COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the I	Matter	of:
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ELECTRONIC APPLICATION OF ATMOS ENERGY) CASE NO.
CORPORATION FOR AN ADJUSTMENT OF RATES	2018-00281

NOTICE OF FILING

Notice is given to all parties that the following materials have been filed into the record of this proceeding:

- The digital video recording of the evidentiary hearing conducted on April 2, 2019 and April 3, 2019 in this proceeding;
- Certification of the accuracy and correctness of the digital video recording;
- All exhibits introduced at the evidentiary hearing conducted on April 2, 2019 and April 3, 2019 in this proceeding;
- A written log listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recording of the evidentiary hearing conducted on April 2, 2019 and April 3, 2019.

A copy of this Notice, the certification of the digital video record, hearing log, and exhibits have been electronically served upon all persons listed at the end of this Notice. Parties desiring to view the digital video recording of the hearing may do so at:

http://psc.ky.gov/av_broadcast/2018-00281/2018-00281_02Apr19_Inter.asx http://psc.ky.gov/av_broadcast/2018-00281/2018-00281_03Apr19_Inter.asx.

Parties wishing an annotated digital video recording may submit a written request by electronic mail to pscfilings@ky.gov. A minimal fee will be assessed for a copy of this recording.

Done at Frankfort, Kentucky, this 15th day of April 2019.

Gwen R. Pinson

Executive Director

Public Service Commission of Kentucky

Steven R. Punson

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COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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ELECTRONIC APPLICATION OF ATMOS)	
ENERGY CORPORATION FOR AN)	CASE NO.
ADJUSTMENT OF RATES)	2018-00281

CERTIFICATION

- I, Angela Fields, hereby certify that:
- 1. The attached DVD contains a digital recording of the Hearing conducted in the above-styled proceeding on April 2, 2019. The Hearing Log, Exhibit List and Witness List are included with the recording on April 2, 2019.
 - 2. I am responsible for the preparation of the digital recording;
- The digital recording accurately and correctly depicts the Hearing of April 2, 2019.
- 4. The Hearing Log attached to this Certificate accurately and correctly states the events that occurred at the Hearing of April 2, 2018, and the time at which each occurred.

Signed April 12, 2019.

Angela Fields, Paralegal Consultant

Stephanie Schweighardt, Notary Public

State at Large

Commission Expires: January 14, 2019

ID#: 525987



Session Report - Detail

2018-00281 02Apr2019

Atmos Energy Corporation

Date:	Туре:	Location:	Department:
4/2/2019	General Rates	Hearing Room 1	Hearing Room 1 (HR 1)

Judge: Bob Cicero; Talina Mathews; Michael Schmitt

Witness: Watson Dane; Smith Gregory; Waller Gregory; Weide James; Story Jennifer; Christian Joe; McDill John;

Densman Josh; Kollen Lane; Gillham Laura; Mark Martin; Raab Paul

Clerk: Angela Fields

Log Event	
Session Started	
Session Paused	
Session Resumed	
Review of 4/2/2019 8:56:33 AM	
Chairman	
Note: Fields, Angela	Preliminary Comments
Atty Hughes	
Note: Fields, Angela	Intro of counsel
Chairman	
Note: Fields, Angela	Notice of hearing filed?
Chairman	
Note: Fields, Angela	Confidentiality motion/requests.
Atty Hughes	
Note: Fields, Angela	We have maps for visual aid purposes; however, they are confidential.
Chairman	
Note: Fields, Angela	Call first witness
Chairman	
Note: Fields, Angela	Swearing in Witness Vander Weide
Atty Hughes direct James Vande	r Wiede
Note: Fields, Angela	Preliminary questions.
Atty Goad cross James Vander W	/eide
Note: Fields, Angela	Since Atmos last rate case filing, in 2017 case 343. Has Atmos financial risk changed significantly?
Atty Goad cross James Vander W	/eide
Note: Fields, Angela	In Atmos's case they use forcasted test year, so wouldn't that reduce the regulatory lag?
Atty Goad cross James Vander W	
•	Explain benefit of reducing regulatory lag.
	In the pending application Atmos is using a forcasted test period?
	· · · · · · · · · · · · · · · · · · ·
Note: Fields, Angela	What if some of the regulary lag was removed, why is the return of
, 5	equity of 10.4 percenty is appropriate?
Atty Goad cross James Vander W	/eide
Note: Fields, Angela	Agree it is this Commission's duty to allow for recovery of incurred costs and expenses
Atty Goad cross James Vander W	•
Note: Fields, Angela	Are you aware of awarded ROEs for the other Atmos companies in other states?
	Session Started Session Paused Session Resumed Review of 4/2/2019 8:56:33 AM Chairman Note: Fields, Angela Atty Hughes Note: Fields, Angela Chairman Note: Fields, Angela Atty Hughes direct James Vande Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela Atty Goad cross James Vander W Note: Fields, Angela

9:07:46 AM	Atty Goad cross James Vander Weide Note: Fields, Angela PHDR - Provide the most recent ROEs for other operation companies in other states and the year.
9:08:20 AM	Atty Goad cross James Vander Weide
0.00.46.444	Note: Fields, Angela JVW testimoney pg 1 of 6
9:09:16 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela "for an electric proxy group" That was a mistake, it should say natural gas?
9:10:21 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela PSC Exhibit 1 - Hand out - Commission created document. graphic representation of information provided by Atmos - Treasury yield.
9:12:52 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Agree the trend line for the 10/20/30 years since April portray a downward slope?
9:13:48 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Interest rates have not significally moved since Atmos's last final order.
9:14:15 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela March federal reserve. Did the FED increase interest rates?
9:15:27 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Do you use forcasted interest rates in your analysis?
9:15:50 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela PHDR - provide detailed analysis.
9:16:27 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela The Cap M model used the forcasted rates?
9:17:22 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela PHDR -
9:17:36 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Pg 4 of your rebuttal testimony lines 15-16
9:18:10 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Concerns of Duke Energy's electric or gas operations?
9:18:39 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Do you think typically electric operations carries a higher risk than gas and get awarded a higher ROE?
9:19:38 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Atmos carries a higher risk than Duke Energy and should be compensated for it?
9:20:32 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Atmos carries higher risk than LG&E?
9:20:57 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Do you think investors know what this Commission has allowed regarding ROE?
9:21:51 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela According to testimony, ROE in the 9.7% range are too low, why would Duke Energy and LG&E request ROEs that could be detrimental to their companies?
9:23:20 AM	VC Cicero - James Vander Weide
	Note: Fields, Angela
9:24:29 AM	VC Cicero - James Vander Weide
	Note: Fields, Angela Investors know that could be the market rate of retune and therefore accept that based on risk?
9:25:08 AM	Atty Goad cross James Vander Weide
	Note: Fields, Angela Pg 4-5 of rebuttal testimony. Floatation costs should be included in the equity analysis?

9:25:47 AM	Atty Goad cross James Vander We	
	Note: Fields, Angela	The Commission did not allow for flotation costs in the last Atmos case?
9:26:18 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	PHDR - list of each of its operating companies, etc.
9:26:35 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Any other companies awarded as size adjustments in their ROEs?
9:26:59 AM	Atty Goad cross James Vander We	· · · · · · · · · · · · · · · · · · ·
	Note: Fields, Angela	PHDR - list of other Atoms ocompanies, size adjustment in ROE, and size of the adjustments.
9:27:16 AM	Atty Goad cross James Vander We	· · · · · · · · · · · · · · · · · · ·
	Note: Fields, Angela	Aware of any rating agencies singling-out the PSC for awarding a low ROEs?
9:27:55 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Refer to your rebuttal testimony pg 8, table 1, return on equity.
9:28:41 AM	Atty Goad cross James Vander We	· · · · · · · · · · · · · · · · · · ·
	Note: Fields, Angela	Do you believe that New Jersey resources are an outlyer?
9:29:32 AM	Atty Goad cross James Vander We	
	Note: Fields, Angela	Earning a 17.1 percent ROE in general is not sustainable?
9:30:18 AM	Atty Goad cross James Vander We	
3.30.10711	Note: Fields, Angela	Do you know average ROE for 2017 if you remove New Jersey
	· -	resources?
9:31:47 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Explain why NJ resources should be included in the average ROE even though it is an outlyer for 2018?
9:33:28 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Refer to rebuttal JVW- R-1, rebuttal schedual 1, page 1 of 2. line 3 New Jersey Resources.
9:35:41 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Table for 2018 ROE. Do you know what NJ resources ROE for first quarter of 2019?
9:36:02 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	PHDR - table 1 be updated
9:36:45 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	Rebuttal testimony, table 2. Are floatation cost ro size adjustment included in this table?
9:38:07 AM	Atty Goad cross James Vander We	eide
	Note: Fields, Angela	PHDR - update to table 1 excluding floatation costs and size adjustments.
9:38:25 AM	VC Cicero - James Vander Weide	
	Note: Fields, Angela	Table 1, years 2022-2024, is this a Valueline provided number?
9:38:45 AM	VC Cicero - James Vander Weide	
	Note: Fields, Angela	Valueline and S&P global. What causes you to use a particular database over another database?
9:42:16 AM	VC Cicero - James Vander Weide	
	Note: Fields, Angela	Agree that S&P is a realiable database as far as what is being presented?
9:42:55 AM	VC Cicero - James Vander Weide	
	Note: Fields, Angela	In your opinion the best estimate In the market place it is 10.4% on an ROE?
9:43:23 AM	VC Cicero - James Vander Weide	
	Note: Fields, Angela	You say the rates reflect the future?

9:44:17 AM	VC Cicero - James Vander Weide Note: Fields, Angela	No matter what method you use, it is highly subjective. When Commission does and evaluation, the Commission has to look at everything to make a determination, would you agree?
9:46:56 AM	VC Cicero - James Vander Weide Note: Fields, Angela	The long-run view of the future would be what those interest rates will be in the future?
9:47:46 AM	VC Cicero - James Vander Weide Note: Fields, Angela	Atmos intends on coming in every year so those premiums and returns will be adjusted every year going forward base on the current application?
9:49:00 AM	VC Cicero - James Vander Weide Note: Fields, Angela	Not as important to try to project interest rates.which may be based on assumptions, etc. Isn't that the best measure of what an investor should expect to receive on a return?
9:49:25 AM	Atty Hughes redirect James Vand Note: Fields, Angela	er Weide Understanding of the S&P report he was referring to?
9:50:15 AM	Atty Hughes redirect James Vand Note: Fields, Angela	er Weide Was it your understanding that it was the RRA report?
9:50:34 AM	Atty Hughes redirect James Vand Note: Fields, Angela	
9:51:28 AM	Chairman Note: Fields, Angela	Witness excussed
9:51:49 AM	Chairman Note: Fields, Angela	Swears in Paul Raab
9:52:12 AM	Atty Hughes direct Paul Raab Note: Fields, Angela	Preliminary questions
9:52:45 AM	Chairman Note: Fields, Angela	Admitted PSC Exhibit 1 into the record.
9:52:53 AM	Atty Goad cross Paul Raab Note: Fields, Angela	Refer to your direct testimony, Exhibit PHR-5 page 2 of 2. revenue deficiencies and equalized proposed returns.
9:55:00 AM	Atty Goad cross Paul Raab Note: Fields, Angela	PSC Exhibit 2 handed out and admitted into the record. Exhibit
9:55:54 AM	Atty Goad cross Paul Raab	PHR-5, page 2 of 2 of Raab Testimony.
9.33.34 AM	Note: Fields, Angela	Confirm that this Commission Staff created table is and exact replica, etc, and that we just added an additional column?
9:56:37 AM	Atty Goad cross Paul Raab Note: Fields, Angela	PSC Exhibit 3, admitted into the record. Raab Testimony, Rate of
9:57:46 AM	Atty Goad cross Paul Raab	Return at Present and Proposed Rates of each COSS.
	Note: Fields, Angela	This table appear to represent current rate of return from each of your rate studies?
9:58:33 AM	Atty Goad cross Paul Raab Note: Fields, Angela	Explain what this class is.
9:59:47 AM	Atty Goad cross Paul Raab Note: Fields, Angela	Agree based on your studies the nonresidential interruptable sales
	, -	class is being heavily subsidized?
10:00:13 AM	Atty Goad cross Paul Raab Note: Fields, Angela	Explain why only 10.7% if the average increase needed for an equalized return is allocated to this class if they are being subsidized?

10:00:35 AM	Atty Goad cross Paul Raab Note: Fields, Angela	Is the residential class contributing to the subsidation of the nonresidential interruptable sales class?
10:01:04 AM	Atty Goad cross Paul Raab Note: Fields, Angela	PHDR - revised PHR -5 and schedule M removing all subsidies.
10:04:05 AM	Atty Goad cross Paul Raab Note: Fields, Angela	If the Commission to alter the revenue requirements for nonresidential interruptable sales class, Atmos to propose their recommendation is for how the revenue should be allocated at that point.
10:04:53 AM	Chairman Note: Fields, Angela	witness excused
10:05:07 AM	Chairman Note: Fields, Angela	Swears in Josh Densman
10:05:32 AM	Atty Hughes direct Josh Densman Note: Fields, Angela	Preliminary questions.
10:06:06 AM	Chairman Note: Fields, Angela	Swears in Jennifer Story
10:06:23 AM	Atty Hughes cross Jennifer Story Note: Fields, Angela	Preliminary questions
10:06:54 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	You were involved in 2018-00039 that addressed the Tax Cuts and Jobs Act?
10:08:15 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Refer Atmos response to Staff's third data request, pg. 2 item C finalizing of the excess ADIT amount.
10:08:51 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Is that the drop dead that Atmos will have the final excess ADIT number?
10:09:34 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Refer to response to Staff's request regarding ADIT. Shows timing differences between the divisions.
10:10:37 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Look at the time period past in 2018 and 2019. The way you calculated the deffered tax liability,etc. Where did that tax rate come from?
10:12:04 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	2.3 percent of blended rate based on the tax rate in all the states that Atmos operates?
10:12:25 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Waller reuttal testimony GFW R-1. Spreadsheet. tab b.5f.
10:14:06 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Are you provided information for that 2018 revenue requirement
10:14:28 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	model correct? Line 68 and 70. Return Gross-Up for income tax.
10:15:29 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	24.95 percent. What is this number referring to? Is it the blended tax rate?
10:17:31 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Projection for 2018-2020. Look at Division 9 first. That is the primary Kentucky Division, correct?
10:19:08 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Dec. 2018 you modified so in KY you will be using state amounts to calculate the reserves and the assets

10-10-42 AM	Att. D. II	
10:19:42 AM	Atty Bellamy cross Jennifer Story Note: Fields, Angela	Do think it would be reasonalb to use the blended rate that is used
	Note. Fields, Aligeia	to calculate the taxes in the test period?
10:20:43 AM	VC Cicero - Jennifer Story	to calculate the taxes in the test period.
	Note: Fields, Angela	Beginning in Dec. 2018 your are changing methodolgy for taxes
	, 5	from a blended to an actual rate.
10:21:09 AM	VC Cicero - Jennifer Story	
	Note: Fields, Angela	Which methodology are you using?
10:21:35 AM	Chairman	
10.01.71.11	Note: Fields, Angela	Witness excussed
10:21:54 AM	Chairman	Courses in Laure Cillians
10.22.07 AM	Note: Fields, Angela	Swears in Laura Gillham
10:22:07 AM	Atty Hughes direct Laura Gillham	Droliminany quantians
10:22:37 AM	Note: Fields, Angela Atty Goad cross Laura Gillham	Preliminary questions.
10.22.37 AM	Note: Fields, Angela	In your rebuttal testimony on page 7, line 16, regarding total
	Note: Helds, Aligeia	operating expenses as a componant as the composite factor has
		circular results.
10:23:55 AM	VC Cicero - Laura Gillham	
	Note: Fields, Angela	When capital projects and the management of the capital projects
		occur does that occur at Atmos headquarters or at the local level
10:24:28 AM	VC Cicero - Laura Gillham	
	Note: Fields, Angela	Is it more of an umbrella oversight from a corporate level?
10:24:44 AM	Chairman	
10.05.06.444	Note: Fields, Angela	Witness excusssed. Recess.
10:25:06 AM	Session Paused	
10:25:10 AM	Session Resumed	
10:25:21 AM 10:40:54 AM	Session Paused Session Resumed	
10:41:01 AM	Chairman	
10.11.01 AM	Note: Fields, Angela	Swears in Mark Martin
10:41:12 AM	Atty Hughes direct Mark Martin	Swears in Mark Martin
10.11.12 / 11	Note: Fields, Angela	Preliminary questions
10:41:42 AM	Atty McNeil cross Mark Martin	Tremmary questions
	Note: Fields, Angela	AG Exhibit 16. List of KY legislative employers.
10:43:43 AM	Atty McNeil cross Mark Martin	3 , ,
	Note: Fields, Angela	Do direct Mr. Ashcroft's efforts.
10:44:18 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	When he relays his (Ashcroft) reports are you always involved?
10:44:32 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	Is much of your time spent dealing with this issue (quarterly
40 44 =0 444		reports)?
10:44:59 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	Are you the primary person between Atmos corporate and lobbying
10:45:48 AM	Atty McNeil cross Mark Martin	efforts?
ויוא סד.כד.טו	Note: Fields, Angela	What percentage of your salary is above the line, and paid by
	Note: Fields, Aligela	ratepayers?
10:46:00 AM	Atty McNeil cross Mark Martin	·
	Note: Fields, Angela	PHDR - salary/benfits paid above the line
10:46:51 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	High level policy, is it not under your purview?

10:47:36 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	In the current case, Atmos is proposing to recover forcasted prp costs.
10:47:49 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	Pg 3 in your rebuttal testimony line 15
10:48:19 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	AG EXhibit 1. Final order in last rate case, 2017-00349. Page 37.
10:51:06 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	This part of the Commission's order arose out of Atmos overspending under the PRP program.
10:51:42 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	But the costs were higher than anticipated?
10:52:21 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	Same order, Pg 40.
10:55:44 AM	Atty McNeil cross Mark Martin	
	Note: Fields, Angela	The context that the Commission issued the final order in that case arose out of 1) the cost per mile had doubled and 2) use of forcasted cost projections were at a 12% escalation.
10:56:30 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	Which were noted as speculative (prp and non-prp projects)?
10:57:03 AM	Atty McNeil cross Mark Martin	* * * * * * * * * * * * * * * * * * * *
10:58:42 AM	Note: Fields, Angela Atty McNeil cross Mark Martin	Refer to your rebuttal tesitmony at pg. 3, line 16.
11:02:09 AM	Note: Fields, Angela Atty McNeil cross Mark Martin	True that Atmos is back to using forcasted estimates?
	Note: Fields, Angela	Actual total spend. If the Commission would compare the total amount of proposed captial spending in this case, that total would approximate the total of capital spending in its last rate case.
11:02:37 AM	Atty McNeil cross Mark Martin	
11:03:10 AM	Note: Fields, Angela Atty McNeil cross Mark Martin	Atmos is not anticipating influx of new costomers?
11:03:48 AM	Note: Fields, Angela Atty McNeil cross Mark Martin	Atmos controls it capital expenditures, agreed?
11:03:48 AM	Note: Fields, Angela	AG Exhibit 2 - tab 2 in binder. Atmos's response to AG's first request for information.
11:04:44 AM	Atty McNeil cross Mark Martin	
11:05:21 AM	Note: Fields, Angela Atty McNeil cross Mark Martin	Your response to A.
	Note: Fields, Angela	Increasing rate base by capital expendatures has effect of increasing company top line?
11:05:57 AM	Atty McNeil cross Mark Martin	To analyze the second s
	Note: Fields, Angela	Increasing revenue as well as income will happen if you have little to no customer growth?
11:06:27 AM	Atty McNeil cross Mark Martin Note: Fields, Angela	As a general manager, you understand how revenue requirement in this case is determined?
11:07:16 AM	Atty McNeil cross Mark Martin	and case is determined.
	Note: Fields, Angela	AG Exhibit 17. Revised filing requirement filed in response to Staff data request.
11:08:58 AM	Atty Goad cross Mark Martin Note: Fields, Angela	Refer to Commission Staff 2nd request for information, Item 4.
11:09:38 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Explain why Atmos used 325 new customers in the company's forcast when the previous average was 319?

11:12:11 AM	Atty Goad cross Mark Martin	The next annual rate case he will be averaging 16, 17 and 193
11:12:31 AM	Note: Fields, Angela Atty Goad cross Mark Martin	The next annual rate case be will be averaging 16, 17 and 18?
	Note: Fields, Angela	Are any of the current or preposed projects expansion projects that will serve new customers?
11:13:08 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	PRP rider approved by the Commission on May 28, 2010.
11:13:37 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Expand on the large increase in the pipe replacment program since inception in 2010, in case 2017- 00308?
11:15:04 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Last estimate on the PRP was \$438 million, still accurate?
11:15:43 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Anything not bare steel going through the non-prp projects?
11:16:59 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Replace all by 2027? What about the other pipes, but what about the other non- prp?
11:17:30 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Atmos be designating steel prp vs non-prp projects?
11:18:06 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	PHDR - asking for details about costs and changes since last order.
11:19:07 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Atmos has stated throughout the record that is doesn't have an objection, but had problems with the historical test period.
11:20:26 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Has atmos followed the changes from the prp rider from the last order.
11:21:06 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Refer to page 21 of Mr. Kollon's testimony.
11:21:47 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	The table that appears on pg. 21 is an accurate reflection of prp and non-prp investment numbers?
11:22:13 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	What was Atmos's total prp investment in 2018?
11:22:49 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Based on the \$28 million cap, it appears atmos is forcasting \$28 million for both 2019 and 2020 for investments.
11:23:21 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	What the proposed non-prp investment for 2020?
11:24:47 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Based on estimated totals the proposed 2019 or 2020 investment is double than that of 2018
11:26:40 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Proposed prp 2019-2020 is double because you are including other types of pipes other than bare steel?
11:27:34 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	The doubling of non-prp investment is not at all connected to to the Commission placing a cap on the \$28 million?
11:28:28 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Stmos proposes to update the time period used to weather normalize revenues.
11:29:27 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	PHDR - provide current and proposed updated heat sensitivity and heat load factors.

11:29:41 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Refer to Commission Staff's second request. Item 76, third party contract damages.
11:30:31 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Explain atmos process specific process of detemining who is at fault.
11:31:42 AM	Atty Goad cross Mark Martin	Descended at Atmos handles the damage claims?
11:32:03 AM	Note: Fields, Angela Atty Goad cross Mark Martin	Personnel at Atmos handles the damage claims?
11.52.05 AI1	Note: Fields, Angela	Are you involved in that process (damage prevention) at all?
11:32:25 AM	Atty Goad cross Mark Martin	The year inversed in that process (admage provention) at aim
	Note: Fields, Angela	PHDR - organizational chart
11:33:05 AM	Atty Goad cross Mark Martin	, and the second
	Note: Fields, Angela	PHDR - do so with general counsel or in-house counsel.
11:33:40 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	The charge that those collection agencies charge.
11:34:01 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Commission Staff's 3rd request for information Item 27. Response of Greg Smith. CPCN filing.
11:34:59 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	No requests for specific projects by CPCN as far back as 1992.
11:35:46 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Explain how atmos determines which capital expense project needs a CPCN.
11:37:04 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Atmos is using the 2% net plant perameters, ect. any project uder 9.9 million would be exempt?
11:37:58 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	\$9.5 million and 11.3 million a lot without oversight or approval?
11:39:45 AM	Atty Goad cross Mark Martin	
	Note: Fields, Angela	Have you ever broken down larger projects into smaller projects without intent to circumvent the Commission?
11:40:47 AM	Atty Goad cross Mark Martin	T. A
	Note: Fields, Angela	Is Atmos aware issues and order altering the 2% thumb then the Commission order to suspceed the Staff opinion?
11:41:10 AM	VC Cicero - Mark Martin	
	Note: Fields, Angela	\$28 million limit was initated on a couple of different bases.
11:45:30 AM	VC Cicero - Mark Martin	TI 1:
	Note: Fields, Angela	The big issue I have is that in 2013 capital spend was projected to be 35.5 million, now it is projected to triple in 2020 will triple to \$96.7 million.
11:46:18 AM	VC Cicero - Mark Martin	
	Note: Fields, Angela	Looking at year 17-18, 18-19 and 19-20, ect. At what point will you reach a level were you are not continuing the 10 percent capital spend each year from year before?
11:48:10 AM	VC Cicero - Mark Martin	
	Note: Fields, Angela	Must take additional resources in order to managed a budget that has tripled. What are the increases in staffing?
11:49:16 AM	VC Cicero - Mark Martin	
	Note: Fields, Angela	Are those employees assigned to projects or are a general overhead incurred by Atmos?
11:50:26 AM	VC Cicero - Mark Martin	
	Note: Fields, Angela	PHDR # of staff
11:50:45 AM	Atty McNeil cross Mark Martin	December assuments done at the 16 of
	Note: Fields, Angela	Does the company done any studies if gas prices rise?

11:51:54 AM	Atty McNeil cross Mark Martin	PHDR - study to explain that analysis?
11:52:17 AM	Note: Fields, Angela Chairman	FIDA - Study to explain that analysis:
	Note: Fields, Angela	Break for lunch.
11:52:55 AM	Session Paused	
12:57:47 PM	Session Resumed	
12:57:51 PM	Chairman	
	Note: Fields, Angela	Swears in John McDill
12:58:09 PM	Atty Hughes direct John McDill	
	Note: Fields, Angela	Preliminary questions
12:58:40 PM	Atty Cook cross John McDill	
	Note: Fields, Angela	You did not file direct testimony in this case did you?
12:59:08 PM	Atty Cook cross John McDill	
	Note: Fields, Angela	Refer to you rebuttal testimony, page 14, line 12,
12:59:35 PM	Atty Cook cross John McDill	
	Note: Fields, Angela	FERC does not regulate in the same way the Commission does?
1:00:19 PM	Atty Cook cross John McDill	
	Note: Fields, Angela	PRP provides more rapid cost recovery than a rate case?
1:01:06 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	Refer to your rebuttal testimony, pg 7 lines 3- 9
1:02:31 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	Atmos request to increast to \$33.9 million in 2018, \$58.7 million in
		2019, and \$68.7 million in 2020 is properly balancing these
1.02.20 DM	Attr. Condernos John McDill	competing interests?
1:03:39 PM	Atty Goad cross John McDill	De very think that it is fiscally vacuatible for Atmospherical an
	Note: Fields, Angela	Do you think that it is fiscally responsible for Atmos to request an increase in the non-prp investment for double?
1:05:06 PM	Atty Goad cross John McDill	increase in the non-prp investment for double:
1.03.00 FM	Note: Fields, Angela	has atmos taken any
1:05:45 PM	Atty Goad cross John McDill	nas acinos caken any
1.05.45 114	Note: Fields, Angela	Did Atmos conside the associate rate impact when preparing the
	Note: Fields, Aligeia	budgets?
1:06:07 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	Refer to your rebuttal testimony on pg 7. etc. Do you confirm that
	, 5	is your testimony
1:07:50 PM	VC Cicero - John McDill	
	Note: Fields, Angela	Aren't you the VP over all the pipeline replacement programs?
1:08:20 PM	VC Cicero - John McDill	
	Note: Fields, Angela	How your cycle in KY compares to the rest of Atmos?
1:09:15 PM	VC Cicero - John McDill	
	Note: Fields, Angela	Have some kine of schedule that shows what the system is?
1:10:04 PM	VC Cicero - John McDill	
	Note: Fields, Angela	PHDR - schedule for cycles are for various states.
1:10:30 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	Your contention any level of replacement is below what Atmos has
		proposed is unsafe somehow?
1:11:16 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	What is the percent of high relative risks assets atmos plans to
		replace on an annual basis. Pg 9 of rebuttal, line 13.
1:13:17 PM	Atty Goad cross John McDill	
	Note: Fields, Angela	Does Atmos use any of that same (?) on the KY assets?
1:13:43 PM	VC Cicero - John McDill	
	Note: Fields, Angela	Situation where Atmos was only did the 5%.?

