedings**

Applicant	Date	Docket/Type of Case	Subject
<b>Testimony before the Maryland Public Service Commission (PSC) (continued)</b>			
Columbia Gas of Maryland	04/2016	Case No. 9417 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Maryland	02/2013	Case No. 9316 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
<b>Testimony before the New Hampshire and Maine Public Utility Commissions</b>			
Northern Utilities, Inc.	03/2003	Docket No. 03-080 (NH) Case No. 2003-00222 (ME) Financing Petition	Financing Authority (\$60.0 million)
Northern Utilities, Inc.	11/2002	Case No. 2002-00680 (ME) Financing Vehicle	Alternative Fuel Financing Arrangement
Northern Utilities, Inc.	09/2001	Case No. 2001-00646 (ME) Participation in Intra- System Financing Vehicle	Participation in a Funds Pooling Agreement
<b>Testimony before the Virginia State Corporation Commission (SCC)</b>			
Columbia Gas of Virginia	04/2022	PUR-2022-00036 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Virginia	08/2018	PUR-2018-00131 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Virginia	04/2016	PUE-2016-00033 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
Columbia Gas of Virginia	04/2014	PUE-2014-00020 Base Rate Proceeding	Cost of Capital (ROE) Capital Structure
<b>Testimony before the Federal Energy Regulatory Commission (FERC)</b>			
Northern Indiana Public Service Company	03/2012	Docket No. EL12-49-000 Transmission Rate Incentives for MVP Projects	Incentive Rate Treatment - CWIP and Abandoned Plant

**Vincent V. Rea**  
**Subject Matter Support in Regulatory Proceedings**  
**(Representative Cases)**

Applicant	Date	Docket/Type of Case	Subject
<b>Virginia State Corporation Commission</b>			
Columbia Gas of Virginia	10/2016	PUE-2016-00129 Financing Petition	Financing Authority (\$60.0 million)
Columbia Gas of Virginia	10/2014	PUE-2014-00109 Financing Petition	Financing Authority (\$240.0 million)
Columbia Gas of Virginia	10/2012	PUE-2012-00126 Financing Petition	Financing Authority (\$175.0 million)
<b>Maryland Public Service Commission</b>			
Columbia Gas of Maryland	12/2018	Case No. 9601 Financing Petition	Financing Authority (\$21.0 million)
Columbia Gas of Maryland	09/2016	Case No. 9427 Financing Petition	Financing Authority (\$20.0 million)
Columbia Gas of Maryland	07/2014	Case No. 9359 Financing Petition	Financing Authority (\$10.0 million)
<b>Public Utilities Commission of Ohio</b>			
Columbia Gas of Ohio	09/2015	Case No. 15-1548-GA-AIS Financing Petition	Financing Authority (\$300.0 million)
Columbia Gas of Ohio	08/2014	Case No. 14-1523-GA-AIS Financing Petition	Financing Authority (\$300.0 million)
Columbia Gas of Ohio	07/2012	Case No. 12-2056-GA-AIS Financing Petition	Financing Authority (\$300.0 million)
<b>Pennsylvania Public Utility Commission</b>			
Columbia Gas of Pennsylvania	11/2017	Docket No. S-2017- 2632449	Financing Authority (\$160.0 million)
Columbia Gas of Pennsylvania	11/2015	Docket No. S-2015- 2515414	Financing Authority (\$130.0 million)



**Vincent V. Rea**  
**Subject Matter Support in Regulatory Proceedings**  
**(Representative Cases)**

<b>Applicant</b>	<b>Date</b>	<b>Docket/Type of Case</b>	<b>Subject</b>
Columbia Gas of Pennsylvania	11/2013	Docket No. S-2013-2395719 Financing Petition	Financing Authority (\$150.0 million)
Columbia Gas of Pennsylvania	12/2011	Docket No. S-2012-2282635 Financing Petition	Financing Authority (\$185.0 million)
<b>Kentucky Public Service Commission</b>			
Columbia Gas of Kentucky	10/2018	Case No. 2018-00356 Financing Petition	Financing Authority (\$40.0 million)
Columbia Gas of Kentucky	10/2015	Case No. 2015-00354 Financing Petition	Financing Authority (\$58.0 million)
Columbia Gas of Kentucky	09/2012	Case No. 2012-00418 Financing Petition	Financing Authority (\$45.0 million)
<b>Federal Energy Regulatory Commission</b>			
Northern Indiana Public Service Company	06/2015	Docket No. ES15-33-000 Short-Term Debt Authority Under Federal Power Act	Short-Term Debt Authority (\$1.0 billion)
Northern Indiana Public Service Company	05/2013	Docket No. ES13-25-000 Short-Term Debt Authority Under Federal Power Act	Short-Term Debt Authority (\$1.0 billion)
<b>Securities and Exchange Commission - PUHCA Authority</b>			
Columbia Energy Group and Columbia Gas of Ohio, Inc.	07/2004	HCAR No. 27899 Factoring Arrangement	Capital Contribution to Factoring Subsidiary
NiSource Inc. and Subsidiaries	11/2003	HCAR No. 27789 U-1 Financing Application	U-1 Financing PUHCA of 1935
NiSource Inc. and Subsidiaries	09/2002	HCAR No. 27567 Tax Allocation Agreement	U-1 Tax Allocation Agreement
Bay State Gas Company, Northern Utilities, Inc., and Granite State Gas Transmission, Inc.	08/2002 & 06/2002	HCAR Nos. 27559/27535 Intra-System Financing Vehicle	Release of Jurisdiction to Participate in NiSource Money Pool System
NiSource Inc. and Subsidiaries	12/2001	HCAR No. 27479 Intra-System Financing	Establish Money Pool System

**Vincent V. Rea**  
**Professional Experience in the Capital Markets**

<b>Transaction Type</b>	<b>Date</b>	<b>Company/Issuer</b>	<b>Transaction Size</b>
Initial Public Offering (Equity)	02/2015	Columbia Pipeline Partners, L.P.	\$1.2 billion
Public Debt Offering (30-year/10-year)	06/2012	NiSource Finance Corp.	\$750.0 million
Revolving Credit Facility Amendment	05/2012	NiSource Finance Corp.	\$1.5 billion
Tender Offer for Senior Unsecured Notes	12/2011	NiSource Finance Corp.	\$250.0 million
Public Debt Offering (30-year/10-year)	11/2011	NiSource Finance Corp.	\$500.0 million
Public Debt Offering (30-year)	06/2011	NiSource Finance Corp.	\$400.0 million
Commercial Paper Program Implementation	06/2011	NiSource Finance Corp.	\$500.0 million
Revolving Credit Facility	03/2011	NiSource Finance Corp.	\$1.5 billion
Tender Offer for Senior Unsecured Notes	12/2010	NiSource Finance Corp.	\$273.0 million
Public Debt Offering (30-year)	12/2010	NiSource Finance Corp.	\$250.0 million
Equity Offering (Forward Equity Offering)	09/2010	NiSource Inc.	\$400.0 million
Project Financing (Private Placement)	08/2010	Millennium Pipeline Company	\$725.0 million
Accounts Receivable Securitization Program	03/2010	Columbia Gas of Pennsylvania	\$75.0 million
Public Debt Offering (12-year)	12/2009	NiSource Finance Corp.	\$500.0 million
Accounts Receivable Securitization Program	10/2009	Columbia Gas of Ohio	\$275.0 million

**Vincent V. Rea**  
**Professional Experience in the Capital Markets**

<b>Transaction Type</b>	<b>Date</b>	<b>Company/Issuer</b>	<b>Transaction Size</b>
Accounts Receivable Securitization Program	10/2009	Northern Indiana Public Service Company	\$200.0 million
Term Loan Facility	04/2009	NiSource Finance Corp.	\$385.0 million
Tender Offer for Senior Unsecured Notes	04/2009	NiSource Finance Corp.	\$251.0 million
Public Debt Offering (7-year)	03/2009	NiSource Finance Corp.	\$600.0 million
Open Market Repurchases of Senior Unsecured Notes	01/2009	NiSource Finance Corp.	\$100.0 million
Revolving Credit Facility	09/2008	NiSource Finance Corp.	\$500.0 million
Reoffering of Tax-Exempt Pollution Control Bonds	08/2008	Jasper County, Indiana (on behalf of Northern Indiana Public Service Company)	\$254.0 million
Public Debt Offering (5-year/10-year)	05/2008	NiSource Finance Corp.	\$700.0 million
Construction Financing Credit Facility	08/2007	Millennium Pipeline Company	\$800.0 million
Public Debt Offering (10-year)	08/2007	NiSource Finance Corp.	\$800.0 million
Project Financing (Private Placement)	06/2006	Hardy Storage Project (Hardy Storage Company)	\$124.0 million
Private Placement Debt Offering (multiple tranches)	11/2005	NiSource Finance Corp.	\$900.0 million
Bilateral Revolving Credit Facility	11/2005	NiSource Finance Corp.	\$300.0 million
Public Debt Offering (12-year/15-year)	09/2005	NiSource Finance Corp.	\$1.0 billion
Revolving Credit Facility	03/2005	NiSource Finance Corp.	\$1.25 billion

**Vincent V. Rea**  
**Professional Experience in the Capital Markets**

<b>Transaction Type</b>	<b>Date</b>	<b>Company/Issuer</b>	<b>Transaction Size</b>
Public Debt Offering (5-year floating rate notes)	11/2004	NiSource Finance Corp.	\$450.0 million
Settlement of Forward Stock Purchase Agreements and Remarketing of Debentures	11/2004	NiSource Inc. (Mandatorily-Convertible Hybrid Securities)	\$144.0 million
Accounts Receivable Securitization Program	05/2004	Columbia Gas of Ohio	\$300.0 million
Revolving Credit Facilities (364-day/3-year)	03/2004	NiSource Finance Corp.	\$1.25 billion
Refunding of Tax-Exempt Pollution Control Bonds	12/2003	Jasper County, Indiana (on behalf of Northern Indiana Public Service Company)	\$55.0 million
Accounts Receivable Securitization Program	12/2003	Northern Indiana Public Service Company	\$200.0 million
Public Debt Offering (1.5-year floating/3-year)	11/2003	NiSource Finance Corp.	\$500.0 million
Public Debt Offering (11-year)	07/2003	NiSource Finance Corp.	\$500.0 million
Settlement of Forward Stock Purchase Agreements and Remarketing of Debentures	02/2003	NiSource Inc. (Mandatorily-Convertible Hybrid Securities)	\$345.0 million
Equity Offering	11/2002	NiSource Inc.	\$735.0 million
Revolving Credit Facility (364-day)	03/2002	NiSource Finance Corp.	\$500.0 million
Public Debt Offering (2-year)	04/2001	NiSource Finance Corp.	\$300.0 million
Post-Merger Consolidation of Bank Credit Facilities and Commercial Paper Facilities	03/2001	NiSource Inc. Columbia Energy Group NiSource Finance Corp.	\$2.5 billion

# Attachment VVR-2

Columbia Gas of Kentucky, Inc.  
Weighted Average Cost of Capital and Fair Rate of Return  
13-Month Average through December 31, 2025

<u>Form of Capitalization</u>	<u>Cap. Struct. Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	45.53%	4.88%	2.22%
Short-Term Debt	1.83%	5.25%	0.10%
Total Common Equity	52.64%	10.80%	5.69%
Total Capitalization	100.00%		8.01%

# Attachment VVR-3

**Columbia Gas of Kentucky, Inc.**  
**Comparative Risk Assessment - 2019-2023 and 5-Year Averages**

<b>Business &amp; Other Hybrid Metrics (1)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5-Year Average</b>
<b>Relative Size Comparison - Total Capital</b>						
Permanent Capitalization (excl. OCI)	\$ 542,404	\$ 484,359	\$ 417,043	\$ 340,638	\$ 311,060	\$ 419,101
Current Maturities and Short-Term Debt	23,049	57,386	36,584	38,848	21,860	35,545
Total Capitalization (excl. OCI)	\$ 565,452	\$ 541,744	\$ 453,627	\$ 379,486	\$ 332,919	\$ 454,646

**Standard Deviation and Coefficient of Variation of Return on Book Equity**

Return on Avg. Book Equity, incl. AFUDC (2)	9.0%	9.9%	6.0%	6.5%	9.5%	8.2%
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	<b>Average</b>	<b>Std. Dev.</b>	<b>Coff. Var.</b>
Return on Avg. Book Equity, incl. AFUDC (2)	<b>8.18%</b>	<b>1.61%</b>	<b>0.197</b>

<b>Financial Risk/Credit Quality Metrics</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5-Year Average</b>
<b>Permanent Capitalization Ratios</b>						
Long-Term Debt	46.3%	45.1%	46.1%	45.3%	45.8%	45.7%
Preferred Stock	-	-	-	-	-	-
Common Equity (2)	53.7%	54.9%	53.9%	54.7%	54.2%	54.3%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Total Capitalization Ratios**

Total Debt (incl. CMD and STD)	48.5%	50.9%	50.5%	50.9%	49.3%	50.0%
Preferred Stock	-	-	-	-	-	-
Common Equity (2)	51.5%	49.1%	49.5%	49.1%	50.7%	50.0%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**EBITDA Interest Coverage (3)**

EBITDA Interest Cov. (incl. AFUDC ded.)	5.43	5.51	4.96	4.97	5.36	5.25
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**FFO to Adjusted Total Debt (4)**

FFO to Adj. Debt (incl. AFUDC ded.)	20.2%	19.5%	13.8%	15.3%	18.8%	17.5%
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(1) Columbia Gas of Kentucky, Inc. standalone risk metrics.

(2) Excludes Other Comprehensive Income (Loss) component of Stockholders' Equity.

(3) Earnings before interest, taxes, depreciation and amortization, divided by interest expense (including capitalized AFUDC interest).

(4) Funds from Operations (net income, including AFUDC, plus depreciation, amortization and deferred income taxes) divided by Adjusted Total Debt (total debt, incl. current maturities and short-term debt, plus post-retirement obligations recognized within the balance sheet).



**Gas LDC Group**  
**Comparative Risk Assessment - 2019-2023 and 5-Year Averages**

<b>Business &amp; Hybrid Risk Metrics (1)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5-Year Average</b>
<b>Relative Size Comparison - Total Capital</b>						
Permanent Capitalization (excl. OCI)	9,508,723	8,330,855	7,800,370	6,885,963	6,035,937	\$ 7,712,369
Current Maturities and Short-Term Debt	987,636	1,152,945	846,723	367,591	637,049	\$ 798,389
Total Capitalization (excl. OCI)	10,496,359	9,483,800	8,647,093	7,253,554	6,672,985	\$ 8,510,758

**Standard Deviation and Coefficient of Variation of Return on Book Equity**

Return on Avg. Book Equity (2)(incl. AFUDC)	9.40%	10.30%	10.05%	9.80%	9.83%	9.88%
	<b>Average</b>	<b>Std. Dev.</b>	<b>Coeff. Var.</b>			
Return on Avg. Book Equity (2)(incl. AFUDC)	<b>9.81%</b>	<b>0.85%</b>	<b>0.081</b>			

<b>Financial Risk/Credit Quality Metrics</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>5-Year Average</b>
<b>Permanent Capitalization Ratios</b>						
Long-Term Debt	50.1%	50.8%	52.8%	48.9%	45.6%	49.6%
Preferred Stock	1.0%	2.2%	2.3%	1.8%	1.9%	1.8%
Common Equity (2)	48.8%	47.0%	45.0%	49.3%	52.5%	48.5%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Total Capitalization Ratios**

Total Debt (incl. CMD and STD)	55.0%	57.0%	58.1%	53.0%	50.7%	54.8%
Preferred Stock	0.9%	1.9%	2.1%	1.6%	1.7%	1.6%
Common Equity (2)	44.2%	41.1%	39.8%	45.3%	47.6%	43.6%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**EBITDA Interest Coverage (3)**

EBITDA Interest Cov. (incl. AFUDC deduction)	5.77	7.35	7.97	7.24	6.51	6.97
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**FFO to Adjusted Total Debt (4)**

FFO to Adj. Debt (incl. AFUDC deduction)	14.9%	14.0%	13.6%	15.7%	16.0%	14.8%
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- (1) All comparative risk metrics for the Gas LDC Group represent the arithmetic average of the calculated results for each of the individual companies within the Group.
- (2) Excludes the Other Comprehensive Income (Loss) component of Stockholders' Equity.
- (3) Earnings before interest, taxes, depreciation and amortization, divided by interest expense.
- (4) Funds from Operations (net income, plus depreciation, amortization and deferred income taxes) divided by Adjusted Total Debt (total debt, including current maturities and short-term debt, plus post-retirement obligations recognized within the balance sheet).

Source: 10-K filings of the proxy group companies.

**Capital Structure Ratios - Permanent Capitalization  
Gas LDC Group - 2019-2023 and 5-Year Average**

	2023	2022	2021	2020	2019	5-Year Average
<b><u>Atmos Energy Corp.</u></b>						
Long-Term Debt	39.1%	38.9%	38.6%	39.8%	37.6%	38.8%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	60.9%	61.1%	61.4%	60.2%	62.4%	61.2%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>New Jersey Resources Corp.</u></b>						
Long-Term Debt	58.0%	57.7%	56.5%	54.5%	49.3%	55.2%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	42.0%	42.3%	43.5%	45.5%	50.7%	44.8%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>NiSource Inc.</u></b>						
Long-Term Debt	52.1%	54.5%	55.4%	60.6%	56.4%	55.8%
Preferred Stock	2.3%	8.9%	9.3%	5.8%	6.3%	6.5%
Common Equity (1)	45.6%	36.6%	35.3%	33.6%	37.3%	37.7%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>Northwest Natural Gas Co.</u></b>						
Long-Term Debt	52.5%	51.3%	52.5%	48.8%	47.9%	50.6%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	47.5%	48.7%	47.5%	51.2%	52.1%	49.4%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>ONE Gas, Inc.</u></b>						
Long-Term Debt	43.8%	50.7%	61.0%	41.4%	37.6%	46.9%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	56.2%	49.3%	39.0%	58.6%	62.4%	53.1%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>Spire, Inc.</u></b>						
Long-Term Debt	55.3%	51.6%	52.5%	48.6%	44.7%	50.6%
Preferred Stock	3.8%	4.2%	4.3%	4.9%	5.2%	4.5%
Common Equity (1)	40.9%	44.1%	43.1%	46.6%	50.1%	45.0%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>Average of Gas LDC Proxy Group</u></b>						
Long-Term Debt	50.1%	50.8%	52.8%	48.9%	45.6%	49.6%
Preferred Stock	1.0%	2.2%	2.3%	1.8%	1.9%	1.8%
Common Equity (1)	48.8%	47.0%	45.0%	49.3%	52.5%	48.5%
Total Permanent Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Excludes Other Comprehensive Income (Loss) component of Stockholders' Equity.

**Capital Structure Ratios - Total Capitalization  
Gas LDC Group - 2019-2023 and 5-Year Average**

	2023	2022	2021	2020	2019	5-Year Average
<b><u>Atmos Energy Corp.</u></b>						
Total Debt (incl. CM and STD)	39.9%	47.4%	48.3%	39.8%	40.5%	43.2%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	60.1%	52.6%	51.7%	60.2%	59.5%	56.8%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>New Jersey Resources Corp.</u></b>						
Total Debt (incl. CM and STD)	61.1%	62.1%	61.1%	56.1%	50.0%	58.1%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	38.9%	37.9%	38.9%	43.9%	50.0%	41.9%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>NiSource Inc.</u></b>						
Total Debt (incl. CM and STD)	58.1%	58.8%	57.0%	61.9%	61.3%	59.4%
Preferred Stock	2.0%	8.0%	9.0%	5.6%	5.6%	6.0%
Common Equity (1)	39.9%	33.2%	34.0%	32.5%	33.1%	34.5%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>Northwest Natural Gas Co.</u></b>						
Total Debt (incl. CM and STD)	56.3%	57.4%	60.2%	58.3%	54.0%	57.2%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	43.7%	42.6%	39.8%	41.7%	46.0%	42.8%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>ONE Gas, Inc.</u></b>						
Total Debt (incl. CM and STD)	52.4%	55.6%	63.9%	47.2%	45.8%	53.0%
Preferred Stock	-	-	-	-	-	-
Common Equity (1)	47.6%	44.4%	36.1%	52.8%	54.2%	47.0%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b><u>Spire, Inc.</u></b>						
Total Debt (incl. CM and STD)	61.9%	60.7%	58.0%	55.0%	52.7%	57.7%
Preferred Stock	3.2%	3.4%	3.8%	4.3%	4.5%	3.8%
Common Equity (1)	34.9%	35.9%	38.2%	40.8%	42.9%	38.5%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<b>Average of Gas LDC Proxy Group</b>						
Total Debt (incl. CM and STD)	55.0%	57.0%	58.1%	53.0%	50.7%	54.8%
Preferred Stock	0.9%	1.9%	2.1%	1.6%	1.7%	1.6%
Common Equity (1)	44.2%	41.1%	39.8%	45.3%	47.6%	43.6%
Total Capitalization	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Excludes Other Comprehensive Income (Loss) component of Stockholders' Equity.

Abbreviations: "CM" denotes Current Maturities of Debt; "STD" denotes Short-Term Debt.

# Attachment VVR-4

Regulatory Mechanisms by Jurisdiction  
Atmos Energy Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
CO	-	System Safety and Integrity Rider (SSIR)
KS	Weather Normalization (WNA)	Gas System Reliability Surcharge (GSRS) and System Integrity Program (SIP)
KY	Weather Normalization (WNA)	Pipeline Replacement Program (PRP)
LA	WNA and Rate Stabilization Clause (RSC)	Safety and Reliability Deferral Mechanism (SIIP)
MS	WNA and Stable Rate Filing (SRF)	System Integrity Rider (SIR)
TN	WNA and Annual Rate Mechanism (ARM)	Infrastructure Deferral Mechanism
TX (Mid)	WNA and Rate Review Mechanism	Rule 8.209 System Safety and Reliability Capital Deferral Mechanism and Gas Reliability Infrastructure Program (GRIP)
TX (West)	WNA and Rate Review Mechanism	Rule 8.209 System Safety and Reliability Capital Deferral Mechanism and Gas Reliability Infrastructure Program (GRIP)
VA	Weather Normalization (WNA)	Steps to Advance Virginia Energy (SAVE)

Regulatory Mechanisms by Jurisdiction  
New Jersey Resources Corp.