1:15:02 PM	VC Cicero - John McDill Note: Fields, Angela	You are never at the 5% you are always above that requirement?
1:16:30 PM	VC Cicero - John McDill Note: Fields, Angela	Prioritize what the risk is. Ever only spend 5% of what was idenfied
1:17:27 PM	Chairman	as high risk.
	Note: Fields, Angela	witness excussed
1:17:39 PM	Chairman Note: Fields, Angela	Swears in Gregory Smith
1:18:05 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	Preliminary questions
1:18:30 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	Correction to rebuttal testimony pg 17, number came down from 928 to 922
1:19:38 PM	VC Cicero - Gregory Smith	
	Note: Fields, Angela	Capital projects, you charge that portion of workforce to them, and anything related to operation and maintanence be charged to expense?
1:19:55 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	Mr. Smith has maps for visual aid. They are confidential.
1:22:38 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	Did you prepare the maps?
1:22:53 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	Generaly discribe the nature of the maps?
1:23:30 PM	Atty Hughes direct Gregory Smith Note: Fields, Angela	2nd set of maps, please explain those?
1:25:11 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	With regard to the non metalic pipe, any data on the number of
1:25:42 PM	, -	leaks?
1.23. 4 2 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	Are you able to provide estimates?
1:26:03 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	Refer to your rebuttal testimony pg. 20., line 3-5 read into record.
1:26:37 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	Clarify if company contention that it is in the public interest to allow
1:27:53 PM	Atty McNeil cross Gregory Smith	Atmos to build to standards in excess than required by law?
1.27.55 FIN	Note: Fields, Angela	Refer to pg 18 of rebuttal, line 17. Is it common for Atmos to go above and beyond standards?
1:28:56 PM	Atty McNeil cross Gregory Smith	above and beyond standards.
	Note: Fields, Angela	Farm tap projects Atmos plans to replace, are they all owned by the company?
1:30:58 PM	Atty McNeil cross Gregory Smith	
1:31:15 PM	Note: Fields, Angela Atty McNeil cross Gregory Smith	Does any of that work involve replacement of regulators?
	Note: Fields, Angela	Same situation where some regulators may be owed by others?
1:32:13 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	The forcasted test year 2020, any other projects planned for that
1:32:42 PM	Atty McNeil cross Gregory Smith	year?
	Note: Fields, Angela	Is that also true for the last 6 months of the year? (discrete projects)
1:33:14 PM	Atty McNeil cross Gregory Smith	
	Note: Fields, Angela	PHDR clarify discrete projects

1:33:47 PM	Atty McNeil cross Gregory Smith Note: Fields, Angela	Projects for the last 6 months of the year, is it already identified and
1:35:03 PM	Atty McNeil cross Gregory Smith	allocated to this years projects?
1:35:58 PM	Note: Fields, Angela Atty Bellamy cross Gregory Smith	Specific Project identified. Is that made clear in this filing
	Note: Fields, Angela	Is that with the projected capital expendatures in the base period in the test year, or at some other level of spending?
1:37:42 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	More has to do with useful life and how long they will last?
1:39:24 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	What is the approx. age of the bare steel pipe that is proposed to be
1:40:32 PM	Atty Bellamy cross Gregory Smith	replaced?
1.10.32111	Note: Fields, Angela	There could be pipes older than those, but there useful life may be longer, correct?
1:41:13 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Specific type of pipe, or is that a brand name (Aldyl-A)?
1:42:00 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	When you say excellerated replacement plane, excellerated in respect to what?
1:42:58 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	Rate of replacement, are you meaning to replace them before they get to the point of needing replaced?
1:43:52 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	Is the first step in the process when determining what project to do the allocation of capital?
1:45:23 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	The first step is the allocation of capital correct?
1:46:18 PM	Atty Bellamy cross Gregory Smith	·
	Note: Fields, Angela	Once allocted you divide up as you see fit. But when the Board of Governors is allocating capital spending for projects, what are they looking at?
1:48:15 PM	Atty Bellamy cross Gregory Smith	
1:49:20 PM	Note: Fields, Angela Atty Bellamy cross Gregory Smith	Refer to page 4 of direct testimony, line 3-9.
1 50 01 514	Note: Fields, Angela	Proposing to replace bare steel by or in 2027?
1:50:01 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	The capitol budget Atmos proposed for KY didn't change for 2019 to
1:50:41 PM	Atty Bellamy cross Gregory Smith	2020, the amount of capitol you will be spending?
1.50.41114	Note: Fields, Angela	Replacing the bare steel at at rate by 2022, not 2027, twice as fast. When replacing twice as fast would it cost twice much?
1:51:58 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	Currently proposing \$28 million on bare steel to be competed by 2027. If you were able to continue to replace bare steel as proposed in previous rate case, completing by 2022, would you agree you would be spending \$55 to \$60 million per year?
1:53:55 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Are these projects that could have been put off till 2022?
1:55:59 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	Refer to Atmos resonse to Commission Staff 3rd request. You did answer that question?

1:57:00 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Attachment 1 to that request. lists all capital projects for for 2019 in test year. Is that what that attachment does show?
1:58:48 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	This shows the capital spending for Oct. 2018, to Sept. 2019?
2:00:09 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	the state of the s
2:00:30 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	specific capital projects is this spreadsheet, 327, is there some other spreadsheet
2:01:48 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	327 spreadsheet produced?
2:02:27 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	·
2:03:02 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	PHDR - total amount on each project.
2:03:33 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Item 27, No projects would require a CPCN.
2:04:42 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Refer to pg 7 of direct testimony. line 11. read into record.
2:05:38 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	KY projects often that exceed any one year budget. Exceeds \$86 million.
2:07:09 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	
2:08:07 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	
2:08:58 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	
2:11:25 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Do you know which project were discrestionary and why?
2:12:12 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	In FEMSA advisory - Aldyl being a brand name and mentioned in the rebuttal.
2:12:53 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	
2:13:42 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	Does it say the pipes should be taken out the ground immediately?
2:15:38 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	It refers to three different types of pipes. Are those are the ones they (DOT) have seen issues with or do you know?
2:16:24 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	, , , ,
2:17:08 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	, , ,
2:18:10 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	
2:18:24 PM	Atty Bellamy cross Gregory Smith Note: Fields, Angela	

2:20:06 PM	Atty Bellamy cross Gregory Smith	
	Note: Fields, Angela	Commission Staff's 5th request item 2. Are those projects that could be delayed at some point?
2:22:12 PM	VC Cicero - Gregory Smith Note: Fields, Angela	Timeline for Aldyl-A and low-pressure lines?
2:22:54 PM	VC Cicero - Gregory Smith	Timeline for Alayr A and low pressure lines.
	Note: Fields, Angela	Replace these line there is a reduction in line loss, is that line loss included in savings going forward?
2:24:05 PM	VC Cicero - Gregory Smith	To bloom to a moderation to the along one above environment and to also
	Note: Fields, Angela	If there is a reduction in line loss are the savings realized in the forcast?
2:25:30 PM	VC Cicero - Gregory Smith	DUDD former waried of words consent of all the mine
2:25:41 PM	Note: Fields, Angela	PHDR - forcast period of replacement of all the pipe.
2.23.41 PM	VC Cicero - Gregory Smith Note: Fields, Angela	Has your capital budget been approved by your board?
2:27:11 PM	VC Cicero - Gregory Smith	rias your capital budget been approved by your board:
2.27.11111	Note: Fields, Angela	PHDR can you tell from these maps how many linear feet there are
		and how may are supposed to be replaced
2:28:25 PM	Commissioner Mathews - Gregory	Smith
	Note: Fields, Angela	Looked back at previous rate case and all projects in the pipe
		replacement program. You removed everything that wasn't bare steel?
2:29:40 PM	Commissioner Mathews - Gregory	
	Note: Fields, Angela	The overall budget has not changed for the capital spend for the
		forcasted year, the company has indicated it will come in every year for a rate adjustment, I thought pipeline replacement program was
		for the most risky assets. That is not how your really approaching it
		anymore?
2:30:57 PM	Commissioner Mathews - Gregory	Smith
	Note: Fields, Angela	On the farm taps there has been a recent development, on the replacement of the farm taps, does that change your plans at all?
2:31:40 PM	Commissioner Mathews - Gregory	
	Note: Fields, Angela	The lower-pressure system that is not bare steel is going to be replaced?
2:32:05 PM	Commissioner Mathews - Gregory	
	Note: Fields, Angela	Do some over-pressure protection service, what is callled a slam shut?
2:33:24 PM	Commissioner Mathews - Gregory	
	Note: Fields, Angela	Your responsibe for KY, TN, and VA. When you look at ppr projects,
2-24-42 DM	Chairman Constant	do you have a risk ranking over the three states?
2:34:43 PM	Chairman - Gregory Smith	The life scale of nine at massaut is OF come in I/V comment?
2:35:23 PM	Note: Fields, Angela	The life cycle of pipe at present is 95 years in KY, correct?
2.33.23 PM	Chairman - Gregory Smith Note: Fields, Angela	What is the life cycle in TN?
2:36:22 PM	Chairman - Gregory Smith	What is the life cycle in Tiv:
2.30.22 111	Note: Fields, Angela	Is the company's position that investing infrastructure in upgrades
		is more likely to occure in states in which the rate of return is better?
2:39:39 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	Under existing federal regulation what is the time to fix the grade 1 leaks?
2:40:14 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	Is there a time period required by federal regulation to repair a grade 3 leak?

2:40:38 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	When grade 2 and 3 leaks are detected, how is the repair made?
2:41:33 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	PHDR - leaks on pg. 5 of your report. Are the records kept about
		the type of pipe that was leaking or the type of pipe that a repair
2 42 40 514		was made?
2:43:48 PM	Chairman - Gregory Smith	-
2 44 22 214	Note: Fields, Angela	The blue is low-pressure but could also be bare steel?
2:44:33 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	It appears that the pipe that is in need of replacing are in areas with
2 46 40 514		fewer people, would you agree?
2:46:10 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	The large blank areas on the map I assume are vacant areas. Is
2 47 02 514		that correct?
2:47:03 PM	Chairman - Gregory Smith	T 0 1 11 2010 1 11 1 1 1 1 1 1 1 1 1 1 1
	Note: Fields, Angela	The Owensboro, the 2010 platt suggests the same thing, in that
		most of the low-pressure systems and bare steel pipes, most has
2-40-02 DM	Chairman Constant	been replaced?
2:48:03 PM	Chairman - Gregory Smith	B At I I I II II ALLIA . II . II
	Note: Fields, Angela	Does Atmos have records when all the Aldyl-A pipes currently in its
2.40.42 DM	Chairmann Cranaur Craith	system were purchased?
2:48:42 PM	Chairman - Gregory Smith	De very knew when the Owenshove nine was installed?
2-40-16 DM	Note: Fields, Angela	Do you know when the Owensboro pipe was installed?
2:49:16 PM	Chairman - Gregory Smith	06 the mine that has been made as de law on been much of the Ald d
	Note: Fields, Angela	Of the pipe that has been replace, do know how much of the Aldyl
2.F0.20 DM	Chairmann Cranaur Craith	was replaced?
2:50:29 PM	Chairman - Gregory Smith	TE Aldred in company and in the common of magnitudes a local in the contra
	Note: Fields, Angela	If Aldyl is uncovered in the course of repairing a leak is then it
2:52:07 PM	Chairman Cragony Smith	might be noted and repaired?
2:52:07 PM	Chairman - Gregory Smith	When the pipe is put in the ground does the manufactorer have a
	Note: Fields, Angela	claim of useful life?
2:52:53 PM	Chairman - Gregory Smith	claim of userul life:
2.32.33 FM	Note: Fields, Angela	I would assume Atmos would have some plan in place to replace all
	Note: Ficias, Angela	the infrastructure over time, but you do not have a plan that
		specifies the number of years for the replacement?
2:56:02 PM	Atty Hughes redirect Gregory Sn	· · · · · · · · · · · · · · · · · · ·
	Note: Fields, Angela	When the prp was proposed, did the company have the same level
	Trees Trees and	of experiance in estimating costs then it does now?
2:56:26 PM	Atty Hughes redirect Gregory Sn	nith
	Note: Fields, Angela	Is that a reflection of the difference between to 2009 estimate and
	, 3	current estimates?
2:56:50 PM	Atty Hughes redirect Gregory Sn	nith
	Note: Fields, Angela	Is the law proactive or reactive? Are you supposed to anticipate
	, -	things before they happen and fix them or only after?
2:57:38 PM	Atty McNeil recross Gregory McN	leil
	Note: Fields, Angela	As to Aldyl-A pipe and Dupont pipe, have they stood behind there
	· - -	product?
2:58:12 PM	Chairman - Gregory Smith	
	Note: Fields, Angela	Over the past five years has Atmos experienced an explosion on any
	· -	its lines?
2:59:13 PM	Atty Hughes redirect Gregory Sn	nith
	Note: Fields, Angela	Absense some exteral force, there has not been anyting associated
		with a leak or a a fault in your system that has caused personal
		injury or property damage in the last five years.

3:01:01 PM	Session Paused	
3:17:53 PM	Session Resumed	
3:18:07 PM	Atty Hughes	
	Note: Fields, Angela	Release witness?
3:18:46 PM	Chariman	
	Note: Fields, Angela	Swearing in Gregory Waller
3:19:00 PM	Atty Hughes direct Gregory Walle	
	Note: Fields, Angela	Preliminary questions
3:19:46 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	AG Exhibit 17, revised schedule, line 1 column d.
3:21:59 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	2nd page of that packet. revised scheduled. Would you agree that
		rate base is plan in serive plus minus certain products?
3:22:55 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	The \$449 million is the forcasted test period 13-month average?
3:23:47 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	Base period 13- month average?
3:25:01 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	If I made that subtraction the total would be \$126.5 million?
3:25:42 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	Gross that up with the 1,34184 it would be 13.5 million?
3:26:09 PM	Atty McNeil cross Gregory Waller	
	Note: Fields, Angela	Pg 4. schedule J1 revised. proposed rates for forcasted period in
2 26 52 514	A.I. M. N. II	top right.
3:26:52 PM	Atty McNeil cross Gregory Waller	C CO
2.20.20 DM	Note: Fields, Angela	6.60 percent represent the shareholder return?
3:28:30 PM	Atty McNeil cross Gregory Waller	Oncepting income impacts of rate base you would also get
	Note: Fields, Angela	Operating income impacts of rate base, you would also get depreciation?
3:28:52 PM	Atty McNeil cross Gregory Waller	depredation:
J.20.J2 FM	Note: Fields, Angela	Rough 50 yr fixed depreciation rate if \$126.5 million times .02 you
	Note: Ficius, Angela	would get a 2.5 in annual depreciation rate?
3:29:42 PM	Atty McNeil cross Gregory Waller	Would get a 215 in annual acpreciation rate.
3123112111	Note: Fields, Angela	Atmos has proposed to increase its rate base by one-third over that
		time period, a year after requesting less oversite by this
		Commission?
3:30:31 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Should the depreciation rate on pipes be 1 %?
3:30:53 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Does the company use variance project reports?
3:32:33 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Is it true that a prp provides more rapid cost recovery than a base
		rate case?
3:33:02 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	The prp recovery mechanisms appears as a monthy surcharge line
2 24 00 514		item on the customer bills?
3:34:08 PM	Atty Cook cross Gregory Waller	AFIJDC - 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1
	Note: Fields, Angela	AFUDC methodology is considered to be is mutally exclusive,
2124122 DM	Athy Cook gross Crosser Maller	correct?
3:34:33 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	What about between rate cases?
3:35:46 PM	Atty Cook cross Gregory Waller	אאוומר מחחתר חברואבבוו ומרב רמפבף:
J.JJ.TU FIYI	Note: Fields, Angela	Then it would not be reasonable to recover the same return twice?
	Note: Ficius, Aligeia	THEIT IC WOULD NOT DE TEASONADIE TO TECOVEL THE SAME LECTION (WICE:

3:36:14 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	The company then recoverd the return on CWIP through its customers?
3:37:01 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	You included the AFUVC in rate base, correct?
3:38:24 PM	Atty Cook cross Gregory Waller	
2 22 54 514	Note: Fields, Angela	Why could it not be done through this rate case?
3:39:51 PM	Atty Cook cross Gregory Waller	DUDD I I I
3:40:16 PM	Note: Fields, Angela	PHDR - calculation
3:40:16 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	What is the earned ROE since the final order in the last rate case?
3:41:38 PM	Atty Cook cross Gregory Waller	What is the earned ROE since the final order in the last rate case:
J.71.J0 FM	Note: Fields, Angela	Is that the same as the earned ROE since the last rate case order?
3:42:17 PM	Atty Cook cross Gregory Waller	13 that the same as the carried ROL since the last rate case order.
0112127 111	Note: Fields, Angela	how much customer growth has occured since that last rate case?
3:43:03 PM	Atty Cook cross Gregory Waller	3. C. T. T. C.
	Note: Fields, Angela	Does Atmos intend to abide by the Commission's Order?
3:44:56 PM	Atty Cook cross Gregory Waller	,
	Note: Fields, Angela	Given the dictates from the commission's order from last rate, true only a lag of 5 months after the end of a historic test year?
3:46:05 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Atmos has gone above and beyond to include another \$14 million, and another \$28 million in the forcast tes year?
3:48:13 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	When the proposal is approved, how will it identify and track pipeline replacement cost when the rider is eliminated?
3:49:45 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Is the catagory you refer to as non prp something to do with a FERC account or uniform system of accounts?
3:50:22 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	AG Exhibit 3 - PSC 3-22 under the current projects the non-prp 2018 -2020 is more than double?
3:52:26 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	Acknowledge that three-fouths of the capital your requesting is for profit?
3:53:43 PM	Atty Cook cross Gregory Waller	
2 54 22 514	Note: Fields, Angela	In other jurisdictions is there the same catagory as a non- prp?
3:54:23 PM	Atty Cook cross Gregory Waller	DUDD ather invitalistic as to identify the name of the name and
	Note: Fields, Angela	PHDR - other jurisdictions to identify the name of the progam and historic spending.
3:55:19 PM	Atty Cook cross Gregory Waller	10511111
2 55 40 514	Note: Fields, Angela	AG Exhibit 4 Response to AG 1-15.
3:55:49 PM	Atty Cook cross Gregory Waller	AC Fubibit 2 - former total investment
2.F0.22 DM	Note: Fields, Angela	AG Exhibit 3 - forcast total investment
3:59:33 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	Are farm taps jurisdicitional to local distrubution companies in KY?
3:59:53 PM	Atty Cook cross Gregory Waller	Are fairif taps jurisdictional to local distribution companies in Kr:
3.33.33 11.1	Note: Fields, Angela	Refer to your rebuttal at pg 3.
4:00:47 PM	Atty Cook cross Gregory Waller	iteles to your reduction de pg or
	Note: Fields, Angela	The prp rider would subject to company to regulatory lag
4:01:11 PM	Atty Cook cross Gregory Waller	, , , , , , , , , , , , , , , , , , ,
	Note: Fields, Angela	AG Exhibit 5 page 17

4:02:20 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	In 2009 Atmos was saying it would allow the company to timely
4:03:35 PM	Atty Cook gross Cragony Waller	recover its costs, but you are not saying that in this case?
4.03.33 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	True the prp collection mechanism was designed to reduce regulatory lag?
4:04:18 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	Did Atmos file its annual prp application?
4:05:22 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	What limits on capital spending does the company have
4:06:35 PM	Atty Cook cross Gregory Waller	, , ,
	Note: Fields, Angela	Aware company the company requested depreciation rates calulated using the elg procedure?.
4:07:34 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	How ofted does the company develop new depreciation rates?
4:07:59 PM	Atty Cook cross Gregory Waller	, , , , , , , , , , , , , , , , , , ,
	Note: Fields, Angela	If the commissions adopts new depreciation rates every three to five years company revenues recovered depreciation rates over 3-5 year period?
4:10:06 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	company's revenue are not reset in real time
4:10:47 PM	Atty Cook cross Gregory Waller	Defende Mr. Meteoricushidal et es 4
4:12:20 PM	Note: Fields, Angela Atty Cook cross Gregory Waller	Refer to Mr. Watson rebuttal at pg 4.
7.12.20 TM	Note: Fields, Angela	At lines 16-19. Hypothetically, if you have only one group of assets with a cost of \$10 with a 2 yr life you would have a depreciate rate of 50 for that group and depreciation rate of \$5?
4:14:10 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	But that is true only if the asset is retired, correct?
4:15:03 PM	Atty Cook cross Gregory Waller	but that is true only if the asset is retired, correct:
1113103111	Note: Fields, Angela	Refer to your rebuttal at pg 7.
4:16:21 PM	Atty Cook cross Gregory Waller	, 13
	Note: Fields, Angela	On of the duties for the Board for a for-profit company is to find ways to increase profit?
4:17:11 PM	Atty Cook cross Gregory Waller	
4.17.42 DM	Note: Fields, Angela	What is the company doing to keep its rates affordable?
4:17:43 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	If Mr. Kollen's proposed adjustment interfered with Amos's plan, that would be unacceptable Atmos?
4:20:10 PM	Atty Cook cross Gregory Waller	
	Note: Fields, Angela	It appears the complany included costs for the executive retirement program?
4:21:10 PM	Atty Cook cross Gregory Waller Note: Fields, Angela	AG Exhibit 6. Final order in LG&E rate case. page 27.
4:23:11 PM	Atty Cook cross Gregory Waller	Ad Exhibit of Tilial order in Edge rate case. page 27.
	Note: Fields, Angela	PHDR
4:24:27 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Explain if Atmos considers the the associated rate impacts when it is creating its capital budgets?
4:25:10 PM	Atty Goad cross Gregory Waller Note: Fields, Angela	Does the Board of Directors creates those capital budgets?
4:25:31 PM	Atty Goad cross Gregory Waller	boes the board of birectors creates those capital budgets:
	Note: Fields, Angela	What level of involvment do you have working with everyone in Texas?

4:27:21 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Atmos KY is curretnly on a 95 year replacemnt plan?
4:27:44 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	What is Atmos's proposed replacement plan?
4:28:23 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Does atmos have any evidence to support a lower replacement rate?
4:29:05 PM	Atty Goad cross Gregory Waller	, , , , , , , , , , , , , , , , , , , ,
	Note: Fields, Angela	In your direct and rebuttal testimony you provide the Atmos
	, 5	midstate division net income and various schedules?
4:29:48 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	PHDR
4:32:34 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Confirm that the only difference in those models provided are the
	3 · · · · · · · · · · · · · · · · · · ·	depreciation rates that are used?
4:33:54 PM	Atty Goad cross Gregory Waller	•
	Note: Fields, Angela	Refer rebuttal pg 8-11. Confirm Atmos currently reports allowance
		for funds used for construction?
4:34:38 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Atmos net plant includes AFUDC capitalize prior to the test period?
4:36:05 PM	Atty Goad cross Gregory Waller	
	Note: Fields, Angela	Refer to Staff's third request for information, item 27, Attachment1.
4:37:55 PM	Atty Goad cross Gregory Waller	7,7,100
1137133 111	Note: Fields, Angela	Expand on that to explain why the commission should not make that
	receir relas, ruigela	adjustment to remove the additional \$800 thousand above the cap?
4:38:40 PM	Atty Goad cross Gregory Waller	aujustinana to remove and auditional good anousand above the cup.
	Note: Fields, Angela	Refer to Staff's 2nd request for information item 64, Attachment 2.
4:42:01 PM	Atty Goad cross Gregory Waller	There is a start of the request for information reality retainment in
1112101111	Note: Fields, Angela	Plant addition and construction at same level of details?
4:43:00 PM	Atty Goad cross Gregory Waller	Traine addition and construction at same level of details.
1. 15.00 111	Note: Fields, Angela	Any allowance for funds used during construction or other financing?
	Note: Fields, Aligeid	This another for furido used during construction of other financing.
4:43:22 PM	VC Cicero - Gregory Waller	
	Note: Fields, Angela	Risk assesment is made on pipe replacement every state. Is that an
	, 3	internal document that Atmos has?
4:43:55 PM	VC Cicero - Gregory Waller	
	Note: Fields, Angela	PHDR - risk assessment studies
4:44:04 PM	VC Cicero - Gregory Waller	
	Note: Fields, Angela	Any saving included in reduction of pipeline loss associated with
	, 3	hugh capital spending going on with pipeline replacement?
4:46:02 PM	VC Cicero - Gregory Waller	
	Note: Fields, Angela	What staff reductions have been made by Atmos.
4:46:43 PM	VC Cicero - Gregory Waller	•
	Note: Fields, Angela	The answer was no, there are not savings that is forcast for those
		things?
4:48:09 PM	Atty Hughes redirect Gregory Wa	-
	Note: Fields, Angela	Are the forcasts built on the company's actuals?
4:48:33 PM	Atty Hughes redirect Gregory Wa	· · ·
	Note: Fields, Angela	AG exhibit 17, page 4. ROE
4:49:09 PM	Atty Hughes redirect Gregory Wa	t t s
	Note: Fields, Angela	If the prp is on a historic calendar year basis how many months
	. tota laida, / liigald	would lapse between spending an rate recovery?
4:50:30 PM	Atty Hughes redirect Gregory Wa	•
	Note: Fields, Angela	If there had not been a push back on the bare steel in the last case
		what would happen to the other projects proposed now?

4:52:12 PM Chairman

Note: Fields, Angela

4:52:27 PM Session Paused 4:54:05 PM Session Ended Excussed witness. Recess till 9:00 a.m., April 3, 2019.



Exhibit List Report

2018-00281 02Apr2019

Atmos Energy Corporation

Name:	Description:
Atmos Energy Confidential Exhibit 1	Owensboro map
Atmos Energy Confidential Exhibit 2	Bowling Green map
Attorney General Exhibit 01	Commission Order in PSC Case No. 2017-00349 entered on May 3, 2017.
Attorney General Exhibit 02	Atmos response to AG DR Set No. 1, Question 1-01. PSC Case No. 2017-00349
Attorney General Exhibit 03	Atmos response to Staff DR Set No. 3, Question No. 3-22. PSC Case No. 2018-00281
Attorney General Exhibit 04	Atmos response to AG DR Set No. 1, Question No. 1-15, PSC Case No. 2017-00349
Attorney General Exhibit 05	Testimony of Gregory Waller in PSC Case No. 2009-00345
Attorney General Exhibit 06	PSC Order in Case No. 90-158 (LG&E rate adjustment)
Attorney General Exhibit 16	List: Kentucky Registered Legislative Employers
Attorney General Exhibit 17	Atmos response to Staff DR Set No. 2, Question No. 2-64 in PSC Case No. 2018-00281
PSC Exhibit 01	PSC prepared chart
PSC Exhibit 02	Raab Testimony, Exhibit PHR-5, page 2 of 2. Table: Revenue Deficiency at Equalized Proposed Return
PSC Exhibit 03	Raab Testimony - Rate of Return at Present and Propsed Rates for each COSS

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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ELECTRONIC APPLICATION OF ATMOS)	
ENERGY CORPORATION FOR AN)	CASE NO.
ADJUSTMENT OF RATES)	2018-00281

CERTIFICATION

- I, Angela Fields, hereby certify that:
- 1. The attached DVD contains a digital recording of the Hearing conducted in the above-styled proceeding on April 3, 2019. The Hearing Log, Exhibit List and Witness List are included with the recording on April 3, 2019.
 - 2. I am responsible for the preparation of the digital recording;
- The digital recording accurately and correctly depicts the Hearing of April 3, 2019.
- 4. The Hearing Log attached to this Certificate accurately and correctly states the events that occurred at the Hearing of April 3, 2018, and the time at which each occurred.

Signed April 12, 2019.

Angela Fields, Paralegal Consultant

Stephanie Schweighardt, Notary Public

State at Large

Commission Expires: January 14, 2019

ID#: 525987



Session Report - Detail

2018-00281 03Apr2019

Atmos Energy Corporation

Date:	Туре:	Location:	Department:
4/3/2019	General Rates	Hearing Room 1	Hearing Room 1 (HR 1)

Judge: Bob Cicero; Talina Mathews; Michael Schmitt

Witness: Joe Christian; Josh Densman; Laura Gillham; Lane Kollen; Mark Martin; John McDill; Paul Raab; Gregory

Smith; Jennifer Story; James Vander Weide; Gregory Waller; Dane Watson

Clerk: Angela Fields

Event Time	Log Event	
8:23:02 AM	Session Started	
8:23:06 AM	Session Paused	
8:57:48 AM	Session Resumed	
8:57:53 AM	Chairman	
	Note: Fields, Angela	Swearing in Dane Watson
8:58:12 AM	Atty Hughes direct Dane Watson	
	Note: Fields, Angela	Preliminary questions
8:59:00 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	AG Exhibt 9, DAW-1 written testimony.
8:59:28 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Not performed a depreciation study for consumers of government agency?
8:59:52 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	That front loads that depreciation expense?
9:01:35 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	That recovery would have to follow the theroretical pattern of depreciation?
9:02:44 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Under both alg and elg methods the company will recover revenue sufficient to to recover all of its plant costs?
9:03:18 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Rebuttal at page 4. line 5, read into the record
9:04:21 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	You provided in your discovery showed significate saving in the depreciation expense if alg procedure be adopted in this case?
9:04:46 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Mr Kollen based his proposed adjustments on your calculations?
9:05:37 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	The reduction in the depreciation expense does not result in disallowance or penalty to the company?
9:05:52 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	It is a matter of timing correct?
9:06:09 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Your rebuttal at pg 14, alg produces such inequities?
9:06:52 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	You do not agree that alg meerly smooths cost recovery over asset life?
9:07:22 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Intergenerational inequity is more likely under alg?
9:07:43 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Have to make the same set of assumptions or perameters with alg subgroups as groups?

9:08:27 AM	Atty Cook cross Dane Watson Note: Fields, Angela	The depreciation study filed in 2015 case was based on plant
		balances of 2013?
9:08:48 AM	Atty Cook cross Dane Watson Note: Fields, Angela	Three years have passed since depreciation rates have been reset?
9:09:37 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Your rebuttal also states that the Commission has approved alg procedure for Atmos only for approved settlements that included depreciation rate, but the Commission has not expressly approving elg?
9:10:44 AM	Atty Cook cross Dane Watson Note: Fields, Angela	Refer to rebuttal at pg 2 lines 12-16.
9:11:18 AM	Atty Cook cross Dane Watson Note: Fields, Angela	That was a litigated issue in the Duke KY electric rate case?
9:11:46 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Are you aware that all other depreciation rates in KY are calculated using the alg method?
9:12:00 AM	Atty Cook cross Dane Watson	
9:13:13 AM	Note: Fields, Angela Atty Cook cross Dane Watson	AG Exhibit 8. turn to pg 4 on tab 8.
9.13.13 AM	Note: Fields, Angela	Isn't the average service life procedure identical to the alg
	, J. 1	procedure?
9:13:20 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Final order in Duke rate case, turn to pg 8 of that order. Read first bullet point.
9:15:03 AM	Atty Cook cross Dane Watson Note: Fields, Angela	AG Exhibit 10. LG&E and KU rate case in 2018.
9:15:52 AM	Atty Cook cross Dane Watson	AG EXHIBIC 10. EGGE and NO rate case in 2010.
	Note: Fields, Angela	AG Exhibit 11, page 3 read from line 20.
9:17:35 AM	Atty Cook cross Dane Watson	
	Note: Fields, Angela	Utilized the alg method for the gas plant just like with its electric plant?
9:17:53 AM	Atty Cook cross Dane Watson	AG Exhibit 12, page 4. read highlighted
9:18:52 AM	Note: Fields, Angela Atty Cook cross Dane Watson	AG Exhibit 12, page 4. Teau highlighteu
311010127111	Note: Fields, Angela	AG Exhibit 13. testimony of William Seely, Delta rate case.
9:20:22 AM	Atty Cook cross Dane Watson	,
	Note: Fields, Angela	AG Exhibit 14. testimony of David Davis, KY Powers rate case, page 7.
9:21:02 AM	Atty Cook cross Dane Watson	A L 11 A G . L 11 11 . O A A
9:22:08 AM	Note: Fields, Angela	Admit AG exhibits 8-14
9:22:08 AM	Atty Goad cross Dane Watson Note: Fields, Angela	Assert in your rebuattal testimony that you the Commission has
	Note: Ficial, Angela	approved the use of elg procedure through settled and litigated cases?
9:23:14 AM	Atty Goad cross Dane Watson	
	Note: Fields, Angela	How does the elg procedure achieves the regulatory compact of the proper matching of revenu and expenses?
9:24:33 AM	Atty Goad cross Dane Watson	
	Note: Fields, Angela	Atmos will excellerate the recovery in the early and decellerate in the later years?
9:25:48 AM	Atty Goad cross Dane Watson	In cortain instances old would accollerate description resources
	Note: Fields, Angela	In certain instances elg would accellerate depreciation recovery as opposed to the alg procedure?

9:26:22 AM	Atty Goad cross Dane Watson	
	Note: Fields, Angela	Reviewed the final order in 2017-321 Duke KY?
9:27:17 AM	Atty Goad cross Dane Watson	
	Note: Fields, Angela	In the final order 2017-00321 regulatory accounting requiry proper
0.20.02.444	AU 6 1 5 W	matching and elg does not meet that criteria?
9:28:02 AM	Atty Goad cross Dane Watson	
0.20 50 444	Note: Fields, Angela	Atmos is the only invester-owned utility in KY that uses elg?
9:28:58 AM	Atty Goad cross Dane Watson	DUDD II II I
0-20-27 AM	Note: Fields, Angela	PHDR any other that uses elg
9:29:37 AM	VC Cicero Dane Watson	Door Atmos us als throughout the sementian?
0.20.12 AM	Note: Fields, Angela VC Cicero Dane Watson	Does Atmos us elg throughout the corporation?
9:30:12 AM		The other states den't use also
9:30:22 AM	Note: Fields, Angela VC Cicero Dane Watson	The other states don't use elg?
9:30:22 AIVI		Why change in methodolog because of jurisdiction? Why not
	Note: Fields, Angela	Why change in methodoloy because of jurisdiction? Why not uniform?
9:32:47 AM	VC Cicero Dane Watson	
	Note: Fields, Angela	More accurately matches those assets in a class that may not be
		depreciate quicky enough to that ratepayers are paying for assests
		on extended basis?
9:33:33 AM	VC Cicero Dane Watson	
	Note: Fields, Angela	Useful life of asset over alg asset just as accurately measure?
9:36:14 AM	VC Cicero Dane Watson	
	Note: Fields, Angela	Based on statistical modeling that comes from historical data.
9:37:44 AM	VC Cicero Dane Watson	***
0.00.00.444	Note: Fields, Angela	It is historical based with projections and assumptions?
9:38:28 AM	VC Cicero Dane Watson	Character and the Atomost the
	Note: Fields, Angela	Given the aggressive investment proposed by Atmos, the replacement of two different lines, etc., should have some effect on
		the depreication method longer life an the end?
9:40:11 AM	Atty Hughes redirect Dane Watso	•
51 10111 711 1	Note: Fields, Angela	Is it important that Atmos has historically and currently uses elg?
9:42:09 AM	Atty Hughes redirect Dane Watso	· · · · · · · · · · · · · · · · · · ·
	Note: Fields, Angela	Would changing methodology at this point be inappropriate or a
	, J	bad practice for Atmos?
9:43:17 AM	Chairman	·
	Note: Fields, Angela	Witness excused- recess
9:43:35 AM	Session Paused	
9:56:30 AM	Session Resumed	
9:56:36 AM	Chairman	
	Note: Fields, Angela	Swears in Joe Christian
9:56:49 AM	Atty Hughes direct Joe Christian	
	Note: Fields, Angela	Preliminary questions.
9:57:41 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Do you agree with Mr. Kollen's testimony that leading study in
0.50.04 454	Atta Cook anno 1 Christin	terms of cash either by investors or customers?
9:58:04 AM	Atty Cook cross Joe Christian	Carla diagrams and another attended materials and descriptions and
	Note: Fields, Angela	Cash dispersment made on three items: return on depreciation, non dividend component on equity, income tax expenses.
9:58:41 AM	Atty Cook cross Joe Christian	arriagna component on equity, income tax expenses.
7.30. II AII	Note: Fields, Angela	All non cash expenses?
9:59:35 AM	Atty Cook cross Joe Christian	
5.55.55711	Note: Fields, Angela	Concept of expense lag days.
	. total i ladaj i ligala	concept or expense and anyon

10:01:29 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Paid contractor in cash the same day as the contractor provided service, you would have zero expense lag days?
10:01:49 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	You would have infinity expense lag days?
10:02:30 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Never or no payment in cash does not equal zero expense lag day because the company did not pay the contractor in cash ever.
10:03:29 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	You don't pay depreciation expense in cash?
10:03:55 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Refer to rebuttal testimony re: capital structure
10:04:18 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Rebuttal at page 6. read 3-7
10:05:22 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Reviewed the company's response to Staff's data request item 43?
10:05:56 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Information was retained from Valueline, but did nto include short term debt?
10:06:17 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Aware that the company filing includes short term debt?
10:07:37 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	AG Exhibit 7. Average is 50.2 percent including short term debt.
10:08:32 AM	Atty Cook cross Joe Christian	N
	Note: Fields, Angela	Not consistent among the 10ks, does that mean not all the companies are the same?
10:09:03 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Only information provided in tthe 10K regarding capital structure?
10:10:05 AM	Atty Cook cross Joe Christian	
10 10 20 114	Note: Fields, Angela	PHDR provide calculations
10:10:30 AM	Atty Cook cross Joe Christian	44 50/ : 11 1 1 : 11
10-12-15 AM	Note: Fields, Angela	44.5% is the lowest in the proxy group, and the highest is 60.1%
10:12:15 AM	Atty Cook cross Joe Christian	Tarak and the making
10-12-22 AM	Note: Fields, Angela	Taget equity ratio
10:12:32 AM	Atty Cook cross Joe Christian	Var. magneted E0 240/ agreets making in initial filings
10.12.55 444	Note: Fields, Angela	You requested 58.24% equity ratio in initial filing?
10:12:55 AM	Atty Cook cross Joe Christian Note: Fields, Angela	Dravided no evidence that it requires a equity ratio at the higher
	Note: Fields, Aligeia	Provided no evidence that it requires a equity ratio at the higher end?
10:13:57 AM	Atty Cook cross Joe Christian	G.1.4.
	Note: Fields, Angela	Refer to pg 12 of rebuttal testimony. lines 11-15. talks about
10.14.57 444	Att. Cool, and J. Christian	effects of downgrade in debt.
10:14:57 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	The common equity and the return on equity recommended by the AG are well within the company's capital structure?
10:15:35 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	AG's recommended ROE is within the range recommended by Vander Weide?
10:16:42 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Not suggesting that a common equity of 54.3% and a 9.7 ROE would result in a downgrade?
10:18:28 AM	Atty Cook cross Joe Christian	
	Note: Fields, Angela	Only effect new debt issues?

10:19:57 AM	Atty Cook cross Joe Christian Note: Fields, Angela	On pg. 12 of your rebuttal, line 11, you lump all the debt together. \$3.6 billion?
10:20:32 AM	Atty Cook cross Joe Christian	\$3.0 DIIIIO11:
10.20.32 AM	Note: Fields, Angela	The greater the equity ratio the greater the return on rate base and the greater the income tax expense?
10:21:06 AM	VC Cicero - Joe Christian Note: Fields, Angela	Debt issuance left off intial application What caused that problem?
10:22:40 AM	Atty Cook Note: Fields, Angela	move to enter AG Exhibit 7
10:23:26 AM	Chairman Note: Fields, Angela	Swear in Lane Kollen.
10:23:43 AM	Atty Cook direct Lane Kollen	
10:26:14 AM	Note: Fields, Angela Atty Bellamy cross Lane Kollen	Preliminary questions
10:28:37 AM	Note: Fields, Angela Atty Bellamy cross Lane Kollen	Refer to pg 36 of your testimony. Lead lag study.
10.26.37 AM	Note: Fields, Angela	Since defered tax is reversing, would that not be an actual tax expense that would have to be paid?
10:28:59 AM	Atty Bellamy cross Lane Kollen	
10.20.57 AM	Note: Fields, Angela	Refer to the workpaper/spreadsheet you filed with your testimony.
10:29:57 AM	Atty Bellamy cross Lane Kollen Note: Fields, Angela	Where you got the 3% from. (dividend yield)
10:31:12 AM	Atty Bellamy cross Lane Kollen	Where you got the 570 Hollin (dividend yield)
	Note: Fields, Angela	The only portion on the ROE you included as a cash expense is the divident payment?
10:31:27 AM	Atty Bellamy cross Lane Kollen Note: Fields, Angela	Same spreadsheet, depreciation #1 alg vs elg. If the Commission would adopt alg, etc.
10:34:19 AM	Atty Bellamy cross Lane Kollen	
	Note: Fields, Angela	The depreciation expense was \$7.4 million. That decrease in the orginal rates would be refected over the 13-month period so reduction would be reflected in the 13-month period?
10:37:00 AM	Atty Bellamy cross Lane Kollen Note: Fields, Angela	Do know if that accounts for the \$50 thousand difference
10:37:31 AM	Atty Bellamy cross Lane Kollen	
	Note: Fields, Angela	Refer to your testimony at page 13, line 25.
10:43:49 AM	Atty Bellamy cross Lane Kollen Note: Fields, Angela	Is the primary reason to use the alg over the elg because there would be regulatory lag.
10:47:17 AM	Atty Bellamy cross Lane Kollen	, ,
	Note: Fields, Angela	In Mr. Wallers testimony page 10, he critized your removal of? based on the fact that there was no AFUDC
10:50:37 AM	Atty Bellamy cross Lane Kollen Note: Fields, Angela	Summarize you answer, The removal of QIP?
10:51:58 AM	Atty Bellamy cross Lane Kollen	
	Note: Fields, Angela	Historical period in the last rate case, QIP was awarded during that period, for all 4 divisions so no AFUDC should have been awarded.
10:53:32 AM	Atty Bellamy cross Lane Kollen	On your worknapper when you calculated that shapes you want the
	Note: Fields, Angela	On your workpaper when you calculated rate changes you used the rate base of \$430,000,095. Do you know where that number came from?

10:54:52 AM	Atty Bellamy cross Lane Kollen	
	Note: Fields, Angela	Rate base for Atmos was \$430 million. Assuming that is forcasted test-year rate base?
10:55:42 AM	Atty Bellamy cross Lane Kollen	
	Note: Fields, Angela	PHDR review and update if necessary (starting rate base number)
10:56:06 AM	VC Cicero - Lane Kollen	
	Note: Fields, Angela	Would you say elg is a better method to use if the record keeping is more precise ?
10:58:03 AM	VC Cicero - Lane Kollen	
	Note: Fields, Angela	The depreciation will all be the same over the end life of the asset
11:00:02 AM	VC Cicero - Lane Kollen	
	Note: Fields, Angela	Turbine hypothetical. If I am able to catorgize 10yr, 20yr, 30yr, use alg or elg?
11:02:32 AM	VC Cicero - Lane Kollen	
	Note: Fields, Angela	When we talk about alg and elg we are only talking about book only. No impact on the tax calculation?
11:03:01 AM	Atty Cook cross Lane Kollen	
	Note: Fields, Angela	In preparation for this case did you create an exhibt that dipicts that elg could overly recover?
11:03:20 AM	Atty Cook cross Lane Kollen	
	Note: Fields, Angela	AG Exhibit 15.
11:07:07 AM	VC Cicero	
	Note: Fields, Angela	For clarity, are you saying it is a depreciation reset or are you saying the rate base?
11:08:22 AM	VC Cicero	
	Note: Fields, Angela	It does not make any diffference if Atmos comes in every year or not, unless the ydo another depreciation study, the rates in the prior depreciation study are the rates utilized.
11:08:58 AM	Chairman	
	Note: Fields, Angela	excused witness
11:09:17 AM	Atty Hughes	
	Note: Fields, Angela	Confirm dates
11:09:36 AM	Chairman	
	Note: Fields, Angela	PHDRs due April 5, Responses due April 12, Data Requests for info not readily available due April 23rd, briefs due April 23, Commission decision April 24.
11:10:56 AM	Session Paused	·
11:12:16 AM	Session Ended	



Exhibit List Report

2018-00281 03Apr2019

Atmos Energy Corporation

Name:	Description:
Attorney General Exhibit 07	Common Equity Ratios for Companies in VanderWeide Proxy Group
Attorney General Exhibit 08	Direct Testimony of John Spanos in PSC Case No. 2018-00261
Attorney General Exhibit 09	Direct Testimony of John Spanos in PSC Case No. 2015-00418
Attorney General Exhibit 10	Direct Testimony of John Spanos in combined PSC Case Nos. 2018-00294 and 2018-0295
Attorney General Exhibit 11	Direct Testimony of John Spanos in PSC Case No. 2016-00371
Attorney General Exhibit 12	PSC Order in Case No. 2016-00162 (Columbia Gas)
Attorney General Exhibit 13	Direct Testimony of William S. Seelye in PSC Case No. 2010-00116
Attorney General Exhibit 14	Direct Testimony of David Davis in PSC Case No. 2014-00396
Attorney General Exhibit 15	Chart: Cumulative Depreciation Expense on \$10 Asset with a Two-Year Service Life, and the Depreciation Rate Based on ELG Methodology

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF ATMOS)	
ENERGY CORPORATION FOR AN ADJUSTMENT)	CASE NO.
OF RATES AND TARIFF MODIFICATIONS)	2017-00349

ORDER

Atmos Energy Corporation ("Atmos") is a gas distribution company that operates in eight states and serves roughly 3 million customers. Its Kentucky/Mid-States division is one of six operating divisions that provides natural gas service in Kentucky, Tennessee, and Virginia. In Kentucky, Atmos serves approximately 176,000 customers in 38 central and western counties. The most recent adjustment of Atmos's base rates was in August 2016 in Case No. 2015-00343.¹

BACKGROUND

On August 25, 2017, Atmos filed a notice of intent to file an application for a general rate case based upon a forecasted test period. On September 28, 2017, Atmos submitted its application based on a forecasted test period ending March 31, 2019, seeking an increase in revenues of \$10,416,024, or 6.10 percent, with a proposed effective date of October 28, 2017.²

A review of the application revealed that it did not meet the minimum filing requirements of 807 KAR 5:001, Sections 16 and 17, and a notice of filing deficiencies

¹ Case No. 2015-00343, Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications (Ky. PSC Aug. 4, 2016).

² Application, Volume 1, at 3.

was issued. Atmos filed information on both October 4, 2017, and October 5, 2017, to cure the noted filing deficiencies and to request a deviation from certain filing requirements. A notice that Atmos's deficiencies had been cured was issued October 6, 2017, stating that the application met the minimum filing requirements as of October 5, 2017. The Commission's October 11, 2017 Order granted Atmos a deviation from the public notice requirements of 807 KAR 5:011, Section 8(2)(b)(3) with regard to publishing its corrected notice of the rate adjustment to the Research and Development rider ("R&D Rider") twice rather than three times. Based on an October 5, 2017 filing date, the earliest possible date Atmos's proposed rates could become effective was November 4, 2017.

The Commission found that an investigation would be necessary to determine the reasonableness of Atmos's proposed rates and therefore suspended them for six months, from November 4, 2017, up to and including May 3, 2018, pursuant to KRS 278.190(2). The October 17, 2017 Suspension Order included a procedural schedule, which provided for discovery to both Atmos and any intervenors, intervenor testimony, discovery on any intervenor testimony, rebuttal testimony by Atmos, a public hearing, and an opportunity to file post-hearing briefs.

A petition to intervene was filed by the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention ("Attorney General"). The Attorney General was granted full intervention. Discovery was conducted on Atmos's application by the Attorney General and Commission Staff ("Staff"). The Attorney General filed testimony on which discovery was conducted by Atmos and Staff, and

Atmos filed rebuttal testimony. In Atmos's rebuttal testimony, after certain adjustments were made, the revenue increase request was updated to \$1,764,082.3

The Commission held an information session and public meeting for the purpose of taking public comments on February 22, 2018, at Daviess County Courthouse in Owensboro, Kentucky. The Commission held an evidentiary hearing on the proposed rate adjustment on March 22, 2018, at its offices in Frankfort, Kentucky. Both Atmos and the Attorney General filed responses to post-hearing requests for information. Post-hearing briefs were filed by both Atmos and the Attorney General, and Atmos filed a reply brief as permitted by the Commission in an April 19, 2018 Order. The case now stands submitted for a decision.

TEST PERIOD

Atmos proposed the 12 months ending March 31, 2019, as its forecasted test period to determine the reasonableness of its proposed rates. The Attorney General did not object to the proposed test period or suggest an alternative test period; it did, however, criticize Atmos's development of certain items contained in the proposed test period, as discussed herein. Atmos stated that its development of a forecasted test period begins with its budget, which it prepares annually for its October 1 to September 30 fiscal year. It described the numerous approvals to which its budgets are subjected, including the final review by the Atmos Board of Directors. Atmos noted that, along with its Kentucky operations, Atmos maintains a Division General Office ("DGO") that manages utility operations in the states, including Kentucky, which comprises the Kentucky/Mid-States division. It further noted that Atmos has a Shared Services Unit

³ Atmos Rebuttal Testimony, Waller Exhibit GKW-R-1, Overall Financial Summary.

("SSU") which provides support services such as accounting, billing, tax, call center, collections, etc. to the various operating divisions. Atmos stated that separate budgets are developed each year at the Kentucky, DGO, and SSU levels.

The Commission finds Atmos's forecasted test period to be reasonable and consistent with the provisions of KRS 278.192 and Kentucky Administrative Regulation 5:001, Section 16 (6), (7), and (8). Therefore, we will accept the forecasted test period proposed by Atmos for use in this proceeding.

VALUATION

Rate Base

Atmos proposed a net investment rate base for its forecasted test period of \$430,095,330 based on the 13-month average for that period.⁴ In response to errors identified in discovery, Atmos revised this amount to \$430,063,026.⁵ In its rebuttal testimony, Atmos further revised its proposed rate base to \$427,151,221 to remove prepayments and certain deferred tax assets not associated with the cost of service, as proposed by the Attorney General.⁶

The Attorney General proposed to reduce Atmos's rate base to \$375,511,070.7

The Attorney General proposed to 1) eliminate Net Operating Loss Carry-forwards

⁴ Application, Volume 7, FR 16(8)(b).

⁵ Atmos's response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 37, Attachment 1, Schedule A.

⁶ Rebuttal Testimony of Joe T. Christian ("Christian Rebuttal Testimony") at 15, Rebuttal Testimony of Jennifer K. Story ("Story Rebuttal Testimony") at 4–5, and Rebuttal Testimony of Gregory K. Waller ("Waller Rebuttal Testimony"), Exhibit GKW-R-1, Schedule A-1.

Direct Testimony of Lane Kollen ("Kollen Testimony"), Attachment Atmos_Rev_Req_-_AG_Recommendation.xlsx, Tab COC.

("NOLC") resulting from the losses reported by Atmos's regulated operations for tax purposes; 2) remove certain deferred tax assets not associated with the cost of service and include temporary differences associated with deferred tax assets included in the cost of service; 4) remove a 12 percent escalation factor from Atmos's non-PRP capital additions from October 2018 through March 2019; 10 5) reduce cash working capital to reflect the Attorney General's adjustments to Atmos's as-filed lead/lag study; 11 6) remove prepayments, 12 and; 7) reflect the effects on accumulated depreciation of the Attorney General's recommendation to remove net salvage values from depreciation rates. 13

As discussed later in this order, the Commission has determined that Atmos's net investment rate base is \$427,646,252 as shown below. Cash working capital has been reduced to reflect the lead/lag study Atmos filed with its application.

Utility Plant in Service	\$	656,927,449
Construction Work In Progress		27,493,203
Total Utility Plant	\$	684,420,652
LESS:		
Accumulated Depreciation	<u>\$</u>	191,908,970
Net Utility Plant	\$	492,511,682
ADD:		
Cash Working Capital Allowance	\$	2,400,429
Inventory and Prepayments	***************************************	8,469,206

⁸ Kollen Testimony at 18-29.

⁹ Id. at 11-13.

¹⁰ Id. at 6-8.

¹¹ Id. at 30-36.

¹² Id. at 36.

¹³ Id. at 59.

Subtotal	\$	10,869,635
DEDUCT:		
Customers Advances for Construc	tion \$	1,437,537
Regulatory Assets/Liabilities		34,312,410
Accumulated Deferred Income Tax	res	
And Investment Tax Credits		39,985,118
Subtotal	\$	75,735,065
NET INVESTMENT RATE BASE	<u>\$</u>	427,646,252

Capitalization

Atmos's proposed capitalization represents the end of year balances of the thirteen-month average for the test period ending March 31, 2019. Atmos conducts utility operations in eight states through unincorporated operating divisions, which are not separate legal entities, and comprise the Atmos Corporation. All debt or equity funding of each division is issued by Atmos as a whole. Atmos states that this consolidated capital structure is appropriate for ratemaking in Kentucky because Atmos provides the debt and equity capital that supports the assets serving Kentucky customers. The total capitalization for the forecasted test period is \$6,977,465,606. The Attorney General did not recommend any adjustments to the proposed capitalization amount. The Commission accepts the proposed capitalization amount.

REVENUES AND EXPENSES

Atmos developed an operating statement for its forecasted test period based on its budgets for the 2018 fiscal year. As required by 807 KAR 5:001, Section 16(6)(a),

¹⁴ Direct Testimony of Joe T. Christian ("Christian Testimony") at 5.

¹⁵ Id.

¹⁶ Application, FR 16(8)(j).

the financial data for the forecasted test period was presented by Atmos in the form of pro forma adjustments to its base period, the 12 months ending December 31, 2017.¹⁷ Based on the assumptions built into its budgets, Atmos calculated its test year revenues and operating and maintenance ("O&M") expenses to be \$170,729,276 and \$143,802,790, respectively.¹⁸

Based on the adjusted revenues and O&M expenses stated above, Atmos's test period operating income was \$26,926,486, which, based on its proposed rate base, results in a 6.26 percent overall rate of return.¹⁹ Based on a proposed return on equity ("ROE") of 10.30 percent, Atmos determined that it required a revenue increase of \$10,416,375, which would produce an overall return on rate base of 7.73 percent.²⁰

The Attorney General, based on a number of proposed adjustments to Atmos's test period results and an 8.80 percent return on equity, recommended a decrease in revenues of \$16,937,397.²¹

The Commission will accept most components of Atmos's test period and many of its proposed adjustments, and will also accept some of the Attorney General's proposed adjustments. A discussion of the individual adjustments accepted, modified

¹⁷ Application, Volume 7, Schedules D.1 and D.2.