Jurisdiction	Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
NJ	Revenue Decoupling (Conservation Incentive Program (CIP), including WNA)	Safety Acceleration and Facility Enhancement Program (SAFE), Reinvestment in System Enhancement (RISE) Program, Resiliency and Reliability Invest. (IIP)

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Regulatory Mechanisms by Jurisdiction  
NiSource Inc.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
IN	Fixed Customer Charge (Gas)	Transmission, Distribution and Storage System Improvement Charge (TDSIC) (Gas and Electric)
KY	Weather Normalization Adjustment (WNA) and Fixed Customer Charge	Safety Modernization and Repl. Program (SMRP)
MD	Weather Normalization Adjustment (WNA) and Revenue Normalization Adjustment (RNA)	Strategic Infrastructure Development and Enhancement (STRIDE)
OH	Straight-Fixed Variable Rate Design	Capital Expenditure Program (CEP) and Infrastructure Replacement Program (IRP)
PA	Weather Normalization Adjustment (WNA) and Fixed Customer Charge	Distribution and Storage System Impr. Charge (DSIC)
VA	Weather Normalization Adjustment (WNA) and Revenue Normalization Adjustment (RNA)	Steps to Advance Virginia's Energy Plan (SAVE)

Regulatory Mechanisms by Jurisdiction  
Northwest Natural Gas Co.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
OR	Revenue Decoupling & WNA (WARM)	Forward Test Year
WA	-	Forward Test Tear (Multiyear)

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Regulatory Mechanisms by Jurisdiction  
ONE Gas, Inc.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
KS	Weather Normalization Adjustment (WNA)	Gas System Reliability Surcharge (GSRS)
OK	WNA (Temperature Adjustment Clause)	PBRC - Incremental Capital Investment
TX	Weather Normalization Adjustment (WNA)	Gas Reliability Infrastructure Program (GRIP) and Cost of Service Adjustment (COSA)

Regulatory Mechanisms by Jurisdiction  
Spire Inc.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
AL	WNA (Temperature Adjustment Rider) and Rate Stabilization & Equalization (RSE)	-
MO	Weather Normalization (WNA)	Infrastructure System Replacement Surcharge (ISRS)
MS	WNA and Rate Stabilization Adjustment (RSA)	Supplemental Growth Rider (SG)

- (1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Source of Data: Company 10-K reports and investor conference presentations.

Regulatory Mechanisms by Jurisdiction  
Alliant Energy Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
IA	-	Forward Looking Test Years
WI	-	Forward Looking Test Years

Regulatory Mechanisms by Jurisdiction  
Avista Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
ID	Revenue Decoupling (Fixed Cost Adjustment)	-
OR	Revenue Decoupling	-
WA	Revenue Decoupling / Multi-Year Rate Plan	-

Regulatory Mechanisms by Jurisdiction  
Black Hills Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
AR	WNA and Revenue Decoupling (Gas)	Safety and Integrity Rider (Gas)
CO	-	System Safety Integrity Rider - (SSIR) (Gas)
IA	-	System Safety and Maintenance Adjustment Rider (Gas)
KS	Weather Normalization Adjustment (WNA)	Gas System Reliability Surcharge (Gas)
NE	-	Infrastructure Repl. Cost Recovery Surcharge (Gas) and System Safety and Integrity Rider (Gas)
SD	-	Transmission Facility Adjustment (TFA)
WY	-	Integrity Rider

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.



Regulatory Mechanisms by Jurisdiction  
CMS Energy Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
MI	Revenue Decoupling (Gas)	Forward Looking Test Year

Regulatory Mechanisms by Jurisdiction  
Consolidated Edison, Inc.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
NY	WNA and Revenue Decoupling (Gas & Electric)	-
NJ	Revenue Decoupling - Conservation Incentive Program (CIP)	Infrastructure Investment Program (IIP)

Regulatory Mechanisms by Jurisdiction  
Eversource Energy

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
MA	Revenue Decoupling (Gas & Electric)	Gas System Enhancement Program (GSEP)(Gas)
CT	Revenue Decoupling) (Gas & Electric)	Electric System Improvements Charge (ESI) and System Resiliency Plan (Electric); Gas System Improvement (GSI) Mechanism (Gas)
NH	Regulatory Reconciliation Adjustment (RRA)	-

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Regulatory Mechanisms by Jurisdiction  
MGE Energy Inc.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
WI	-	Forward Test Years and Current Return on 50% of CWIP or 100% AFUDC

Regulatory Mechanisms by Jurisdiction  
Northwestern Corp.

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
MT	Fixed Cost Recovery Mechanism Pilot (FCRM)	-
NE	-	-
SD	-	-

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Source of Data: Company 10-K reports and investor conference presentations.

Regulatory Mechanisms by Jurisdiction  
WEC Energy Group

Jurisdiction	Rate / Revenue Stabilization Mechanisms (1)	Infrastructure Replacement Cost Recovery Mechanisms
IL	Revenue Decoupling (Gas) and Modified Fixed-Variable Rate Design (Gas)	Gas Pipeline Replacement Rider, Qualifying Infrastructure Plant Rider, Forward Test Year
MI	-	Main Replacement Rider, Forward Test Year
MN	Revenue Decoupling (Gas)	Gas Utility Infrastructure Cost Rider Surcharge, Forward Test Year
WI	-	Forward Test Years (Gas & Electric)

(1) Rate/revenue stabilization mechanisms include the following four rate design approaches: (a) revenue decoupling mechanisms (incl. lost revenues adjustment); (b) weather normalization adjustment (WNA) clauses; (c) straight-fixed variable (SFV) or modified fixed-variable (MFV) rate design; and (d) rate stabilization tariffs.

Source of Data: Company 10-K reports and investor conference presentations.

# Attachment VVR-5

Columbia Gas of Kentucky, Inc.

Ratesetting Capital Structure and Related Ratios  
Actual at February 28, 2024 and Projected at August 31, 2024 and December 31, 2025

Form of Capitalization	Actual at February 28, 2024		Projected at August 31, 2024		Projected at December 31, 2025		Thirteen Month Average December 31, 2025	
	Amount Outstanding	Capital Structure Ratios	Amount Outstanding	Capital Structure Ratios	Amount Outstanding	Capital Structure Ratios	Amount Outstanding	Capital Structure Ratios
Long-Term Debt	\$ 251,375,000	43.87%	\$ 256,375,000	44.34%	\$ 285,000,000	43.67%	\$ 277,259,615	43.73%
Current Maturities - LT Debt	-	0.00%	-	0.00%	12,375,000	1.90%	11,423,077	1.80%
<b>Total Long-Term Debt</b>	<b>\$ 251,375,000</b>	<b>43.87%</b>	<b>\$ 256,375,000</b>	<b>44.34%</b>	<b>\$ 297,375,000</b>	<b>45.57%</b>	<b>\$ 288,682,692</b>	<b>45.53%</b>
<b>Common Equity</b>								
Common Stock Issued	\$ 23,806,200		\$ 23,806,200		\$ 23,806,200		\$ 23,806,200	
Additional Paid-In Capital	58,018,524		60,018,524		68,018,524		68,018,524	
OCI	-		-		-		-	
Retained Earnings	222,958,411		220,424,709		251,756,154		241,957,527	
<b>Total Common Equity</b>	<b>\$ 304,783,135</b>	<b>53.20%</b>	<b>\$ 304,249,432</b>	<b>52.62%</b>	<b>\$ 343,580,878</b>	<b>52.65%</b>	<b>\$ 333,782,250</b>	<b>52.64%</b>
<b>Total Permanent Capital</b>	<b>\$ 556,158,135</b>	<b>97.07%</b>	<b>\$ 560,624,432</b>	<b>96.96%</b>	<b>\$ 640,955,878</b>	<b>98.22%</b>	<b>\$ 622,464,943</b>	<b>98.17%</b>
Short-Term Debt (1)	\$ 16,794,228	2.93%	\$ 17,596,785	3.04%	\$ 11,600,500	1.78%	\$ 11,600,500	1.83%
<b>Total Capitalization</b>	<b>\$ 572,952,363</b>	<b>100.00%</b>	<b>\$ 578,221,218</b>	<b>100.00%</b>	<b>\$ 652,556,378</b>	<b>100.00%</b>	<b>\$ 634,065,442</b>	<b>100.00%</b>

(1) 13-month average short-term debt balance.

Source: Company provided information.

# Attachment VVR-6

Columbia Gas of Kentucky, Inc.

Actual at February 28, 2024 and Projected at August 31, 2024 and December 31, 2025

Debt Instrument	Maturity Date	Interest Rate	Principal Value	Annual Interest Expense
5.9200% Notes, due January 5, 2026	1/5/2026	5.9200%	12,375,000	732,600
6.0200% Notes, due December 16, 2030	12/16/2030	6.0200%	10,000,000	602,000
5.7700% Notes, due January 7, 2043	1/7/2043	5.7700%	20,000,000	1,154,000
6.2000% Notes, due December 23, 2043	12/23/2043	6.2000%	20,000,000	1,240,000
4.4300% Notes, due December 16, 2044	12/16/2044	4.4300%	5,000,000	221,500
3.8425% Notes, due September 30, 2046	9/30/2046	3.8425%	31,000,000	1,191,175
4.6436% Notes, due December 31, 2048	12/31/2048	4.6436%	13,000,000	603,668
3.7485% Notes, due December 31, 2049	12/31/2049	3.7485%	15,000,000	562,275
3.1742% Notes, due June 30, 2050	6/30/2050	3.1742%	12,000,000	380,904
3.2720% Notes, due June 30, 2051	6/30/2051	3.2720%	22,000,000	719,840
3.2770% Notes, due September 30, 2051	9/30/2051	3.2770%	22,000,000	720,940
3.2671% Notes, due December 31, 2051	12/31/2051	3.2671%	10,000,000	326,710
4.1243% Notes, due March 31, 2052	3/31/2052	4.1243%	8,000,000	329,944
5.0808% Notes, due June 30, 2052	6/30/2052	5.0808%	18,000,000	914,544
6.2618% Notes, due September 29, 2053	9/29/2053	6.2618%	33,000,000	2,066,394
Long-Term Debt at February 28, 2024			\$ 251,375,000	\$ 11,766,494

Embedded Cost of Long-Term Debt	4.68%
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6.2500% Notes, due June 30, 2054	6/30/2054	6.2500%	5,000,000	312,500
Long-Term Debt at August 31, 2024			\$ 256,375,000	\$ 12,078,994

Embedded Cost of Long-Term Debt	4.71%
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6.2500% Notes, due September 30, 2054	9/30/2054	6.2500%	24,000,000	1,500,000
6.0000% Notes, due March 31, 2055	3/31/2055	6.0000%	2,000,000	120,000
6.0000% Notes, due June 30, 2055	6/30/2055	6.0000%	15,000,000	900,000
Long-Term Debt at December 31, 2025			\$ 297,375,000	\$ 14,598,994

Embedded Cost of Long-Term Debt	4.91%
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Columbia Gas of Kentucky, Inc.

Thirteen Month Average through December 31, 2025

Debt Instrument	Maturity Date	Interest Rate	Principal Value	Annual Interest Expense
5.9200% Notes, due January 5, 2026	1/5/2026	5.9200%	12,375,000	732,600
6.0200% Notes, due December 16, 2030	12/16/2030	6.0200%	10,000,000	602,000
5.7700% Notes, due January 7, 2043	1/7/2043	5.7700%	20,000,000	1,154,000
6.2000% Notes, due December 23, 2043	12/23/2043	6.2000%	20,000,000	1,240,000
4.4300% Notes, due December 16, 2044	12/16/2044	4.4300%	5,000,000	221,500
3.8425% Notes, due September 30, 2046	9/30/2046	3.8425%	31,000,000	1,191,175
4.6436% Notes, due December 31, 2048	12/31/2048	4.6436%	13,000,000	603,668
3.7485% Notes, due December 31, 2049	12/31/2049	3.7485%	15,000,000	562,275
3.1742% Notes, due June 30, 2050	6/30/2050	3.1742%	12,000,000	380,904
3.2720% Notes, due June 30, 2051	6/30/2051	3.2720%	22,000,000	719,840
3.2770% Notes, due September 30, 2051	9/30/2051	3.2770%	22,000,000	720,940
3.2671% Notes, due December 31, 2051	12/31/2051	3.2671%	10,000,000	326,710
4.1243% Notes, due March 31, 2052	3/31/2052	4.1243%	8,000,000	329,944
5.0808% Notes, due June 30, 2052	6/30/2052	5.0808%	18,000,000	914,544
6.2618% Notes, due September 29, 2053	9/29/2053	6.2618%	33,000,000	2,066,394
6.2500% Notes, due June 30, 2054	6/30/2054	6.2500%	5,000,000	312,500
6.2500% Notes, due September 30, 2054	9/30/2054	6.2500%	24,000,000	1,500,000
6.0000% Notes, due March 31, 2055	3/31/2055	6.0000%	1,384,615	83,077
6.0000% Notes, due June 30, 2055	6/30/2055	6.0000%	6,923,077	415,385
Thirteen Month Average through December 31, 2025			\$ 288,682,692	\$ 14,077,456

Embedded Cost of Long-Term Debt	4.88%
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# Attachment VVR-7



DCF Method  
Gas LDC Group  
Projected Growth Rates and Cost of Equity Estimates

	(1)	(2)	(3)	(4)	(5)	(5)	(5)
	Dividend Yield	Yahoo Finance EPS Growth	Zacks EPS Growth	Value Line EPS Growth	Yahoo Finance EPS COE	Zacks EPS COE	Value Line EPS COE
Gas LDC Group							
Atmos Energy Corp	2.9%	7.5%	7.3%	7.0%	10.4%	10.2%	9.9%
New Jersey Resources Corp.	4.0%	6.0%	6.0%	5.0%	10.0%	10.0%	9.0%
Nisource Inc.	4.0%	7.3%	7.2%	9.5%	11.3%	11.1%	13.5%
Northwest Natural Gas Co.	5.2%	2.8%	3.7%	6.5%	8.0%	8.9%	11.7%
ONE Gas, Inc.	4.3%	5.0%	5.0%	4.0%	9.3%	9.3%	8.3%
Spire Inc.	5.1%	6.4%	5.6%	4.5%	11.5%	10.7%	9.6%
Average Estimate (6)	4.2%	5.8%	5.8%	6.1%	10.1%	10.0%	10.3%
Median Estimate					10.2%	10.1%	9.8%

Low-End and High-End Outlier Tests

Low-End Threshold (7.00%) (6)	7.00%	7.00%	7.00%
Median Result (excluding negative values)(6)	10.2%	10.1%	9.8%
200% of Median Result (6)	20.4%	20.2%	19.6%
High-End Threshold - 200% of Median (average)	20.0%	20.0%	20.0%

(1) See page 3 of this Attachment.

(2) [www.finance.yahoo.com](http://www.finance.yahoo.com) (accessed March 1, 2024).

(3) [www.zacks.com](http://www.zacks.com) (accessed March 1, 2024).

(4) See page 5 of this Attachment.

(5) Sum of dividend yield and applicable projected growth rate.

(6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% of the median value of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of this Attachment and FERC Opinion No. 569, 169 FERC ¶, 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020). FERC's previous high-end outlier test of 17.7% was further applied where indicated (see ISO New England Inc., 109 FERC ¶ 61,147 at P 205 (November 3, 2004).

DCF Method  
Gas LDC Group  
Historical EPS Growth Rates and Cost of Equity Estimates

	(1)	(2)	(3)	(4)	(5)
	Dividend Yield	5-Year Historical EPS Growth	10-Year Historical EPS Growth	Average Historical EPS Growth	Cost of Equity - Hist. EPS
Gas LDC Group					
Atmos Energy Corp.	2.9%	9.0%	9.5%	9.3%	12.2%
New Jersey Resources Corp.	4.0%	2.5%	5.0%	3.8%	7.7%
NiSource Inc.	4.0%	15.0%	1.5%	8.3%	12.2%
Northwest Natural Gas Co.	5.2%	2.5%	-1.0%	2.5%	7.7%
ONE Gas, Inc.	4.3%	6.0%	n/a	6.0%	10.3%
Spire Inc.	5.1%	3.0%	5.0%	4.0%	9.1%
Average Estimate (6)	4.2%	6.3%	4.0%	5.6%	9.9%
Median Estimate					9.7%

<u>Low-End and High-End Outlier Tests</u>	
Low-End Threshold (7.00%) (6)	7.00%
Median Result (excluding negative values)(6)	9.7%
200% of Median Result (6)	19.4%
High-End Threshold - 200% of Median (average)	19.4%

- (1) See page 3 of this Attachment.
- (2) See page 5 of this Attachment.
- (3) See page 5 of this Attachment.
- (4) Average of (2) and (3) above. If either the 10-year or 5-year historical EPS growth rate is unavailable or negative, only the available or positive EPS growth rate has been referenced.
- (5) Sum of (1) and (4) above.
- (6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% higher than the average of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of this Attachment and FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020).

DCF Method  
Gas LDC Group  
Dividend Yield Calculations

	(a)	(b)	(b)/(a)
Gas LDC Group	30/60/90 Day Stock Price Avg.	Next 12-Mo. Dividends	Dividend Yield
Atmos Energy Corp.	\$ 113.67	\$ 3.34	2.9%
New Jersey Resources Corp.	\$ 42.38	\$ 1.68	4.0%
NiSource Inc.	\$ 25.95	\$ 1.03	4.0%
Northwest Natural Gas Co.	\$ 37.73	\$ 1.95	5.2%
ONE Gas, Inc.	\$ 61.26	\$ 2.65	4.3%
Spire Inc.	\$ 59.92	\$ 3.06	5.1%
Average	-	-	4.2%

(a) See page 4 of this Attachment; 30/60/90 day average closing stock price.

(b) Value Line Investment Survey, Summary and Index, February 23, 2024. Estimated dividends, next twelve months.

DCF Method  
Gas LDC Group  
30/60/90 Day Average Closing Stock Price Through February 23, 2024

Averages	Atmos Energy	New Jersey Resources	NiSource Inc.	Northwest Natural Gas	ONE Gas, Inc.	Spire Inc.
30-Day Average	\$ 113.47	\$ 41.63	\$ 25.77	\$ 37.36	\$ 60.42	\$ 58.91
60-Day Average	\$ 114.38	\$ 42.90	\$ 26.13	\$ 37.98	\$ 61.54	\$ 60.89
90-Day Average	\$ 113.17	\$ 42.61	\$ 25.94	\$ 37.86	\$ 61.82	\$ 59.95
30/60/90 Day Avg.	\$ 113.67	\$ 42.38	\$ 25.95	\$ 37.73	\$ 61.26	\$ 59.92