¹⁸ Application, Volume 7, Schedule C.1. Through rebuttal testimony, Atmos revised its O&M expense projections to \$140,138,939. *See* Waller Rebuttal Testimony, Exhibit GKW-R-1, Schedule C.1.

¹⁹ Application, Volume 7, Schedule C.1. Atmos's revised O&M expense result in a test period net income of \$30,590,337 and 7.16 percent overall rate of return. *See* Waller Rebuttal Testimony, Exhibit GKW-R-1, Schedule C.1.

²⁰ Application, Volume 7, Schedule C.1. Based on Atmos's revised O&M expense, Atmos determined that it required a revenue increase of \$1,764,082 to produce a 7.72 percent overall rate of return. See Waller Rebuttal Testimony, Exhibit GKW-R-1, Schedule A.

²¹ Kollen Testimony at 5.

or rejected by the Commission, and the impact of those adjustments on Atmos's revenue requirement, follows.²²

Escalation Factor for Non-PRP Capital Additions

Atmos prepares its budget on a fiscal year basis, for the year ended September 30.²³ Atmos's fiscal year 2018 budget ends September 30, 2018, while its forecasted test period in this proceeding ends March 31, 2019. To forecast the Kentucky division, non-PRP capital additions for the test-year months outside of Atmos's 2018 budget, Atmos applied an escalation factor of 12 percent using the approved expense levels in its fiscal year 2018 as the starting point.²⁴ This escalation factor of 12 percent "reflects expected growth in investment needs consistent with [Atmos]'s five-year plan."²⁵

The Attorney General opposed Atmos's use of an escalation factor to forecast test period capital additions and proposed to include the same level of capital expense for the last six months of the test year as Atmos's 2018 budget.²⁶ The Attorney General stated that Atmos has neither identified any specific projects in support of the proposed increase in capital spending nor explained the 12 percent escalation factor.²⁷ The

The Attorney General adjustments to which Atmos wholly agreed on rebuttal are: revenue requirement reduction of \$53,216 to correct filing errors in response to Staff's Second Request, Item 37; removal from rate base of prepayments in the amount of \$1,729,944, which reduces the revenue requirement by \$167,053; and reduction of federal income tax rate included in the gross-revenue conversion factor ("GRCF") to 21 percent, for a reduction in the revenue requirement of \$6,796,256. The Commission accepts these adjustments as well.

²³ Direct Testimony of Gregory K. Waller ("Waller Testimony") at 21.

²⁴ Waller Testimony at 14.

²⁵ Waller Testimony at 12 and Atmos's response to Staff's Second Request, Item 16.

²⁶ Kollen Testimony at 8.

²⁷ Id.

Attorney General proposed revenue requirement reductions of \$53,890 to remove the impact of escalation on rate base and \$21,450 to reduce the depreciation expense.

On rebuttal, Atmos stated that the escalation factor projects increases in direct investment that reflect actual and expected capital expenditure growth consistent with the operational needs of Atmos's jurisdictional property and that Atmos has experienced minimal budget variances, which confirms that the increased investment is need-based.²⁸ However, Atmos failed to provide any explanation of how the 12 percent escalation factor was developed other than that the factor is utilized in Atmos's budget process.²⁹

Finding no persuasive reason to base capital spending increases on a generic escalation factor, the Commission accepts the Attorney General's proposed adjustment. The result is a \$75,360 reduction in the test-year revenue requirement.

Escalation Factor for Ad Valorem Tax Expense

Atmos included in its test-year operating expenses a provision for ad valorem taxes that applies an 8 percent escalation factor to 2017 estimated tax expense.³⁰ Atmos stated that the 8 percent escalation factor is "a standard estimated tax increase from year to year" based on "a 3% tax rate and 5% valuation increase."³¹

²⁸ Waller Rebuttal Testimony at 4.

²⁹ See Atmos's responses to Staff's Second Request, Item 16; Attorney General's First Request for Information ("Attorney General's First Request"), Item 15; and Commission Staff's Third Request for Information ("Staff's Third Request"), Item 8.

³⁰ Post-Hearing Brief of Atmos at 25.

³¹ Atmos's response to Attorney General's First Request, Item 24.

The Attorney General recommended that the Commission reject the forecasted ad valorem tax expense and instead include just the fiscal year 2017 estimates.³² The effect of this recommendation is a decrease to revenue requirements of \$543,158.³³

Finding no persuasive reason to base ad valorem tax expense increases on a generic escalation factor, the Commission accepts the Attorney General's proposed adjustment. The result is a \$543,158 reduction in the test-year revenue requirement.

Net Operating Loss Carryforward

Atmos included in rate base an accumulated deferred income tax ("ADIT") asset that it attributed to federal NOLC arising from its regulated operations ("NOLC ADIT"), which offset corresponding ADIT liabilities included in rate base. The Attorney General proposed to remove the NOLC ADIT from rate base, which would result in a revenue requirement reduction of \$3,741,762.³⁴ In support of its recommendation, the Attorney General cited Private Ruling Letter ("PRL") 2014-18024 in which the Internal Revenue Service ("IRS") determined that a state utility commission's decision to exclude an ADIT asset attributable to NOLC from rate base would not result in a violation of normalization requirements imposed by federal tax law.³⁵ Based on that PLR, the Attorney General

³² Kollen Testimony at 52.

³³ Id.

³⁴ Id. at 19.

³⁵ *Id.* at 55; see also Private Letter Ruling 201418024, 2014 WL 1743212 (issued May 2, 2014)(in which IRS determined that it was not a normalization violation to exclude NOLC ADIT while including the ADIT liabilities arising from book-tax depreciation timing differences).

argued that removing the NOLC ADIT from rate base here would not cause a tax normalization violation.³⁶

Atmos claimed that removing the NOLC ADIT from rate base while allowing corresponding ADIT liabilities to reduce rate base would result in a tax normalization violation.³⁷ It stated that a violation would cause it to lose accelerated tax depreciation in future years and require amended returns for any affected tax years that recalculate its tax liability.³⁸ Atmos also claimed that removing the NOLC ADIT from its rate base is inappropriate and inconsistent with sound ratemaking principles and that the facts presented in PLR 2014-18024 are not comparable to the instant case.³⁹

While there is some ambiguity in the relevant provisions of the Internal Revenue Code, and related Treasury regulations cited by the Attorney General and Atmos on the subject of NOLCs, the Commission is unable to agree with the Attorney General that a tax normalization violation would not result from a decision to remove NOLC ADIT attributable to tax-book timing differences for the depreciation of public utility property from Atmos's rate base while allowing corresponding ADIT liabilities attributable to those tax-book timing differences to reduce rate base. In Case No. 2013-00148,⁴⁰ the Commission ordered Atmos to seek a PLR from the IRS on the ADIT/NOLC issue. On August 21, 2015, the IRS issued PLR 2015-534001, in which it stated, based on the

³⁶ Id. at 24.

³⁷ Story Rebuttal Testimony at 40.

³⁸ Id.

³⁹ Id. at 31-34.

⁴⁰ Case No. 2013-00148, Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications (Ky. PSC Apr. 22, 2014).

facts and circumstances presented by Atmos to the IRS, that Atmos's NOLC ADIT attributable to tax-book timing differences for the depreciation of public utility property should be included in rate base if the corresponding ADIT liabilities attributable to those tax-book timing differences are included to reduce rate base. The PLR is applicable to Atmos's specific tax situation in Kentucky. Therefore, the Commission finds that NOLC ADIT attributable to tax-book timing differences for the depreciation of public utility property jurisdictional to Kentucky should be included in rate base, since the corresponding ADIT liabilities attributable to those tax-book timing differences are included to reduce rate base (with the net affect being an overall reduction in rate base); however, the amount included in rate base has been based on changes to the NOLC resulting from changes to the taxable income during the test year and removal of ADIT derived from items not included in the cost of service. Accordingly, the Commission will increase the revenue requirement by \$215,454.

Amortization of Excess Accumulated Deferred Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act ("TCJA") was signed into law and, among other things, reduced the federal corporate income tax rate from 35 percent to 21 percent. Through rebuttal testimony, Atmos proposed a reduction in its revenue requirement of \$1,471,233 to reflect the estimated impact of the TCJA on its ADIT.⁴¹ Atmos proposed a 24-year amortization period for estimated excess ADIT of \$35,309,597, using the alternative method provided by the TCJA for utilities that do not keep vintage depreciation records necessary to utilize the Average Rate Assumption

⁴¹ Waller Rebuttal Testimony, Exhibit GKW-R-1, page 4 of 123.

Method.⁴² Atmos will not have finalized data for the correct amount of excess ADIT or the amortization period until it completes accounting for its 2018 fiscal year, which ends September 30, 2018.⁴³ The record of Case No. 2018-00039⁴⁴ will remain open to determine any additional rate adjustments necessary when finalized data is available.

The Attorney General estimated Atmos's excess ADIT to be \$46,372,101 and amortization of this amount to be \$2,318,605 based on a proposed 20-year amortization period.⁴⁵ Accordingly, the Attorney General proposed to reduce the revenue requirement by \$2,934,943 to reflect the amortization of excess ADIT.⁴⁶

The Commission accepts Atmos's proposed amortization of estimated excess ADIT. Accordingly, the Commission will reduce the test-year federal income tax expense by \$1,471,233, which reduces the revenue requirement by \$1,981,192. <u>Depreciation Rates – Net Salvage</u>

The Attorney General recommended an adjustment to the test-year depreciation and accumulated depreciation to reflect the removal of net salvage from depreciation rates, which would reduce the revenue requirement by \$3,430,385.⁴⁷ The Attorney General stated that including net salvage in depreciation rates "front-loads forecasted"

⁴² Story Rebuttal Testimony at 42-43.

⁴³ Id. at 47.

⁴⁴ Case No. 20118-00039, Electronic Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Atmos Energy Corporation (Ky. PSC Mar. 19, 2018).

⁴⁵ Kollen Testimony at 49 and Atmos_Rev_Req_-_AG_Recommendation.xlsx, Tab Tax Rate Change 21%.

⁴⁶ Kollen Testimony, Atmos_Rev_Req_-_AG_Recommendation.xlsx, Tab Summ Rev Req.

⁴⁷ Kollen Testimony at 59.

costs based on limited data" and "preemptively recovers costs that have not and may not be incurred."48

Atmos did not propose changes to its depreciation rates in this proceeding and included depreciation studies in its application that were submitted and approved in Case No. 2015-00343.⁴⁹ Atmos contended that its current depreciation rates were approved in Case No. 2015-00343 and include net salvage according to the customary methodology accepted by the Commission.⁵⁰ Atmos avers that the Attorney General's recommendation would violate "traditional depreciation theory, this Commission's precedent, intergenerational equity between generations of customers and the Federal Energy Regulatory Commissions ("FERC") guidance on accrual accounting."⁵¹

The Commission finds the Attorney General's recommendation on the treatment of net salvage in computing Atmos's depreciation rates unreasonable in that it opposes customary depreciation conventions and creates intergenerational inequity, and should, therefore, be rejected. Atmos's depreciation rates, as approved in Case No. 2015-00343, should remain in effect until a new depreciation study is filed and accepted by the Commission. The Commission also finds that Atmos should prepare a new depreciation rate study for Commission review by the earlier of five years from the date of this Order or the filing of Atmos's next general rate case.

Accumulated Deferred Income Taxes and Temporary Differences

⁴⁸ Id. at 58.

⁴⁹ Application, Volume 6, Tab FR 16(7)(s).

⁵⁰ Rebuttal Testimony of Dane A. Watson, at 4.

⁵¹ Id. at 6.

The Attorney General recommended a total revenue requirement reduction of \$727,927 to 1) exclude from rate base ADIT associated with expenses that the Attorney General contends were not included in the test year, and; 2) include in rate base liabilities for the temporary tax difference associated with expenses that were included in the test year.⁵² The Attorney General contended that its recommendation is necessary to properly reflect rate base and revenue requirement.⁵³

Through discovery and rebuttal, Atmos agreed to remove ADIT associated with five expenses excluded from the test year, and refused two items because the expenses were in fact included in the test year.⁵⁴ Through rebuttal, Atmos asserted that it should not reduce rate base for liabilities associated with expenses that were included in the test year because the net result of timing differences between expense and revenue is accounted for in the cash working capital allowance that is included in rate base.

The Commission concurs with Atmos and the Attorney General that rate base should be reduced to exclude ADIT associated with expenses that were not included in the test year. As discussed below, the Commission accepts the Attorney General's recommendation to exclude restricted stock expense for directors and accepts this additional item above those accepted by Atmos. The Commission also concurs with Atmos that liabilities resulting from timing differences are reflected in rate base through the cash working capital allowance and, therefore, rejects the Attorney General's

⁵² Kollen Testimony at 17-18.

⁵³ Id. at 9.

⁵⁴ Story Rebuttal Testimony at 7.

recommended adjustment for those items. Accordingly, the Commission will reduce Atmos's revenue requirement by \$173,960.

Cash Working Capital Allowance

As a result of the settlement agreement accepted in Case No. 2015-00343, Atmos filed a lead/lag study with its application in this proceeding. Atmos proposed to determine cash working capital in rate base based upon the one-eighth O&M methodology. It stated that this methodology recognizes that lead/lag studies are burdensome and time-consuming and produces a reasonable estimate of cash working capital.⁵⁵ Atmos proposed to include \$3,270,504 of cash working capital in the test-year rate base.⁵⁶

The Attorney General proposed a reduction to the revenue requirement of \$658,905 to reflect cash working capital based on "corrections" to the lead/lag to remove non-cash items.⁵⁷ The Attorney General also stated that the one-eighth O&M methodology is outdated, simplistic, and does not measure the timing of cash receipts or disbursements for revenues or expenses.⁵⁸

The Commission finds that the cash working capital allowance included in Atmos's rate base should be based upon the lead/lag study as filed. While the one-eighth O&M methodology is a reasonable estimate of cash working capital absent a lead/lag study, Atmos's lead/lag study is part of the record of this proceeding and more

⁵⁵ Waller Testimony at 18.

⁵⁶ Application, Volume 7, Schedule B.1 F.

⁵⁷ Kollen Testimony, Atmos_Rev_Req_-_AG_Recommendation.xlsx, Tab Summ Rev Req.

⁵⁸ Id. at 36-37.

accurately reflects the working capital needs of Atmos. Accordingly, the Commission will reduce Atmos's revenue requirement by \$84,049.

Rate Case Regulatory Asset and Amortization

Atmos proposed to include \$235,413 in rate base for the 13-month average of a regulatory asset for its expenses related to this proceeding.⁵⁹ Atmos also proposed a 2-year amortization period for this regulatory asset, resulting in amortization expense of \$156,942.⁶⁰

The Attorney General recommends denying the establishment of this regulatory asset or recovery of amortization expense because he contends that Atmos's test-year results show that a decrease in base rates are warranted and thus Atmos did not require an increase in base rates and should not have incurred rate case expense.⁶¹ The Attorney General contends that denying recovery of rate case expense will incentivize Atmos to file rate cases only when necessary.⁶²

The Commission finds that rate case expenses should only be denied when the expenses themselves are found unreasonable. However, the Commission rejects Atmos's proposed 2-year amortization period and will use the customary 3-year period. The increased regulatory asset balance included in rate base and the decreased amortization expense together result in a decrease in revenue requirements of \$50,156.

Test-Year O&M Expense

⁵⁹ Application, Volume 7, Schedule F.6.

⁶⁰ Id.

⁶¹ Kollen Testimony at 38 and Post-Hearing Brief of the Attorney General at 16.

⁶² Post-Hearing Brief of the Attorney General at 16.

The Attorney General recommended adjustments to test-year O&M expense for direct costs of Atmos and those expenses allocated from the Kentucky/Mid-States division.⁶³ To support and quantify the proposed adjustment, the Attorney General compared the forecast test-year level of these expenses to Atmos's 2016 actual expenses.⁶⁴ The Attorney General contended that he identified "unusual increases compared to actual expense levels incurred in prior years."⁶⁵ These two adjustments together would reduce the revenue requirement by \$1,404,322.

On rebuttal, Atmos asserted that these adjustments should be rejected on the basis that they do not include cost categories that decreased from 2016 actuals and ignore the base-period expense levels, which would result in a smaller reduction.⁶⁶

The Commission concurs with Atmos that any adjustments to the forecast test year O&M expense should have included both increases and decreases in cost components. The Attorney General's decision to adjust only those costs that increased from 2016 to the test-period is unreasonable. The Commission, therefore, finds that the Attorney General's recommended adjustment to test-year O&M expense should be denied.

Directors' Stock Expense

Atmos included \$181,683 in its revenue requirements for restricted stock expense for its Board of Directors.⁶⁷ The Attorney General proposed to remove this

⁶³ Kollen Testimony at 40 and 44.

⁶⁴ Id. at 39-40.

⁶⁵ Id. at 39 and 41.

⁶⁶ Post-Hearing Brief of Atmos at 18-19.

expense from the test year as it is compensation directly tied to Atmos's financial performance.⁶⁸ The Commission accepts the Attorney General's recommended adjustment and will reduce the revenue requirement by \$182,963.

Retirement Plan Expenses

Atmos incurs direct and allocated retirement plan expense related to employees who are covered by both a defined benefit plan and a defined contribution plan. The Attorney General recommended reducing Atmos's retirement plan expense by \$575,076⁶⁹ based on recent decisions in which the Commission denied recovery of retirement expenses where a utility made contributions to both defined benefit and defined contribution plans for certain employees.⁷⁰

Atmos contended that the Attorney General has offered no justification as to why its test-year retirement plan expense is unreasonable or assessed the market competitiveness of its retirement plans.⁷¹ Atmos stated that all 145 employees currently participating in the defined benefit plan also participate in the defined contribution plan.⁷²

⁶⁷ Atmos's response to Commission Staff's Post-Hearing Request for Information, Item 7.

⁶⁸ Kollen Testimony at 44–45. See Attorney General's response to Atmos's Request for Information, Item 20.

⁶⁹ See Atmos's response to Staff's Second Request, Item 24 and Attorney General's Second Request for Information ("Attorney General's Second Request"), Item 25.

⁷⁰ Kollen Testimony at 45-46.

⁷¹ Waller Rebuttal Testimony at 10.

⁷² Atmos's response to Attorney General's Second Request, Item 25 and Post-Hearing Brief of Atmos at 24.

The Commission finds that, for ratemaking purposes, it is not reasonable to include both Atmos's defined benefit plan expense and matching contributions to employees' defined contribution plans. Accordingly, the Commission will accept the Attorney General's adjustment and reduce Atmos's revenue requirement by \$579,127.

PRO FORMA ADJUSTMENTS SUMMARY

The effect of the Commission's adjustments on Atmos's pro forma test-period operations is as follows:

	Atmos	Commission	Commission
	Forecasted	Accepted	Adjusted
	Test Period	Adjustments	Test Period
Operating Revenues	\$170,729,276	\$ -0-	\$ 170,729,276
Operating Expenses	143,802,790	(6,156,380)	137,646,410
Net Operating Income	\$ 26,926,486	\$ 6,156,380	\$ 33,082,866

RATE OF RETURN

Capital Structure and Cost of Debt

Atmos proposed a test-year-end capital structure consisting of 43.95 percent long-term debt at a cost of 5.11 percent; 3.48 percent short-term debt at a cost of 1.99 percent; and 52.57 percent common equity with a proposed ROE of 10.30 percent.⁷³ The Attorney General recommended two adjustments to Atmos's proposed debt cost. The first was to adjust the cost of short-term debt downward to 0.92 percent to reflect the exclusion of \$2.604 million in commitment fees and to reflect these fees through O&M expenses.⁷⁴ Atmos disagreed with this adjustment, stating that commitment fees

⁷³ Application, FR 16(8)(j).

⁷⁴ Direct Testimony of Richard A. Baudino ("Baudino Testimony") at 29.

are part of the cost of debt and are up-front interest payments which are properly accounted for as interest costs. The Commission agrees that commitment fees are a component of the short-term interest rate and should be included in the short-term interest rate calculation.

The second recommendation from the Attorney General regarding debt cost was to update the cost of long-term debt to reflect the maturation of a \$450 million debt issuance during the last month of the forecasted test period.⁷⁵ This debt instrument currently has a coupon rate of 8.5 percent and will be refinanced at an interest rate reflective of the interest rate environment at the time of refinancing. The Attorney General recommended applying a coupon rate of 4.0 percent for the entirety of the debt, deferring the greater interest expense between the maturing issue and the new debt issuance, and recovering the interest rate differential over a ten-year amortization period.⁷⁶ In its Rebuttal Testimony, Atmos disagreed with this adjustment, stating that the terms of the refinancing are not known and the recording of the interest rate differential as an O&M expense is inappropriate.77 Atmos notes that the debt instrument is maturing on March 15, 2019, so only one half of a month of the future test year will be affected by the interest rate decrease. Atmos countered that in the absence of the approval of the proposed ARM, a more accurate way to reflect the refinancing is to weigh the issuance at 11 and one-half months at the current rate and one-half month at a forecasted rate. Irrespective of the treatment of the ARM proposal, the Commission

⁷⁵ Id. at 30.

⁷⁶ Kollen Testimony at 61.

⁷⁷ Christian Rebuttal Testimony at 4.

believes that a blended rate is a more accurate representation of the cost of the long-term debt. The Attorney General stated that its estimated rate was based on the average yield on utility bond yields and that as of March 29, 2018, this bond yield was 4.15 percent.⁷⁸ The Commission finds a 4 percent cost rate should be used for the refinancing of the \$450 million debt for one-half of a month, resulting in a blended rate of 8.31 percent for the debt instrument, and 5.09 percent for the cost of long-term debt.⁷⁹ The effect of the adjustment is a reduction to the revenue requirement of \$43,010.

Return on Equity

In its Application, Atmos developed its proposed ROE using the Discounted Cash Flow ("DCF") method, two Risk Premium ("RP") methods, and two Capital Asset Pricing Model ("CAPM") methods. Derived from the cost of capital evaluations, Atmos recommended an ROE range, adjusted for flotation costs, of 9.4 percent to 11.0 percent and proposed an ROE of 10.3 percent based on the average of the model outputs. Atmos maintained that an ROE of 10.3 percent is conservative because the financial risk of the comparable companies used in the models is less than the financial risk associated with the lower equity ratio used in Atmos's ratemaking capital structure.⁸⁰ The table below summarizes Atmos's ROE estimates:⁸¹

⁷⁸ Attorney General's responses to Commission Staff's Post-Hearing Request for Information, Item 1.

⁷⁹ Christian Rebuttal Testimony, Exhibit JTC-R-2 Updated Long-term Debt Rate.

⁸⁰ Direct Testimony of James H. Vander Weide, Ph.D. ("Vander Weide Testimony") at 4.

⁸¹ Id. at 44.

STUDY	ROE
DCF	9.4%
Ex Ante Risk Premium	11.0%
Ex Post Risk Premium	10.2%
CAPM - Historical	10.2%
CAPM - DCF Based	10.7%
Average	10.3%

The Attorney General provided direct testimony and analysis regarding ROE which employed the DCF and CAPM models but based its recommendation on the results of the DCF model.⁸² The Attorney General examined the proxy groups used by Atmos and found them to be reasonable, but noted that in the time between the filing of Atmos's direct testimony and the filing of the Attorney General's testimony, South Jersey Industries ("South Jersey") had announced acquisition activity, causing this company to be excluded from the Attorney General's proxy group.⁸³ In the DCF model, the Attorney General employed both the average and the median values for the expected growth rates. The model results indicated equity cost rates ranging from 8.13 percent to 9.01 percent using average growth rates, and using median growth rates, 7.68 percent to 9.20 percent. The Attorney General recommended removing the low end of the average growth range, stating that the 8.13 percent and 7.68 percent appeared to be understated. The remaining DCF estimates reflect a range of

⁸² Baudino Testimony at 3.

⁸³ Id. at 17-18.

approximately 8.24 percent to 9.2 percent. The Attorney General recommended an ROE near the midpoint or 8.80 percent.⁸⁴

The Attorney General stated that Atmos's analysis produced an overstated ROE and that it did not reflect the return requirement of investors in today's marketplace. BE He disagreed with Atmos's DCF analysis, specifically noting that the use of quarterly compounding produced overstated results and that Atmos confined its growth rate analysis to earnings forecasts from only Institutional Brokers' Estimate System ("IBES"). BE HE Attorney General stated that Atmos's analysis produced an overstated ROE and that it did not reflect the return requirement of investors in today's marketplace. BE He disagreed with Atmos's DCF analysis, specifically noting that the use of quarterly compounding produced overstated results and that Atmos confined its growth rate analysis to earnings forecasts from only Institutional Brokers' Estimate System ("IBES").

In regard to Atmos's RP models, the Attorney General stated that these model results are also overstated and should not be relied upon.⁸⁷ The Attorney General took issue with the use of forecasted bond yields and specifically noted that the use of a forecasted bond yield in any RP analysis should be rejected in favor of current, observable bond yields, as these reflect current market information including expectations about future interest rates.⁸⁸ The Attorney General criticized Atmos's use of historical returns of stocks over bonds for the Ex-Post RP analysis, noting that gas distribution utility stock returns are lower than those of unregulated companies in the Standard & Poor's ("S&P") 500, and stating this further supports its argument that the RP models are overstated. The Attorney General observed that focus on historical S&P

⁸⁴ Id. at 28.

⁸⁵ Id. at 32.

⁸⁶ Id. at 33.

⁸⁷ Id. at 34.

⁸⁸ Id. at 35.

returns does not capture what investors require today, as today's requirements may be quite different from a long-term historical perspective.⁸⁹

The Attorney General's CAPM results range from 7.29 percent to 7.49 percent for the forward-looking CAPM return on equity estimates and 6.21 percent to 7.66 percent using historical risk premiums.⁹⁰ The Attorney General stated that Atmos's CAPM analysis employed inflated projected interest rates, and that it was not appropriate to use forecasted interest rates for the same reasons that projected interest rates should be rejected in the RP models.⁹¹ The Attorney General further argued that the use of an adjustment factor to "correct" the CAPM results for smaller sized gas distribution companies as measured by market capitalization and for those companies whose betas are less than 1.0 is an inappropriate adjustment, as there is no evidence supporting a CAPM bias towards underestimating the cost of equity for companies with these characteristics.⁹² Also, the Attorney General questioned Atmos using a beta of 0.90 in its analysis as opposed to a proxy group beta of 0.74.

Finally, the Attorney General disagreed with Atmos's inclusion of an upward adjustment for flotation costs. The Attorney General noted that flotation costs attempt to collect the costs of issuing common stock, which are already accounted for in current stock prices, and that adding an adjustment for floatation costs amounts to double

⁸⁹ Id. at 37.

⁹⁰ Id. at 27.

⁹¹ Id. at 38.