Date	Atmos Energy	New Jersey Resources	NiSource Inc.	Northwest Natural Gas	ONE Gas, Inc.	Spire Inc.
2/23/2024	112.76	41.42	26.12	35.85	59.34	59.14
2/22/2024	114.19	41.64	26.04	39.76	60.66	59.60
2/21/2024	114.69	42.01	26.25	38.87	60.39	59.73
2/20/2024	113.69	42.02	26.02	39.16	60.55	59.81
2/16/2024	113.95	42.08	25.90	36.49	60.74	59.42
2/15/2024	114.27	42.35	25.97	36.06	61.38	60.03
2/14/2024	112.98	41.34	25.38	35.53	59.82	58.50
2/13/2024	111.75	40.66	25.28	35.14	59.16	57.74
2/12/2024	114.00	42.13	25.63	36.62	62.45	59.34
2/9/2024	113.11	41.28	25.25	35.13	60.85	58.35
2/8/2024	112.93	41.15	25.06	35.36	60.26	58.46
2/7/2024	111.93	40.50	25.09	35.62	58.76	57.86
2/6/2024	111.81	40.91	25.08	35.75	58.67	57.95
2/5/2024	111.78	39.48	25.25	35.84	58.86	58.03
2/2/2024	113.77	40.80	25.60	36.94	61.27	59.00
2/1/2024	115.79	41.46	26.35	37.03	61.90	59.27
1/31/2024	113.94	40.83	25.97	36.86	61.37	56.77
1/30/2024	114.51	41.66	26.12	37.70	61.47	58.03
1/29/2024	114.26	42.10	26.09	38.98	62.39	58.53
1/26/2024	113.70	41.54	25.82	38.73	61.34	58.15
1/25/2024	113.92	41.94	25.56	38.99	61.23	58.83
1/24/2024	110.89	41.69	25.18	38.45	60.59	59.50
1/23/2024	112.70	42.36	25.68	39.00	61.15	60.81
1/22/2024	113.14	42.18	25.59	38.77	60.30	60.17
1/19/2024	113.08	41.73	25.60	38.00	59.18	58.79
1/18/2024	112.43	41.49	25.65	37.77	58.57	58.20
1/17/2024	112.74	42.07	25.94	37.71	58.86	58.41
1/16/2024	114.08	42.15	26.28	37.83	59.27	59.00
1/12/2024	115.79	42.93	26.74	38.43	60.80	60.09
1/11/2024	115.39	42.95	26.50	38.31	61.03	59.84
1/10/2024	118.04	44.06	27.34	39.19	62.50	61.41
1/9/2024	118.36	43.96	27.14	39.19	63.02	61.74
1/8/2024	118.85	44.99	27.29	39.63	64.53	63.06
1/5/2024	117.98	44.96	27.04	39.38	63.93	62.70
1/4/2024	117.60	45.32	26.86	39.69	64.39	63.08
1/3/2024	118.02	45.25	26.89	39.93	65.01	63.68
1/2/2024	116.93	45.27	27.01	39.68	64.69	63.76
12/29/2023	115.90	44.58	26.55	38.94	63.72	62.34
12/28/2023	116.08	44.77	26.55	39.02	64.27	62.41
12/27/2023	115.92	44.68	26.28	39.16	64.35	62.58
12/26/2023	115.81	44.84	26.43	39.11	64.82	63.30
12/22/2023	114.91	45.06	26.25	39.16	65.06	63.78
12/21/2023	113.75	44.52	26.04	38.52	64.24	62.99
12/20/2023	113.16	43.95	26.08	38.20	63.01	62.70
12/19/2023	115.15	44.47	26.54	38.62	63.72	63.58
12/18/2023	114.28	43.79	26.39	38.04	63.02	62.80
12/15/2023	114.82	43.67	26.48	38.43	63.23	62.93
12/14/2023	115.39	44.74	26.68	39.28	64.46	64.66
12/13/2023	116.85	45.03	27.03	39.76	64.16	65.30
12/12/2023	113.70	43.75	26.18	38.38	61.04	63.90
12/11/2023	113.32	44.07	26.34	38.60	61.11	63.38
12/8/2023	113.46	44.14	26.30	38.63	61.55	62.88
12/7/2023	114.53	44.32	26.43	38.58	61.09	63.90
12/6/2023	114.73	44.32	26.41	38.31	61.33	63.45
12/5/2023	113.88	43.41	26.14	37.73	60.31	61.84
12/4/2023	114.92	43.85	26.44	38.18	61.88	62.57
12/1/2023	113.85	43.00	26.20	37.30	59.74	61.88
11/30/2023	113.81	42.20	25.64	36.62	57.63	61.01
11/29/2023	112.05	41.88	25.81	36.37	58.87	60.92
11/28/2023	112.50	42.09	26.18	36.70	59.02	61.33
11/27/2023	112.64	42.41	26.20	36.73	58.78	60.91
11/24/2023	112.00	42.72	26.10	36.47	58.99	60.73
11/22/2023	113.05	42.69	26.19	36.65	59.31	60.53
11/21/2023	111.60	41.71	26.01	36.30	59.07	59.76
11/20/2023	112.92	42.35	26.06	36.73	60.41	60.96
11/17/2023	113.90	43.01	26.08	37.22	61.68	61.36
11/16/2023	114.05	42.76	25.77	37.15	61.75	59.74
11/15/2023	113.53	42.55	25.75	37.36	61.79	59.91
11/14/2023	114.14	42.94	25.97	37.26	61.46	59.64
11/13/2023	111.12	41.18	24.81	35.75	59.67	57.23
11/10/2023	111.41	41.03	25.00	36.20	60.33	56.92
11/9/2023	111.29	41.13	24.82	36.11	60.20	57.16
11/8/2023	109.27	41.41	24.98	36.71	59.71	57.05
11/7/2023	109.86	41.95	25.06	37.34	61.23	57.88
11/6/2023	110.70	42.32	25.29	37.75	62.21	58.14
11/3/2023	111.49	43.07	25.72	39.34	62.21	59.39
11/2/2023	111.38	42.50	25.78	38.58	62.35	58.19
11/1/2023	108.67	41.71	25.40	37.46	61.44	56.82
10/31/2023	107.66	40.58	25.16	36.71	60.40	55.63
10/30/2023	106.44	40.67	25.12	36.29	61.32	54.99
10/27/2023	106.12	40.67	25.15	37.05	61.51	54.80
10/26/2023	108.76	41.51	25.72	37.66	63.04	55.52
10/25/2023	108.35	41.57	25.31	37.71	62.81	55.37
10/24/2023	108.67	41.70	25.23	37.81	64.40	55.49
10/23/2023	107.79	41.46	24.68	38.19	65.38	56.52
10/20/2023	108.78	42.18	25.22	39.40	65.97	57.61
10/19/2023	110.10	42.49	25.63	39.94	66.59	57.56
10/18/2023	111.88	43.47	25.98	40.36	68.26	58.86
10/17/2023	112.73	43.07	26.13	40.36	69.58	59.43
10/16/2023	112.25	42.55	26.11	39.90	69.80	58.41

DCF Method  
Gas LDC Group  
Per Share Annual Growth Rates - Historical and Projected

Gas LDC Group	Past 5-Years Historical Growth Rates				Estimated '21-'23 to '27-'29 Growth Rates			
	EPS	DPS	BVPS	Average	EPS	DPS	BVPS	Average
Atmos Energy Corp.	9.0%	8.5%	12.0%	9.8%	7.0%	7.5%	4.0%	6.2%
New Jersey Resources Corp.	2.5%	6.5%	7.0%	5.3%	5.0%	5.0%	4.5%	4.8%
NiSource Inc.	15.0%	3.5%	0.5%	6.3%	9.5%	4.5%	5.0%	6.3%
Northwest Natural Gas Co.	2.5%	0.5%	0.5%	1.2%	6.5%	0.5%	4.0%	3.7%
ONE Gas, Inc.	6.0%	8.0%	4.0%	6.0%	4.0%	3.0%	4.5%	3.8%
Spire Inc.	3.0%	5.5%	3.5%	4.0%	4.5%	4.5%	5.5%	4.8%
Average	6.3%	5.4%	4.6%	5.4%	6.1%	4.2%	4.6%	4.9%

Gas LDC Group	Past 10-Years Historical Growth Rates			
	EPS	DPS	BVPS	Average
Atmos Energy Corp.	9.5%	7.0%	9.5%	8.7%
New Jersey Resources Corp.	5.0%	6.5%	7.5%	6.3%
NiSource Inc.	1.5%	-0.5%	-3.0%	-0.7%
Northwest Natural Gas Co.	-1.0%	1.5%	1.0%	0.5%
ONE Gas, Inc.	n/a	n/a	n/a	n/a
Spire Inc.	5.0%	5.0%	5.5%	5.2%
Average	4.0%	3.9%	4.1%	4.0%

Source: Value Line Investment Survey, Ratings & Reports, February 23, 2024.

DCF Method - Gas LDC Group  
Determination of "Low-End" Outlier Threshold for DCF Estimates

Recent Average between Moody's "A" Rated and "Baa" Rated 30-Year Utility Bond Yield (1)	5.69%
Market Risk Premium per CAPM Analysis (2)	7.25%
20% Weighting Factor per FERC Opinion No. 569 (3)	20.0%
Equity Risk Premium Factor to Apply to "A"/"Baa" Rated Bond Yield (3)(4)	1.45%
Low-End Outlier Threshold (3)(5)	7.14%
Low-End Outlier Threshold Referenced	7.00%

Footnotes:

- (1) 12-month average of "A" rated and "Baa" rated utility bond yields. Source: Mergent Bond Record (January 2024 edition).
- (2) See Mr. Rea's CAPM analysis (Attachment VVR-11, p. 1).
- (3) See FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387-389 (Nov. 21, 2019), and FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.161-162 (May 21, 2020).
- (4) Product of (2) x (3) above.
- (5) Sum of (1) and (4) above. To ensure a conservative analysis, the 7.14 percent low-end outlier estimate was rounded down to 7.00 percent.

DCF Method  
Gas LDC Group  
Investment Risk Indicators

Gas LDC Group	Value Line Risk Indicators					Long-Term Credit Ratings				Market Cap	
	Beta	Safety Rank	Financial Strength	Fin. Str. Weight	Stk Price Stability	S&P LT Rating	S&P Weight	Moody's LT Rating	Moody's Weight	Source: Value Line	Billions (\$)
Atmos Energy Corp.	0.85	1	A+	2	95	A-	7	A1	5	\$	17.20
New Jersey Resources Corp.	0.95	2	A	3	85	n/a	n/a	A1	5		4.10
Nisource Inc.	0.90	2	B++	4	95	BBB+	8	Baa2	9		10.60
Northwest Natural Gas Co.	0.85	2	A	3	85	A+	5	Baa1	8		1.30
ONE Gas, Inc.	0.85	2	B++	4	90	A-	7	A3	7		3.50
Spire Inc.	0.85	2	B++	4	90	A-	7	Baa2	9		3.30
Averages	0.88	2	A	3	90	A-	7	A3	7	\$	6.67

Source: Value Line Investment Survey, Ratings & Reports, February 23, 2024 and Value Line Summary and Index, February 9, 2024. S&P and Moody's long-term credit ratings accessed February 24, 2024.

S&P Credit Rating	S&P Weightings	Moody's Credit Rating	Moody's Weightings	Value Line Fin. Str. Weightings
AAA	1	Aaa	1	A++
AA+	2	Aa1	2	A+
AA	3	Aa2	3	A
AA-	4	Aa3	4	B++
A+	5	A1	5	B+
A	6	A2	6	B
A-	7	A3	7	C++
BBB+	8	Baa1	8	C+
BBB	9	Baa2	9	C
BBB-	10	Baa3	10	
BB+	11	Ba1	11	
BB	12	Ba2	12	
BB-	13	Ba3	13	

# Attachment VVR-8



DCF Method  
Combination Utility Group  
Projected Growth Rates and Cost of Equity Estimates

	(1)	(2)	(3)	(4)	(5)	(5)	(5)
	Dividend Yield	Yahoo Finance EPS Growth	Zacks EPS Growth	Value Line EPS Growth	Yahoo Finance EPS COE	Zacks EPS COE	Value Line EPS COE
Combination Utility Group							
Alliant Energy Corp.	3.7%	6.6%	6.2%	6.5%	10.2%	9.8%	10.2%
Avista Corp.	5.4%	6.2%	6.2%	6.0%	11.6%	11.6%	11.4%
Black Hills Corp.	5.0%	0.7%	n/a	3.0%	5.7%	n/a	8.0%
CMS Energy Corp.	3.6%	7.8%	7.7%	5.5%	11.4%	11.4%	9.1%
Consolidated Edison, Inc.	3.7%	5.7%	2.0%	6.0%	9.4%	5.7%	9.7%
Eversource Energy	5.0%	3.3%	4.2%	5.5%	8.2%	9.2%	10.5%
MGE Energy, Inc.	2.5%	5.4%	5.4%	5.5%	7.9%	7.8%	8.0%
Northwestern Corp.	5.3%	4.5%	5.2%	3.5%	9.8%	10.5%	8.8%
WEC Energy Group	4.2%	6.0%	5.9%	6.0%	10.2%	10.1%	10.2%
Average Estimate (6)	4.3%	5.1%	5.3%	5.3%	9.8%	10.0%	9.5%
Median Estimate (including outlier estimates)					9.8%	10.0%	9.7%
Average Estimate (including outlier estimates)					9.4%	9.5%	9.5%
<b>Low-End and High-End Outlier Tests</b>							
Low-End Threshold (7.00%) (6)					7.00%	7.00%	7.00%
Median Result (excluding negative values)(6)					9.8%	10.0%	9.7%
200% of Median Result (6)					19.6%	19.9%	19.4%
High-End Threshold - 200% of Median (average)					19.6%	19.6%	19.6%

(1) See page 3 of this Attachment.

(2) www.yahoo.com (retrieved February 24, 2024).

(3) www.zacks.com (retrieved February 24, 2024).

(4) See page 5 of this Attachment.

(5) Sum of dividend yield and applicable projected growth rate.

(6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% of the median value of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of Attachment VVR-7 and FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020). FERC's previous high-end outlier test of 17.7% was further applied where indicated (see ISO New England Inc., 109 FERC ¶ 61,147 at P 205 (November 3, 2004)).

DCF Method  
Combination Utility Group  
Historical EPS Growth Rates and Cost of Equity Estimates

	(1)	(2)	(3)	(4)	(5)
Combination Utility Group	Dividend Yield	5-Year Historical EPS Growth	10-Year Historical EPS Growth	Average Historical EPS Growth	Cost of Equity - Hist. EPS
Alliant Energy Corp.	3.7%	8.0%	6.0%	7.0%	10.7%
Avista Corp.	5.4%	0.5%	2.5%	1.5%	6.9%
Black Hills Corp.	5.0%	5.5%	9.5%	7.5%	12.5%
CMS Energy Corp.	3.6%	6.0%	6.5%	6.3%	9.9%
Consolidated Edison, Inc.	3.7%	1.0%	1.5%	1.3%	5.0%
Eversource Energy	5.0%	5.0%	6.0%	5.5%	10.5%
MGE Energy, Inc.	2.5%	6.0%	5.0%	5.5%	8.0%
Northwestern Corp.	5.3%	1.0%	3.5%	2.3%	7.5%
WEC Energy Group	4.2%	7.0%	6.5%	6.8%	11.0%
Average (6)	4.3%	4.4%	5.2%	4.8%	10.0%
Median (including outlier estimates)					9.9%
Average (including outlier estimates)					9.1%
<b>Low-End and High-End Outlier Tests</b>					
Low-End Threshold (7.00%) (6)					7.00%
Median Result (excluding negative values)(6)					9.9%
200% of Median Result (6)					19.7%
High-End Threshold - 200% of Median (average)					19.7%

- (1) See page 3 of this Attachment.  
(2) See page 5 of this Attachment.  
(3) See page 5 of this Attachment.  
(4) Average of (2) and (3) above.  
(5) Sum of (1) and (4) above.  
(6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% of the median value of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of Attachment VVR-7 and FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020). FERC's previous high-end outlier test of 17.7% was further applied where indicated (see ISO New England Inc., 109 FERC ¶ 61,147 at P 205 (November 3, 2004).

DCF Method  
Combination Utility Group  
Dividend Yield Calculation

	(a)	(b)	(b)/(a)
Combination Utility Group	30/60/90 Day Avg. Stock Price	Next 12-Mo. Dividends	Dividend Yield
Alliant Energy Corp.	\$ 49.51	\$ 1.81	3.7%
Avista Corp.	\$ 34.19	\$ 1.84	5.4%
Black Hills Corp.	\$ 52.10	\$ 2.60	5.0%
CMS Energy Corp.	\$ 57.13	\$ 2.06	3.6%
Consolidated Edison, Inc.	\$ 90.00	\$ 3.34	3.7%
Eversource Energy	\$ 57.07	\$ 2.85	5.0%
MGE Energy, Inc.	\$ 68.74	\$ 1.71	2.5%
Northwestern Corp.	\$ 49.11	\$ 2.60	5.3%
WEC Energy Group	\$ 81.04	\$ 3.40	4.2%
<b>Average</b>			<b>4.3%</b>

(a) See page 4 of this Attachment; 30/60/90 day average closing stock price.

(b) Value Line Investment Survey, Summary and Index, February 23, 2024. Estimated dividends during the next 12-months.

DCF Method  
Combination Utility Group  
30/60/90 Day Average Closing Stock Price through February 23, 2024

30-Day Average	\$ 48.67	\$ 33.75	\$ 51.52	\$ 56.98	\$ 89.46	\$ 55.47	\$ 66.19	\$ 48.07	\$ 79.41
60-Day Average	\$ 50.03	\$ 34.59	\$ 52.87	\$ 57.59	\$ 90.48	\$ 58.33	\$ 69.52	\$ 49.71	\$ 81.85
90-Day Average	\$ 49.82	\$ 34.23	\$ 51.92	\$ 56.84	\$ 90.07	\$ 57.39	\$ 70.51	\$ 49.56	\$ 81.85
30/60/90 Day Avg.	\$ 49.51	\$ 34.19	\$ 52.10	\$ 57.13	\$ 90.00	\$ 57.07	\$ 68.74	\$ 49.11	\$ 81.04

Date	Alliant Energy Corp.	Avista Corp.	Black Hills Corp.	CMS Energy Corp.	Consolidated Edison, Inc.	Eversource Energy	MGE Energy, Inc.	Northwestern Corp.	WEC Energy Group
2/23/2024	48.70	33.86	52.32	57.70	87.93	58.87	64.49	49.10	78.86
2/22/2024	48.63	33.99	52.20	57.14	87.91	58.11	64.46	49.24	78.25
2/21/2024	49.09	34.33	52.92	57.73	88.61	58.42	65.58	49.32	79.29
2/20/2024	48.25	33.94	52.26	57.03	87.58	57.52	65.00	48.92	78.00
2/16/2024	48.35	33.57	52.08	57.27	87.32	58.87	65.30	48.83	78.07
2/15/2024	48.40	33.71	52.36	57.22	88.22	58.62	65.73	49.20	78.00
2/14/2024	47.63	32.28	51.42	56.42	86.84	57.06	64.75	46.70	76.65
2/13/2024	47.57	32.31	50.98	56.14	86.67	54.50	64.25	46.59	76.46
2/12/2024	48.46	33.38	52.82	56.95	89.45	55.47	66.09	47.59	78.37
2/9/2024	47.93	33.17	51.63	56.08	89.05	54.95	65.42	47.30	77.55
2/8/2024	47.48	32.90	51.25	56.27	88.67	54.07	64.59	47.08	77.40
2/7/2024	47.78	32.64	49.62	56.41	89.47	53.79	64.30	46.62	78.16
2/6/2024	47.76	32.88	49.91	56.47	89.77	53.74	63.32	47.07	78.34
2/5/2024	47.61	33.08	49.67	56.58	89.67	53.69	62.19	46.97	78.03
2/2/2024	48.80	34.11	51.18	57.77	91.10	55.20	64.30	47.99	79.86
2/1/2024	49.84	34.50	52.55	58.84	92.78	55.96	65.63	48.71	81.78
1/31/2024	48.66	34.01	51.76	57.16	90.90	54.22	64.49	48.12	80.76
1/30/2024	48.88	34.14	52.15	57.28	90.68	54.81	65.84	48.57	80.76
1/29/2024	49.19	34.21	51.95	57.13	90.59	55.16	65.95	48.63	80.45
1/26/2024	48.85	33.78	50.80	56.39	90.02	55.12	65.64	47.79	79.87
1/25/2024	48.75	33.94	51.00	56.46	89.67	54.86	65.90	47.95	80.01
1/24/2024	48.14	33.40	50.06	55.61	88.32	53.16	65.68	47.40	79.06
1/23/2024	48.77	34.26	51.19	56.81	89.12	52.88	67.35	48.38	79.75
1/22/2024	48.46	34.05	50.60	56.59	89.20	52.78	68.66	47.87	79.48
1/19/2024	48.87	33.66	50.23	56.44	89.86	53.41	69.17	47.41	80.03
1/18/2024	49.05	33.48	50.38	56.34	89.40	54.00	69.63	47.45	80.40
1/17/2024	49.54	33.93	51.34	57.18	90.55	54.76	70.52	47.83	81.31
1/16/2024	50.28	33.91	51.58	58.07	91.56	56.24	69.92	48.21	82.57
1/12/2024	50.38	35.69	53.49	58.10	91.62	56.88	71.16	49.69	82.79
1/11/2024	50.09	35.48	53.94	57.68	91.25	57.12	70.48	49.69	82.12
1/10/2024	51.91	36.09	55.31	59.50	94.32	58.36	71.59	51.30	85.59
1/9/2024	52.22	36.21	55.46	59.37	93.70	58.00	71.80	51.47	85.33
1/8/2024	52.33	36.53	56.04	59.57	93.81	62.87	72.11	51.37	85.57
1/5/2024	52.03	36.21	55.21	59.34	93.52	62.07	71.60	50.77	86.24
1/4/2024	51.94	36.20	54.97	59.38	93.25	62.89	72.13	50.90	85.92
1/3/2024	51.76	36.32	55.14	59.29	93.00	64.29	72.90	51.18	86.61
1/2/2024	51.88	36.05	55.20	59.21	92.41	63.74	72.78	51.16	86.32
12/29/2023	51.30	35.74	53.95	58.07	90.97	61.72	72.31	50.89	84.17
12/28/2023	51.32	35.87	54.31	58.00	90.65	61.96	72.44	51.43	84.05
12/27/2023	50.84	35.63	53.64	57.46	89.80	61.36	73.00	51.10	83.45
12/26/2023	50.93	35.98	54.25	57.50	90.27	61.44	72.62	51.35	83.64
12/22/2023	50.94	35.99	54.32	57.23	89.68	61.08	71.47	51.18	82.94
12/21/2023	50.57	35.56	53.92	56.91	89.21	60.91	71.07	50.99	82.35
12/20/2023	50.25	34.77	54.16	57.10	89.35	60.53	70.69	51.09	81.79
12/19/2023	51.24	35.52	55.15	58.04	90.31	61.60	72.19	51.62	83.26
12/18/2023	50.86	34.81	54.43	58.10	90.00	61.98	72.08	50.58	82.38
12/15/2023	50.62	34.87	54.62	57.98	89.85	61.82	73.44	50.83	82.46
12/14/2023	52.19	35.69	55.71	58.96	91.91	63.53	74.11	52.05	84.62
12/13/2023	53.38	36.30	56.01	59.91	94.01	63.09	74.55	53.60	87.00
12/12/2023	51.39	35.10	53.81	57.97	91.73	60.21	71.68	51.54	83.03
12/11/2023	51.51	35.05	53.93	58.08	91.87	60.79	72.67	51.74	84.21
12/8/2023	51.38	35.14	54.10	58.15	91.55	59.65	72.60	51.87	84.07
12/7/2023	51.82	35.16	54.08	57.94	92.44	60.37	73.50	52.01	85.00
12/6/2023	52.10	35.22	53.85	57.83	91.65	60.60	74.47	51.83	84.91
12/5/2023	51.25	34.75	53.43	57.33	91.19	60.19	74.32	51.80	83.73
12/4/2023	51.40	35.18	53.47	58.33	91.99	60.69	74.53	51.32	85.00
12/1/2023	51.49	34.91	53.46	58.40	91.68	60.78	74.20	51.42	84.97
11/30/2023	50.57	33.95	51.59	56.76	90.11	59.41	73.75	50.31	83.62
11/29/2023	49.94	33.93	51.24	56.75	89.94	59.71	73.95	50.52	82.97
11/28/2023	50.12	34.26	51.56	57.44	90.80	59.93	74.91	50.89	83.16
11/27/2023	49.96	34.40	51.13	57.33	90.67	59.04	74.95	50.45	82.22
11/24/2023	49.75	34.74	51.26	57.59	90.96	59.26	74.40	51.13	81.60
11/22/2023	49.54	34.78	51.19	57.07	90.52	59.53	74.39	50.90	81.48
11/21/2023	49.09	34.67	50.91	56.83	90.49	58.82	73.84	50.60	80.92
11/20/2023	49.11	34.92	50.71	57.14	90.94	58.30	73.49	50.86	81.32
11/17/2023	49.23	35.09	51.67	57.40	91.36	58.51	74.16	51.27	81.74
11/16/2023	49.48	34.98	51.10	57.50	91.13	57.48	74.54	51.15	82.37
11/15/2023	49.32	35.14	52.30	57.08	90.55	57.25	74.70	50.63	81.43
11/14/2023	49.12	34.90	51.14	57.25	90.50	56.23	74.73	50.52	81.51
11/13/2023	47.61	33.30	48.29	55.31	88.37	53.03	71.13	48.29	79.38
11/10/2023	48.57	33.46	49.14	55.60	89.35	53.80	71.59	48.63	80.31
11/9/2023	48.61	33.60	48.44	54.74	89.25	54.24	71.62	48.90	79.63
11/8/2023	49.61	33.87	49.82	55.40	88.68	55.69	72.25	49.38	81.00
11/7/2023	50.00	34.66	51.09	55.26	89.48	56.35	72.49	50.55	82.05
11/6/2023	50.44	34.94	51.48	55.07	90.54	56.56	73.36	51.43	82.76
11/3/2023	51.10	35.04	51.52	55.74	90.07	55.43	74.39	51.90	83.95
11/2/2023	50.26	34.34	49.91	55.51	90.16	54.28	74.33	50.76	83.89
11/1/2023	49.50	33.72	48.44	54.73	89.16	53.09	72.38	48.97	82.56
10/31/2023	48.79	31.69	48.35	54.34	87.79	53.79	71.63	48.01	81.39
10/30/2023	48.48	32.19	48.06	54.09	87.48	53.39	71.35	47.42	81.60
10/27/2023	48.93	31.83	48.30	54.27	87.47	53.16	70.57	46.55	81.73
10/26/2023	49.79	32.15	49.03	55.18	89.30	54.16	70.78	47.63	83.13
10/25/2023	49.54	31.57	48.40	54.45	88.31	54.22	70.93	47.49	82.32
10/24/2023	49.44	31.41	48.23	53.64	87.97	54.03	70.51	47.45	81.58
10/23/2023	48.50	31.10	48.16	52.61	86.59	52.46	70.02	46.79	80.53
10/20/2023	48.82	31.50	48.90	52.91	87.06	53.50	70.14	47.09	81.20
10/19/2023	49.45	32.06	50.08	53.51	87.67	53.90	71.06	47.28	82.45
10/18/2023	49.82	32.68	50.15	53.95	88.28	54.49	71.65	48.05	83.01
10/17/2023	50.02	33.10	51.40	54.29	88.90	55.46	71.19	48.79	83.43
10/16/2023	50.25	33.14	51.85	54.29	88.66	56.20	71.84	49.02	83.62
90-Day Average	\$ 49.82	\$ 34.23	\$ 51.92	\$ 56.84	\$ 90.07	\$ 57.39	\$ 70.51	\$ 49.56	\$ 81.85

Source: finance.yahoo.com (accessed February 24, 2024).

DCF Method  
Combination Utility Group  
Per Share Annual Growth Rates - Historical and Projected

Combination Utility Group	Past 5-Years Historical Growth Rates				Estimated '20-'22 to '27-'29 Growth Rates			
	EPS	DPS	BVPS	Average	EPS	DPS	BVPS	Average
Alliant Energy Corp.	8.0%	6.5%	7.0%	7.2%	6.5%	6.0%	5.0%	5.8%
Avista Corp.	0.5%	4.0%	3.5%	2.7%	6.0%	4.5%	3.5%	4.7%
Black Hills Corp.	5.5%	6.0%	7.5%	6.3%	3.0%	4.5%	4.0%	3.8%
CMS Energy Corp.	6.0%	7.0%	7.5%	6.8%	5.5%	5.0%	4.5%	5.0%
Consolidated Edison, Inc.	1.0%	2.5%	3.0%	2.2%	6.0%	3.5%	3.5%	4.3%
Eversource Energy	5.0%	5.5%	4.5%	5.0%	5.5%	5.5%	3.0%	4.7%
MGE Energy, Inc.	6.0%	4.5%	6.0%	5.5%	5.5%	4.5%	2.5%	4.2%
Northwestern Corp.	1.0%	4.0%	4.5%	3.2%	3.5%	2.0%	3.5%	3.0%
WEC Energy Group	7.0%	6.5%	3.5%	5.7%	6.0%	7.0%	4.0%	5.7%
Average	4.4%	5.2%	5.2%	4.9%	5.3%	4.7%	3.7%	4.6%

Combination Utility Group	Past 10-Years Historical Growth Rates			
	EPS	DPS	BVPS	Average
Alliant Energy Corp.	6.0%	6.5%	6.0%	6.2%
Avista Corp.	2.5%	4.5%	4.0%	3.7%
Black Hills Corp.	9.5%	4.5%	4.5%	6.2%
CMS Energy Corp.	6.5%	8.0%	6.0%	6.8%
Consolidated Edison, Inc.	1.5%	2.5%	3.5%	2.5%
Eversource Energy	6.0%	6.5%	4.5%	5.7%
MGE Energy, Inc.	5.0%	4.0%	6.0%	5.0%
Northwestern Corp.	3.5%	5.5%	6.0%	5.0%
WEC Energy Group	6.5%	10.0%	7.0%	7.8%
Average	5.2%	5.8%	5.3%	5.4%

Source: Value Line Investment Survey, Ratings & Reports, February 9, 2024, January 19, 2024 and December 8, 2023.  
n/a = Data not published or not available.

DCF Method  
Combination Utility Group  
Investment Risk Indicators

Combination Utility Group	Value Line Risk Indicators					Long-Term Credit Ratings				Market Cap
	Beta	Safety Rank	Financial Strength	Fin. Str. Weight	Stk Price Stability	S&P LT Rating	S&P Weight	Moody's LT Rating	Moody's Weight	Billions (\$) per Value Line
Alliant Energy Corp. (LNT)	0.90	2	A	3	95	A-	7	Baa2	9	12.60
Avista Corp.	0.95	3	B+	5	75	BBB	9	Baa2	9	2.80
Black Hills Corp. (BKH)	1.00	3	B++	4	85	BBB+	8	Baa2	9	3.80
CMS Energy Corp. (CMS)	0.85	3	B++	4	95	BBB+	8	Baa2	9	16.70
Consolidated Edison, Inc. (ED)	0.80	1	A+	2	90	A-	7	Baa1	8	31.30
Eversource Energy (ES)	0.95	2	A	3	80	A-	7	Baa2	9	19.30
MGE Energy, Inc.	0.75	3	B++	4	100	AA-	4	A1	5	2.70
Northwestern Corp.	0.95	3	B+	5	90	BBB	9	Baa2	9	3.10
WEC Energy Group (WEC)	0.85	1	A+	2	90	A-	7	Baa1	8	25.90
<b>Averages</b>	<b>0.89</b>	<b>2</b>	<b>B++</b>	<b>4</b>	<b>89</b>	<b>A-</b>	<b>7</b>	<b>Baa1</b>	<b>8</b>	<b>13.13</b>

Source: Value Line Investment Survey, February 9, 2024, January 19, 2024, and December 8, 2023. S&P and Moody's ratings accessed on February 24, 2024.

S&P Credit Rating	S&P Weightings	Moody's Credit Rating	Moody's Weightings	Value Line Fin. Str. Weightings
AAA	1	Aaa	1	A++
AA+	2	Aa1	2	A+
AA	3	Aa2	3	A
AA-	4	Aa3	4	B++
A+	5	A1	5	B+
A	6	A2	6	B
A-	7	A3	7	C++
BBB+	8	Baa1	8	C+
BBB	9	Baa2	9	C
BBB-	10	Baa3	10	
BB+	11	Ba1	11	
BB	12	Ba2	12	
BB-	13	Ba3	13	

# Attachment VVR-9

DCF Method  
Non-Regulated Group  
Projected Growth Rates and Cost of Equity Estimates

Non-Regulated Group	Ticker	Projected Growth Rates				Cost of Equity (COE)		
		Dividend Yield	Yahoo	Zacks	Value Line	Yahoo	Zacks	Value Line
			Finance EPS Growth	EPS Growth	EPS Growth	Finance EPS COE	EPS COE	EPS COE
Air Products and Chemicals, Inc.	APD	2.8%	6.7%	7.3%	10.5%	9.4%	10.1%	13.3%
Brown-Forman Corporation	BFB	1.5%	11.0%	n/a	16.5%	12.5%	n/a	18.0%
Coca-Cola Co.	KO	3.3%	6.2%	6.3%	8.0%	9.5%	9.6%	11.3%
Hershey Company	HSY	2.9%	5.8%	6.8%	9.5%	8.7%	9.7%	12.4%
Home Depot Inc.	HD	2.4%	4.5%	9.8%	6.5%	6.9%	12.3%	8.9%
McCormick & Co.	MKC	2.5%	6.7%	6.6%	4.5%	9.2%	9.1%	7.0%
McDonald's Corp.	MCD	2.4%	7.4%	7.5%	10.0%	9.8%	9.8%	12.4%
Mondelez International	MDLZ	2.3%	8.4%	8.4%	11.0%	10.8%	10.7%	13.3%
Republic Services, Inc.	RSG	1.3%	8.9%	10.1%	10.5%	10.2%	11.4%	11.8%
Sherwin-Williams Company'	SHW	0.9%	11.4%	11.8%	11.0%	12.2%	12.7%	11.9%
Waste Management, Inc.	WM	1.6%	10.0%	9.6%	6.0%	11.6%	11.2%	7.6%
<b>Average Estimate (6)</b>		<b>2.2%</b>	<b>7.9%</b>	<b>8.4%</b>	<b>9.5%</b>	<b>10.4%</b>	<b>10.7%</b>	<b>11.0%</b>
<b>Median Estimate (including outlier estimates)</b>						<b>9.8%</b>	<b>10.4%</b>	<b>11.9%</b>
<b>Average Estimate (including outlier estimates)</b>						<b>10.1%</b>	<b>10.7%</b>	<b>11.6%</b>
<b>Low-End and High-End Outlier Tests</b>								
<b>Low-End Threshold (7.00%) (6)</b>						<b>7.00%</b>	<b>7.00%</b>	<b>7.00%</b>
<b>Median Result (excluding negative values)(6)</b>						<b>9.8%</b>	<b>10.4%</b>	<b>11.9%</b>
<b>200% of Median Result (6)</b>						<b>19.5%</b>	<b>20.8%</b>	<b>23.7%</b>
<b>High-End Threshold - 200% of Median (average)</b>						<b>21.3%</b>	<b>21.3%</b>	<b>21.3%</b>

- (1) See page 3 of this Attachment.
- (2) Consensus estimates provided by Yahoo Finance (accessed February 25, 2024).
- (3) Consensus estimates provided by Zacks (accessed February 25, 2024).
- (4) Value Line Investment Survey, Ratings and Reports; February 16, 2024, January 26, 2024, January 12, 2024, and December 15, 2023.
- (5) Sum of dividend yield and applicable projected growth rate.
- (6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% of the median value of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of Attachment VVR-7 and FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020). FERC's previous high-end outlier test of 17.7% was further applied where indicated (see ISO New England Inc., 109 FERC ¶ 61,147 at P 205 (November 3, 2004)).



DCF Method  
Non-Regulated Group  
Historical EPS Growth Rates and Cost of Equity Estimates

	(1)	(2)	(3)	(4)	(5)
	Dividend Yield	5-Year Historical EPS Growth	10-Year Historical EPS Growth	Average Historical EPS Growth	Cost of Equity Historical EPS Growth
Non-Regulated Group					
Air Products and Chemicals, Inc.	2.8%	8.0%	6.5%	7.3%	10.0%
Brown-Forman Corporation	1.5%	3.0%	5.5%	4.3%	5.8%
Coca-Cola Co.	3.3%	3.0%	2.0%	2.5%	5.8%
Hershey Company	2.9%	10.0%	9.5%	9.8%	12.6%
Home Depot Inc.	2.4%	18.0%	19.0%	18.5%	20.9%
McCormick & Co.	2.5%	8.0%	7.0%	7.5%	10.0%
McDonald's Corp.	2.4%	8.0%	5.5%	6.8%	9.1%
Mondelez International	2.3%	5.5%	3.0%	4.3%	6.6%
Republic Services, Inc.	1.3%	13.5%	8.5%	11.0%	12.3%
Sherwin-Williams Company'	0.9%	14.0%	17.5%	15.8%	16.6%
Waste Management, Inc.	1.6%	11.0%	8.5%	9.8%	11.4%
Average Estimate (6)	2.2%	9.3%	8.4%	8.8%	11.7%
Median Estimate (including outlier estimates)					10.0%
Average Estimate (including outlier estimates)					11.0%

Low-End and High-End Outlier Tests	
Low-End Threshold (7.00%) (6)	7.00%
Median Result (excluding negative values)(6)	10.0%
200% of Median Result (6)	20.0%
High-End Threshold - 200% of Median (average)	20.0%

(1) See page 3 of this Attachment.

(2) Value Line Investment Survey, Ratings and Reports; February 16, January 26, 2024, January 12, 2024, and December 15, 2023.

(3) See (2) above.

(4) Average of (2) and (3) above.

(5) Sum of (1) and (4) above, which is the sum of the dividend yield and the average historical earnings growth rate.

(6) For cost of equity estimates, the average calculations exclude the highlighted data. DCF estimates below 7.00% were excluded from the estimated cost of equity. Also excluded were DCF results that were more than 200% of the median value of the DCF results for the entire proxy group prior to the elimination of any outlier results (with the exception of negative estimates). See page 6 of Attachment VVR-7 and FERC Opinion No. 569, 169 FERC ¶ 61,129, at P. 387 (Nov. 21, 2019), FERC Opinion No. 569-A, 171 FERC ¶ 61,154, at P.154 (May 21, 2020), and FERC Opinion No. 569-B, 173 FERC ¶ 61,159, at P.140 (Nov. 19, 2020). FERC's previous high-end outlier test of 17.7% was further applied where indicated (see ISO New England Inc.,

DCF Method  
Non-Regulated Group  
Dividend Yield Calculations

Non-Regulated Group	Ticker	Dividend Next 12-Months (1)	30/60/90 Day Stock Price Average	Dividend Yield
Air Products and Chemicals, Inc.	APD	7.00	254.14	2.8%
Brown-Forman Corp.	BFB	0.87	56.70	1.5%
Coca-Cola Co.	KO	1.96	59.28	3.3%
Hershey Company	HSY	5.48	191.15	2.9%
Home Depot, Inc.	HD	8.36	346.02	2.4%
McCormick & Co.	MKC	1.68	66.56	2.5%
McDonald's Corp.	MCD	6.83	289.28	2.4%
Mondelez International	MDLZ	1.70	72.66	2.3%
Republic Services, Inc.	RSG	2.14	168.13	1.3%
Sherwin-Williams	SHW	2.55	298.84	0.9%
Waste Management, Inc.	WM	3.00	183.55	1.6%
<b>Average</b>				<b>2.2%</b>

(1) Source: Value Line Investment Survey, Summary and Index, February 23, 2024.

DCF Method  
Non-Regulated Group  
Average Closing Stock Price Through February 23, 2024

Averages	Air Products & Chem., Inc.	Brown-Forman Corp.	Coca-Cola	Hershey Co.	Home Depot Inc.	McCormick & Co.	McDonald's Corp.	Mondelez International	Republic Services, Inc.	Sherwin-Williams Co.	Waste Management
30-Day Average	\$ 243.11	\$ 56.35	\$ 59.95	\$ 193.17	\$ 358.88	\$ 66.60	\$ 293.20	\$ 73.95	\$ 173.23	\$ 307.83	\$ 190.18
60-Day Average	\$ 256.35	\$ 56.77	\$ 59.46	\$ 190.02	\$ 348.68	\$ 67.02	\$ 291.56	\$ 72.87	\$ 168.15	\$ 302.67	\$ 183.06
90-Day Average	\$ 262.95	\$ 56.97	\$ 58.44	\$ 190.25	\$ 330.52	\$ 66.05	\$ 283.07	\$ 71.15	\$ 163.02	\$ 286.03	\$ 177.41
30/60/90 Day Avg.	\$ 254.14	\$ 56.70	\$ 59.28	\$ 191.15	\$ 346.02	\$ 66.56	\$ 289.28	\$ 72.66	\$ 168.13	\$ 298.84	\$ 183.55

Date	Air Products & Chem., Inc.	Brown-Forman Corp.	Coca-Cola	Hershey Co.	Home Depot Inc.	McCormick & Co.	McDonald's Corp.	Mondelez International	Republic Services, Inc.	Sherwin-Williams Co.	Waste Management
2/23/2024	232.79	57.49	61.20	193.83	371.96	68.08	297.75	73.98	184.98	322.03	208.05
2/22/2024	231.50	57.82	61.15	193.54	371.34	67.79	295.92	74.13	183.33	320.62	207.24
2/21/2024	228.10	58.57	61.24	192.49	364.13	67.53	293.91	73.80	181.36	314.29	204.23
2/20/2024	228.09	58.51	60.70	193.57	362.57	68.06	292.65	73.19	180.01	311.26	201.79
2/16/2024	226.85	57.87	59.39	191.16	362.35	66.15	292.02	71.98	180.43	309.08	201.54
2/15/2024	226.95	58.01	59.40	192.58	361.08	65.55	291.86	71.61	179.86	312.51	199.11
2/14/2024	217.01	57.35	59.29	191.25	358.23	64.99	288.17	71.41	178.74	311.03	199.16
2/13/2024	217.61	56.69	59.35	194.84	357.59	65.35	287.11	71.98	175.61	307.21	199.49
2/12/2024	222.59	57.78	59.70	193.72	365.45	66.07	289.44	73.50	172.00	310.42	188.26
2/9/2024	219.84	56.57	59.56	195.45	363.15	64.65	289.47	73.17	173.49	311.74	188.86
2/8/2024	219.91	56.93	59.83	202.31	363.72	65.82	291.93	74.76	174.64	312.15	189.49
2/7/2024	215.38	57.13	59.99	194.26	362.69	65.62	287.33	74.62	174.56	309.86	189.98
2/6/2024	218.05	56.91	59.94	194.78	356.25	67.05	284.65	75.25	173.68	307.88	189.21
2/5/2024	218.02	56.43	60.04	196.39	355.14	65.85	285.97	75.33	173.25	304.49	188.20
2/2/2024	258.17	56.80	60.54	197.66	357.23	67.68	297.05	76.87	173.66	309.99	188.21
2/1/2024	259.56	57.03	60.98	198.43	360.07	68.69	298.08	76.54	173.83	309.08	188.42
1/31/2024	255.71	54.90	59.49	193.54	352.96	68.16	292.72	75.27	171.12	304.38	185.63
1/30/2024	259.28	56.11	59.90	197.38	357.10	69.27	294.65	76.34	172.88	307.63	187.11
1/29/2024	261.13	56.48	59.73	192.79	355.70	68.58	292.31	75.72	171.47	308.09	185.35
1/26/2024	261.90	56.69	59.37	190.21	353.30	69.08	292.26	75.14	171.29	301.85	185.81
1/25/2024	263.65	55.71	59.16	189.36	350.97	68.60	297.21	74.50	170.28	303.91	185.10
1/24/2024	257.16	54.56	58.91	189.31	347.27	65.78	300.44	73.95	169.34	301.06	183.80
1/23/2024	263.24	55.04	59.85	192.03	350.78	66.80	300.05	74.41	169.82	305.46	185.54
1/22/2024	260.93	53.99	59.57	188.26	356.69	64.61	298.41	73.12	168.83	307.48	184.91
1/19/2024	260.64	54.60	59.83	190.46	362.41	65.03	300.53	72.85	168.68	304.02	184.45
1/18/2024	260.03	54.54	60.16	191.47	357.90	64.92	294.36	72.91	167.75	306.37	183.51
1/17/2024	260.14	54.03	59.99	191.54	355.70	65.02	291.16	73.30	166.20	300.88	181.47
1/16/2024	260.45	54.56	59.99	191.53	358.43	65.18	291.09	72.85	165.64	300.08	180.77
1/12/2024	264.13	55.78	60.39	190.64	355.71	66.35	293.47	73.12	166.14	302.51	181.40
1/11/2024	264.59	55.51	59.81	190.41	356.53	65.72	294.15	72.78	163.93	297.42	179.22
1/10/2024	266.96	55.59	60.20	189.64	356.80	66.27	294.09	73.08	164.30	298.40	179.18
1/9/2024	268.09	55.56	60.00	193.09	346.19	67.63	290.87	73.74	163.81	297.51	178.23
1/8/2024	272.84	55.69	60.11	191.45	347.93	67.22	291.90	73.71	164.35	299.47	178.24
1/5/2024	270.15	55.09	59.67	187.64	342.94	67.24	288.99	73.09	163.52	296.68	177.77
1/4/2024	270.25	55.84	59.76	190.50	338.59	68.05	291.74	73.28	164.16	295.77	178.79
1/3/2024	270.86	55.77	59.96	191.84	338.26	68.96	294.39	73.28	163.72	296.77	178.53
1/2/2024	273.47	56.85	59.82	192.03	345.08	69.54	297.04	73.84	164.94	304.91	179.61
12/29/2023	273.80	57.10	58.93	186.44	346.55	68.42	296.51	72.43	164.91	311.90	179.10
12/28/2023	274.23	57.35	58.75	184.11	347.36	68.23	295.84	72.26	164.31	312.84	178.14
12/27/2023	275.69	57.29	58.71	183.92	348.53	68.21	294.55	72.21	163.76	313.27	177.75
12/26/2023	274.87	57.69	58.56	183.40	349.31	68.16	292.86	71.71	163.07	312.67	177.52
12/22/2023	272.84	57.73	58.32	182.52	348.59	67.87	291.70	71.21	162.69	311.27	176.95
12/21/2023	271.74	57.54	57.99	181.00	348.97	67.87	291.39	70.46	161.65	306.93	176.81
12/20/2023	268.15	57.00	57.61	179.52	348.66	66.94	288.99	69.33	162.20	304.21	175.76
12/19/2023	272.52	59.09	58.83	182.55	352.07	68.21	290.73	71.05	162.80	307.21	176.78
12/18/2023	271.20	58.18	59.02	182.26	350.81	67.71	290.23	71.06	163.57	308.37	177.63
12/15/2023	270.86	57.33	58.60	181.71	354.00	66.88	287.27	70.70	162.08	309.77	174.55
12/14/2023	270.81	58.42	59.04	186.21	351.81	68.28	290.02	70.70	162.69	306.77	176.67
12/13/2023	269.32	57.11	59.93	188.79	343.40	69.79	295.93	73.11	167.11	303.39	179.06
12/12/2023	267.34	56.94	59.42	184.69	333.20	67.68	291.42	72.27	165.17	294.82	176.59
12/11/2023	264.56	56.44	59.04	186.28	331.33	67.85	289.15	71.75	162.44	291.63	173.38
12/8/2023	263.27	55.08	58.61	185.74	326.47	67.09	285.53	71.09	161.79	289.82	172.50
12/7/2023	262.01	54.52	58.74	189.06	326.17	67.73	286.79	71.61	161.59	291.58	172.84
12/6/2023	261.28	53.98	58.60	189.20	326.11	67.73	286.86	71.29	161.85	286.71	173.95
12/5/2023	262.02	60.23	58.66	187.93	323.50	66.65	286.54	70.68	161.46	283.00	173.07
12/4/2023	270.15	60.38	58.57	190.62	324.02	66.79	286.13	71.22	162.56	281.46	174.39
12/1/2023	272.64	59.94	58.64	190.98	319.62	65.99	285.96	70.82	163.92	282.33	173.80
11/30/2023	270.55	58.74	58.44	187.92	313.49	64.83	281.84	71.06	161.84	278.80	170.99
11/29/2023	266.48	58.23	58.23	185.72	311.02	64.28	280.38	70.44	159.93	273.72	169.74
11/28/2023	268.40	59.26	58.58	188.99	313.34	65.01	282.09	71.43	159.84	273.45	169.68
11/27/2023	271.67	59.12	58.46	188.40	310.92	64.94	281.84	71.48	160.25	275.38	171.48
11/24/2023	274.50	59.75	58.57	191.68	310.70	66.44	282.54	71.62	160.40	275.83	172.01
11/22/2023	274.27	59.55	58.42	191.61	309.20	66.15	281.93	71.49	160.01	274.65	171.77
11/21/2023	276.34	58.59	58.03	190.59	305.34	65.38	280.47	70.97	160.04	273.54	171.69
11/20/2023	272.15	59.02	57.40	193.07	308.19	65.63	279.03	70.91	159.50	273.04	171.18
11/17/2023	269.99	58.51	57.26	196.00	307.27	66.36	275.75	70.63	158.72	270.28	170.55
11/16/2023	273.60	57.69	57.15	195.84	306.44	66.04	276.12	70.62	158.88	269.30	171.44
11/15/2023	273.62	59.22	57.21	195.72	308.19	65.87	270.39	69.99	157.02	264.79	171.17
11/14/2023	268.41	59.09	57.10	197.84	303.63	66.31	271.49	70.10	159.06	266.34	172.14
11/13/2023	265.03	57.56	56.93	194.70	288.07	65.10	269.20	69.30	158.40	253.89	171.69
11/10/2023	265.46	57.02	56.72	191.48	291.59	64.93	267.79	69.12	157.79	255.75	171.77
11/9/2023	263.99	58.38	56.66	188.62	287.87	64.55	266.91	68.94	156.35	252.40	170.06
11/8/2023	259.93	58.72	57.09	189.02	295.92	65.30	267.49	69.02	155.61	256.09	170.27
11/7/2023	254.46	59.09	57.18	187.49	294.77	64.77	268.67	68.49	154.91	251.99	169.36
11/6/2023	291.30	58.97	56.97	187.66	294.57	64.71	268.91	68.24	154.65	250.50	169.22
11/3/2023	293.20	59.55	56.74	187.99	295.61	64.96	267.87	68.82	153.45	250.91	168.12
11/2/2023	289.62	57.84	57.09	189.55	294.53	64.82	266.85	67.97	151.71	245.32	166.85
11/1/2023	283.41	56.17	56.44	187.85	286.63	64.11	261.97	66.82	148.74	238.91	164.04
10/31/2023	282.44	56.16	56.49	187.35	284.69	63.90	262.17	66.21	148.49	238.21	164.33
10/30/2023	280.70	55.23	56.15	185.98	281.48	63.78	260.15	65.98	147.25	235.42	162.75
10/27/2023	276.15	55.04	55.24	184.11	276.46	62.98	255.76	65.01	146.00	236.03	161.38
10/26/2023	277.66	55.96	55.78	189.05	278.00	64.43	255.83	65.65	146.02	237.71	162.82
10/25/2023	274.48	55.97	56.12	194.47	280.93	64.					