⁹² Id. at 39.

counting.⁹³ The Attorney General observed that if flotation costs are excluded from Atmos's DCF analysis, the cost of equity results fall in the range of 8.80 percent to 9.30 percent.⁹⁴

In its rebuttal testimony, Atmos disagreed with the methods used in the Attorney General's ROE analysis. Specifically, Atmos disagreed with the use of an annual versus a quarterly DCF model, stating that since the proxy companies pay dividends quarterly, a quarterly model should be employed. Atmos further disagreed with the Attorney General's inclusion of forecasted dividends per share as an input to the DCF analysis. In regard to the CAPM analysis, Atmos disagreed with the Attorney General's use of current yields, the use of geometric and arithmetic means for historical returns on the S&P 500 to estimate the market risk premium, failure to recognize that the CAPM underestimates the cost of equity for companies with betas less than 1.0 and with small market capitalization. Finally, Atmos reiterated its position regarding flotation costs, stating that flotation costs are deducted from the proceeds of a stock issuance prior to the distribution of the net proceeds and thus are not included in the stock price. Atmos believes that it will not be able to earn a fair ROE if flotation costs are not included.

⁹³ Id. at 34.

⁹⁴ Id.

⁹⁵ Rebuttal Testimony of James H. Vander Weide, Ph.D. at 3.

⁹⁶ Id. at 11-12.

⁹⁷ Id. at 6.

Atmos provided an update of its ROE analysis in its rebuttal testimony and responses to post-hearing requests for information, which resulted in an increase in its estimated ROE to 10.4 percent and 10.6 percent, respectively, further supporting its request of a 10.3 percent ROE.98

In its Post-Hearing Brief ("Brief"), Atmos stated that the updated ROE of 10.6 percent is based on the most current financial information available. Atmos noted that the Attorney General's witness stated during the hearing that the rising interest rate environment leads to upward pressure on ROE rates and that he admitted that no Commission has recently adopted an ROE of its recommended 8.8 percent. Atmos contends that given this acknowledgment, a continued recommendation of an 8.8 percent ROE is unexplained and unwarranted. Atmos further discounts reliance on Regulatory Research Associates ("RRA") allowed returns because they only reflect regulatory commission decisions, not market forces, and that market forces relevant to each particular case should be assessed to determine ROE, not RRA results.

In its Post-Hearing Brief ("Brief"), the Attorney General stated that Atmos's ROE recommendations were anything but conservative, that the analysis was unnecessarily inflated and overstated for a regulated utility such as Atmos, and thus that it is improper for Commission consideration.¹⁰² The Attorney General did not question the models

⁹⁸ Id. at 27 and Atmos's Response to Staff's Post-Hearing Request for Information, Item 10.

⁹⁹ Post-Hearing Brief of Atmos at 7.

¹⁰⁰ Id. at 60.

¹⁰¹ Id.

¹⁰² Post-Hearing Brief of the Attorney General at 20.

used for ROE valuation, but rather the modifications of the methods. The Attorney General stressed its position regarding flotation costs and emphasized the low-interest rate environment of the current U.S. economy, proposing that the Commission give more weight to models that depend on current market rates rather than forecasted rates as these rates may never come to fruition.

The Commission agrees with the Attorney General that flotation costs should be excluded from the analysis as they are already accounted for in the current stock prices and therefore overstate the results. The Commission further agrees that including South Jersey as a proxy company in the DCF model results in an overstated ROE. Making adjustments for flotation and removing South Jersey from the DCF model causes the lower end of Atmos's proposed ROE range to decrease to 9.1 percent.¹⁰³

Economic data indicates a healthy outlook for steady growth, low unemployment, and inflation at the Federal Reserve's ("FED") target level. Citing a solid economic outlook, the FED increased the federal funds' interest rate to 1.75 percent this past March, the highest level in a decade, and signaled that two to three more rate hikes are possible in 2018. Increased government spending, the possible impact of the current tariff policy on net imports, and the Tax Cut and Jobs Act of 2017 all contribute to a healthier economy. These macroeconomic inputs point to a robust outlook and an economy that has recovered from the Great Recession. However, notwithstanding these improvements, interest rates are still historically low, the impact of interest rate changes is unpredictable, and increases in the federal funds rate are not guaranteed.

¹⁰³ Staff removed 5 percent from each DCF model result, eliminated South Jersey, and calculated the average.

For 2017, the average authorized ROE in the gas utility industry as reported in the RRA's quarterly review was 9.72 percent and absent an outlier, 9.63 percent. 104 In addition, the average earned ROE for Atmos's proxy group is 9.23.105 The Commission believes that both the ROE reports and average proxy group returns are benchmarks worthy of consideration but are not the only determining factors. The Commission notes the economy has shown quantifiable signs of improvement and responded as such with an award to Duke Energy Kentucky, Inc. of 9.725 for its electric division. 106 The Commission agrees with Atmos that one must not only look at other regulatory decisions but also at capital markets and expected returns from similar utilities. Therefore the Commission awards Atmos an ROE of 9.7 percent. An ROE of 9.7 percent will best allow Atmos to attract capital at a reasonable cost, maintain its financial integrity to ensure continued service, provide for necessary expansion to meet future requirements, and result in the lowest possible cost to ratepayers. This ROE lies within Atmos's proposed range, is greater than the proxy group's current return, therefore, taking into consideration capital markets and current economic improvements, and is within the range of authorized approved ROEs. The effect of this adjustment is a reduction in the revenue requirement of \$1,808,091.

¹⁰⁴ Hearing Log at 11:39:56.

¹⁰⁵ Atmos's Response to Staff's Second Request, Item 48.

¹⁰⁶ Case No. 2017-00321, Electronic Application of Duke Energy Kentucky, Inc., for 1) an Adjustment of the Electric Rates; 2) Approval of an Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) All Other Required Approvals and Relief (Ky. PSC Apr. 13, 2018).

Rate-of-Return Summary

Applying the cost rates of 1.66 percent for short-term debt, 5.09 percent for long-term debt, and 9.70 for common equity to the proposed capital structure percentages consisting of 3.48 percent, 43.95 percent, and 52.57 percent, respectively, produces an overall cost of capital of 7.41 percent.

REVENUE REQUIREMENTS

Based upon Atmos's rate base of \$427,646,252 and an overall cost of capital of 7.41 percent, the net operating income that is justified for Atmos by the evidence of record is \$31,688,587. Recognizing the adjustments found reasonable herein, 107 Atmos's pro forma net operating income for the test year is \$33,082,866. Based on the difference in these two amounts, Atmos's annual operating income should be reduced by \$1,394,279. After recognizing the provision for uncollectible accounts, state and federal income taxes, and the Commission Assessment, Atmos's revenue sufficiency is \$1,890,792.

PRICING AND TARIFF ISSUES

Cost-of-Service Study

Atmos filed three fully allocated cost-of-service studies ("COSS") as required by Case No. 2013-00148.¹⁰⁸ The Attorney General's testimony did not address Atmos's COSSs and did not include any alternate COSSs. Having reviewed the three COSSs,

¹⁰⁷ See Appendix A to this Order for a summary of adjustments.

¹⁰⁸ Atmos filed a Customer/Demand study, a Demand/Commodity study, and a Demand-only study.

the Commission finds that the COSSs are acceptable to use as a guide in setting rates for Atmos.

Revenue Allocation

According to Atmos, while the results of its COSS show that all customer classes except the residential class contribute adequately to its cost of service, it chose to allocate a portion of the requested revenue increase to each customer class. It proposed to slightly increase the customer charges of all classes, and allocated the remainder of each class's increase to volumetric rates. 109 As previously mentioned, the Attorney General submitted no COSS and made no recommendation regarding revenue allocations in its direct testimony. In its Brief, however, the Attorney General urged the Commission to use the same or similar methodology to reduce base rate revenues, if any reductions were required in this proceeding, as was used in Case No. 2018-00039¹¹⁰, to apply interim reductions to base rates and the PRP mechanism that resulted from the decrease in the federal corporate tax rate. The Attorney General further requested that if the Commission awards a base rate revenue increase to Atmos that any increase in revenue allocated to residential customers be collected through an increase to the volumetric delivery charge and the residential customer charge not be increased. 111

The Commission's allocation of the required revenue decrease as reflected in the rates found reasonable herein preserves the base monthly customer charges approved

¹⁰⁹ Direct Testimony of Mark A. Martin ("Martin Testimony") at 18.

¹¹⁰ Case No. 2018-00039, Electronic Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Atmos Energy Corporation (Ky. PSC Mar. 19, 2018).

¹¹¹ Post-Hearing Brief of the Attorney General at 47-48.

in Atmos's last rate case, as discussed below, with the remainder of the revenue requirement allocated to volumetric rates in a manner that approximately preserves the existing base rate revenue responsibility among the customer classes.

Rate Design

Atmos proposed no change in rate design, maintaining a monthly base customer charge and declining block volumetric rates for all rate schedules. It proposed to increase the G-1 Firm Sales Service base customer charge to \$20.50 for residential customers and to \$52.50 for non-residential customers. It also proposed to increase the base customer charge for G-2 Interruptible Sales Service and for T-4 and T-3 Firm and Interruptible Transportation Service customers to \$400.00. Atmos proposed to increase volumetric rates for all customer classes. As previously mentioned, the Attorney General made no recommendation with regard to rate design in direct testimony, but in its Brief, the Attorney General made specific recommendations as to rates resulting from any decrease or increase in revenues approved by the Commission, as previously discussed.

The Commission finds that Atmos's currently approved monthly base customer charges of \$17.50 and \$44.50 for the G-1 Firm Sales Service base residential and non-residential customer charges, respectively, continue to be reasonable based on the COSSs submitted by Atmos. Likewise, the \$375.00 G-2 Interruptible Sales Service and T-4 and T-3 Firm and Interruptible Transportation Service monthly base customer charges should not be increased, as indicated by the COSS. As discussed herein, Atmos's monthly base customer charges should, therefore, remain at their current levels

¹¹² Direct Testimony of Paul H. Raab, Exhibit PHR-5, page 1.

for all customer classes, and the revenue decrease required herein should be allocated to volumetric rates. Because the customer charges are maintained at their current levels, the remainder of the revenue requirement has been allocated to the volumetric charges. In order to retain the approximate class contributions to total revenues, an increase in the 1-300 Mcf block for firm sales and transportation customers is required. The remainder of the volumetric rates have been only slightly changed from the current rates.

Annual Rate Mechanism

Atmos proposed an Annual Review Mechanism ("ARM") and associated tariff to implement a formula rate mechanism similar to that approved by the Tennessee Public Utility Commission for Atmos's operations in Tennessee. The Martin Direct Testimony described formula rate mechanisms that were approved for Atmos in other jurisdictions as successful, with the process having become largely formulaic with prescribed information filed and reviewed on an annual basis. According to Atmos, the regularly scheduled rate review would cost less, and the timelier annual rate adjustments would achieve the result contemplated by the Commission's rate orders. The implementation of the timelier annual rate adjustments would achieve the result contemplated by the Commission's rate orders.

The Waller Direct Testimony elaborated that the proposed ARM is designed to create a more efficient and less costly process to review rates annually, resulting in customer rates that more accurately reflect the current costs. Atmos further argued that the ARM would appropriately reflect current cost of service through transparent rate

¹¹³ Atmos stated in response to Staff's Second Request, Item 10, that in 2013 Tennessee adopted legislation concerning annual rate formula mechanisms.

¹¹⁴ Martin Testimony at 20.

reviews that ensure the Company earns only its authorized return, in a timelier and less costly manner than in traditional ratemaking. Atmos proposes that the ARM replace the Pipeline Replacement Program ("PRP") mechanism and process, with plant investment and recovery pursuant to KRS 278.509 being included in the annual comprehensive review of Atmos's financial performance. Atmos states that the ARM creates a streamlined, lower cost, and more rational process that annually adjusts rates to reflect current operations. It further alleges that it would benefit customers by avoiding the costly and resource-intensive traditional rate case process, and would eliminate concerns that its earnings are too high. Atmos states that the PRP addresses only investment in eligible pipeline replacement programs and that it does not adjust for other changes in revenues and expenses or in its capital structure or cost of debt.

Details of the proposed ARM are set out in the proposed new Annual Review Mechanism tariff, Sheet Nos. 42 through 42.5, and in Exhibit GKW-3 of the Waller Direct Testimony. Atmos indicated that it would make annual ARM filings based on the forward-looking test year revenue requirements on or before December 1 of each year, starting this year, with rates effective the following April 1.¹¹⁷ Revenues and certain costs would be subject to true-up based on actual costs as filed in an annual

¹¹⁵ Waller Testimony at 5.

¹¹⁶ Id. at 6.

¹¹⁷ In order to address an expressed concern of Attorney General witness Kollen regarding the inflation factor proposed to be applied to Atmos's capital budget, the Waller Rebuttal Testimony on page 12 proposes a modification to align the forward-looking test year with Atmos's fiscal year, and change the ARM filing date to June 1, for rates to be effective October 1, with a resulting forward-looking test year of October 1 to September 30.

reconciliation filing. All customer classes are proposed to be subject to ARM rate changes except special contract customers.

The Attorney General's opposition to the proposed ARM is set out in the Kollen Direct Testimony and was addressed in its Brief. The Attorney General recommends that the ARM be rejected because 1) it is not necessary to achieve annual or more frequent rate increases; 2) it is not necessary to eliminate regulatory lag due to Atmos's ability to use a forecasted test year; 3) it will harm customers by forcing the incurrence of more frequent and larger increases without the traditional rate case process review; 4) there is no support for Atmos's claim that the ARM will result in savings due to reduction in ratemaking cost, and; 5) the ARM removes the utility's incentive to exercise management control to maintain its authorized return between rate cases. 118 Atmos responded to the Attorney General's criticism of the ARM in rebuttal testimony by reiterating that the traditional rate case process is burdensome and expensive when compared to the proposed ARM, and referenced other state regulatory commissions that have found annual mechanisms to be a preferable alternative. Atmos stated that streamlining the ratemaking process through the proposed ARM would assist both the Commission and Commission Staff during a time of severe budget cuts by reducing the time and resources currently required to process traditional rate cases. Atmos countered the Attorney General's position that the ARM would harm customers, stating that the ARM has necessary safeguards to ensure customers are not harmed, and that the true-up component provides that customers pay no more than the cost of service plus the Commission-approved return. Atmos further contended that the proposed

¹¹⁸ Kollen Testimony at 68–70.

ARM would result in stable and gradual increases or decreases in rates, and reduce or prevent rate shock that stems from traditional rate cases. Atmos states that the ARM mechanism provides more regulatory oversight of its expenses and investments through the annual review and reconciliation process by the Commission as well as third parties such as the Attorney General. In response to the Attorney General's concern regarding decreased review and oversight in comparison to the traditional ratemaking process, Atmos offered to modify its proposed ARM process to develop a procedural schedule for each filing, which would include multiple rounds of discovery and the opportunity for intervenor testimony.

In his Brief, the Attorney General claims that neither KRS Chapter 278 nor the Commission's administrative regulations contemplate or permit a ratemaking scheme such as the proposed ARM, and that in general, the Commission should continue to deny formula base ratemaking mechanisms.¹²¹

The Commission finds that the current ratemaking process is aligned with Kentucky statutes and regulations, ensures the public interest is served, and that it is fair to Atmos and its shareholders. The proposed ARM, while it may meet the needs of commissions in other jurisdictions, is not attractive in its offer of expediency or its relative guarantee of return. The Commission shares some of the concerns of the Attorney General with regard to lack of clear benefit to customers beyond that of a decrease in regulatory expense, and a predictable and possibly gradual annual increase

¹¹⁹ Martin Rebuttal Testimony at 3-6.

¹²⁰ Waller Rebuttal Testimony at 13.

¹²¹ Attorney General Brief at 6.

in rates, the possibility of rate decreases notwithstanding. Moreover, to approve an annual ratemaking mechanism that could subsequently, and perhaps inevitably, be requested by and approved for 42 other gas and electric utilities and dozens of regulated water and sewer utilities, does not appear to provide benefits to the Commission, Commission Staff, intervenors, or consumers in terms of using scarce resources to produce reasonable outcomes. The Commission, therefore, finds that the proposed ARM tariff and mechanism should be denied.

Pipeline Replacement Program

In Case No. 2017-00308,¹²² the Commission found in its October 27, 2017 Final Order that the significant increase in the cost of Atmos's PRP Rider since it was approved in Case No. 2009-00354¹²³ warranted a more detailed review in this case. The Commission noted that "when Atmos's PRP Rider was approved in 2010, the 15-year program included the replacement of 250 miles of bare steel pipe and services at a cost estimated to be \$124 million. Atmos subsequently discovered that there was an additional 100 miles of bare steel pipe to be replaced, and then added the replacement of the Shelbyville Line at a cost of \$21.7 million and the Lake City Line at a cost of \$5.7 million, both due to safety and reliability concerns. Atmos now estimates the cost of the pipeline replacement program to be \$438 million for 350 miles of bare steel pipes and services and the two additional projects. Thus, the cost per mile for replacing the bare steel pipe and services has more than doubled, from just under \$500,000 per mile to

¹²² Case No. 2017-00308, Electronic Application of Atmos Energy Corporation for PRP Rider Rates (Ky. PSC Oct. 27, 2017).

¹²³ Case No. 2009-00354, Application of Atmos Energy Corporation for an Adjustment of Rates (Ky. PSC May 28, 2010).

just over \$1.17 million per mile." Atmos affirmed in that case and reiterated during the course of this proceeding, its intent to complete the PRP within the 15-year time period originally approved in Case No. 2009-00354.

The Attorney General recommends that the Commission terminate the PRP and PRP Rider, or in the alternative cap, the annual PRP Rider increases. The Attorney General considers the PRP and associated Rider to be a growth vehicle for earnings, with customer rates steadily increasing between base rate increases. ¹²⁴ In the Attorney General's Post-Hearing Brief, it cited the fact that most of the PRP cost increases that have been projected by Atmos are expected to occur beginning with the end of fiscal year 2017. ¹²⁵ The Attorney General states that if the Commission approves the continuation of the PRP, it would be reasonable for the Commission to establish a total PRP rate increase cap of 5 percent, to protect customers from increases that the Attorney General terms "wild" and "open-ended." ¹²⁶

In its Reply Brief, Atmos countered the Attorney General's assertions that the PRP is excessively costly because Atmos's growth rate is relatively flat, that there are virtually no savings associated with the program, and that the PRP is specifically designed to minimize Commission oversight over PRP projects. Atmos emphasized that the focus of the PRP is safety, which is not a growth-driven factor and therefore makes miles of pipeline replaced and the cost of replacement irrelevant. According

¹²⁴ Kollen Testimony at 73-74.

¹²⁵ Attorney General's Brief at 17.

¹²⁶ Id. at 20.

¹²⁷ Atmos Reply Brief at 1.

to Atmos, the Attorney General's argument fails to recognize that the fundamental purpose of infrastructure mechanisms such as the PRP is to accelerate replacement of aging infrastructure that poses safety and reliability concerns. Atmos states that KRS 278.509 was enacted to encourage, and not discourage, safety-related investment. Atmos maintains that the Attorney General's analysis of the PRP has provided no evidence that costs incurred to date are not fair, just, and reasonable, and thus properly recoverable. 128 Atmos further claims that the Attorney General's analysis fails to consider that its cost projections beginning in 2023 include other types of pipe including early generation and un-locatable plastic pipe. 129 With regard to the argument concerning Commission oversight, Atmos states that the Commission reviews and scrutinizes each project and expenditure annually, with opportunity for the Attorney General to intervene in PRP proceedings. Atmos further claims that if the Commission were to accept the Attorney General's recommendation to terminate the PRP and instead review PRP projects and expenditures in base rate proceedings, it will necessarily limit the time and depth of analysis currently afforded to the Commission. 130

The Commission has consistently found that the public interest is served by pipeline replacement programs that have been approved as being fair, just, and reasonable. To the extent that the pipeline eligible for recovery poses a safety risk to the utility's customers, service areas, and employees, the Commission has proven itself to be in favor of accelerated replacement. Having considered the record with regard to

¹²⁸ Id. at 2.

¹²⁹ Id. at 3.

¹³⁰ Id. at 6.

Atmos's PRP, the Commission finds that up to this point Atmos has operated within the parameters of the Commission's prior approval with regard to the pace of replacements. The eligible bare steel pipeline replacements for which Atmos's PRP is approved, however, cannot reasonably be made and funded by ratepayers at the levels estimated by Atmos for the PRP program years of 2019 through 2022. The Commission trusts that Atmos replaced the highest-risk pipeline on its system first and that it will continue to risk categorize the remaining pipeline to be replaced. Responses to requests for information filed by Atmos in this proceeding show that the annual number of leaks on its system has decreased significantly since the inception of the PRP, Table and that its system's lost and unaccounted for gas percentage ("L&U") has been in a range of .84 percent to 2.32 percent since 2009 when its L&U was 3.45 percent.

Atmos's direct and rebuttal testimony, responses to requests for information, witness testimony at the hearing, and post-hearing brief have assured the Commission that Atmos will make any necessary effort or investment to ensure the safety of its customers and the integrity of its system. The Commission agrees with the Attorney General, however, that Atmos's annual recovery of investment should be limited, and that it can be limited without risk to public safety. Information provided by Atmos was sufficient to show that extending its program by an additional 10 years would

¹³¹ Atmos indicated in response to Post-Hearing Request for Information 3, Item 3, page 2, that it anticipates the replacement of bare steel pipeline in its system will be complete in 2022, with estimated investment totaling \$234.3 million, consisting of \$51.1 million in 2019 to replace 63 miles of bare steel pipe; \$56.9 million in 2020 to replace 70 miles of bare steel pipe; \$63.2 million in 2021 to replace 78 miles of bare steel pipe.

¹³² Atmos's response to Staff's Second Request, Item 18.d.

¹³³ Atmos's response to Staff Post-Hearing Request for Information, Item 9.

necessitate estimated annual PRP investment of \$28 million.¹³⁴ The Commission finds that Atmos's PRP and associated Rider should be approved. We find, however, that the original 15-year PRP time period should be extended and that annual ratepayer-funded PRP investment should be limited to \$28 million, barring the identification of a PRP eligible pipeline-related hazard that could not have been reasonably foreseen. \$28 million in annual investment should cause the remaining PRP for bare steel replacement to be complete in 8 - 9 years beginning in 2019 with estimated completion in 2027, adding two years to the originally approved 15-year timeframe. The Commission finds the annual investment amount of \$28 million to be reasonable based on Atmos's average actual annual PRP investment from 2012 through 2017.¹³⁵

Commission Staff propounded multiple post-hearing requests for information to Atmos in an effort to reconcile conflicting information concerning its 2018 PRP activities, its replacement completion rate, and most importantly its budget estimates representing millions of dollars of future ratepayer investment. Atmos's inconsistent and unsupported estimates for PRP-eligible projects that it states are necessary to complete the program is of great concern to the Commission. Atmos's projections based on a 12 percent future annual escalation rate resulted in an estimated \$517.8 million remaining investment amount that caused the Commission to question the reliability of the

¹³⁴ Atmos's response to Staff's Fourth Request, Item 9. The Commission notes that Atmos provided this information in the context of investment required to replace all at-risk pipeline, both bare steel, which is eligible for replacement, and plastic for which it has not requested or received Commission approval, as further explained in response to Post-Hearing Request for Information 3, Item 3.

¹³⁵ Atmos's response in Case No. 2017-00308 to the Attorney General's First Request for Information, Item 1(b)iv. provided a table summarizing annual actual and projected PRP capital investment for 2011 through 2022. The amounts provided in the table produced a six-year actual average PRP investment of \$27.4 million. Actual PRP investment for 2011, the first year of PRP spending, was \$3.7 million and is not considered representative.

estimates and the reasonableness of the program as currently structured. Atmos stated in its April 20, 2018 response that the PRP estimates for 2023 through 2025 that it provided in Case No. 2017-00308, and which it has continued to support in this case (\$70.7 million in 2023; \$79.2 million in 2024; and \$88.7 million in 2025), are actually cost of "estimated miles of early generation and un-locatable plastic" pipe, 136 which are not currently eligible for replacement through the PRP. The Commission, therefore, finds these future cost estimates to be speculative despite Atmos's reliance on past Commission decisions concerning eligibility of projects beyond bare steel, 137 and no conclusions can be reached about the appropriate timeframe for their recovery in this proceeding.

KRS 278.509 authorizes the recovery of PRP investment costs only when the Commission has deemed the costs to be fair, just, and reasonable. In order to remove any question as to the reasonableness of the ratepayer-funded PRP, we therefore, find that Atmos's recovery of PRP investment should be based on actual spending subject to the \$28 million cap in a historic 12-month period, and that budget estimates for funding a future PRP period will no longer be accepted as the basis for calculating the PRP Rider rate.

Atmos should file a revision to Sheet No. 38 of its tariff to state that its annual PRP filing will reflect the impact on the company's revenue requirements of net plant additions during the most recent 12 months ended September 30, with adjustment to the Rider becoming effective March 1. Annual PRP applications should be filed no later

¹³⁶ Atmos's response to Staff's Third Post Hearing Request for Information, Item 3.

¹³⁷ Id.

than January 1. Atmos may include with its tariff revisions a provision for a balancing adjustment to reconcile collections with actual investment for the preceding program year. Applications should include sufficient detail with regard to individual projects completed to support the annual PRP revenue requirements. Atmos should also include in its annual PRP filling details concerning planned projects for the upcoming year similar to what it currently files for its future PRP investment approval.

Research and Development Rider

Atmos proposed to increase its R&D Rider rate from \$.0035 per Mcf to \$.0174 per Mcf. Collections through the R&D Rider support the research of the Gas Technology Institute ("GTI"). Atmos explained in testimony and in its Post-Hearing Brief that the R&D Rider charge has remained at the level of \$.0035 per Mcf since it was first approved by the Commission in its final Order in Case No. 1999-00070. The R&D Rider is a standalone rate that is designed to recover only Atmos's contributions in support of the research of GTI. No revenues or expenses related to the R&D Rider are included in, or otherwise affect, base rates. Atmos currently recovers approximately \$56,000 through the Rider, and proposes to increase that amount to \$278,000 annually. Atmos states that the proposed \$.0174 per Mcf R&D Rider charge is equal to the interstate pipeline charge it paid prior to the phase-out of that charge in 2004. The state of the charge in 2004.

In support of its request to increase funding to GTI through the R&D Rider,
Atmos states that technologies developed by GTI, and supported by Atmos and its

¹³⁸ Case No. 1999-00070, Application of Western Kentucky Gas Company for an Adjustment of Rates (Ky. PSC Dec. 21, 1999).

¹³⁹ Martin Direct Testimony at 20.

ratepayers, have benefited gas consumers. Benefits cited by Atmos are increased safety, enhanced deliverability, contained costs for distribution O&M, enhanced environmental quality, and greater system integrity through the development of distribution operations technologies. Atmos states that its proposed increase in GTI funding to \$278,000 is in line with the funding approved by the Commission for Columbia Gas of Kentucky, Inc. ("Columbia"), which collects \$300,000 annually for remittance to GTI pursuant to its Rider for Natural Gas Research and Development.

The Attorney General recommends in testimony and in its Brief that the Commission either terminate the R&D Rider or reject the proposed increase to Atmos's funding to GTI, arguing that Atmos has not shown any direct benefit to Kentucky customers resulting from the funding. The Attorney General points out that the funding is discretionary and states that the ratepayers' sponsorship of GTI through the Rider ultimately benefits industry vendors and manufacturers by subsidizing their product development research.¹⁴²

The Commission finds that Atmos's request to increase the R&D Rider rate to the level it paid through the 2004 interstate pipeline charge is reasonable and should be approved. The Commission further finds that the value of benefits received by Atmos's customers and gas consumers, in general, outweighs the bill increase to its

¹⁴⁰ Martin Rebuttal Testimony at 11.

¹⁴¹ Martin Direct Testimony at 22 and Atmos Brief at 85.

¹⁴² Kollen Testimony at 75-76.

customers.¹⁴³ While the R&D Riders of both Atmos and Columbia were initially approved as a result of rate case settlements in which the Attorney General was a participant, the Commission approved a GTI Rider for Delta Natural Gas Company, Inc. ("Delta") in a contested rate proceeding in Case No. 2004-00067.¹⁴⁴ Despite the opposition of the Attorney General, the Commission stated in its final Order that:

The Commission agrees with Delta's proposal to recover monies to voluntarily fund GTI research through a tariff rider. The Commission has provided a clear signal to jurisdictional gas utilities in the past that it supports research and development efforts in the gas industry. Allowing recovery via a rider is consistent with Commission decisions for two other gas utilities, Atmos Energy and Columbia Gas of Kentucky. 145

This decision is also consistent with a resolution issued by the National Association of Regulatory Utility Commissioners ("NARUC") in support of research and development funded by gas and electric utilities and performed by institutions such as GTI.¹⁴⁶

The Commission notes that not all states in which Atmos operates have approved ratepayer contributions to research and development. This arguably creates a "free rider" issue because consumers that do not contribute to the efforts of entities such as GTI share in benefits in which they have no investment. The Commission

¹⁴³ According to the Notice Atmos provided to its customers, the average residential bill will increase \$.07 per month and the average commercial bill will increase \$.36 per month as a result of the increase in research and development funding through the Rider.

¹⁴⁴ Case No. 2004-00067, Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates (Ky. PSC Nov. 10, 2004).

¹⁴⁵ Case No. 2004-00067, final Order at 59.

¹⁴⁶ NARUC Resolution on Public Purpose Research & Development in the Electricity and Natural Gas Industries, adopted November 12, 1997.

finds, however, that all gas consumers including the customers of Atmos, the utility itself, and the general public, benefit sufficiently from the relatively small investment that it is reasonable for an average residential customer's annual bill to be increased less than a dollar. While private firms may benefit as well, their investment in research and development may not adequately fund science and technology activities that produce important health and safety benefits. With pipeline safety concerns often at the forefront on a national level, R&D Rider funding appears to be a natural accompaniment to pipeline replacement programs approved pursuant to KRS 278.509.

Demand-Side Management Cost Recovery Mechanism, Demand-Side Management

The Commission finds that, upon the implementation of new base rates, the demand-side management ("DSM") Lost Sales Adjustment component of Atmos's DSM cost-recovery mechanism should be reset to zero. Atmos's compliance tariff should reflect this revision to the DSM Cost Recovery Mechanism.

SUMMARY

The Commission, after consideration of the evidence of record and being otherwise sufficiently advised, finds that:

- 1. The rates set forth in Appendix B to this Order are the fair, just, and reasonable rates for Atmos to charge for service rendered on and after May 3, 2018.
- 2. The rate of return granted herein is fair, just, and reasonable and will provide sufficient revenue for Atmos to meet its financial obligations with a reasonable amount remaining for equity growth.
- The rates proposed by Atmos would produce revenue in excess of that found reasonable herein and should be denied.

- 4. Atmos's depreciation rates, as approved in Case No. 2015-00343, should remain in effect until a new depreciation study is filed and accepted by the Commission.
- 5. Atmos should file a new depreciation study for Commission review by the earlier of five years from the date of this Order or the filing of its next general rate application.
 - 6. The proposed ARM and associated tariffs should be denied.
 - 7. The PRP and associated tariffs should be modified as discussed herein.
 - 8. Atmos's request to increase its R&D Rider Rate should be approved.

IT IS THEREFORE ORDERED that:

- 1. The rates and charges proposed by Atmos are denied.
- 2. The rates in Appendix B to this Order are approved for service rendered by Atmos on and after May 3, 2018.
- 3. Atmos's depreciation rates, as approved in Case No. 2015-00343, shall remain in effect until a new depreciation study is filed and accepted by the Commission.
- 4. Atmos shall submit a new depreciation study for Commission review by the earlier of five years from the date of this Order or the filing of its next general rate case.
 - 5. The proposed ARM is denied.
- 6. Atmos's future recovery of PRP investment is limited to \$28 million annually and shall be recovered based on a historic 12-month period as described herein.
- 7. Within 20 days of the date of this Order, Atmos shall file with the Commission, using the Commission's Electronic Tariff Filing System, new tariff sheets

setting forth the rates, charges, and revisions approved herein, including those required for the PRP, and reflecting their effective date and that they were authorized by this Order.

8. Absent a request for rehearing, this case will be closed and removed from the Commission's docket upon expiration of the statutory time period to request rehearing.

Partial Dissenting Opinion of Vice Chairman Robert Cicero in Case No. 2017-00349

The majority approves the R&D Rider and rate increase from \$.0035 per Mcf to \$.0174 per Mcf, finding it to have sufficient public interest value to justify the additional charge to the customers of Atmos; however, I do not agree. Although funding for GTI is discretionary for the utility, once the Commission approves the rate it is mandatory for Atmos's sales customers. The current \$.0035 per Mcf rate was approved almost 20 years ago, and while I do not believe ratepayers receive a direct benefit from the R&D Rider, at least the rate charged represented a *de minimis* and familiar portion of the customers' bills. Increasing the amount remitted to GTI annually is not reasonable given the very general benefits that *may* accrue to not only Atmos's customers, but also to customers of utilities that do not charge such rates, or whose regulatory Commissions will not approve them, and to private industry. Atmos's ratepayers are already investing a sufficient monetary amount through the PRP surcharge to ensure the safety of the system and the communities served; therefore, additional funding charged through the R&D rate appears burdensome.

Thus, while I join the rest of the Commission with respect to the final order, I respectfully dissent only to the decision regarding the R&D Rider rate increase.

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By the Commission

ENTERED

MAY 03 2018

KENTUCKY PUBLIC SERVICE COMMISSION

Vice Chairman Robert J. Cicero dissenting in part.

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00349 DATED MAY 0 3 2018

Adjustment	Amo	ount
Atmos Request Based on Original Filing	\$	10.416
Atmos Modification of Request to Correct Filing Errors	\$	(0.053)
Atmos Modified Request Amount to Correct Filing Errors	\$	10.363
Remove Forecast 12% Escalation on Capital Additions for Kentucky Non-PRP Oct 2018-Mar 2019	\$	(0.054)
Remove Account 190 ADIT Not Associated With Cost of Service		(0.174)
Reflect Cash Working Capital Based on Lead/Lag Study	\$	(0.084)
Remove Prepayments from Rate Base	\$	(0.167)
Reflect 3-Year Amortization Period for Rate Case Regulatory Asset	\$	0.003
NOLC Balancing Adjustment	\$	0.230
Reduce Amortization Expense for Rate Case Regulatory Asset	\$ \$ \$	(0.053)
Remove Directors Stock Expense	\$	(0.183)
Reduce Retirement Plan Expenses	\$	(0.579)
Reduce Income Tax Expense to Reflect Reduction in Federal Income Tax Rate	\$	(6.796)
Reduce Income Tax Expense to Amortize Excess ADIT	\$	(1.981)
Remove Escalation in Ad Valorem Taxes	\$	(0.543)
Adjust Depreciation Expense to Remove Forecast 12% Escalation on Non-PRP Capital Additions	\$	(0.021)
Reduce Long Term Debt Rate by Reflecting Redemption and Reissue of High Interest Debt	\$	(0.043)
Reflect Return on Equity of 9.70%	\$	(1.808)
Total Adjustments	\$	(12.254)
Total Increase/(Decrease)	\$_	(1.891)

Dollar amounts shown are in millions.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00349 DATED MAY 0 3 2018

The following rates and charges are prescribed for the customers served by Atmos Energy Corporation. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to the effective date of this Order.

RATE G-1 GENERAL FIRM SALES SERVICE

Base Charge

\$17.50 per meter per month for residential service \$44.50 per meter per month for non-residential service

Distribution Charge

First 300 Mcf \$ 1.7250 per Mcf Next 14, 700 Mcf \$.9600 per Mcf Over 15, 000 Mcf \$.7700 per Mcf

RATE G-2 INTERRUPTIBLE SALES SERVICE

Base Charge

\$375.00 per delivery point per month

Distribution Charge

First 15, 000 Mcf \$.8550 per Mcf Over 15, 000 Mcf \$.6350 per Mcf

RATE T-3 INTERRUPTIBLE TRANSPORTATION SERVICE

Base Charge

\$375.00

per delivery point per month

Distribution Charge for Interruptible Service

First

15, 000 Mcf

\$.8550 per Mcf

Over

15, 000 Mcf

\$.6350 per Mcf

RATE T-4 FIRM TRANSPORTATION SERVICE

Base Charge

\$375.00

per delivery point per month

Distribution Charge for Firm Service

First

300 Mcf

\$ 1.7250 per Mcf

Next

14, 700 Mcf

\$.9600 per Mcf

Over

15, 000 Mcf

\$.7700 per Mcf

Research and Development Rider

\$.0174 per Mcf

Pipeline Replacement Program Rider Rates

	Monthly Customer Charge		stribution rge per Mcf
Rate G-1 (Residential)	\$ 0.00		\$0.00
Rate G-1 (Non-Residential)	\$ 0.00		\$0.0000
Rate G-2	\$ 0.00	1-15,000 Mcf Over 15,000 Mcf	\$0.0000 \$0.0000
Rate T-3	\$ 0.00	1-15,000 Mcf Over 15,000 Mcf	\$0.0000 \$0.0000
Rate T-4	\$ 0.00	1-300 Mcf 301-15,000 Mcf Over 15,000 Mcf	\$0.0000 \$0.0000 \$0.0000

*Honorable John N Hughes Attorney at Law 124 West Todd Street Frankfort, KENTUCKY 40601 *Eric Wilen Project Manager-Rates & Regulatory Affairs Atmos Energy Corporation 5420 LBJ Freeway, Suite 1629 Dallas, TEXAS 75420

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Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division AG DR Set No. 1 Question No. 1-01 Page 1 of 4

REQUEST:

Refer to Atmos' response to PSC Staff DR 2-01 (a)-(c), in case number 2017-00308, wherein the Company states that it proposed the PRP program because the "bare steel pipe had been in the ground approximately 50-75 years" and that "the ultimate goal of the Company's PRP program is the accelerated replacement of aging infrastructure that has outlived its useful life."

- a. Is Atmos in control of capital expenditures, such as when it replaces infrastructure? If not, who controls the capital expenditures of Atmos? The PSC?
- b. If the answer to (a), above, is that Atmos is the entity that controls its capital expenditures, then why should customers pay more for accelerated replacement of pipe, when it was Atmos that allowed so much infrastructure to "outlive[] its useful life?"
- c. If the answer to (a), above, is that any other entity or body controls Atmos' capital expenditures, why should the Commission allow such control?
- d. Confirm that the Company believes the singular purpose of the PRP is the accelerated replacement of aging infrastructure that has outlived its useful life and/or poses a possible safety and/or reliability concern.
- e. Where does Atmos find support for "reliability concern" being a determining factor for inclusion through the Company's PRP?
- f. Does the Company believe it must be incentivized to replace aging or unsafe infrastructure with mechanism such as the PRP? If not, then explain the statement, "the accelerated replacement of aging infrastructure allows the Company to modernize its distribution system."
- g. What preempts Atmos' ability to adequately replace aging or unsafe infrastructure without the use of the PRP.
- h. Confirm that the purpose of the PRP is to expedite the recovery of costs.

Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division AG DR Set No. 1 Question No. 1-01 Page 2 of 4

RESPONSE:

- a) Yes, To the extent its level of investment ensures compliance with federal, state and local regulations, Atmos Energy manages the pace with which investment is made in infrastructure replacement as well as all other capital investment. The Company strives to be the safest provider of natural gas service and will always operate a safe and reliable service.
- b) The Company disagrees with the premise of the question. The method of replacement through its pipeline replacement program (PRP) benefits the customer by permitting obsolete infrastructure to be removed at an accelerated pace in an efficient manner. Please note that the Company's PRP is allowed by Kentucky statute, KRS 278.509. According to the American Gas Association, forty-one (41) states including the District of Columbia have specific rate mechanisms that foster accelerated replacement of pipelines no longer fit for service. While the Company's PRP does accelerate the replacement of aging infrastructure, it is a safety program. Atmos Energy is one of many utilities to have a PRP in Kentucky or the United States. The Company is replacing aging infrastructure to be proactive in modernizing its system. Providing safe and reliable gas service to all of its customers is Atmos Energy's most fundamental objective. The Company is acutely aware that its actions can directly impact the safety of its customers, communities and employees. The importance of focusing on safety is magnified when one considers the natural gas incidents that have resulted in loss of life, injuries, and damage to property.
- c) Not applicable.
- d) Deny, the PRP has more than a "single purpose". The Company can confirm that one purpose of the PRP is to provide a benefit to the customer by accelerating replacement of aging infrastructure that poses a possible safety and/or reliability concern in a manner that is more efficient than replacement and recovery through litigated rate case proceedings.
- e) Please refer to the Commission's Order in Case No. 2014-00274 in which the Company listed safety and reliability concerns as reasons for the replacement of the Shelbyville Line within the Company's PRP.

Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division AG DR Set No. 1 Question No. 1-01 Page 3 of 4

- f) As stated above, the Company strives to be the safest provider of natural gas service and the Company's PRP is a safety program which is allowed by statute. The incentive of the PRP is to replace aging infrastructure on a more proactive basis creating a more modern system that is both safer and more reliable. Bare steel pipe is prone to failure over time. The number one cause of leaks on bare steel pipe is corrosion and once the corrosion process has started, corrosion will continue until the pipe fails. As a result of these concerns, the accelerated replacement of pipes made of bare steel materials is reasonable and prudent and such pipes and services should be replaced as expeditiously as possible to ensure the system remains safe.
- As stated above, the Company's PRP is allowed by statute and is a more efficient method of investment/recovery than investment/recovery through litigated rate proceedings and thus more beneficial to the customer than recovery through litigated proceedings. This more efficient recovery is also in line with advice from state and federal regulators. In a letter to the National Association of State Regulatory Commissions ("NARUC"), the Pipeline and Hazardous Materials Safety Administration ("PHMSA") administrator stated, "[W]e appreciate the NARUC's continued diligence in promoting rate mechanisms that will encourage and enable pipeline operators to take reasonable measures to repair, rehabilitate or replace high-risk gas pipeline infrastructure." PHMSA further requests NARUC's "support in ensuring that [state] commissions implement effective programs for the timely repair, replacement, and rehabilitation of high-risk gas pipeline infrastructure."

In response to fatal explosions caused by natural gas pipeline failures in Allentown, Pennsylvania and San Bruno, California, the Secretary of Transportation Ray LaHood issued a Call to Action. The Call to Action called on pipeline operators and owners to review their pipelines and quickly repair and replace sections in poor condition. NARUC responded by issuing a resolution encouraging "regulators and industry to consider sensible programs aimed at replacing the most vulnerable pipelines as quickly as possible along with the adoption of rate recovery mechanisms that reflect the financial realities of the particular utility in question" and further encouraging state commissions to "consider adopting alternative rate recovery mechanisms as necessary to accelerate the modernization, replacement and expansion of the nation's natural gas pipeline systems." Consistent with these calls to action, in Proceeding No. 2009-00354, Atmos Energy proposed the PRP to provide timely recovery of safety and reliability investments and to help reduce the frequency of base rate proceedings.

Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division AG DR Set No. 1 Question No. 1-01 Page 4 of 4

h) Confirm. While the recovery of costs is a benefit of the PRP, the primary purpose of the PRP, which is allowed by statute, is to replace aging infrastructure on a more proactive basis creating a more modern system that is both safer and more reliable.

Respondents: Mark Martin and Greg Waller

Case No. 2018-00281 Atmos Energy Corporation, Kentucky Division Staff DR Set No. 3 Question No. 3-22 Page 1 of 2

REQUEST:

Refer to Atmos's response to the Attorney General's Initial Request, Item 8.

- a. Confirm that it is Atmos's intent to limit former-PAP expenditures to \$28 million per year. If confirmed, explain why "PRP Investment" amounts of \$28.8 million are listed for fiscal years 2019 and 2020.
- b. Explain in detail and include a listing of major projects, the 70 percent increase in "Non PRP Investment" between fiscal years 2018 and 2019.

RESPONSE:

 Confirmed. The \$28.8 million figures in 2019 and 2020 were erroneous. The corrected table follows:

-			
.X	mi	lions	r

Fiscal Year	RP stment	100000	n PRP estment	 al Direct estment	PRP as	
2013	\$ 17.2	\$	18.3	\$ 35.5		48%
2014	22.7		26.6	49.3		46%
2015	36.9		18.6	55.5		66%
2016	30.0		34.2	64.2		47%
2017	39.9		33.0	72.9		55%
2018	45.9		33.9	79.8		58%
2019	28.0		58.7	86.7		32%
2020	28.0		68.7	96.7		29%

Please see Attachment 1 to the Company's response to Staff DR No. 3-27 for project level detail by month for the Company's fiscal 2019 budget. The Attachment lists PRP projects for FY19 that total \$28.8 million. While this is \$0.8 million higher than the \$28 million ordered by the Commission in Case No. 2017-00349, it is and will continue to be the Company's intention to comply with the Commission's Order. The \$0.8 million discrepancy represents 2.9% of the intended PRP target and is due to the systematic allocation of the overhead pool across projects in the Company's budgeting system.

b. Please see Attachment 1. The primary drivers of the increase in non PRP investment between 2018 and 2019 are the ANR Bon Harbor, Paducah Mall & Creek HCA, and KY Farm Tap projects.

Case No. 2018-00281 Atmos Energy Corporation, Kentucky Division Staff DR Set No. 3 Question No. 3-22 Page 2 of 2

ANR Bon Harbor - Project includes the installation of approximately 4 miles of 8 inch from ANR/TransCanada purchase in Stanley, KY to Atmos Energy's Bon Harbor storage field. Gas conditioning equipment at the storage field is being upgraded for well injection/withdraw and will eliminate on-site compression. With successful completion of the project, the existing 4 inch pipeline running from Stanley to Bon Harbor will be downgraded from Transmission to High Pressure Distribution, eliminating a High Consequence Area (HCA) in Owensboro and reducing risk.

Paducah Mall & Creek HCA - Project involves the replacement of approximately 15,000 feet of 8 inch steel transmission pipe eliminating one High Consequence Area (HCA). The installation of the new pipe allows the operation of existing pipe at distribution pressure, eliminating approximately (12) farm taps and (2) above-ground regulator stations in a high-traffic business district.

KY Farm Tap projects - per PHMSA amended 192.740 regulation (published 3/24/17) titled 'Pressure regulating, limiting, and overpressure protection - Individual service lines directly connected to a production, gathering, or transmission pipeline' (AKA 'Farm Tap Rule'), operators have 3 years to rebuild or modify 'Farm Tap' stations to be routinely inspected every 3 years using the same criteria as distribution system stations. Atmos Energy has approximately 928 farm taps to rebuild/replace and has budgeted work in several cost centers in order to meet this regulatory deadline.

For further explanation, please see the testimony of Greg Waller at the Hearing in Case No. 2017-00349 on the hearing video from approximately 4:23 - 4:29 (run time) which occurred from approximately 2:35 - 2:41 PM on March 22, 2018.

ATTACHMENT:

ATTACHMENT 1 - Atmos Energy Corporation, Staff_3-22_Att1 - Non-PRP Investment FY18 vs. FY19.xls, 5 Pages.

Respondents: Greg Smith and Greg Waller

The contract of	The best first the contract of the party of the contract of the contract of	CATALOG OF THE STATE OF THE STA	Charles and a second of the later of the	reches Victor
2609	CCB Description	CB Budget Cat	2018	\$0.04
2609	2609.Abandon Taps.FY19 2609.ANR.Bon Harbor	System Integrity System Improvements	\$2,416	\$8.65
	2609.Bypass Hoses.FY19	Equipment	\$2.410	\$0.00
	2609.Contacter Replacement	System Integrity		\$0.5
	2609.Equipment.FY18	Equipment	\$0.025	70.3
	2609. Farm Taps. FY19	System Integrity	\$0.004	\$2.74
	2609.Grandview Well Workover	System Integrity	(\$0.001)	
	2609.Leak.Functional	System Integrity	\$0.001	
	2609.Midwestern.Trans.Boiler	System Improvements	\$0.115	
	2609.Stonebore Methanol Pumps	Equipment	•	\$0.0
5	2609.Wescor 6" Exposure.FY19	System Improvements	2	\$0.18
	BonHarbor.P&A 3 Wells.WO BH7	System Integrity	(\$0.000)	
	Grandview Well Workover.FY18	System Integrity	\$0.228	\$0.54
	Hickory.Junction Valve Repl.17	System integrity	\$0.018	A
	Odorant Tank Disposal - FY19	System Integrity	•	\$0.13
609 Total			\$2.806	\$12.8
2612	2612.Gas Supply RTU Install	System Improvements		\$0.09
	2612.KY.Corrector Repl.FY19	System Improvements		\$0.04
	2612.KY.Corrector.Repl.FY18	System improvements	\$0.054	
	2612.KY.ECAT Replacement.FY17	System improvements	\$0.000	
	2612.KY.Emergency.Regulators	System Improvements	\$0.022	
	2612.KY.RTU Upgrades.FY18	System Improvements	\$0.056	
	CB18.2612.01.FQ.009	Equipment	\$0.016	
	KY.East Diamond.RTU Upgrade	System Improvements	\$0.020	\$0.0!
	KY.Emergency Regulators.FY19	System Improvements		\$0.02
	KY.Hudson.Foods RTU Upgrade	System Improvements		\$0.02
	Truckline.KY.RTU.Uprgrade	System Improvements		\$0.02
612 Total	11 detailed in 1111 Orb propose	Distantini Oremeno	\$0.147	\$0.26
2634	2634.41A Phase ILFY19	Public Improvements	70.277	\$0.29
	2634.Crystal Gauges.FY19	Equipment		\$0.00
	2634.Equipment.FY18	Equipment	\$0.065	V 0.00
	2634.ERXs Purchase.FY19	System Integrity	*******	\$0.00
	2634.Gas Tracker.FY19	Equipment		\$0.02
	2634.Growth.Functional	Growth	\$0.217	\$0.15
-	2634 Jamison Tracker 800. FY19	Equipment	VO.LET	\$0.00
	2634Juno WMR.FY19	Equipment		\$0.0
	2634.Leak.Functional	System Integrity	\$0.042	\$0.13
	2634.Misc Growth Mains.FY19	Growth	30.042	\$0.0
	2634.Misc.Growth.FY18	Growth	\$0.006	30.00
	2634.Misc.SysInt.Mains.FY18	System Integrity	\$0.269	
	2634.Misc.Sysint.Mains.FY19		30.209	\$0.00
	2634.Misc.Syst.Integ.Main.FY17	System Integrity	(\$0.004)	30.00
	2634.Non.Growth.Functional	System Integrity	45 77.35	\$0.48
		System Integrity	\$0.469	\$0.48
	2634.Office.Repairs	Structures	\$0.014	40.00
	2634.Poole Purchase Replace	System Improvements		\$0.06
	2634.Poole TB Replacement	System Improvements		\$0.05
	2634.Thonridge Rucker#1.FY17	System Improvements	(\$0.000)	
	2634.Town Border 2 Replacement	System Improvements	*****	\$0.16
	2634.YZ Purchase Cover.FY18	Structures	\$0.003	4
	TD Williamson Tapping.FY19	Equipment		\$0,D
	Warehouse Office Remodel.FY19	Structures		\$0.08
	WMR.2634.Dixon Tower.FY19	System Improvements		\$0.07
	WMR.2634.Endpoints.FY17	System Improvements	\$0.005	
	WMR.2634.Spottsville Base.FY19	System Improvements		\$0.03
634 Total			\$1.088	\$1.68
2635	2635.Equipment.FY18	Equipment	\$0.018	
	2635.Equipment.FY19	Equipment	4	\$0.0
	2635.Growth.Functional	Growth	\$0.098	\$0.04
	2635.Leak.Functional	System Integrity	\$0.022	- \$0.0
	2635.Mlsc Growth Mains.FY19	Growth	1	\$0.0
	2635.Misc.Growth.FY18	Growth	\$0.010	
	2635.Misc.Sysint.Mains.FY19	System Integrity	Process Assessment	\$0.0
	2635.Misc.Syst.Integ.Main.FY17	System Integrity	(\$0.000)	1.000
	2635.Non.Growth.Functional	System Integrity	\$0.241	\$0,36
	2635.Reg.Cover Dawson Springs	Structures	\$0.004	
	2635.WMR.Endpoints.FY18	System Improvements	\$0.618	
	Dawson Springs System Tie Back	System Integrity		\$0.10
and a second of participation of	WMR.2635.Towers.FY18	System Improvements	\$0.124	
635 Total			\$1.135	\$0.68
2636	050.2636.Gateway.Commons	System Improvements	\$0.049	
	2636.5th. St. System Improv.	System Improvements	\$0.020	
	2636.Bentree Tie Back.FY19	System Improvements	,	\$0.05
		at the distribution of the State of the Stat		\$0.05