DCF Method  
Non-Regulated Group  
Investment Risk Indicators

Non-Regulated Group	Value Line Risk Indicators						Long-Term Credit Ratings				Market Cap.
	Beta	Safety Rank	Financial Strength	Fin. Str. Weight	Stk Price Stability	Percent % Debt/Cap.	S&P LT Rating	S&P Weight	Moody's LT Rating	Moody's Weight	Billions (\$) Value Line
Air Products and Chemicals, Inc.	0.90	1	A++	1	90	40.0%	A	6	A2	6	\$ 63.8
Brown-Forman Corporation	0.90	1	A	3	95	45.0%	A-	7	A1	5	\$ 27.2
Coca-Cola Co.	0.85	1	A++	1	100	56.0%	A+	5	A1	5	\$ 255.0
Hershey Company	0.75	1	A+	2	100	51.0%	A	6	A1	5	\$ 38.1
Home Depot Inc.	0.95	1	A++	1	95	96.0%	A	6	A2	6	\$ 322.0
McCormick & Co.	0.80	1	A+	2	90	50.0%	BBB	9	Baa2	9	\$ 18.4
McDonald's Corp.	0.90	1	A++	1	100	100.0%	BBB+	8	Baa1	8	\$ 210.0
Mondelez International, Inc.	0.80	1	A+	2	100	37.0%	BBB	9	Baa1	8	\$ 98.6
Republic Services, Inc.	0.85	1	A	3	100	54.0%	BBB+	8	Baa1	8	\$ 54.5
Sherwin-Williams Company'	0.95	1	A+	2	90	70.0%	BBB	9	Baa2	9	\$ 72.0
Waste Management, Inc.	0.75	1	A	3	100	69.0%	A-	7	Baa1	8	\$ 75.8
Averages	0.85	1	A+	2	96	60.7%	A-	7	A3	7	\$ 112.3

S&P Credit Rating Weightings		Moody's Credit Rating Weightings		Value Line Fin. Str. Weightings	
AAA	1	Aaa	1	A++	1
AA+	2	Aa1	2	A+	2
AA	3	Aa2	3	A	3
AA-	4	Aa3	4	B++	4
A+	5	A1	5	B+	5
A	6	A2	6	B	6
A-	7	A3	7	C++	7
BBB+	8	Baa1	8	C+	8
BBB	9	Baa2	9	C	9
BBB-	10	Baa3	10		
BB+	11	Ba1	11		
BB	12	Ba2	12		
BB-	13	Ba3	13		

Source: Value Line Investment Survey, Ratings and Reports; February 16, 2024, January 26, 2024, January 12, 2024, and December 15, 2023. S&P and Moody's ratings information accessed on February 25, 2024.

# Attachment VVR-10

**Capital Structure Ratios - Book vs. Market Capitalization Ratios for Leverage Calculations**  
**Gas LDC Group - 12/31/2023 or Fiscal Year End**

\$ in thousands	[Source is 10-K]		[Source is 10-K and Yahoo Finance]		Common Shares Outstanding at Fiscal Y/E	Closing Stock Price at Fiscal Y/E
	Carrying Values (Book Value)		Market Values (Fair Value)			
	Dollars 2023	Percentage 2023	Dollars 2023	Percentage 2023		
<b>Atmos Energy Corp.</b>						
Long-Term Debt (1)	6,639,211	39.1%	5,481,802	25.8%	@ 9/30/2023	
Preferred Stock	-	-	-	-		
Common Equity (2)	10,351,536	60.9%	15,729,842	74.2%		
Total Permanent Capitalization	\$ 16,990,747	100.0%	\$ 21,211,644	100.0%	148,492.8	\$ 105.93
<b>New Jersey Resources Corp.</b>						
Long-Term Debt (1)	2,768,017	58.0%	\$ 2,286,708	36.6%	@ 9/30/2023	
Preferred Stock	-	-	-	-		
Common Equity (2)	2,000,694	42.0%	3,964,858	63.4%		
Total Permanent Capitalization	\$ 4,768,711	100.0%	\$ 6,251,566	100.0%	97,584.5	\$ 40.63
<b>NiSource Inc.</b>						
Long-Term Debt (1)	11,055,500	52.1%	10,347,100	45.6%	@ 12/31/2023	
Preferred Stock	486,100	2.3%	486,100	2.1%		
Common Equity (2)	9,683,800	45.6%	11,877,984	52.3%		
Total Permanent Capitalization	\$ 21,225,400	100.0%	\$ 22,711,184	100.0%	447,381.7	\$ 26.55
<b>Northwest Natural Gas Co.</b>						
Long-Term Debt (1)	1,425,435	52.5%	1,297,076	47.0%	@ 12/31/2023	
Preferred Stock	-	-	-	-		
Common Equity (2)	1,290,887	47.5%	1,465,359	53.0%		
Total Permanent Capitalization	\$ 2,716,322	100.0%	\$ 2,762,435	100.0%	37,631.2	\$ 38.94
<b>ONE Gas, Inc.</b>						
Long-Term Debt (1)	2,160,401	43.8%	2,027,000	36.0%	@ 12/31/2023	
Preferred Stock	-	-	-	-		
Common Equity (2)	2,767,059	56.2%	3,603,105	64.0%		
Total Permanent Capitalization	\$ 4,927,460	100.0%	\$ 5,630,105	100.0%	56,545.9	\$ 63.72
<b>Spire, Inc.</b>						
Long-Term Debt (1)	3,554,000	55.3%	3,113,600	48.9%	@ 9/30/2023	
Preferred Stock	242,000	3.8%	242,000	3.8%		
Common Equity (2)	2,627,700	40.9%	3,010,056	47.3%		
Total Permanent Capitalization	\$ 6,423,700	100.0%	\$ 6,365,656	100.0%	53,200.0	\$ 56.58
<b>Average Ratios of Gas LDC Group</b>						
Long-Term Debt (1)		50.1%		40.0%		
Preferred Stock		1.0%		1.0%		
Common Equity (2)		48.8%		59.0%		
Total Permanent Capitalization		100.0%		100.0%		

- (1) Long-term debt balances exclude the current portion of long-term debt and short-term debt. In cases where a company's SEC debt disclosure for fair value vs. carrying value only discloses total debt (including short-term debt and current maturities), the difference between fair value and carrying value was fully applied to the long-term debt balance.
- (2) Includes common stock account and retained earnings account; excludes other comprehensive income (loss) and shares in a deferred compensation trust.

# Attachment VVR-11

CAPM Method  
Gas LDC Group - Cost of Equity Estimates

Prospective Market Return

DCF Approach - S&P 500 Index

Dividend Yield (1)	1.66%
Growth Rate (2)	10.84%
DCF Market Return - S&P 500 (3)	12.51%

DCF Approach - Value Line 1,700 Stock Universe

Dividend Yield (4)	2.22%
Growth Rate (5)	8.34%
DCF Market Return - Value Line 1,700 Stock Universe (6)	10.55%

Prospective Market Return (Average) (7)	11.53%
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Prospective Risk-Free Rate of Return

Blue Chip Financial Forecasts - 30-Year U.S. Treasury  
Bond Yield Forecast (2024-2028 average) (8)

4.21%

Prospective Market Risk Premium (Average) (9)	7.32%
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Historical Market Risk Premium (Kroll Cost of Capital Navigator)

Historical Average Market Risk Premium (1926-2023) (10)	7.17%
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Indicated Market Risk Premium (11)	7.25%
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Gas LDC Group Beta Coefficient (12)	0.935
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Gas LDC Group Risk Premium (13)	6.78%
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Prospective Risk-Free Rate of Return (Average) (8)	4.21%
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Traditional CAPM Result (14)	10.98%
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Size Premium Adjustment (15)	0.64%
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Implied Cost of Equity (CAPM with Size Adjustment) (16)	11.62%
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## CAPM Method Gas LDC Group - Cost of Equity Estimates

### Empirical CAPM Model (ECAPM)

Prospective Risk-Free Rate of Return (Average) (8)	4.21%
25% Weighting of Market Risk Premium (17)	1.81%
75% Weighting of Beta x Market Risk Premium (18)	5.08%
<b>Implied Cost of Equity (ECAPM Model) (19)</b>	<b>11.10%</b>

#### Footnotes:

- (1)  $D/P = [\$18.38]$  (cash dividends for Q4, 2023) x 4 (quarters) x  $(1 + (.5) \text{ growth rate}) / [\$4,655.69]$  (90 trading-day average closing price through February 23, 2024). Source: [www.standardandpoors.com](http://www.standardandpoors.com) and [www.finance.yahoo.com](http://www.finance.yahoo.com).
- (2) Bloomberg Finance L.P. Average long-term consensus earnings growth estimates for the S&P 500 Index (10.84%).
- (3) (1) + (2) above.
- (4) See page 6 of this Attachment. Median estimated dividend yield for the next 12 months for all dividend paying stocks. Value Line Summary & Index; average estimated dividend yield from 13 consecutive weekly reports (December 1, 2023 - February 23, 2024).
- (5) See page 6 of this Attachment. The Value Line average median price appreciation potential 3 to 5 years hence is 49.23%. The annual expected price appreciation growth rate based upon the five-year average horizon is 8.34%  $[(1 + .4923)^{.20} - 1]$ . Source: Value Line Summary & Index; average of 13 consecutive weekly reports (December 1, 2023 - February 23, 2024).
- (6) (4) + (5) above.
- (7) Average of (3) and (6) above. Result may reflect rounding differences.
- (8) Interest rate forecasts from Blue Chip Financial Forecasts, Vol. 42, No. 12 (December 1, 2023).
- (9) (7) - (8) above. Result may reflect rounding differences.
- (10) Historical Average Market (Equity) Risk Premium (1926-2023), as reported by Kroll Cost of Capital Navigator.
- (11) Average of (9) and (10) above. May reflect rounding differences.
- (12) Relevered beta coefficient for the Gas LDC Group.
- (13) (11) x (12) above.
- (14) (13) + (8) above.
- (15) Size premium (return in excess of CAPM) for Decile 4 portfolios, as reported by Kroll Cost of Capital Navigator.
- (16) (14) + (15) above.
- (17) (11) above x 25%.
- (18) 75% x (11) above x (12) above.
- (19) (8) + (17) + (18) above.

CAPM Method  
Combination Utility Group - Cost of Equity Estimates

Indicated Market Risk Premium (20)	7.25%
Combination Utility Group Beta Coefficient (21)	0.946
Combination Utility Group Risk Premium (22)	6.85%
Prospective Risk-Free Rate of Return (Average) (23)	4.21%
Traditional CAPM Result (24)	11.06%
Size Premium Adjustment (25)	0.46%
Implied Cost of Equity (CAPM with Size Adjustment) (26)	11.52%

Empirical CAPM Model (ECAPM)

Prospective Risk-Free Rate of Return (Average) (23)	4.21%
25% Weighting of Market Risk Premium (27)	1.81%
75% Weighting of Beta x Market Risk Premium (28)	5.14%
Implied Cost of Equity (ECAPM Model) (29)	11.16%

Footnotes:

- (20) See pages 1-2 of this Attachment and footnotes 1-11 therein.  
(21) Levered beta coefficient for the Combination Utility Group.  
(22) (20) x (21) above.  
(23) See pages 1-2 of this Attachment and footnote 8 therein.  
(24) (22) + (23) above.  
(25) Size premium (return in excess of CAPM) for Decile 2 portfolios, as reported by Kroll Cost of Capital Navigator.  
(26) (24) + (25) above.  
(27) (20) above x 25%.  
(28) 75% x (21) above x (20) above.  
(29) (23) + (27) + (28) above.

CAPM Method  
Non-Regulated Group - Cost of Equity Estimates

Indicated Market Risk Premium (30)	7.25%
Non-Regulated Group Beta Coefficient (31)	0.903
Non-Regulated Group Risk Premium (32)	6.54%
Prospective Risk-Free Rate of Return (Average) (33)	4.21%
Traditional CAPM Result (34)	10.75%
Size Premium Adjustment (35)	-0.06%
Implied Cost of Equity (CAPM with Size Adjustment) (36)	10.69%

Empirical CAPM Model (ECAPM)

Prospective Risk-Free Rate of Return (Average) (37)	4.21%
25% Weighting of Market Risk Premium (38)	1.81%
75% Weighting of Beta x Market Risk Premium (39)	4.91%
Implied Cost of Equity (ECAPM Model) (40)	10.93%

Footnotes:

(30) See pages 1-2 of this Attachment and footnotes 1-11 therein.

(31) Relevered beta coefficient for the Non-Regulated Group.

(32) (30) x (31) above.

(33) See pages 1-2 of this Attachment and footnote 8 therein.

(34) (32) + (33) above.

(35) Size premium (return in excess of CAPM) for Decile 1 portfolios, as reported by Kroll Cost of Capital Navigator.

(36) (34) + (35) above.

(37) See pages 1-2 of this Attachment and footnote 8 therein.

(38) (30) above x 25%.

(39) 75% x (30) above x (31) above.

(40) (37) + (38) + (39) above.

CAPM Method  
Value Line Investment Survey  
Median Estimated Dividend Yields and Price Appreciation Potential

Value Line Report Date	Median Estimated Dividend Yields (1)	Median Price Apprec. Potential (2)
2/23/2024	2.20%	45.00%
2/16/2024	2.20%	50.00%
2/9/2024	2.20%	50.00%
2/2/2024	2.20%	45.00%
1/26/2024	2.20%	45.00%
1/19/24	2.20%	45.00%
1/12/24	2.20%	45.00%
1/5/24	2.20%	45.00%
12/29/23	2.20%	45.00%
12/22/23	2.20%	50.00%
12/15/23	2.20%	55.00%
12/8/23	2.30%	60.00%
12/1/23	2.30%	60.00%
13-Week Average	2.22%	49.23%

Annual Appreciation Return (3-year realization)	14.28%
Annual Appreciation Return (4-year realization)	10.53%
Annual Appreciation Return (5-year realization)	8.34%

Source: Value Line Investment Survey, Summary & Index. Averages derived from 13 consecutive weekly reports, from December 1, 2023 to February 23, 2024.

- (1) The Value Line median of estimated dividend yields (for the next 12 months) of all dividend paying stocks under review.  
(2) The Value Line estimated median price appreciation potential of all 1,700 stocks in the hypothesized economic environment, 3 to 5 years hence.

# Attachment VVR-12

Risk Premium Method (RPM)  
Gas LDC Group - Indicated Cost of Equity

Prospective "Aaa" Rated Corporate Bond Yield (1)	5.02%
Yield/Credit Spread Adjustment Between "Aaa" Rated Corporate Bond Yields and "A" Rated Public Utility Bond Yields (2)	0.70%
<hr/> Prospective "A" Rated Public Utility Bond Yield (3) <hr/>	<hr/> 5.72% <hr/>
Yield/Credit Spread Adjustment Between "A" Rated Public Utility Bonds and A-/A3 Average Rating of the Gas LDC Group (4)	0.10%
<hr/> Prospective Bond Yield for Gas LDC Group (5) <hr/>	<hr/> 5.82% <hr/>
Equity Risk Premium	
- Total Market Index Approach (6)	5.80%
- Public Utility Index Approach (7)	4.33%
<hr/> Indicated Equity Risk Premium (8) <hr/>	<hr/> 5.07% <hr/>
<hr/> <hr/>	
<hr/> Indicated Cost of Equity - Gas LDC Group (9) <hr/>	<hr/> 10.89% <hr/>

- (1) See page 2 of this Attachment. Average prospective "Aaa" bond yield for the 2024-2028 period from the Blue Chip Financial Forecasts.
- (2) See page 3 of this Attachment. Yield adjustment derived from historical corporate bond yield data (recent 12 months) found in the Mergent Bond Record.
- (3) Sum of (1) and (2) above.
- (4) Adjustment to reflect credit spread differential between "A" rated public utility bonds and A-/A3 rating of the Gas LDC Group, as reflected on page 3 of this Attachment. The 0.10% adjustment was derived via simple linear interpolation between the yield spread differential for the "Baa" rated and "A" rated public utility bonds, respectively  $((5.84\% - 5.54\%)/3) = 0.10\%$ .
- (5) Sum of (3) and (4) above, subject to rounding.
- (6) See page 4 of this Attachment.
- (7) See page 5 of this Attachment.
- (8) Average of (6) and (7) above.
- (9) Sum of (5) and (8) above, subject to rounding.

Risk Premium Method (RPM)  
Blue Chip Financial Forecasts - Consensus Forecasts

Six Quarter Forecast (Q4, 2023 - Q1, 2025)

Quarter/Year	"Aaa" Rated Corp. Bonds	"Baa" Rated Corp. Bonds
Q4, 2023 (1)	5.50%	6.40%
Q1, 2024 (1)	5.50%	6.40%
Q2, 2024 (1)	5.30%	6.40%
Q3, 2024 (1)	5.30%	6.30%
Q4, 2024 (1)	5.10%	6.20%
Q1, 2025 (1)	5.00%	6.10%
Six-Quarter Avg.	5.28%	6.30%

Three and Five Year Forecasts

Year	"Aaa" Rated Corp. Bonds	"Baa" Rated Corp. Bonds
2024 (1)	5.30%	6.33%
2025 (1)	5.00%	6.00%
2026 (1)	4.90%	6.00%
2027 (1)	4.90%	6.00%
2028 (1)	5.00%	6.00%
2024-2026 Avg.	5.07%	6.11%
2024-2028 Avg.	5.02%	6.07%

(1) Blue Chip Financial Forecasts, Vol. 42, No. 12, December 1, 2023.

Risk Premium Method (RPM)  
Historical Corporate Bond Yield Spread Differentials (January 2023 - December 2023)  
Based on Moody's Long-Term Credit Ratings

Period	Corporate Bonds			Public Utility Bonds			Bond Yield Spread Differentials		
	"Aaa" Rated	"A" Rated	"Baa" Rated	"Aa" Rated	"A" Rated	"Baa" Rated	"Aa" (Pub. Util.) vs. "Aaa" Corp.	"A" (Pub. Util.) vs. "Aaa" Corp.	"Baa" (Pub. Util.) vs. "Aaa" Corp.
Jan-23	4.40%	5.04%	5.50%	4.98%	5.20%	5.49%	0.58%	0.80%	1.09%
Feb-23	4.56%	5.16%	5.59%	5.12%	5.29%	5.54%	0.56%	0.73%	0.98%
Mar-23	4.60%	5.25%	5.71%	5.24%	5.39%	5.68%	0.64%	0.79%	1.08%
Apr-23	4.47%	5.02%	5.53%	5.00%	5.13%	5.47%	0.53%	0.66%	1.00%
May-23	4.67%	5.24%	5.77%	5.24%	5.36%	5.71%	0.57%	0.69%	1.04%
Jun-23	4.65%	5.24%	5.75%	5.26%	5.38%	5.73%	0.61%	0.73%	1.08%
Jul-23	4.66%	5.25%	5.74%	5.30%	5.41%	5.73%	0.64%	0.75%	1.07%
Aug-23	4.95%	5.55%	6.02%	5.58%	5.71%	6.08%	0.63%	0.76%	1.13%
Sep-23	5.13%	5.70%	6.16%	5.72%	5.86%	6.15%	0.59%	0.73%	1.02%
Oct-23	5.61%	6.18%	6.63%	6.19%	6.34%	6.61%	0.58%	0.73%	1.00%
Nov-23	5.61%	5.78%	6.19%	5.82%	5.96%	6.20%	0.21%	0.35%	0.59%
Dec-23	4.74%	5.25%	5.64%	5.27%	5.42%	5.68%	0.53%	0.68%	0.94%
12-Month Average	4.84%	5.39%	5.85%	5.39%	5.54%	5.84%	0.56%	0.70%	1.00%

Source: Mergent Bond Record, January 2024, Volume 90, No. 1. Moody's Long-Term Corporate Bond Yield averages reference corporate and utility bonds with maturities as close as possible to 30 years.



Risk Premium Method (RPM)  
Equity Risk Premium Using Total Market Approach  
Gas LDC Group

Historical Equity Risk Premium

Annual Total Returns for S&P 500 Composite Index, Arithmetic Average (1926-2022) (1)	12.00%
Annual Total Returns for Long-Term Corporate Bonds, Arithmetic Average (1926-2022) (2)	6.10%
<u>Historical Equity Risk Premium - Total Market (3)</u>	<u>5.90%</u>

Prospective Equity Risk Premium

Prospective Annual Market Return (Next 3-5 years) (4)	11.53%
Prospective "Aaa" Rated Corporate Bond Yield (5)	5.02%
<u>Prospective Equity Risk Premium - Total Market (6)</u>	<u>6.51%</u>

<u>Indicated Equity Risk Premium - Total Market (7)</u>	<u>6.21%</u>
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Beta Coefficient - Gas LDC Group (8)	0.935
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<u>Equity Risk Premium (Gas LDC Group) (9)</u>	<u>5.80%</u>
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- (1) Source: 2023 SBBI Yearbook (Kroll, LLC); arithmetic average of total returns for large company stocks (S&P 500 Index) (1926-2022).
- (2) Source: 2023 SBBI Yearbook (Kroll, LLC), arithmetic average of total returns for long-term high-grade corporate bonds (1926-2022).
- (3) (1) - (2) above.
- (4) From page 1 of Attachment VVR-11.
- (5) From pages 1 and 2 of this Attachment.
- (6) (4) - (5) above.
- (7) Average of (3) and (6) above.
- (8) Relevered beta coefficient. See the CAPM section of Mr. Rea's testimony.
- (9) (7) x (8) above.

Risk Premium Method (RPM)  
Equity Risk Premium - Public Utility Index Approach  
Gas LDC Group and Combination Utility Group

Historical Equity Risk Premium - Public Utility Index Approach

Annual Holding Period Returns for S&P 500 Utilities Index, Arithmetic Average (1926-2023) (1)	10.62%
Annual Yield on Moody's "A" Rated Public Utility Bonds, Arithmetic Average (1926-2023) (2)	6.23%
<hr/> <u>Equity Risk Premium (Historical) - Public Utility Index Approach (3)</u>	<hr/> <u>4.40%</u>

Currently Implied Equity Risk Premium - Public Utility Index Approach

DCF Approach - S&P 500 Utilities Index	
Dividend Yield (4)	3.75%
Growth Rate (5)	6.43%
<hr/> DCF Market Return - S&P Utilities Index (6)	<hr/> 10.18%
Recent 3-Month Average of Moody's "A" Rated Public Utility Bond Yields (7)	5.91%
<hr/> <u>Equity Risk Premium (Currently Implied) - S&amp;P 500 Utilities (8)</u>	<hr/> <u>4.27%</u>
<hr/> <u>Indicated Equity Risk Premium - Public Utility Index Approach (9)</u>	<hr/> <u>4.33%</u>

(1) Source: S&P 500 Utilities Index historical data (currently comprised of 30 utility companies). See page 6 of this Attachment.

(2) Source: Moody's Public Utility Manual and Mergent Bond Record. Historical yields on "A" rated utility bonds, representing the midpoint of Moody's reported utility credit ratings (Aa/A/Baa). See page 6 of this Attachment.

(3) (1) - (2) above.

(4) Source: www.spindices.com. Recently reported dividend yield for S&P 500 Utilities Index companies (January 31, 2024), adjusted upward by one-half of the expected dividend growth rate as reflected in footnote (5).

(5) Source: Bloomberg Finance LP. Average long-term consensus earnings growth estimate for the S&P 500 Utilities Index.

(6) (4) + (5) above.

(7) See page 3 of this Attachment.

(8) (6) - (7) above. Subject to rounding differences.

(9) Average of (3) and (8) above.

Risk Premium Method (RPM)  
Historical Returns for Utility Indices (1926-2023)

Year	S&P 500 Utilities Index	Moody's "A" Rated Utility Bond Yields	Moody's "Baa" Rated Utility Bond Yields	Year	S&P 500 Utilities Index	Moody's "A" Rated Utility Bond Yields	Moody's "Baa" Rated Utility Bond Yields
1926	5.38%	5.17%	5.67%	1975	43.23%	10.09%	10.96%
1927	28.99%	5.02%	5.46%	1976	30.48%	9.29%	9.82%
1928	56.94%	4.95%	5.33%	1977	8.37%	8.61%	9.06%
1929	11.98%	5.22%	5.76%	1978	-3.53%	9.29%	9.62%
1930	-20.89%	5.06%	5.88%	1979	13.27%	10.49%	10.96%
1931	-34.45%	5.12%	6.90%	1980	14.27%	13.34%	13.95%
1932	-0.85%	6.46%	8.78%	1981	11.19%	15.95%	16.60%
1933	-20.30%	6.32%	9.38%	1982	24.90%	15.86%	16.45%
1934	-18.08%	5.55%	7.49%	1983	19.47%	13.66%	14.20%
1935	74.61%	4.61%	5.56%	1984	24.47%	14.03%	14.53%
1936	20.99%	4.08%	4.67%	1985	31.64%	12.47%	12.96%
1937	-35.64%	3.98%	5.09%	1986	28.08%	9.58%	10.00%
1938	21.92%	3.90%	5.26%	1987	-2.51%	10.10%	10.53%
1939	11.71%	3.52%	4.50%	1988	17.75%	10.49%	11.00%
1940	-16.30%	3.24%	4.05%	1989	45.82%	9.77%	9.97%
1941	-30.50%	3.07%	3.84%	1990	-2.83%	9.86%	10.06%
1942	14.25%	3.09%	3.73%	1991	13.98%	9.36%	9.55%
1943	47.07%	2.99%	3.58%	1992	7.64%	8.69%	8.86%
1944	18.23%	2.97%	3.52%	1993	14.38%	7.59%	7.91%
1945	53.66%	2.87%	3.39%	1994	-7.88%	8.31%	8.63%
1946	2.66%	2.71%	3.03%	1995	40.86%	7.89%	8.29%
1947	-11.85%	2.78%	3.08%	1996	2.90%	7.75%	8.17%
1948	4.67%	3.02%	3.36%	1997	23.68%	7.60%	7.95%
1949	30.99%	2.90%	3.28%	1998	14.39%	7.04%	7.26%
1950	3.26%	2.79%	3.18%	1999	-8.67%	7.62%	7.88%
1951	18.02%	3.11%	3.39%	2000	58.55%	8.24%	8.36%
1952	18.55%	3.24%	3.53%	2001	-30.05%	7.76%	8.03%
1953	7.45%	3.49%	3.73%	2002	-29.99%	7.37%	8.02%
1954	24.18%	3.16%	3.51%	2003	26.26%	6.58%	6.84%
1955	11.07%	3.22%	3.43%	2004	24.28%	6.16%	6.40%
1956	5.05%	3.56%	3.78%	2005	16.84%	5.65%	5.92%
1957	6.33%	4.24%	4.46%	2006	20.99%	6.07%	6.32%
1958	39.86%	4.20%	4.43%	2007	19.38%	6.07%	6.33%
1959	7.46%	4.78%	4.96%	2008	-28.98%	6.52%	7.23%
1960	19.85%	4.78%	4.97%	2009	11.91%	6.05%	7.06%
1961	29.04%	4.62%	4.83%	2010	5.46%	5.45%	5.95%
1962	-2.61%	4.54%	4.75%	2011	19.91%	5.04%	5.57%
1963	12.26%	4.39%	4.67%	2012	1.29%	4.13%	4.86%
1964	15.69%	4.52%	4.74%	2013	13.21%	4.48%	4.98%
1965	4.67%	4.58%	4.78%	2014	28.98%	4.28%	4.80%
1966	-4.60%	5.39%	5.60%	2015	-4.85%	4.12%	5.03%
1967	-0.59%	5.87%	6.15%	2016	16.29%	3.93%	4.68%
1968	5.45%	6.51%	6.87%	2017	12.11%	4.00%	4.38%
1969	-11.28%	7.54%	7.93%	2018	4.11%	4.25%	4.67%
1970	15.67%	8.69%	9.18%	2019	26.35%	3.77%	4.19%
1971	2.22%	8.16%	8.63%	2020	0.48%	3.02%	3.39%
1972	7.57%	7.72%	8.17%	2021	17.67%	3.11%	3.36%
1973	-17.59%	7.84%	8.17%	2022	1.57%	4.72%	5.03%
1974	-21.13%	9.50%	9.84%	2023	-7.08%	5.54%	5.84%
Average	10.62%	6.23%	6.74%				

Risk Premium Method (RPM)  
Combination Utility Group - Indicated Cost of Equity

Prospective "Aaa" Rated Corporate Bond Yield (1)	5.02%
Yield/Credit Spread Adjustment Between "Aaa" Rated Corporate Bond Yields and "A" Rated Public Utility Bond Yields (2)	0.70%
<hr/> <u>Prospective "A" Rated Public Utility Bond Yield (3)</u>	<hr/> <u>5.72%</u>
Yield/Credit Spread Adjustment Between "A" Rated Public Utility Bonds and A-/Baa1 Rating of the Combination Utility Group (4)	0.15%
<hr/> <u>Prospective Bond Yield for Combination Utility Group (5)</u>	<hr/> <u>5.87%</u>
Equity Risk Premium	
- Total Market Index Approach (6)	5.87%
- Public Utility Index Approach (7)	4.33%
<hr/> <u>Indicated Equity Risk Premium (8)</u>	<hr/> <u>5.10%</u>
<hr/> <u>Indicated Cost of Equity - Combination Utility Group (9)</u>	<hr/> <u>10.97%</u>

- (1) See page 2 of this Attachment. Average prospective Aaa bond yield for the 2024-2028 period from the Blue Chip Financial Forecasts.
- (2) See page 3 of this Attachment. Yield adjustment derived from historical corporate bond yield data (recent 12 months) found in Mergent Bond Record Monthly Update.
- (3) Sum of (1) and (2) above.
- (4) Adjustment to reflect bond yield/credit spread differential between "A" rated Public Utility Bonds and A- / Baa1 rating of the Combination Utility Group, as reflected on page 3 of this Attachment. The 0.15% adjustment was derived via linear interpolation between the yield spread differential for "A" rated versus "Baa" rated Public Utility Bonds  $((5.84\% - 5.54\%)/3 * 1.5 = 0.15\%)$ .
- (5) (3) + (4) above. May reflect rounding differences.
- (6) See page 8 of this Attachment.
- (7) See page 5 of this Attachment.
- (8) Average of (6) and (7) above.
- (9) Sum of (5) and (8) above.

Risk Premium Method (RPM)  
Equity Risk Premium Using Total Market Approach  
Combination Utility Group

Historical Equity Risk Premium

Annual Total Returns for S&P 500 Index, Arithmetic Average (1926-2022) (1)	12.00%
Annual Total Returns for Long-Term Corporate Bonds, Arithmetic Average (1926-2022) (2)	6.10%
<u>Historical Equity Risk Premium - Total Market (3)</u>	<u>5.90%</u>

Prospective Equity Risk Premium

Prospective Annual Market Return (Next 3-5 years) (4)	11.53%
Prospective Aaa Rated Corporate Bond Yield (5)	5.02%
<u>Prospective Equity Risk Premium - Total Market (6)</u>	<u>6.51%</u>

<u>Indicated Equity Risk Premium - Total Market (7)</u>	<u>6.21%</u>
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Relevered Beta Coefficient - Combination Utility Group (8)	0.946
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<u>Equity Risk Premium (Combination Utility Group Beta) (9)</u>	<u>5.87%</u>
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- (1) Source: 2023 SBBI Yearbook (Kroll, LLC); arithmetic average of total returns for large company stocks (S&P 500 Index) (1926-2022).
- (2) Source: 2023 SBBI Yearbook (Kroll, LLC); arithmetic average of total returns for long-term high-grade corporate bonds (1926-2022).
- (3) (1) - (2) above.
- (4) From page 1 of Attachment VVR-11.
- (5) From pages 1 and 2 of this Attachment.
- (6) (4) - (5) above.
- (7) Average of (3) and (6) above.
- (8) Relevered beta coefficient. See the CAPM section of Mr. Rea's testimony.
- (9) (7) x (8) above.

Risk Premium Method (RPM)  
Non-Regulated Group - Indicated Cost of Equity

Prospective "Aaa" Rated Corporate Bond Yield (1)	5.02%
Yield/Credit Spread Adjustment Between Aaa Rated Corporate Bond Yield and Average A-/A3 Rated Corp. Bond Yield of Non-Regulated Group (2)	0.71%
<u>Prospective Bond Yield for Non-Regulated Group (3)</u>	<u>5.73%</u>
Equity Risk Premium	
- Total Market Index Approach (4)	5.60%
<u>Indicated Equity Risk Premium</u>	<u>5.60%</u>
<u>Indicated Cost of Equity - Non-Regulated Group (5)</u>	<u>11.33%</u>

(1) See page 2 of this Attachment. Average prospective Aaa bond yield for the 2024-2028 period from the Blue Chip Financial Forecasts.

(2) See page 3 of this Attachment. Yield adjustment derived from historical corporate bond yield data (recent 12 months) reported in the Mergent Bond Record (January 2024). Yield differential between Aaa corporate bonds and A- / A3 rated corporate bonds.

(3) (1) + (2) above.

(4) See page 10 of this Attachment.

(5) Sum of (3) and (4) above.

Risk Premium Method (RPM)  
Equity Risk Premium Using Total Market Approach  
Non-Regulated Group

Historical Equity Risk Premium

Annual Total Returns for S&P 500 Index, Arithmetic Average (1926-2022) (1)	12.00%
Annual Total Returns for Long-Term Corporate Bonds, Arithmetic Average (1926-2022) (2)	6.10%
<u>Historical Equity Risk Premium - Total Market (3)</u>	<u>5.90%</u>

Prospective Equity Risk Premium

Prospective Annual Market Return (Next 3-5 years) (4)	11.53%
Prospective Aaa Rated Corporate Bond Yield (5)	5.02%
<u>Prospective Equity Risk Premium - Total Market (6)</u>	<u>6.51%</u>

<u>Indicated Equity Risk Premium - Total Market (7)</u>	<u>6.21%</u>
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Beta Coefficient - Non-Regulated Group (8)	0.903
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<u>Equity Risk Premium (Non-Regulated Group) (9)</u>	<u>5.60%</u>
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- (1) Source: 2023 SBBI Yearbook (Kroll, LLC); arithmetic average of total returns for large company stocks (S&P 500 Index) (1926-2022).
- (2) Source: 2023 SBBI Yearbook (Kroll, LLC), arithmetic average of total returns for long-term high-grade corporate bonds (1926-2022).
- (3) (1) - (2) above.
- (4) From page 1 of Attachment VVR-11.
- (5) From pages 1 and 2 of this Attachment.
- (6) (4) - (5) above.
- (7) Average of (3) and (6) above.
- (8) Relevered beta coefficient. See the CAPM section of Mr. Rea's testimony.
- (9) (7) x (8) above.

TAB 23

807 KAR 5:001 Section 16(7)(a)

Direct Testimony Greg Skinner



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

In the matter of: )  
 )  
ELECTRONIC APPLICATION OF ) Case No. 2024-00092  
COLUMBIA GAS OF KENTUCKY, INC. )  
FOR AN ADJUSTMENT OF RATES; )  
APPROVAL OF DEPRECIATION STUDY; )  
APPROVAL OF TARIFF REVISIONS; AND )  
OTHER RELIEF )

---

**PREPARED DIRECT TESTIMONY OF  
GREGORY SKINNER  
ON BEHALF OF COLUMBIA GAS OF KENTUCKY, INC.**

---

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May 16, 2024

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

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: )
)
ELECTRONIC APPLICATION OF COLUMBIA GAS )
OF KENTUCKY, INC. FOR AN ADJUSTMENT OF ) Case No. 2024-00092
RATES; APPROVAL OF DEPRECIATION STUDY; )
APPROVAL OF TARIFF REVISIONS; AND OTHER )
RELIEF )

VERIFICATION OF GREGORY SKINNER

STATE OF OHIO )
)
COUNTY OF FRANKLIN )

Gregory Skinner, Vice-President IT Utilities Systems for NiSource Corporate Services Company, being duly sworn, states that he has supervised the preparation of testimony and certain standard filing requirements in the above-referenced case and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Handwritten signature of Gregory Skinner
Gregory Skinner

The foregoing Verification was signed, acknowledged and sworn to before me this 30th day of April, 2024, by Gregory Skinner.

Notary Commission No. N/A
Commission expiration: N/A



John R Ryan III
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

**PREPARED DIRECT TESTIMONY OF GREGORY SKINNER**

1     **I.         INTRODUCTION**

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

3     A:     My name is Gregory Skinner and my business address is 290 West  
4            Nationwide Boulevard, Columbus, Ohio 43215.

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

6     A:     I am employed by NiSource Corporate Services Company (“NCSC”) as Vice  
7            President IT Utilities Systems. As Vice President of IT Utilities Systems, I am  
8            responsible for developing information technology (“IT”) strategy and  
9            corresponding integrated IT roadmap investments to support NiSource  
10           Inc.’s (“NiSource”) multi-year business and IT transformation effort. As it  
11           relates to this proceeding, I am responsible for the design, development,  
12           and implementation of the Work and Asset Management (“WAM”)  
13           transformation program.

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

15    A:     I am a graduate of The Ohio State University with a Bachelor of Science in  
16            Business Administration with a focus on Management Information  
17            Systems. I began my career in 1997 at Accenture, where I worked for  
18            approximately seven years as a Consultant and as Manager of Global  
19            Architecture & Core Technologies. In 2004, I took a position with Horizon  
20            Services Group, LLC, where I served initially as IT Manager and later as  
21            Senior IT Manager of Customer Logistics Solutions for approximately four

1 years. I joined NCSC in 2008, where I have worked in various capacities  
2 over the last fifteen years. From June 2008 to September 2012, I worked as  
3 the Manager of IT Service Delivery. I was the Director of IT (Finance)  
4 Transformation from October 2012 to May 2015. I worked as the Vice  
5 President of IT Project Delivery from June 2015 to December 2017. I  
6 worked as the Vice President of IT Infrastructure from January 2018  
7 through 2022. I have served in my current role as Vice President of IT  
8 Utilities Systems since May 2022.

9 **Q: Have you previously testified before the Kentucky Public Service**  
10 **Commission?**

11 A: No. However, I have submitted testimony before the Indiana Utility  
12 Regulatory Commission, the Virginia State Corporation Commission, and  
13 the Pennsylvania Public Utility Commission.

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

15 A: The purpose of my direct testimony is to support Columbia Gas of  
16 Kentucky, Inc.'s ("Columbia" or "Company") expenditures for  
17 improvements to its IT systems through existing investments made in the  
18 areas of Safety, Business Strategic priorities, Strategic Technology priorities,  
19 Critical Upgrades, and general IT Modernization priorities along with the  
20 current the design, development, and implementation of a new (WAM)  
21 program for the scheduling, dispatch, and execution of work and the

1 management of underlying assets. Specifically, I describe NiSource's  
2 planned five-year IT transformation plan and schedule which includes the  
3 WAM program. I provide overview for the WAM program and explain  
4 why it is reasonable and necessary.

5 **Q: Do you have any Attachments to your testimony?**

6 A: I will sponsor and support the following Attachment:

Exhibit	Description
Attachment GS-1	Overview of NiSource's IT transformation program and the expected implementation schedule

7

8 **Q: For each of the documents included within your Testimony that you are**  
9 **supporting, were they prepared by you or someone working under your**  
10 **supervision?**

11 A: Yes.

12 **Q: What Filing Requirements will you be supporting?**

13 A: I will sponsor and support the following Filing Requirement:

Filing Requirement	Description
807 KAR 5:001 Section 16(7)(c)	A complete description, which may be filed in written testimony form, of all factors used in preparing the utility's forecast period. All econometric models, variables, assumptions, escalation factors, contingency provisions, and changes

	in activity levels shall be quantified, explained, and properly supported.
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1

2 **Q. For the above Filing Requirement that you are co-sponsoring, did you**  
3 **review and concur with the response?**

4 **A:** Yes.