white publication is the second to	t (\$ Millions) (CCB Description	CB Budget Cat	Fiscal Year 2018	20:
mary Condition or the Condition of the C	2636.Building Access Upgrade	Structures	domining at the bearing and in our works	\$0.03
	2636.Burton Rd Station.FY19	System Improvements		\$0.03
	2636.Equipment.FY19	Equipment		\$0.04
	2636.Fairview.Spur.Reg.FY17	System Improvements	\$0.014	
	2636.FY18 Equipment	Equipment	\$0.055	
-	2636.Gas Tracker.FY19	Equipment		\$0.02
•	2636.Growth.Functional	Growth	\$0.843	\$1.13
	2636.Leak.Functional	System integrity	\$0.266	\$0,37
	2636.Misc Growth Mains.FY19	Growth		\$0.12
	2636.Misc.Growth.FY18	Growth	\$0.125	-
	2636.Mlsc.Growth.Main.Ext.FY17	Growth	\$0.049	
	2636.Mlsc.Sysint.Mains.FY18	System Integrity	\$0,433	
	2636.Misc.SysInt.Mains.FY19	System Integrity	,	\$0.00
	2636.Non.Growth.Functional	System Integrity	\$1.550	\$1.58
	2636.Parking Lot Sealing, FY19	Structures	V-11111	\$0.00
	2636.Settles Rd.Tie Back.FY19	System Improvements		\$0.02
	2636.T. D. Williamson.FY19	Equipment		\$0.03
	Breckenridge.Co.Ind.Park.TBS	System Integrity	\$0.002	20,02
	Hartford Purchase YZ Injector	System Integrity	\$0.068	
	Midwest Purch 6 Valve Repl.	System Integrity	\$0.056	
	Owensboro Warehouse Lighting	Structures	JU.V30	\$0.00
	WMR.2636.Cental.City.Endpoints	System Improvements	\$0.213	\$0.00
	WMR.2636.Central.City.Tower	and the second s	\$0.213	
36 Total	venta.2000.Central.City.10wer	System Improvements		60
2637	040.009 MEC Forfeiture	CA	\$3.803	\$3.54
2037	2637.Blandville Rd Widening	Growth	(\$0.131)	44.00
		System integrity	de de	\$0.00
	2637.CalvertCity Purch Rebuild	System integrity	\$0,600	\$0,38
	2637.Equipment.FY18	Equipment	\$0.105	
	2637,Equipment.FY19	Equipment /		\$0.04
	2637.ERX Purchase.FY18	System Improvements	\$0.018	0.200.000.000
	2637.Estes Lane Reinforcement	System Integrity		\$0.12
	2637.Forsythia Farm Taps.FY18	System Integrity	\$0.059	
	2637.Grade 3 Leak Repairs.FY18	System Integrity	\$0.149	
	2637.Grand Rivers WMR Tower	System Improvements	\$0.037	9.40000000000
	2637.Growth.Functional	Growth	\$0.634	\$0.62
	2637.Hwy 282 Main Repl.FY18	System Integrity	\$0.040	
	2637.KY Farm Taps.FY19	System Integrity		\$0.52
	2637.Leak.Functional	System Integrity	\$0.302	\$0.28
	2637.Meredith Rd Reg.Stat.FY18	System Improvements	\$0.018	
	2637.Misc Growth Mains.FY19	Growth	×.	\$0.18
	2637.Misc.Growth.FY18	Growth	\$0.165	
	2637.Misc.Growth.Main.Ext.FY16	Growth	\$0.000	
	2637.Misc.Growth.Main.Ext.FY17	Growth	\$0.031	
	2637.Misc.SysInt.Main.FY18	System Integrity	\$0.122	
	2637.Misc.Sysint.Mains.FY19	System Integrity		\$0.00
	2637.Misc.Syst.Integ.Main.FY17*	System Integrity	(\$0.001)	
	2637.Non.Growth.Functional	System Integrity	\$1.280	\$1.10
	2637.Odorant Tank Disposal.18	System Improvements	\$0.074	
	2637.Un-tonable Pipe Repl.FY19	System Integrity		\$0.20
	2537.WKCTC Pipe Replacement	System Integrity		\$0.10
	2637.WMR Tower.FY19	System Improvements		\$0.06
	CB13.2637.01.GR.009	Growth	\$0.002	,
	Husband.Rd.Replacement.18	System Integrity	\$0.033	
	Hwy 62 Widening Calvert City	Public Improvements	\$0.106	
	Massac Creek Crossing.FY19	System Integrity	\$0.001	\$0.56
	Paducah Grade #3 Leaks.FY19	System Integrity	\$0.001	\$0.04
	Paducah Isolation Valves.FY19			Contraction of the Contraction o
	Paducah Mali & Creek HCA	System Integrity		\$0.01
	Windsor Square.HCA12.FY16	System integrity System integrity	(\$0,000)	\$7.20
27 Total	ANIMON SAMMENUTATELLID	System integrity		644 4-
37 Total	2020 02 1941		\$3.644	\$11.47
2638	2638.63 FV Replacements.FY19	System Integrity		\$0.02
	2638.Beadlestown Purchase.FY17	System Improvements	\$0.115	
	2638.Equipment.FY18	Equipment	\$0.011	
	2638.Equipment.FY19	Equipment		\$0.00
	2638.Growth.Functional	Growth	\$0.115	\$0.120
	2638.Leak.Functional	System Integrity	\$0.048	\$0.07
	2638.Mayfield ERX.2018	System Improvements	\$0.020	
	2638.Mayfield Heater Repl.FY19	System Improvements		\$0.27
	2638.MAYFIELD. GROWTH MAINS	Growth	\$0.005	
	2638.Misc Growth Mains.FY19	Growth		\$0.00
	2638.Misc.Growth.FY18	Growth	\$0,062	
			\$0,002	
	2638.Misc.Growth.Main.Ext.FY15	Growth		

um of Amount (B Department (CB Description	CB Budget Cat	Fiscal Year 2018	20
The second second second	2638.Misc.Growth.Main.Ext.FY17	Growth	\$0.000	g freinighte so m
	2638.Misc.SysInt.Main.FY18	System Integrity	\$0.091	
	2638.Misc.SysInt.Mains.FY19	System Integrity		\$0.00
	2638.Murray St Replacement	System Integrity		\$0.03
	2638.Non.Growth.Functional	System integrity	\$0.434	\$0.47
	2638.Repair Grade 3 Leaks.FY18 2638.South Relaforcement Ph. 2	System Integrity System Improvements	\$0.041 \$0.924	•
	2638.South Reinforcement.FY17	System Improvements	\$0.006	
	2638.Southern Bypass.FY18	Public Improvements	(\$0.044)	
	2638.Wingo Purchase Upgrade	System Integrity	\$0.154	
	Hardeman Creek Crossing.FY19	System Integrity	\$0.001	\$0.04
	Hardeman Hwy 1710 Farm Taps	System Integrity		\$0.08
	Symsonia Creek Crossing.FY19	System Integrity	\$0.001	\$0.04
638 Total	2724 Automorphism Cont CMC	6 1-41	\$1.991	\$1.14
2734	2734.Aubum Purchase.Stat.FY18 2734.BG Center Line Phase 3	System Integrity System Integrity	\$0.146	\$1.12
	2734.BG Farm Taps.FY19	System Integrity		\$1.05
	2734.Elkton TBS.FY17	System Improvements	\$0.041	Q2.00
	2734.Equipment.FY17	Equipment	\$0.000	
	2734.Equipment.FY18	Equipment	\$0.076	
	2734.FY19.Equipment	Equipment		\$0.11
	2734.FY19.Structure	Structures	2	\$0.01
	2734.Growth.Functional	Growth	\$0.954	\$1.21
	2734.Leak.Functional 2734.McGinnis Quarry Rd.Reinf.	System Integrity	\$0.364	\$0.25
	2734.McGinnis Quarry Rd.Reim. 2734.Misc Growth Mains.FY19	System improvements Growth	\$1.147	\$0.29
	2734.Misc.Growth.FY18	Growth	\$0.202	40.23
	2794.Misc.Growth.Main.Ext.FY14	Growth	(\$0.002)	
	2734.Misc.Growth.Main.FY17	Growth	\$0.025	
	2734.Misc.Sysint.Mains.FY18	System Integrity	\$0.018	
	2734.Misc.Sysint.Mains.FY19	System Integrity		\$0.00
	2734.Misc.Syst.Integ.Main.FY17	System Integrity	\$0.001	
	2734.Non.Growth.Functional	System Integrity	\$1.162	\$1.09
	2734.Scottsville.Rd.Extension 2734.Small House Relo.FY18	Growth	\$0.114	
	2734.Structures.FY18	Public Improvements Structures	\$0.657 \$0.034	
	2734.7hree Springs Rd TBS	System Improvements	\$0.034	\$0.23
	Beechbend Rd. Reinforcement	System Improvements		\$0.15
	BG Purchase Stat. 1 Repic.FY17	System Improvements	\$0.044	(*)
	Logan Aluminum Upgrade	System Improvements	\$0.047	
	McGinnis Quarry Rd TGT Tap	System Improvements	\$0.851	
	Petty Rd to JC Kirby Cemetery	System Improvements		\$0.58
	Plano Rd to Scottsville Rd	System Improvements	4	\$2.51
	Plano.Rd.System Improv.	System Improvements	\$0.003 \$0.008	
	Russellville Rd.Dishman.Tie-In Wilkey Industrial Park.FY17	System Improvements Growth	\$0.008	
	WMR.2734.Endpoints.FY19	System Improvements	30,011	\$1.18
	WMR.2734.Towers.FY19	System Improvements		\$0.69
734 Total			\$5.901	\$10.53
2735	2735.Akebono Meter Set	System Improvements		\$0.11
	2755.Cave City Tie-In	System Improvements	\$0.051	
	2735.Equipment FY19	Equipment		\$0.02
	2735.Equipment.FY18	Equipment	\$0.014	\$0.02
	2735.FY19.Glasgow ERX 2735.Glasgow Farm Taps FY19	System improvements System integrity		\$0.63
	2735.Growth.Functional	Growth	\$0.089	\$0.07
	2735.Hiseville.TBS.Replc	System Integrity	\$0.037	- 2.07
	2735.Leak.Functional	System Integrity	\$0.142	\$0.09
	2735.Misc Growth Mains.FY19	Growth		\$0.00
	2735.Misc.Growth.FY18	Growth	\$0.004	10.411.000
	2735.Misc.SysInt.Mains.FY19	System Integrity	4	\$0.00
	2735.Misc.Syst.Integ.Main.FY17	* System Integrity	\$0.044	40.00
	2735.Non.Growth.Functional 2735.Oakland Town Border	System Integrity	\$0.276	\$0.21
	2735-Osmenu 10wn 201081	System Improvements	\$0.657	\$1.27
735 Total	050.2736.Central Ave.FY18	System Integrity	90,007	\$0.69
			(\$0.001)	,
735 Total 2736	2736.Calvin Dr.Reg.Stat.FY17	 System Integrity 	(20.002)	
	2736.Calvin Dr.Reg.Stat.FY17 2736.East 19th St.FY19	System Integrity System Improvements	(20.002)	\$0.69
			\$0.069	\$0.69
	2736.East 19th St.FY19	System Improvements		\$0.69
	2736.East 19th St.FY19 2736.Equipment.FY18	System Improvements Equipment		150

Sum of Amoun	A S. C. P. C. S. C.	the state of the second st	Fiscal Year	Charlet Car
CB Departmen	(CCB Description	CB Budget Cat	2018	201
	2736.Leak.Functional. 2736.Misc Growth Mains.FY19	System integrity	\$0.086	\$0.24
	2736.Misc.Growth.FY18	Growth Growth	\$0.033	\$0.00
	2736.Misc.Growth.Main.FY17	Growth	\$0.003	
	2736.Misc.Sysint.Mains.FY18	System Integrity	\$0.003	
	2736.Misc.Sysint.Mains.FY19	System Integrity	\$0.002	\$0.00
	2736.Non.Growth.Functional.	System Integrity	\$0.346	\$0.297
	2736.Nortonville T.B. Station	System Improvements	\$0.546	\$0.10
	2736.Structures.FY19	Structures		\$0.050
	Hopkinsville Warehouse Repl.	Structures	\$0.105	\$0.050
	Nortonville 1st Cut Station		\$0.106	60.00
	WMR.2736.Endpoints.FY18	System Improvements System Improvements	¢0.265	\$0.108
	WMR.2736.Endpoints.FY19	System improvements	\$0.265	\$0.56
	WMR.2736.Tower.FY18	System Improvements	\$0.109	30.300
736 Total	WWW.E730.TOWGITTIAD	System Improvements	\$1.717	\$3.15
2737	2737.2nd St. Bridge Repl.FY18	System Integrity	\$0,118	\$3.13
2131	2737.Burgin Town Border	System Integrity	30,116	\$0.07
	2737.Caldwell Rectifier.FY18	System Integrity	\$0.006	\$0.07.
	2737.Equipment FY19	- 100	\$0.006	ć0.00
		Equipment	60.024	\$0.036
	2737.Equipment.FY18 2737.FY19.Danville ERX	Equipment	\$0.031	ćn 00-
		System Improvements	40	\$0.039
	2737. Growth Funct.	Growth	\$0.115	\$0.09
	2737.Hustonville Adyl A Repic	System Integrity	*	\$0.55
	2797.Hwy 150 West.FY18	System Improvements	\$0.230	
	2737.Leak.Funct.	System Integrity	\$0.088	\$0.14
	2737.Misc Growth Mains.FY19	Growth		\$0.00
	2737.Misc.Growth.FY18	Growth	(\$0.001)	
	2737.Misc.Growth.Main.FY17	Growth	(\$0.000)	****
	2737.Misc.SysInt.Mains.FY19	System Integrity		\$0.00
	2737.Non.Growth.Funct.	System Integrity	\$0.430	\$0.72
	2737.Office Asphalt ParkingLot	Structures	\$0.068	
	2737.TBS REPLACEMENTS.FY17	System Improvements	\$0,696	
737 Total			\$1.782	\$1.669
2738	2738.Broadway Relocation.FY18	Public Improvements	\$0.612	
	2738.Bypass Relocation	Public Improvements	\$0.073	
	2738.Equipment.FY18	Equipment	\$0.015	
	2738.Equipment.FY29	Equipment		\$0.03
	2738.FY19.Campbelisville ERX	System Improvements		\$0.027
	2738.Greensburg Town Borders	System Improvements		\$0.189
	2738.Growth.Functional	Growth	\$0.159	\$0.10
	2738.Leak.Functional.	System Integrity	\$0.050	\$0.04
	2738.Misc Growth Mains.FY19	Growth		\$0.00
	2738.Mlsc.Growth.FY18	Growth	\$0.023	
	273B.Misc.Growth.Main.FY17	Growth	(\$0.003)	
	2738.Misc.SysInt.Mains.FY19	System Integrity		\$0.00
	2738.Non.Growth.Functional.	System Integrity	\$0.282	\$0.36
	2738.Warehouse Modification	Structures	\$0.056	
	Hodgenville Rd. Reinforcement	System Improvements		\$0.41
	Saloma HPD Line Exposures	System Integrity		\$0.49
	Saloma Purchase Station.FY19	System Integrity	\$0.014	\$0.31
	Summersville Purch Stat.FY19	System Integrity	\$0.012	\$0.30
38 Total			\$1.294	\$2.29
2739	2739.Equipment.FY18	Equipment	\$0.040	ė.
	2739.Equipment.FY19	Equipment		\$0.02
	2739.FY19.Shelbyville ERX	System Improvements		\$0.02
	2739.Growth.Functional	Growth	\$0.360	\$0.39
	2739.Hwy 53 to Lat Line 12 HPS	System Integrity	(\$0.052)	h
	2739.Hwy53 to Waddy Line Ph 2	System Improvements	\$6.986	\$4.21
	2739.Leak.Functional	System Integrity	\$0.013	\$0.04
	2739.Martinrea Town Border	System Integrity		\$0.21
	2739.Misc Growth Mains.FY19	Growth		\$0,08
	2739.Misc.Growth.FY18	Growth	\$0.082	
	2739.Misc.Growth.Main.Ext.FY16	Growth	\$0.000	
	2739.Misc.Growth.Main.FY17	Growth	\$0.021	21
	2739.Misc.SysInt.Mains.FY19	System Integrity	·	\$0.00
	2739.Non.Growth.Functional	System integrity	\$0.178	\$0.39
	2739.Osprey Cove Reinforcement	System Improvements	40.270	\$0.27
	2739.Shelbyville Low Pressure	System Improvements		\$0.42
	CB11.2739.14.SINT.009	System Integrity	\$0.002	JU.72.
	Shelbyville Farm Taps.FY19	System Integrity	30,002	\$1.11
		statem meRmA		-1.11
		Custom Images	én nac	
739 Total	Shelbyville.Purch.Stat.Upgrade	System Improvements	\$0.206 \$7.836	\$7.21

3302	3302.KY.Desktops.FY19	Information Technology		\$0.021
	3302.KY.Laptops.FY19	Information Technology		\$0.020
	3302.KY.MDT.FY19	Information Technology		\$0.072
	3302.KY.MDTs.Spring.FY18	Information Technology	\$0.058	
	3302.KY.Phone.System.Repl.FY17	Information Technology	\$0.007	
	3302.KY.Server.Repl.FY18	Information Technology	\$0.021	
	3303.KY.Laptops.Spring.FY18	Information Technology	\$0.019	

Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division AG DR Set No. 1 Question No. 1-15 Page 1 of 1

REQUEST:

Refer to page 14 of Mr. Waller's Direct Testimony in regards to the Company's five-year plan for direct investment in Kentucky. Provide a copy of the Company's two most recent five-year plans for direct investment in Kentucky.

RESPONSE:

Please see below:

FY17 5yr Plan	 2015 Actual	2016 Proj (Jul)	2017	2018	2019	2020	2021	'17-'21 CAGR
Fiscal Yr CapEx \$ millions	\$ 55,438	\$ 64,341 \$	71,723 \$	80,412 \$	90,061 \$	100,868 \$	112,972	12.0%
FY18 5yr Plan	 2016 Actual	2017 Proj (Jul)	2018	2019	2020	2021	2022	'18-'22 CAGR
Fiscal Yr CapEx \$ millions	\$ 64,449	73,464 \$	77,052 \$	86,298 \$	96,654 \$	108,252 \$	121,242	12.0%

Respondent: Greg Waller

BEFORE THE PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY

IN THE MATTER OF)	
)	
RATE APPLICATION BY)	Case No. 2009-00354
)	
ATMOS ENERGY CORPORATION)	

TESTIMONY OF GREGORY K. WALLER

1		I. INTRODUCTION
2		
3	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
4	A.	My name is Gregory K. Waller. I am Vice President of Finance for the Kentucky/Mid-
5		States Division of Atmos Energy Corporation ("Atmos" or the "Company"). My
6		business address is 810 Crescent Centre Drive, Suite 600, Franklin, TN 37067.
7	Q.	PLEASE STATE YOUR EDUCATION AND PROFESSIONAL BACKGROUND.
8	A.	I received a Bachelor of Arts degree in economics from Dartmouth College in 1994 and
9		an MBA degree from the University of Texas in 2000. I worked as a management
10		consultant from 1994 to 2003 at Harbor Research in Boston, MA (1994-1996) and
11		Towers Perrin in Dallas, TX (1997 - 2003). I joined Atmos Energy in 2003 in the
12		Planning and Budgeting Department in Dallas. I became Vice President of Finance for
13		the Mid-States Division in November, 2005 and added Kentucky to my scope of
14		responsibility in April, 2006.
15	Q.	WHAT ARE YOUR RESPONSIBILITIES AT ATMOS?
16	A.	I am responsible for monitoring and analyzing the financial performance of the
17		Kentucky Mid-States Division, and implementing necessary actions based on those
18		results. I also direct the development of the Division's annual budget. Other
19		responsibilities include establishing and maintaining policy, procedures, and controls to

1		ensure compliance	with Corporate Accounting policies, Generally Accepted
2		Accounting Principles	s (GAAP), and regulatory requirements.
3	Q.	HAVE YOU TEST	THE BEFORE THIS OR ANY OTHER REGULATORY
4		COMMISSION?	
5	A.	Yes. I filed testimo	ony before this Commission in Case No. 2006-00464. I have
6		testified before the	Tennessee Regulatory Authority in 2006 and filed testimony in
7		Company rate proce	edings in Tennessee in 2007 and 2008, Virginia in 2008, and
8		Georgia in 2008 and	2009.
9	Q.	ARE YOU SPONSO	ORING ANY OF THE FILING REQUIREMENTS IN THIS
10		PROCEEDING?	
11	A.	Yes. I am sponsoring	g the following filing requirements:
12		FR 10(8)(a)	Forecasted financial data presented as pro forma adjustments to
13			the base period
14		FR 10(8)(b)	Forecasted adjustments limited to twelve (12) months
15			immediately following the suspension period
16		FR 10(9)(c)	Description of all factors used in preparation of the forecast test
17			period - income statement, operation and maintenance expenses,
18			employee and labor expenses
19		FR 10(9)(d)	Annual and monthly budget for the 12 month period preceding
20			filing date, the base period and the forecast period.
21		FR 10(9)(h)1	Operating income statement
22		FR 10(9)(h)9	Employee Level
23		FR 10(9)(h)10	Labor cost changes
24		FR 10(9)(n)	Latest 12 months of the monthly managerial reports providing
25			financial results of opérations in comparison to forecast
26		FR 10(9)(o)	Complete monthly budget variance reports, with narrative
27			explanations, for the twelve (12) months immediately prior to the
28			base period, each month of the base period, and any subsequent
29			months, as they become available.

¹ "Division" as used in my testimony means the Company's Kentucky/Mid-States Division. "Kentucky" when used in my testimony, unless indicated otherwise, refers exclusively to the Company's operations in Kentucky.

1		FR 10(9)(s)	Summary of latest depreciation study with schedules itemized by
2			major plant accounts, except that telecommunications utilities
3			adopting PSC's average depreciation rates shall identify current
4			and base period depreciation rates used by major plant accounts.
5			If information has been filed in another PSC case, refer to that
6			case's number and style;
7		FR 10(10)(c)	Jurisdictional operating income summary for both base and
8			forecasted periods with supporting schedules which provide
9			breakdowns by major account group and individual account
10		FR 10(10)(d)	Summary of jurisdictional adjustments to operating income
11		FR 10(10)(f)	Summary schedules for the base and forecast periods of various
12			expenses
13		FR 10(10)(g)	Analysis of payroll costs
14		FR 10(10)(i)	Comparative income statements, revenue and sales statistics most
15			recent five years, base period, forecast period and two (2) years
16			beyond
17		FR 10(10)(k)	Comparative financial data and earnings measures
18	Q.	DO YOU ADOPT	THESE FILING REQUIREMENTS AND MAKE THEM A
19		PART OF YOUR	TESTIMONY?
20	A.	Yes.	
21	Q.	WHAT IS THE PU	JRPOSE OF YOUR TESTIMONY?
22	Α.	My testimony will d	lescribe:
23		1. The Operating a	nd Maintenance expense (O&M) budgeting process used by Atmos
24		Energy	
25		2. The process of co	ontrol and monitoring of O&M variances
26		3. The forecasted to	est year budget for O&M, depreciation expense, and taxes other than
27		income taxes, and	1
28		4. The necessity of	the Pipe Replacement Program (PRP) from a financial perspective
29		and the annual pr	ocess to be followed in the PRP.
30			

II. O&M BUDGETING PROCESS

A.

Q. WHAT ARE THE OBJECTIVES OF THE COMPANY'S O&M BUDGETING PROCESS?

A. The objectives of the Company's O&M budgeting process are to: (1) formalize the process of identifying the anticipated costs of operating and maintaining Atmos' systems each year; (2) ensure that all policies and procedures associated with the annual budgeting process are consistently adhered to by the functional managers and officers; (3) assess the appropriateness of routine maintenance requirements and non-capital expenditures proposed by the functional managers and officers to ensure that the amounts do not exceed a level necessary to deliver safe, reliable and efficient natural gas service to the Company's customers; and (4) ensure that the O&M budget properly reflects our strategic operational and financial plans. These objectives are applicable to the Company as a whole as well as to its various division, state and local level operations.

Q. CAN YOU DESCRIBE THE COMPANY'S O&M BUDGETING PROCESS?

Yes. O&M costs are budgeted on a fiscal year basis, which begins on October 1 of each year (consistent with the seasonal operations of our business) and runs through September 30 of the following year. Preparation of operating and construction budgets for a fiscal year formally begins in late May of each year and culminates with completion of final budgets in late August, just prior to the beginning of the fiscal year. Budget preparation is based on meeting the four objectives described above. Budgets are approved at multiple levels beginning with supervisor/managers up through division leadership. Additional reviews are performed by corporate executive operations management and their staff. High level reviews of the division budgets are also performed by the Company's senior executives who are presiding members of the Company's Management Committee. The Board of Directors must review and approve the total Company budget before finalization and implementation. This approval typically occurs in September of each year.

Q. WHAT ROLE DOES THE O&M BUDGETING PROCESS PLAY IN THE COMPANY'S FINANCIAL PLANNING?

Atmos' Planning and Budgeting Department is responsible for financial planning at the enterprise level. That department receives direction from the Board of Directors concerning forward-looking financial objectives for the Company. Planning and Budgeting is responsible, with significant input and collaboration from division leadership, for translating those enterprise targets into a financial plan for each division and rate jurisdiction. It is the collaboration between Planning and Budgeting and division leadership that ensures that all four of the objectives described above are met each year. Spending targets are established as a result of this collaboration.

Q. WHAT IS YOUR ROLE IN THIS PROCESS?

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My role is to facilitate the budget process within the Kentucky/Mid-States Division that confirms the operational feasibility of the targets and produces an O&M budget consistent with the Company's processes and goals described above. My department communicates certain budget guidelines such as average wage increase percentages and anticipated benefits rates to managers and supervisors (cost center owners). Each cost center owner is responsible for building his or her department's budget and submitting it for review by me and approval along the appropriate approval chain. My department provides support to and often asks for clarifying information from cost center owners as needed to explain significant variances from the prior year. In addition, we budget several items on behalf of the entire Division such as bill print fees, insurance costs, bad debt provision, etc. An iterative process involving Division leadership (including myself), my department and the cost center owners ultimately produces an O&M budget that meets the needs of our operations, ensures that we operate safely, reliably and efficiently, and allows our Division to contribute to the financial success of Atmos. This process is used to develop the direct O&M budget for Kentucky, as well as the Division's general office O&M budget. A portion of the Division's general office O&M budget, as hereinafter discussed, is allocated to Kentucky in accordance with the allocation methods addressed in the direct testimony of Company witness Daniel M. Meziere.

Q. ARE YOU FAMILIAR WITH THE COMPANY'S SHARED SERVICES GROUP?

1	A.	Yes. The Company's Shared Services Unit (often referred to as SSU) provides central
2		support functions to the Division, including Kentucky, such as accounting, legal, tax,
3		information technology, customer support (call center, billing, collections), etc.
4	Q.	ARE YOU INVOLVED WITH THE PREPARATION OF THE SSU O&M
5		BUDGET?
6	A.	Only insofar as the amounts which are budget by SSU departments impact the O&M
7		budgets for the Division and for Kentucky, as well as interfacing with appropriate SSU
8		department heads with respect to any additional services which may be required from
9		SSU for the Division or for Kentucky.
10	Q.	SO FAR YOU HAVE DESCRIBED THE O&M BUDGETING PROCESS. CAN
11		YOU EXPLAIN HOW THE BUDGET IS PREPARED WITHIN THE
12		PARAMETERS OF THIS PROCESS?
13	A.	Yes. The O&M budget is prepared by type of cost element, such as labor, benefits,
14		transportation, rents, office supplies, etc. Within each cost element we budget expenses
15		at the sub-account level. The prior year's actual costs, year to date actual costs and
16		budgeted costs for the remainder of the fiscal year are used as guidelines for budgeting
17		by functional managers and officers. The budgets are prepared using a web based
18		software tool called PlanIt. This tool allows cost center owners to enter their budgets
19		and allows my department and Division management to review budgets using a number
20		of standard and ad hoc reports.
21	Q.	ARE THESE BUDGETS PREPARED BY FERC ACCOUNT?
22	Α.	No. In our experience, FERC accounts do not provide a sufficient level of detail to
23		enable us to understand the costs within each account. For budgeting purposes (and
24		subsequent managing of expenses), we need individualized expense types that relate to
25		the operation of each cost center. FERC accounts do not provide that level of detail.
26		However, when we spend, we do identify our expenditures by FERC account as well as
27		expense type. This provides a timely analysis of the type of charges being expensed by
28		FERC account.
29	Q.	HOW DOES ATMOS CONVERT ITS O&M BUDGET BY COST ELEMENT

To convert our budget and forecast to FERC accounts, prior year actual expenditures

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INTO FERC ACCOUNTS?

1		were downloaded from the general ledger by FERC account and cost element. A
2		calculation was then made to determine within each cost element type the percentage of
3		spending attributable to each FERC account. Each percentage factor was then applied
4		to the fiscal year 2010 budget and test period forecast by cost type to develop a budget
5		and test period forecast by FERC account.
6	Q.	HAVE THERE BEEN ANY ORGANIZATIONAL CHANGES SINCE THE
7		COMPANY'S LAST RATE FILING IN KENTUCKY?
8	A.	Yes. The Customer Service Organization ("CSO") was set up as a part of the
9		Company's SSU. The CSO organization is designated as Division 12. The complete
10		SSU common cost allocation process from SSU to the Division and then ultimately to
11		the operating rate divisions within the Division (although briefly described above) is
12		more particularly described in Cost Allocation Manual attached to Mr. Meziere's
13		testimony.
14		
15		III. O&M CONTROL AND MONITORING
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17	Q.	DOES THE COMPANY EMPLOY ANY METHODOLOGY TO MONITOR
18		AND CONTROL O&M ACCORDING TO BUDGETED LEVELS?
19	A.	Yes. Atmos utilizes variance monitoring to ensure financial quality control of O&M
20		expenses by formalizing the analysis of variances by cost type and cost center. On a
21		quarterly basis, we present our Division's actual to budget variances with explanation to
22		the Company's Management Committee, SSU department heads, select Board of
23		Directors members and external auditors at a formal Quarterly Performance Review.
24		The goal is to keep all levels of management informed of our O&M spending in
25		comparison to budgeted amounts, in order to allow management to react to
26		unanticipated events on a timely basis.
27	Q.	ARE O&M VARIANCES EVALUATED MORE FREQUENTLY THAN ON A
28		QUARTERLY BASIS?
29	Α.	Yes. My department conducts a thorough review of O&M actual to budget variances

PLEASE DESCRIBE YOUR MONTHLY VARIANCE REVIEW PROCESS.

each month.