5 **II. THE IT TRANSFORMATION AND NEED TO REPLACE OR UPGRADE**  
6 **NISOURCE’S IT SYSTEMS**

7 **Q: What is your involvement with the implementation of the Utilities**  
8 **Transformation IT projects?**

9 **A:** As part of my role as Vice President of IT Utilities Systems, I am responsible  
10 for the operation and maintenance of NiSource’s IT programs as they exist  
11 today and the planned five-year transformation to future state architecture  
12 that will result in standardized, integrated, secure, and reliable systems. I  
13 will be responsible for overseeing and delivering the IT transformation with  
14 quality and adhering to the budget. As part of that, I was responsible for  
15 planning the request for proposals (“RFP”) processes undertaken for the  
16 WAM program.

17

18

1 **Q: Please describe NiSource’s plan to transform its IT systems over**  
2 **the next five years.**

3 A: Over the next five years, NiSource plans to replace outdated IT systems  
4 with integrated, secure, and reliable systems that will improve employee  
5 performance and benefit our customers. The first step in this planned five-  
6 year transformation is implementation of the WAM program that will  
7 facilitate the planning, scheduling, dispatch, and execution of the work on,  
8 and management of, utility assets. The WAM program is underway and  
9 will be fully completed in 2025. The second step of the IT transformation  
10 will be the completion of a Customer Transformation, which will be further  
11 defined during 2024 and 2025. Once completed, the One Customer  
12 Information system will provide a better experience for customers and  
13 facilitate provision of service to customers. The final step of the planned  
14 five-year IT transformation will be the implementation of a new financial  
15 system, beginning in 2027. Exhibit GS-1 provides a comprehensive  
16 overview of the planned five-year IT transformation plan.

17 **Q: Why it is necessary for NiSource to undertake the planned five-year IT**  
18 **transformation, including implementation of the WAM program?**

19 A: NiSource’s focus on maintaining and repairing its core natural gas and  
20 electric delivery systems over the last 20 years or so has resulted in limited

1 investments in new information systems technology. Consequently,  
2 NiSource's current state of IT architecture is a complex array of legacy  
3 systems dating back to the late 1980s. Our review of the current state  
4 architecture revealed a critical need for IT investment, including  
5 deployment of new work and asset management systems. The WAM  
6 program, for instance, will allow NiSource to eliminate or replace  
7 approximately 19 applications, which are complex and operationally  
8 inefficient.

9 **Q: Are the systems being retired as part of the IT transformation at the end**  
10 **of their useful lives?**

11 A: Yes. In fact, many of these systems are no longer supported or soon will no  
12 longer be supported by their respective software providers. As part of its  
13 overall risk management strategy, NiSource has been tagging these systems  
14 for the last several years as either at risk for failure or as being unable to  
15 upgrade and, therefore, in need of replacement. The current systems also  
16 create cyber vulnerability risks. Every year, support for these software  
17 packages and the underlying infrastructure continues to wane and the risks  
18 associated with them continue to grow. NiSource has determined that  
19 investments must be made now to move to modern software platforms to  
20 ensure reliability, support operations, and benefit customers.

21



1 **Q: How do the current IT systems create cyber vulnerability risks?**

2 A: NiSource's current legacy IT systems create cybersecurity vulnerabilities  
3 that require significant effort to overcome. It is increasingly difficult to  
4 patch and protect systems residing on outdated infrastructure. NiSource  
5 devotes significant resources to ensure its IT systems are secure. Among  
6 other things, NiSource has a very robust patching and threat monitoring  
7 program through its cybersecurity organization. However, NiSource must  
8 put additional protections in place to secure the systems until they can be  
9 placed on more modern platforms.

10 **Q: Do the legacy IT systems that will be replaced as part of the IT**  
11 **transformation create other risks?**

12 A: Yes. The current IT systems present significant risks in operating the  
13 business, including operational risks, reputational risks, regulatory risks,  
14 system risks, and customer support risks. As I mentioned, a number of the  
15 current IT systems are at or are nearing the end of their useful lives and are  
16 at risk of failure. Because of their age, it would take an extraordinary effort  
17 to recover the systems in the event of an outage or cybersecurity event.  
18 NiSource could be faced with a multiday effort to restore the systems,  
19 which would be disruptive. The disparate IT systems also require  
20 significant manual work practices that are prone to human error. The

1 existing legacy systems also lack technical support and cannot be upgraded,  
2 which limits NiSource's ability to take advantage of new features and  
3 capabilities that could create efficiencies that benefit our customers.

4 **Q: Would it make sense to spend money upgrading the existing IT**  
5 **infrastructure?**

6 A: No. The age of the systems is such that they would require significant  
7 upgrades and any investment would likely result in a temporary rather  
8 than permanent solution. It would be imprudent to spend money to  
9 attempt to work within the existing outdated systems because upgrades  
10 would not resolve the core issues and risks associated with these systems,  
11 including cybersecurity risks. The current systems are also costly to  
12 support, and it is difficult to introduce new capabilities and improvements  
13 to those systems, which could not be resolved by a mere upgrade.

14 **Q: Do problems with the current IT systems hinder the ability to complete**  
15 **work?**

16 A: Yes. The current IT systems are significantly underperforming as  
17 compared to newer technology, which results in additional operating  
18 impediments. For instance, due to limitations of the system, NiSource has  
19 created many workarounds that cause inefficiencies. The legacy IT systems  
20 also create difficulties in recruiting and retaining a modern workforce and

1 propagate circumstances where certain groups are familiar with specific  
2 platforms and others are not, which inhibits the ability to integrate IT  
3 operations and promote efficiency.

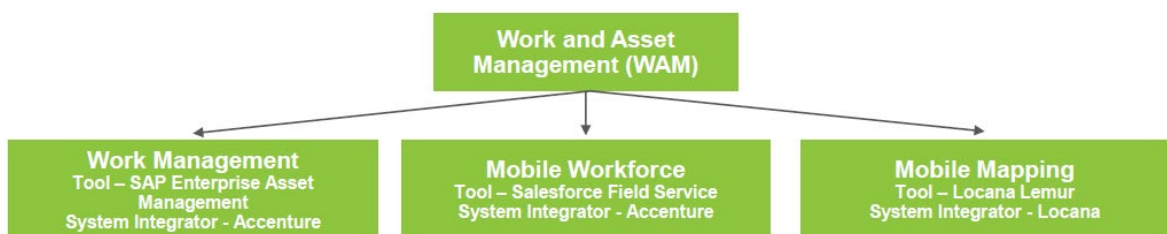
4 **Q: In your opinion, are the current IT systems adequate to support**  
5 **NiSource’s growing customer and business requirements?**

6 **A:** No. The current IT systems need to be replaced to adequately support  
7 NiSource’s existing operations.

8 **IV. THE WAM PROGRAM COMPONENT OF THE IT**  
9 **TRANSFORMATION**

10 **Q: Please describe the first step of NiSource’s IT transformation, the WAM**  
11 **program.**

12 **A:** The WAM program involves the development and system-wide  
13 deployment of new integrated work and asset management IT systems to  
14 replace existing programs that are at or nearing the end of their useful lives,  
15 not fully integrated, and at risk of failure. The WAM program is a  
16 NiSource-wide project. The subsidiary operating companies, and their  
17 customers, will benefit significantly from it. The three components of the  
18 WAM program are shown below:



1 **Q: Please describe the three components shown in the chart above that**  
2 **comprise the WAM program.**

3 A: The three core new systems comprising the WAM program are: (1) the  
4 “Work Management Initiative,” which is technology to perform work and  
5 asset planning, initiation, execution tracking, closeout and reporting to  
6 standardize and enhance business processes, support strong asset  
7 maintenance, safety, compliance and risk management; (2) the “Mobile  
8 Workforce Initiative,” which is technology that supports integrated  
9 planning of work in the field, scheduling, and work route planning and  
10 efficiency to provide an updated scheduling and dispatch solution and help  
11 bring NiSource into the digital age of utility services by giving front-line  
12 employees an easy-to-use mobile application to view assigned work,  
13 indicate work status and track completed tasks; and (3) the “Mobile  
14 Mapping Initiative,” which is a Geographic Information System (“GIS”)  
15 mapping technology that will include functionality on mobile devices for  
16 improved asset data capture and as-builts in the field, which will allow  
17 front-line employees to view and capture more robust details about  
18 infrastructure when and where the work happens.

19

20

1 **Q: How will the three components of the WAM program work together?**

2 A: As an example, an existing asset with a defined maintenance schedule  
3 would exist within the Work Management Initiative system. As the  
4 maintenance date for this asset approaches, this information is presented to  
5 the scheduling team to prepare for the work that will be needed to perform  
6 maintenance (materials, permits, etc.). When the work is ready to be  
7 executed it can then be scheduled and dispatched through the Mobile  
8 Workforce Initiative software. A technically qualified field worker will  
9 receive a dispatched work order with all associated information on the asset  
10 including prior work performed and location details. The field worker will  
11 be able to locate the asset through the Mobile Mapping Initiative software  
12 to begin the work. Upon completion of the work, the field worker will  
13 capture the work performed in the Mobile Workforce Initiative application  
14 and make any real-time edits to the map in the Mobile Mapping  
15 application, all of which are sent back to the Work Management Initiative  
16 software to close out the work. This will all be fully integrated and seamless  
17 as opposed to requiring views of, and entries in, multiple applications as is  
18 required under the current state systems.

19

1 **Q: Please summarize the benefits of the WAM component of the IT**  
2 **transformation.**

3 A: At a high-level, benefits of the WAM program include:

- 4 • Standardization of end-to-end work and asset management  
5 processes supported by a new integrated solution including  
6 industry-standard software;
- 7 • Utilization of compatible unit estimating to standardize designs,  
8 materials, and tools;
- 9 • Incorporation of Operator Qualifications in work scheduling and  
10 assignment to promote efficiency in completing work in the field;
- 11 • Time savings through automation to support the scheduling,  
12 assigning, routing of work, and as-built records closeout – which will  
13 reduce wrench time, travel time and idle time;
- 14 • Modern data capture solution enabled by dynamic smart forms;
- 15 • Improved data quality through the ability to view and update asset  
16 data and data records on maps; and
- 17 • Improved reporting and data availability across common platforms.

18

19

1 **Q: What is the core enterprise software backbone that will be used for the**  
2 **Work Management Initiative component of the WAM program?**

3 A: The core enterprise software for the Work Management Initiative will be  
4 the SAP Enterprise Asset Management (“SAP”) system. SAP will replace  
5 the existing outdated custom work management system used to maintain  
6 and perform work on assets, and several related systems (document and  
7 data warehouse repositories that encompass asset and operational data for  
8 reporting). Those systems have been in service for approximately fifteen to  
9 twenty years in some cases and are no longer officially supported by  
10 vendors.

11 **Q: Will the SAP software improve functionality?**

12 A: Yes. Once implemented, the new SAP software will simplify data entry and  
13 create a single source for asset management data, which will improve  
14 accessibility for NiSource employees. The Work Management Initiative  
15 software will serve as the single source of truth for assets, health, and  
16 maintenance information, as well as for warehouse and materials  
17 management. Currently, this data is housed in multiple locations, which  
18 results in redundant and manual processes.

19

20

1 **Q: What are some of the other benefits of using SAP software?**

2 A: The SAP software (Work Management Initiative) will be integrated with  
3 the Salesforce software (Mobile Workforce Initiative) and Lemur Software  
4 (Mobile Mapping Initiative) as part of the WAM program and will be used  
5 as the backbone of the planned five-year IT transformation. In making this  
6 necessary investment, NiSource has chosen to implement a platform that  
7 allows software to be implemented on a proven, fully integrated basis. SAP  
8 is a top-tier, proven software that is used by many large utilities in their  
9 daily operations.

10 **Q: How were the software platforms and service providers selected?**

11 A: Key service providers and software platforms were selected through  
12 competitive RFP processes. The WAM program team (including myself),  
13 advisory council members, and other NiSource employees (including those  
14 familiar with Columbia's local operations) participated in this process. We  
15 attended software demonstrations and considered both software  
16 applications and potential bolt-on software functionality. WAM program  
17 team members also participated in site visits to companies currently using  
18 enterprise software, conducted telephone reference checks, and conducted  
19 on-site demonstrations. NiSource chose SAP, Salesforce, and Locana



1 (Lemur) based on a number of factors, including the estimated total cost of  
2 ownership.

3 **Q: In addition to the competitive RFP process, what other steps were taken**  
4 **to ensure the WAM program was undertaken at a reasonable cost?**

5 A: Starting in 2019 and continuing through 2021, multiple evaluations took  
6 place with key partners to evaluate the technology landscape, opportunities  
7 for transformation and the sequencing of transformation to begin to  
8 formulate the total cost of ownership for a multi-year transformation. This  
9 review was again conducted in 2022 to confirm the approach, sequencing,  
10 and funding requirement for transformation. In the 2022 review, the WAM  
11 program was prioritized to start as the first major program in the  
12 transformation and the costs to implement were vetted through a  
13 competitive RFP process.

14 **Q: How will customers benefit from the WAM program?**

15 A: As with NiSource's other legacy IT business systems, the systems used for  
16 work and asset management are at the end of their useful lives and are not  
17 fully integrated. As a result, NiSource's current architecture is a complex  
18 array of legacy systems implemented as separate projects over time, wired  
19 together through complex integrations with varying degrees of efficacy,  
20 which leads to a wide array of issues. The WAM program will address

1 these issues, provide new and improved features, and ultimately facilitate  
2 the provision of better service to customers. A more specific customer  
3 benefit of the WAM program worth noting is that the Mobile Mapping  
4 Initiative will offer a significant reduction in cycle time from when work is  
5 performed in the field to when maps are updated. Under NiSource's prior  
6 IT systems, these updates took 30 days. By significantly cutting down on  
7 the time required to make these mapping updates, the Mobile Mapping  
8 Initiative will reduce the opportunity for a dig-in or damage to assets that  
9 could result in a customer outage.

10 **V. STATUS OF WAM IMPLEMENTATION**

11 **Q: What is the status of the implementation of the WAM program?**

12 A: The WAM program has been fully planned and organized, with a full IT  
13 strategy in place. Deployment of the software backbone for the Mobile  
14 Mapping Initiative began in 2023. Implementation of the Work Management  
15 Initiative and Mobile Workforce Initiative began in 2023, with the goal of full  
16 WAM program implementation before the end of 2025.

17 **Q: Please describe NiSource's progress to date implementing the planned**  
18 **five-year IT transformation.**

19 A: A timeline showing the progress in completing the five-year IT  
20 transformation to date and the upcoming steps is included in Exhibit GS-1.

1 Initially, stakeholders from across the NiSource companies were engaged to  
2 create and refine the five-year IT Strategy. Once completed, a roadshow  
3 across the NiSource footprint, including those familiar with Columbia's local  
4 operations, was conducted to gain detailed feedback to be used throughout  
5 execution of the planned five-year IT strategy. NiSource worked with key  
6 executive stakeholders across NiSource to define vision and user-centric  
7 strategy, workshopped with key stakeholders across NiSource to develop  
8 strategy to fine tune strategy, budgeting and staffing.

9 **Q: Are Columbia employees participating in the design and implementation**  
10 **of the new systems?**

11 A: Yes. Employees of all NiSource companies have had, and will continue to  
12 have, extensive involvement in the recommended improvements. As a  
13 practical matter, it is imperative that NiSource employees be involved in the  
14 implementation of the program to ensure business and IT needs are properly  
15 served by the program at all stages of implementation and that all of the  
16 benefits to local operations and customers are realized.

17 **VI. REASONABLENESS OF THE COST OF THE WAM PROGRAM**

18 **Q: What is the projected cost of the WAM program to Columbia?**

19 A: The projected cost of the WAM program to Columbia is addressed in the  
20 Direct Testimony of Company Witness Bly.

1 **Q: Are you sponsoring the amount of WAM program cost that is projected**  
2 **to be allocated to Columbia?**

3 A: No. Company Witness Bly supports this information.

4 **Q: Do you believe the cost of the WAM program is less expensive than costs**  
5 **that might be incurred if NiSource were to attempt to upgrade and**  
6 **maintain the existing legacy systems?**

7 A: In my opinion, yes, assuming such an upgrade were even possible – which  
8 it is not. As discussed above, NiSource’s software systems have already  
9 reached or are soon to be reaching the end of their useful life. Simply put,  
10 NiSource must invest in new software systems to replace aging software  
11 products to continue to provide reliable and efficient service to customers.  
12 Trying to patch or upgrade the legacy systems would be imprudent. The  
13 WAM program will result in a fully integrated IT system, supported by  
14 proven software platforms, and designed to be flexible and allow for  
15 growth for many years, including serving as a foundational platform for IT  
16 enhancements for customer service and accounting.

17

18

19

20

1 **VII. OTHER INCREMENTAL IT INVESTMENTS**

2 **Q: Are there any other incremental IT investments that are a part of the**  
3 **request in this case?**

4 A: Yes. The case includes investments in a Field Mobility program which is  
5 intended to provide upgraded mobile devices in the vehicles coupled with  
6 a connected vehicle solution to improve wireless data connectivity in and  
7 around the vehicle. These investments are foundational to have in place  
8 ahead of the new technology platforms that will be implemented as part of  
9 the WAM program to ensure that the field workers have access to the right  
10 technology coupled with the high-speed connectivity needed to perform  
11 their work.

12 **Q: Where did the idea for this investment come from?**

13 A: In the roadshows I refer to above where we shared the IT Transformation  
14 plan, we heard from the front-line worker about the challenges they  
15 experience daily with the technology in the vehicles and challenges with  
16 connectivity in the Columbia footprint. These challenges were expressed  
17 as an issue for the productivity and safety of the employee and ability to  
18 efficiently serve our customers. In response to these challenges, along with  
19 similar challenges across the NiSource operating centers, the investment  
20 decision was made to address this need in 2024.

1 **VIII. CONCLUSION**

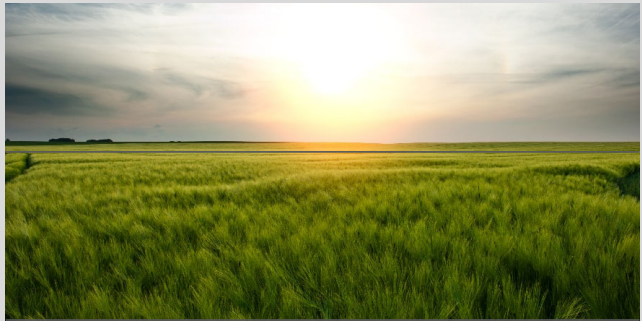
2 **Q: In your opinion, is the implementation of the WAM program reasonable**  
3 **and necessary?**

4 A: Yes, and the costs set forth by Company Witness Bly are reasonably  
5 necessary to complete the work on the WAM program. In my opinion, the  
6 decision to replace NiSource's existing information technology systems is  
7 not only prudent but also absolutely necessary. NiSource's current  
8 information technology systems are at or near the end of their useful lives  
9 and must be replaced. NiSource has taken a holistic look at the software  
10 needs of the entire company and built a solution that will meet the customer  
11 service, safety, and network reliability needs of all customers, including the  
12 customers of Columbia, now and in the future. The WAM program  
13 component of the IT transformation involves the implementation of robust,  
14 integrated software platforms and represents a unique capital project both  
15 in scope and complexity. As indicated above, the costs of the WAM  
16 program are reasonable, and the WAM program team will carefully  
17 manage the costs of the WAM program to provide its customers and other  
18 stakeholders with the greatest value at a reasonable cost.

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

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

# Attachment GS-1



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**Transformation Roadmap Overview**

Melody Birmingham  
EVP & Chief Innovation Officer





# WHY CHANGE? | CRITICAL NEED FOR STRATEGIC IT INVESTMENT

## Current State – at risk and unstable

NiSource’s approach to maintaining and repairing its core systems over the last approximately 20 years resulted in limited investment in new technology.

### End of Life IT Systems

Non-Standard Processes; IT systems at risk of failure

↑ Costs   ↑ Risk   ↑ Complexity  
 ↑ Cyber Vulnerability   ↓ Business Value   ↓ Skill Depth

- Complex and costly to support and introduce new capabilities/investments
- Disparate and manual work practices prone to human error and “waste”
- Significant risk in operating the business (Operational, Reputational, Regulatory, System, Customer, Cyber)
- Data unable to be leveraged to optimize decision making
- Significantly underperforming IT industry benchmarks (high cost with poor performance)
- Unable to recruit and retain modern workforce
- Propagates multiple, non-productive, sub-cultures

## Future State – modern and reliable



By shifting our investment into core system replacements over the next 5+ years, NiSource’s future state architecture will be greatly simplified leading to standard processes and secure and reliable systems

### Modernized IT Systems

Standardized processes; Stable, reliable and secure IT systems

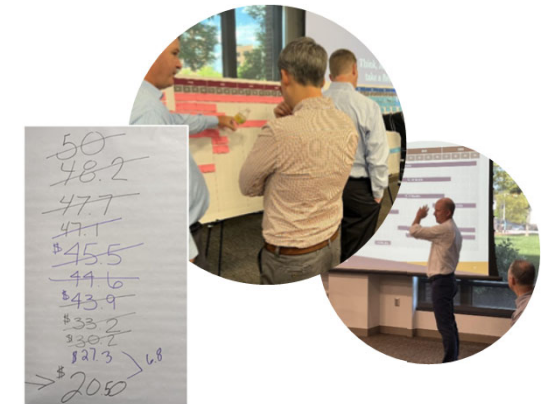
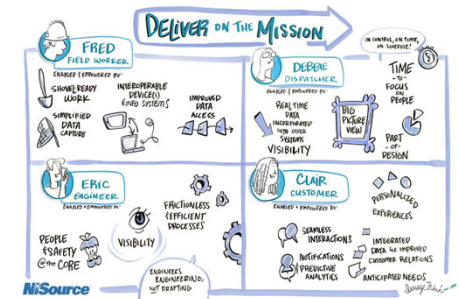
↓ Costs   ↓ Risk   ↓ Complexity  
 ↓ Cyber Vulnerability   ↑ Business Value   ↑ Skill Depth

- New platforms allow efficient workflow reducing waste
- Significantly reduced risk in operating the business (Operational, Reputational, Regulatory, System, Customer, Cyber)
- Increased visibility into data to drive risk-informed decisions
- Positions NiSource for future strategic investments and to achieve aspirational goals
- Meeting or exceeding IT industry benchmarks (lower cost with high performance)
- Competitively recruit modern workforce
- ONE NiSource culture

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# ROADMAP PRIORITIZATION AND SEQUENCING

Utilizing evolving industry trends, NiSource's aspirational commitments, known system dependencies, risks, and financial constraints, the cross-functional working team prioritized and sequenced strategic initiatives.



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## STAKEHOLDER ENGAGEMENT AND COMMUNICATION

Stakeholders from across NiSource were engaged to create and refine the 5-Year IT Strategy. Once completed, a frontline employee roadshow was conducted to gain detailed feedback to be used throughout execution of the 5-Year Strategy.

1

### Output: Vision for the IT 5-Year Strategy

User-Centric Strategy

Workshop with key executive stakeholders across NiSource to define vision and user-centric strategy

2

### Output: Consolidated roadmap that ties back to the vision

Vision and Strategy

Workshop with key executive stakeholders across NiSource to develop strategy to achieve vision

3

### Output: Updated strategy based on budget and resource constraints

Budget and Strategy

Workshop with Finance and Accounting to finetune strategy against budgeting and staffing

4

### Output: Alignment and plan for execution

Execution Plan

Workshop with key executive stakeholders across NiSource to plan for execution using our Vision and Mission (change impact incorporated).

5

### Output: Feedback for execution

Frontline Socialization

Workshop with Finance and Accounting to finetune strategy against budgeting and staffing

6

### Output: Awareness

Broad Socialization

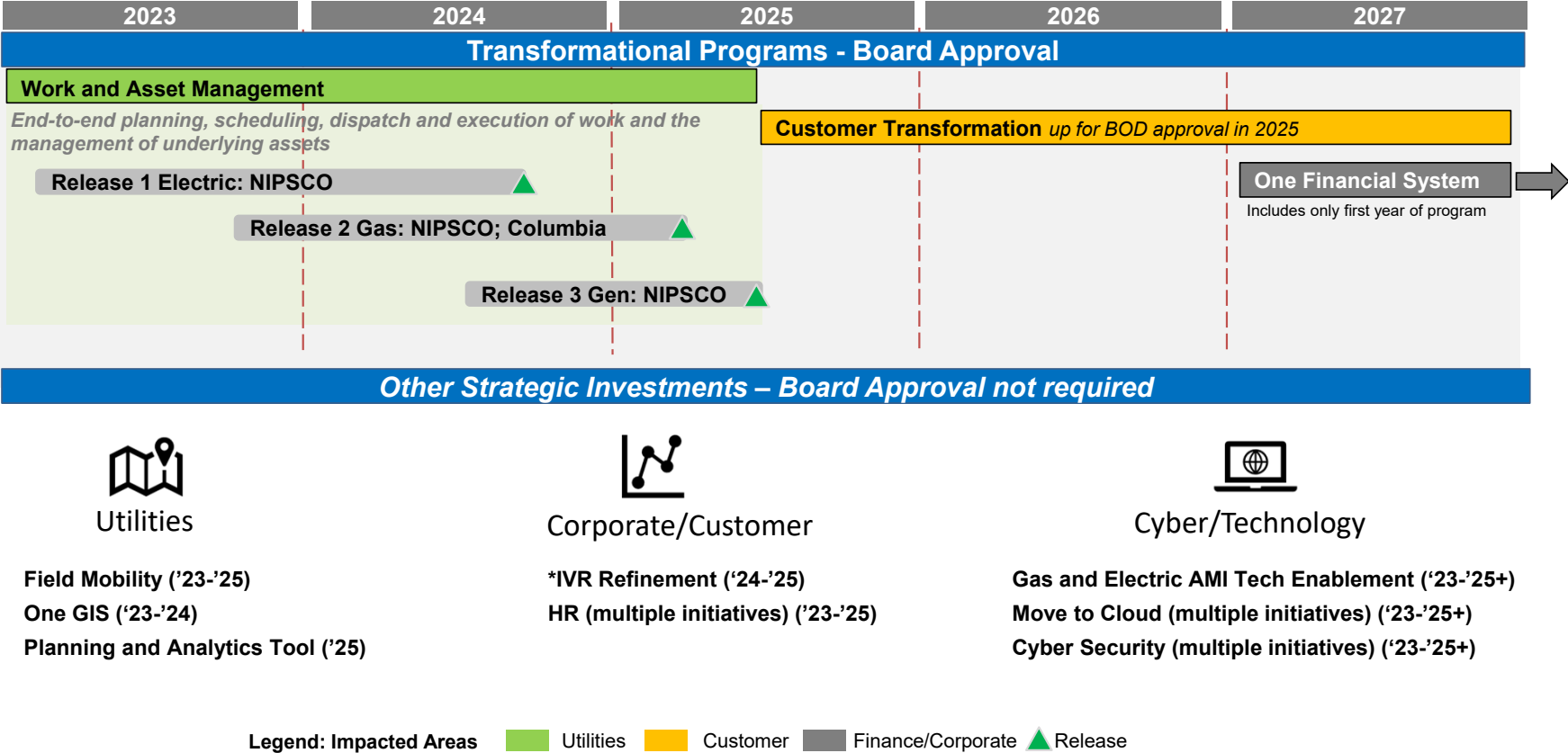
Broad communications to leaders and employees across NiSource will begin in January. The goal is to create awareness across NiSource of the 5-Year IT Strategy, capabilities to be delivered and when they will be delivered.

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# IT 5-YEAR STRATEGY

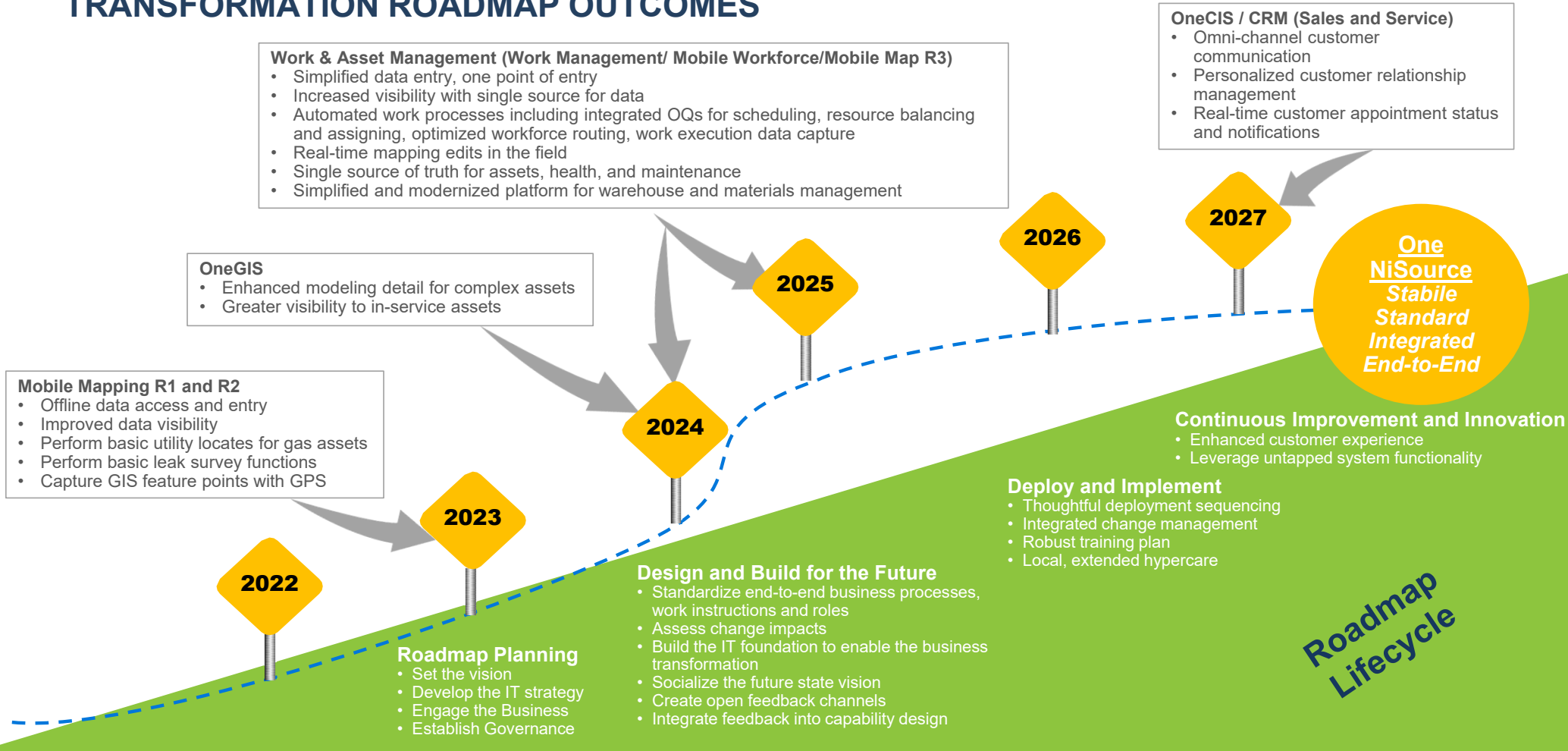
By shifting our investment into core system replacements over the next 5+ years, NiSource’s future state architecture will be greatly simplified leading to standard processes and secure and reliable systems for our employees and our customers.



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\*IVR Refinement timeframe are estimates, current project is pending approval

# TRANSFORMATION ROADMAP OUTCOMES

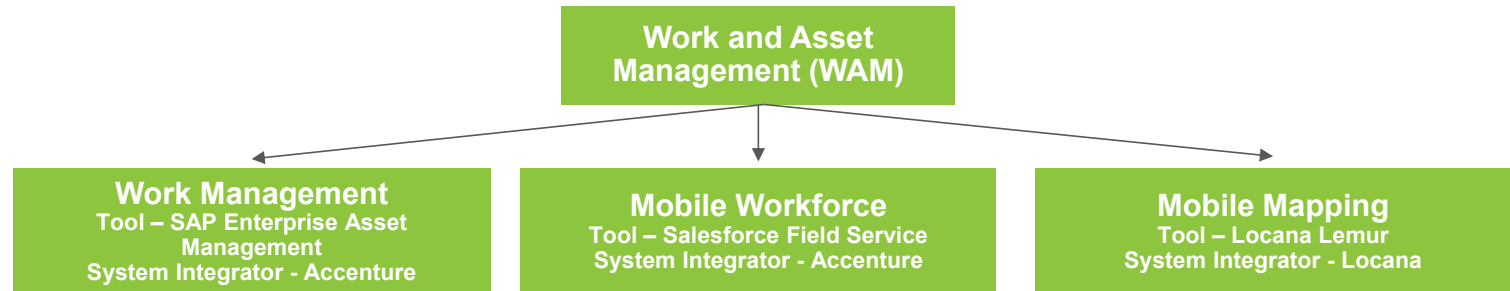


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## READY FOR LAUNCH | WORK AND ASSET MANAGEMENT PROGRAM

Work and Asset Management is prioritized for investment based on the level of risk to support existing systems and the opportunity to impact a large employee population in driving efficiencies and eliminating waste across the work management, engineering, and field operation functions.

### One Program with Three Integrated Projects



### Overview

Implementation of industry leading processes supported by best-in-class technology to manage work and assets through work planning and initiation, field scheduling and dispatch, and work execution and closeout

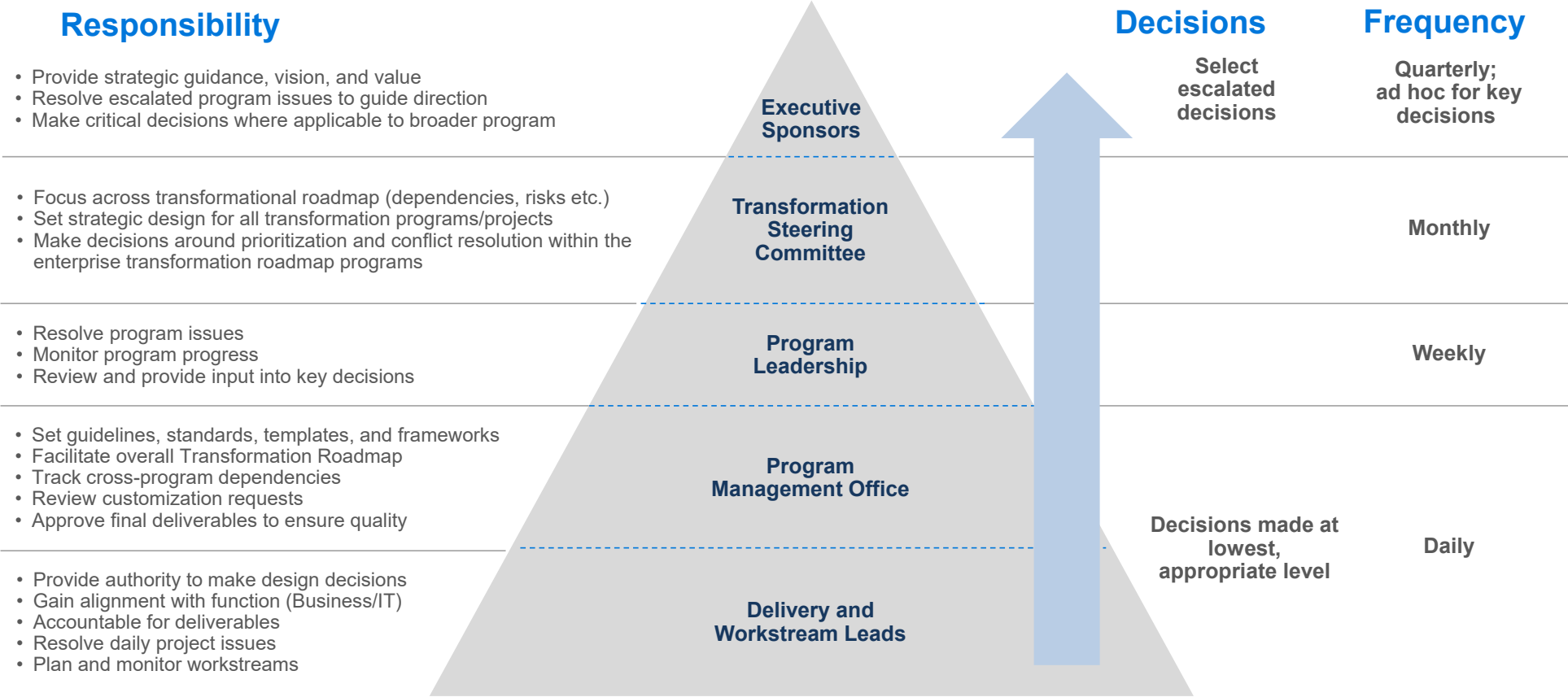
- *Work Management* – Work and asset planning, initiation, execution tracking, closeout and reporting
- *Mobile Workforce* - Integrated field resource planning, work scheduling, and route optimization to support efficient work execution
- *Mobile Mapping* - Geographic Information System (GIS) mapping functionality on mobile devices for improved asset data capture and as-builts in the field

### Benefits

1. Standardization of end-to-end Work and Asset Management processes supported by a new integrated solution including Work Management (SAP Enterprise Asset Management), Mobile Workforce (Salesforce Field Service), and Mobile Mapping (Lemur)
2. Utilization of compatible unit estimating to standardize designs, materials, and tools required
3. Incorporation of Operator Qualifications in work scheduling and assignment
4. Time savings through automation to support the scheduling, assigning, routing of work, and as-built records closeout
5. Modern data capture solution enabled by dynamic smart forms as a part of Mobile Workforce
6. Improved data quality through the ability to view and update asset data and data records on maps
7. Improved reporting and data availability across common platforms

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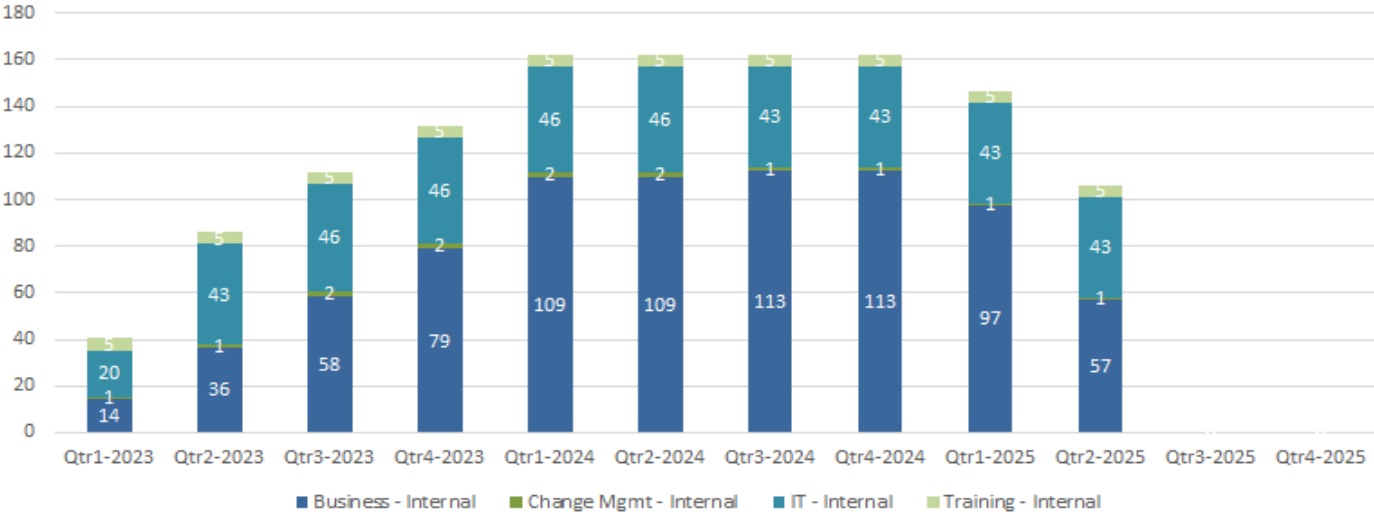
# TRANSFORMATION ROADMAP GOVERNANCE



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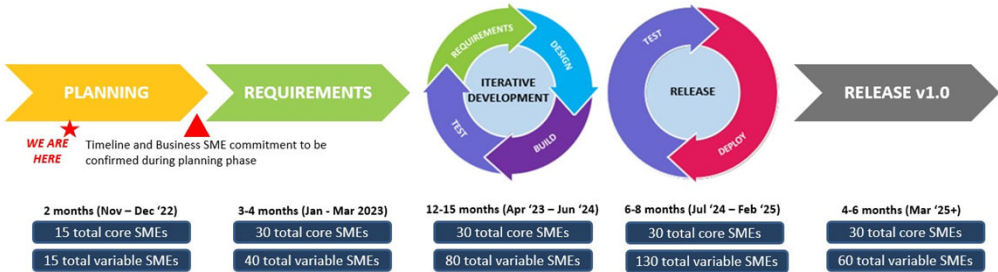
# INTERNAL RESOURCE PLAN VIEW

WAM Internal Program Team Full-Time Equivalent View



### Resource Planning

- Team structures, project plans, and final resource plans are in progress for a February project launch
- External Resource Plans (not displayed) include an additional ~200-250 onshore and offshore IT System Integrators, IT Service Providers, Change Management, Communications, and Training resources to support the program



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## PROGRAM RISK MITIGATION

### Key Areas for Risk

### Mitigation Strategies

#### Change Management

Underestimating the magnitude of cultural change

- Align the organization's leaders early around a clear outcome
- Engage frequently with employees to share progress and collect feedback
- Maintain the leadership capability and discipline to facilitate changes in the organization

#### Resources & Skillsets

Dedicating the right internal and external talent to the program

- Assign dedicated resources to the program with clear delivery roles and responsibilities
- Develop a comprehensive resource plan and approach for capacity management
- Source and upskill resources that bring leadership with a transformation mindset

#### Process Standardization

Driving process standardization across multiple regulated entities

- Apply industry best practices, partner experience and solution capability designs
- Establish clear direction that differences that can be standardized will be standardized
- Formalize process to review and approve any deviations from standard processes

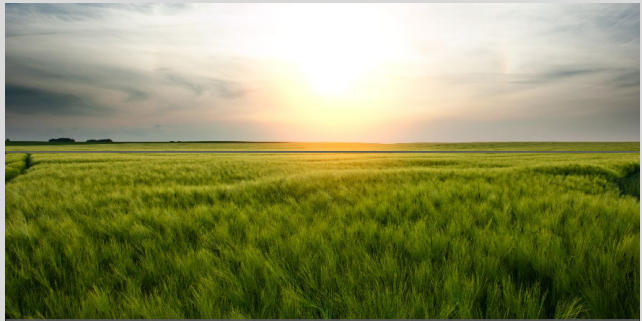
#### Governance & Integration

Ensuring program objectives are met and risks are managed

- Established governance functions to facilitate decision making, risk management and key program delivery objectives – resource management, scope, budget, and timeline
- Provide alignment on key interdependencies with other programs and business priorities

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**Appendix**



# Program Leadership Structure

NiSource Decision Makers	Supporting Partners
NiSource	Partners

Executive Sponsors
NiSource

Transformation Steering Committee (ELT Delegates)
NiSource, Partners

Program Leadership - IT	Program Leadership - Business	Program Leadership - Business Integration & Org Readiness
NiSource, Partners	NiSource, Partners	NiSource, Partners

EPMO	IT PMO
NiSource, Partners	NiSource, Partners

Delivery Leads	Data Lead	Change Management Lead	Communications Lead	Training Lead	HR Lead
NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners

Workstream Leads Workstream	Workstream Leads Workstream	Workstream Leads Workstream	Workstream Leads Workstream	Workstream Leads Workstream	Workstream Leads Workstream	Workstream Leads Workstream
NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners	NiSource, Partners

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# 91% of the utilities companies in the Forbes Global 2000 are SAP customers



## Americas



## Europe, Middle East, Africa



## Asia-Pacific



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Examples of large utilities serving 5+ million contracts