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Q.

We begin by examining, at the Division level, significant variances by cost type (labor, benefits, materials, rents, etc.). Significant variances are researched until an explanation is found. Reasonable explanations could include events that affected the entire Division or a particular cost center or region. In some cases, clarifying information is sought from cost center owners to explain unusual variances or transactions. For some cost types, clarifying analysis is provided by SSU departments. If errors are found, they are most often corrected in the current month's business. Occasionally, however, errors are discovered after the books are closed, and, depending on materiality, they are corrected in the following month's business.

10 Q. DOES ANYONE ELSE WITHIN THE DIVISION HAVE THE ABILITY TO 11 MONITOR OR REVIEW O&M VARIANCES?

A. In addition to the research conducted by my department, each cost center owner has the ability to run variance reports throughout the monthly closing process. Because cost center owners are held accountable for significant variances to budget, they conduct their own research and often contact my department when they find errors or have questions about the expenses that were charged to their cost centers.

Q. WHAT CONTROLS AND REPORTING ARE INVOLVED IN THE MONTHLY CLOSE PROCESS REGARDING O&M VARIANCES?

Once the monthly books are closed, the SSU Financial Reporting department in Dallas publishes (electronically) the monthly Atmos Financial Package. This package details the financial performance for Atmos Energy at the corporate and division level. For each division, the report includes a comparative income statement, operating statistics (volumes, total spending) page, O&M detail page, balance sheet highlights page and financial highlights page. The financial highlights page reports the Division's monthly and year-to-date (YTD) performance versus budget for net income, gross profit, direct O&M and capital spending. I provide narrative comments on this page to describe our monthly and YTD variances. Once complete, this Financial Package is available to all Atmos officers and Board members for review and is an official Sarbanes Oxley control document of the Company. Once the package is complete, I complete an online questionnaire generated by our Sarbanes Oxley Compliance Tool certifying that my department has conducted a thorough review of the division's financial performance

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and the Financial Package and addressed all matters therein. The Company's external auditors look for this certification as evidence of Sarbanes Oxley compliance.

After meeting the Financial Package control requirement, my department publishes (electronically) detailed O&M reports that include monthly and YTD variances for each cost center and these reports are then made available to each cost center owner and their respective managers (managers, Division Vice Presidents, Division President). This activity ensures that each cost center owner receives the same information in the same format each month in a timely fashion in order to make operational decisions and manage our operations effectively and efficiently.

10 Q. HAS THE O&M VARIANCE MONITORING AND CONTROL PROCESS YOU 11 HAVE DESCRIBED ENABLED KENTUCKY TO OPERATE REASONABLY 12 WITHIN ITS BUDGET EACH YEAR?

13 A. Yes. As the table below demonstrates, actual O&M expenditures over the past five 14 years have tracked closely to overall budgeted amounts.

Dollars in thousands

Fiscal	Actual	Budget	Over/(Under)	Variance
Year	\$	\$	\$	%
2009	\$24,329	\$23,445	\$884	3.8%
2008	\$22,334	\$22,268	\$66	0.3%
2007	\$21,372	\$20,179	\$1,193	5.9%
2006	\$19,874	\$19,029	\$845	4.4%
2005	\$18,618	\$19,057	\$(439)	-2.3%

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17 Q. DO YOU HAVE AN OPINION REGARDING THE SIGNIFICANCE OF THE 18 HISTORICAL DATA REFLECTED IN THE TABLE ABOVE?

Overall, I believe that these results indicate that we have been successful in our annual budgets in projecting and managing our O&M expense to the extent those expenses are within our control.

Q. WHY IS THAT IMPORTANT?

1	A.	This data demonstrates that the Company's budgeting and control processes I have
2		described form a reasonable basis for purposes of the Company's forecasted test period
3		O&M budget in this rate proceeding.
4		
5		IV. FORECASTED TEST PERIOD O&M BUDGET
6		
7	Q.	WHAT IS THE FORECASTED TEST PERIOD USED IN THIS RATE
8		APPLICATION?
9	Α.	The forecasted test period is April 1, 2010 through March 31, 2011.
10	Q.	HOW WAS THE FORECASTED TEST PERIOD BUDGET DEVELOPED?
11	A.	The basis for the forecasted test period is our FY2010 budget. Consistent with our
12		normal annual budgeting timelines, this budget was prepared during the summer of
13		2009 and approved by the Board of Directors in September of 2009. This budget was
14		prepared in the manner I described earlier. The forecasted test period includes six
15		months of this approved budget (April - September 2010) and six months of a
16		projection period (October 2010 - March 2011). I will describe the methodology used
17		for the projection period in detail below. The FY2010 O&M budget and forecasted test
18		period projection were converted into FERC account detail using the method described
19		above.
20	Q.	WHAT ARE THE COMPONENTS OF O&M FOR THE FORECASTED TEST
21		PERIOD?
22	A.	The forecasted test period O&M is comprised of three parts: expenses incurred and
23		booked directly in Kentucky (rate division 009), allocated expenses from the
24		Kentucky/Mid-States Division General Office (rate division 091), and allocated
25		expenses from SSU (comprised of rate divisions 002 and 012). I will describe the
26		methodology used for the projection for each of the three components.
27	Q.	WHAT COMPRISES THE BASE PERIOD LEVEL OF COST FILED IN THIS
28		RATE APPLICATION?
29	A.	The base period level of cost is January 1, 2009 through December 31, 2009. It is
30		composed of seven months of actual results up through July, 2009, two months of our
31		FY2009 projection that is updated on a monthly basis with actual results as they become

- available through September 2009, and the first three months of our approved FY2010 budget for the period from October 1 December 31, 2009.
- 3 Q. WHAT IS THE DIRECT O&M FOR THE BASE PERIOD?
- 4 A. \$12,420,487
- 5 Q. WHAT IS THE DIRECT O&M BUDGET FOR THE FORECASTED TEST
 6 PERIOD?
- 7 A. \$11,799,556
- Q. WHAT IS THE DIFFERENCE BETWEEN THE BASE PERIOD O&M AND
 TEST PERIOD O&M?
- 10 A. The difference is a decrease of \$620,931 and reflects adjustments I have made for labor 11 and benefits, rent, other O&M and bad debt.
- 12 Q. PLEASE EXPLAIN YOUR ADJUSTMENT FOR LABOR AND BENEFITS.
- A. The labor forecast for the forecasted test period is based on the Company's approved 13 14 FY2010 budget. As part of the normal budgeting process, each employee's total salary, expected capital / expense ratio and expected standby and overtime amounts are 15 included. While there is always a normal level of position vacancy at any given point in 16 time, we strive to fill open positions in a timely manner when and if filling the position 17 is justified by current workload. The base period level of total labor expenditures 18 19 represents a fully staffed level minus the normal level of vacancies and employee levels are projected to remain relatively constant from the base period to the test period. Base 20 pay increases go into effect each October 1 and averaged 3.0% for the increases that 21 22 went into effect October 1, 2009. These increases are captured as part of the FY2010 budget. An adjustment was made as part of the forecast to account for an average wage 23 24 increase of 3.5% to become effective October 1, 2010. The 3.5% is consistent with the average level of increases from the past several years, excluding 2010. Overall, total 25 labor is projected to increase just \$7,138 from the base period to the test period as we 26 have been increasingly diligent in our FY 2010 budget regarding the filling of positions 27 28 caused by attrition.
 - Labor capitalization rates are forecasted by analyzing annual historical patterns and considering known capital and expense initiatives that may alter anticipated rates. The labor capitalization rate in the FY10 budget and test period averages 50% for the year.

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- This is 3% higher than the labor capitalization rate in the base period. The anticipated
- 2 increase in capitalization rate to 50% (consistent with the approved FY10 budget)
- results in labor expense forecasted to decrease \$322,381 from the base period to the test
- 4 period.
- Benefits are projected as a fixed benefit load percentage of labor expense plus an
- amount for workers' comp insurance. The test period benefits expense of \$2,077,055 is
- 7 \$142,750 lower than the base period.
- 8 Q. PLEASE EXPLAIN YOUR ADJUSTMENT RELATING TO RENT.
- 9 A. Unlike other O&M categories that are likely to increase with normal inflation, our
- building rents are driven by leases already in place and can therefore be projected with a
- high level of accuracy. The rent portion of the O&M category "Rent, Utilities and
- Maintenance" was budgeted by reviewing actual lease amounts. Because a portion of
- building lease payments is capitalized each month, any change in the capitalization rate
- affects the amount of lease payments expensed each month.
- 15 Q. PLEASE EXPLAIN YOUR ADJUSTMENT RELATING TO OTHER O&M.
- 16 A. The budget for O&M expense types other than labor, benefits, rent and bad debt
- categories for the first half of the test period is our FY2010 budget. For the purpose of
- this rate filing, they are forecasted using a standard inflation factor of 3.3% for the
- 19 second half of the test period. The escalation factor is based on recent CPI data from
- 20 the Bureau of Labor Statistics. One exception, insurance, is escalated at 5%. Increases
- in the Company's insurance premiums in recent years have been higher than normal
- 22 inflation levels.
- 23 Q. PLEASE EXPLAIN YOUR ADJUSTMENT RELATING TO BAD DEBT
- 24 A. Our goal is to keep bad debt no higher than 0.50% of residential, commercial and public
- 25 authority revenues during any given year. We work vigorously to collect bad debts and
- 26 reduce the impact of bad debt expense on customers. To arrive at the bad debt
- projection of \$909,895 we simply calculated 0.50% of residential, commercial and
- 28 public authority revenues from the revenue projection in the direct testimony of
- 29 Company witness Mr. Gary Smith. This projection is \$328,000 higher than the base
- 30 period. The Company is requesting a change to its tariff in this rate proceeding to
- 31 collect the gas cost portion of bad debt through the GCA. The change is discussed in

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1		the testimony of Mr. Gary Smith. If the tariff is adopted as filed, the amount of bad
2		debt in the Company's revenue requirement should be \$218,323 which represents
3		0.50% of residential, commercial and public authority gross margins.
4	Q.	WHAT IS THE AMOUNT OF GENERAL OFFICE O&M ALLOCATED TO
5		KENTUCKY FOR THE BASE PERIOD?
6	A.	\$4,118,990.
7	Q.	WHAT IS THE AMOUNT OF THE GENERAL OFFICE O&M BUDGET
8		ALLOCATED TO KENTUCKY FOR THE FORECASTED TEST PERIOD?
9	A.	\$4,487,948.
10	Q.	PLEASE DISCUSS THE DIFFERENCES BETWEEN THE GENERAL OFFICE
11		BASE PERIOD AND FORECASTED TEST PERIOD AMOUNTS.
12	A.	The difference is \$368,958. The primary drivers of the increase are the expense
13		categories of telecommunications and outside services. In both cases, the increases are
14		offset by reductions in the Kentucky direct (division 009) O&M budget.
15	Q.	WHAT IS THE AMOUNT OF SHARED SERVICES O&M ALLOCATED TO
16		KENTUCKY FOR THE BASE PERIOD?
17	A.	\$6,201,269.
18	Q.	WHAT IS THE AMOUNT OF THE SHARED SERVICES O&M BUDGET
19		ALLOCATED TO KENTUCKY FOR THE FORECASTED TEST PERIOD?
20	A.	\$6,581,575.
21	Q.	PLEASE DISCUSS THE DIFFERENCES BETWEEN THE SHARED SERVICES
22		BASE PERIOD AND FORECASTED TEST PERIOD AMOUNTS.
23	A.	The difference is \$380,306. The SSU budget is prepared in a fashion consistent to that
24		of the Division. Once the SSU department heads complete, submit and get approval for
25		their budgets, the appropriate level of expenses are allocated to the Kentucky rate
26		jurisdiction per the methodologies described in Mr. Meziere's testimony.
27	Q.	HOW DO YOU MONITOR SHARED SERVICES BILLINGS TO THE
28		KENTUCKY/MID-STATES DIVISION?
29	A.	Shared Services expense billings are reviewed as part of our monthly close process
30		described earlier. It is my responsibility to contact Accounting in Dallas and obtain an
31		explanation for any significant variances.

1	Q.	WHAT IS THE TOTAL FORECASTED TEST PERIOD O&M THAT RESULTS
2		FROM THE SUM OF THE DIRECT, GENERAL OFFICE AND SSU
3		COMPONENTS?
4	A.	\$22,869,078.
5	Q.	DO THE FORECASTED O&M AMOUNTS DISCUSSED IN YOUR
6		TESTIMONY INCLUDE THE RATEMAKING ADJUSTMENTS QUANTIFIED
7		ON SCHEDULE C-2?
8	A.	No. Schedule C-2 contains five ratemaking adjustments.
9		
10		Adjustment for Owensboro Country Club Expenses
11		The first adjustment removes \$965 of Owensboro Country Club expenses from test year
12		distribution operating expense. It is quantified on Schedule F.2.2.
13		
14		Adjustment for Sales and Promotional Advertising Expenses
15		The second adjustment removes \$273,264 of sales and promotional advertising from
16		test year sales expense. It is quantified on Schedule F.4.
17		
18		Adjustment for Rate Case Expenses
19		The third adjustment adds \$75,667 to test year administrative and general expense to
20		account for a three-year amortization of the expected expenses pertaining to this case.
21		It is quantified on Schedule F.6.
22		
23		Adjustment for Expense Report Exclusion
24		The fourth adjustment removes \$89,245 of certain expense report items from test year
25		administrative and general expense. The Company's goal is to ensure that its Kentucky
26		rates rest upon a sound foundation of unquestionable costs. The Company is committed
27		to achieving that goal even if it means foregoing recovery of a certain amount of
28		legitimate business expense in an effort to ensure that there can be no question about
29		what remains. The expense report exclusion adjustment is made to exclude certain cost
30		items of which the Company does not intend to seek recovery from its customers in this
21		case. As examples such items include executive meals travel and entertainment

1		expenses as well as some non-executive expenses. The Company has taken extra
2		measures to ensure that cost items of this nature do not find their way into Kentucky
3		rates, and it is continuing to do so. While the Company believes that items of this nature
4		are proper business expenses, as a matter of policy, the Company is not seeking to
5		recover expenses of this type from our Kentucky customers. The excluded amounts are
6		quantified on Schedule F.8 and occur in the Kentucky division as well as the General
7		Office and SSU.
8		
9		Adjustment for Previously Deferred Manufactured Gas Plant Expenditures
0		The final adjustment adds \$183,304 to test year administrative and general expense to
1		account for a three-year amortization of previously deferred manufactured gas plant
12		(MGP) expenditures. The Company deferred \$549,913 per the order in Case No. 2008-
13		00230. The adjustment is quantified on Schedule F.9.
14		
15	Q.	YOU HAVE PROPOSED TO RECOVER THE PREVIOUSLY DEFERRED
16		MGP EXPENDITURES IN BASE RATES. IS THE COMPANY OPEN TO
17		CONSIDERING ALTERNATIVE RECOVERY MECHANISMS?
8	A.	Yes. The Company is willing to consider other mechanisms that could more precisely
19		recover the expenses it incurred. In Tennessee, the Company is recovering similar type
20		expenses through a volumetric based surcharge mechanism in which the recovery factor
21		will be trued-up to ensure that the Company recovers no more and no less than the
22		amount originally deferred.
23	Q.	DO YOU BELIEVE THAT THE FORECASTED TEST PERIOD O&M
24		BUDGET YOU HAVE PRESENTED IS THE MOST REASONABLE
25		ESTIMATE OF COSTS FOR THE TEST PERIOD USED IN THIS
26		PROCEEDING?
27	A.	Yes. It is the best estimate we have of the Kentucky jurisdiction's future operating and
28		maintenance expenses.
29		
30		

V. DEPRECIATION EXPENSE AND TAXES, OTHER THAN INCOME TAX

2	0.	WHAT I	STHE	DEPRECLA	ATION	EXPENSE	FOR	THE B	ASE	PERIOD	?
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- 3 A. The amount of depreciation expense for the base period is \$12,587,569.
- 4 Q. WHAT IS THE DEPRECIATION EXPENSE FOR THE FORECASTED TEST 5 PERIOD?
- 6 A. The amount of depreciation expense for the forecasted test period is \$12,899,592.
- Q. PLEASE DISCUSS THE DIFFERENCES BETWEEN THE BASE PERIOD AND
 FORECASTED TEST PERIOD DEPRECIATION AMOUNTS.
- 9 A. Depreciation rates for the forecasted test period for Kentucky (division 009) and SSU
- 10 (divisions 2 and 12) are those approved in Case No. 2006-00464. The Company is
- proposing a change in rates for the relatively minor plant balances in the General Office
- 12 (division 091). These rates have been recently approved for the Company in Tennessee
- and Virginia and were <u>not</u> part of the depreciation studies included in the testimony of
- 14 Company witness Don Roff in Docket No. 2006-00464. The proposed change lowers
- the revenue requirement in this case by \$48,340 once the appropriate allocation factor is
- applied for Kentucky for Division 009 depreciation expense.
- 17 The depreciation rates are applied to the applicable categories of plant for the Kentucky
- jurisdiction as well as the General Office and Shared Services division, resulting in total
- depreciation expense of \$12,899,592. The amounts allocated from the General Office
- and SSU to Kentucky are based upon the cost allocation methodology more fully
- 21 described in Mr. Meziere's testimony.
- Q. WHAT IS THE EXPENSE LEVEL FOR TAXES, OTHER THAN INCOME
- 23 TAXES FOR THE BASE PERIOD?
- 24 A. \$4,032,425.
- 25 Q. WHAT IS THE LEVEL OF TAXES, OTHER THAN INCOME TAXES FOR
- 26 THE FORECASTED TEST PERIOD?
- 27 A. \$4,186,517.
- 28 Q. PLEASE DISCUSS THE DIFFERENCES BETWEEN THE BASE PERIOD AND
- 29 FORECASTED TEST PERIOD BUDGETS.
- 30 A. The difference is an increase of \$154,092. The components are itemized by type of tax
- on Schedule C.2.3 F. For the first half of the test period (April 1, 2010 September 30,

2010) payroll taxes are consistent with the approved FY2010 budget and based on budgeted labor amounts. The amounts for the second half of the test period (October 1, 2010 – March 31, 2011) have been escalated from FY2010 budgeted amounts to account for planned base pay increases. The monthly charge for the Public Service Commission Assessment through June, 2010 is based on the payment made by the Company in July, 2009. That monthly charge has been lowered for the remainder of the test period consistent with the witnessed and anticipated lower revenues in calendar 2009 (on which the next assessment will be based). The budgeted monthly ad valorem accrual in the FY2010 budget is \$244,304. That monthly accrual has been escalated by 5% for the second half of the test period. The DOT transmission user tax has been held constant from the base period. The amount of taxes allocated from the Division General Office and SSU is based on the allocation methodologies discussed in the Cost Allocation Manual attached to Mr. Meziere's testimony.

VI. PIPE REPLACEMENT PROGRAM

Q.

A.

COMPANY WITNESS MR. EARNEST NAPIER DISCUSSES THE TECHNICAL JUSTIFICATION FOR THE COMPANY'S PROPOSED PIPE REPLACEMENT PROGRAM (PRP). PLEASE DISCUSS THE NECESSITY OF THE PROGRAM FROM A FINANCIAL PERSPECTIVE.

In order to accomplish the pipe replacement goals set forth in Mr. Napier's testimony, the Company needs to significantly increase its annual capital investment in Kentucky over and above the average capital expenditures from the last several years. Because the Company's typical level of non-growth capital investment already exceeds its level of depreciation expense, the PRP will result in a significant annual net increase to the Company's rate base in Kentucky. The incremental growth in rate base will cause the Company's revenue deficiency to grow more rapidly than it would in the absence of incremental capital investments. The PRP will allow the Company to earn a timely return on the incremental investment while avoiding the resource commitment and expense required by traditional rate cases.

In the absence of such a mechanism, the Company would find it necessary to:

1		1) file traditional rate cases more frequently,
2		2) reduce its level of incremental capital investment (thus prolonging the time
3		required to replace the bare steel pipe described in Mr. Napier's testimony), or
4		3) some combination of 1 and 2.
5	Q.	WHAT ARE THE KEY ATTRIBUTES OF THE COMPANY'S PROPOSED PRE
6		FROM A FINANCIAL PERSPECTIVE?
7	A.	For the program to be in the best interest of the Company and its customers, it mus
8		have the following design criteria:
9		1. The mechanism must allow the Company to earn a return on the incremental
10		investments, including incurred overhead expenditures, that coincides with the
11		timing of the investments themselves. In other words, the mechanism should
12		incorporate forward-looking rules similar to those available to companies in
13		traditional rate filings.
14		2. The mechanism must include a true-up component that ensures that customers are
15		charged no more and no less than is justified by the actual incremental investments
16		made by the Company under the program.
17		3. The mechanism should include reimbursement for other expenses incurred by the
18		Company as well as cost savings anticipated as a result of having made the
19		investments. Such additional expenses include incremental depreciation expense
20		and ad valorem taxes. Anticipated cost savings include reduced leak survey
21		intervals and reduced leak monitoring costs.
22		4. The annual PRP filings made by the Company must be streamlined so as to avoid the
23		majority of legal and other expenses inherent in traditional rate cases while
24		maintaining an appropriate level of rigor and prudency review.
25	Q.	PLEASE DESCRIBE THE ANNUAL PROCESS THE COMPANY IS
26		PROPOSING FOR ITS PRP.
27	A.	The Company proposes to make annual filings on August 1st of each year. The annual
28		filing will have the following components:
29		1. A forecast of the pipe replacement investments the Company plans to make during
30		its next fiscal year (from October 1 - September 30) following the August 1st filing.

1		2. A reconciliation of the actual pipe replacement investments made versus those
2		originally forecasted for the fiscal year completed (October 1 - September 30)
3		previous to the August 1st filing.
4		3. A calculation of the PRP recovery charge that incorporates:
5		a. The net cumulative investments made under the program since inception and
6		forecasted through the current fiscal year, including gross plant, accumulated
7		depreciation and ADIT,
8		b. The net incremental investments forecasted for the following fiscal year (#1
9		above),
10		c. The reconciliation from the previous fiscal year (#2 above), and
11		d. A calculation of incremental expenses (such as depreciation expense and ad
12		valorem taxes) and anticipated cost savings associated with the PRP
13		investments.
14		
15		The resulting PRP recovery charge calculated in the filing will be implemented on
16		customers' bills beginning with the first billing cycle in October of each year. A
17		discussion of the recovery mechanism implemenation into the Company's rate structure
18		is discussed in the testimony of Company witness Mr. Gary Smith.
19		The time period from August 1st to October 1st will be the review period allowed for the
20		PSC to conduct its prudency review. During that time, the Company would be available
21		to respond to data requests, assist in an audit of the filing or otherwise make its records
22		available for an audit, or participate in other efforts necessary to validate its filing and
23		the charge that should be implemented on October 1st.
24	Q.	HOW WILL THE COMPANY ENSURE THAT INVESTMENTS ARE NOT
25		RECOVERED BOTH IN THE PRP AND IN THE CONTEXT OF A GENERAL
26		RATE FILING?
27	A.	Beginning with the program's inception, the Company will track its PRP-qualifying
28		investments separately from its other investments. This can be accomplished by setting
29		up specific capital assets for each PRP investment and/or recording all PRP investments
30		in designated cost centers in the Company's general ledger. From the time the program
31		is initiated and investments are made that qualify under the program, the Company will,

in effect, account for its PRP rate base and non-PRP rate base separately. The cumulative investments that make up the PRP rate base will be used in the Company's annual PRP filings to calculate the PRP recovery charge. In the context of a general rate case, the revenue requirement will be calculated based on the Company's rate base and expenses that are not already recovered through the PRP. In other words, when the Company files a general rate case, the exact amount of rate base, return on investment, depreciation expense and ad valorem taxes that the Company is recovering through the PRP would be set aside and the remaining components of revenue requirement would be used to calculate rates for the general case. This methodology would ensure that the Company is not "double-dipping" any aspect of its total revenue requirement.

- 11 Q. HOW DOES THE COMPANY PROPOSE TO RECONCILE THE ANNUAL
 12 PROCESS DESCRIBED ABOVE WITH THE TIMING OF THIS RATE
 13 PROCEEDING?
- The Company proposes to make its first PRP filing on August 1, 2010. As described 14 A. 15 above, that filing would normally include forecasted PRP investments for the period from October 1, 2010 to September 30, 2011. However, the forecasted test period in 16 this current rate proceeding extends to March 31, 2011. In the interest of simplicity, the 17 18 Company proposes that all capital investments forecasted through March 31, 2011 be 19 included in the revenue requirement in this proceeding. Thus the Company will begin tracking PRP investments on April 1, 2011. The PRP filing made on August 1, 2010 20 will forecast PRP investments for the period from April 1, 2011 to September 30, 2011. 21 22 The PRP recovery charge, for the first year of the program, should be implemented on 23 the first billing cycle in April, 2011.
 - The PRP's second year will commence with a filing on August 1, 2011 and would forecast PRP investments from October 2011 September 2012. The recovery charge will be implemented in October, 2011.
- The PRP's third year will commence with a filing on August 1, 2012 and would forecast PRP investments from October 2012 September 2013. It would also true-up the actual investments made versus investments originally forecasted from the program's first year (investments made from April 1, 2011 to September 30, 2011).

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1	The recovery charge will be implemented in October, 2012.	Subsequent years w	ould
2	follow the pattern described above.		

- Q. DO YOU BELIEVE THAT THE PRP PROGRAM, AS DESCRIBED IN YOUR
 TESTIMONY AS WELL AS THE TESTIMONY OF MR. GARY SMITH AND
 MR. EARNEST NAPIER REPRESENTS THE BEST BALANCE BETWEEN
 THE INTERESTS OF CUSTOMERS AND FAIRNESS TO THE COMPANY?
- 7 A. Yes. It will allow the Company to make needed incremental investments on behalf of its customers without negatively impacting its opportunity to earn a fair and timely return on its investment.
- 10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 11 A. Yes.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF)	
RATE APPLICATION OF)	Case No. 2009-00354
ATMOS ENERGY CORPORATION)	

CERTIFICATE AND AFFIDAVIT

The Affiant, Gregory K. Waller, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2009-00354, in the Matter of the Rate Application of Atmos Energy Corporation, and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

Affiant further states that he will be present and available for cross examination for such additional direct examination as may be appropriate at any hearing in Case No. 2009-00354 scheduled by the Commission, at which time affiant will further reaffirm the attached testimony as his direct testimony in such case.

STATE OF TENNESSEE COUNTY OF WILLIAMSON

SUBSCRIBED AND SWORN to before me by Gregoky K. WAllek on this the

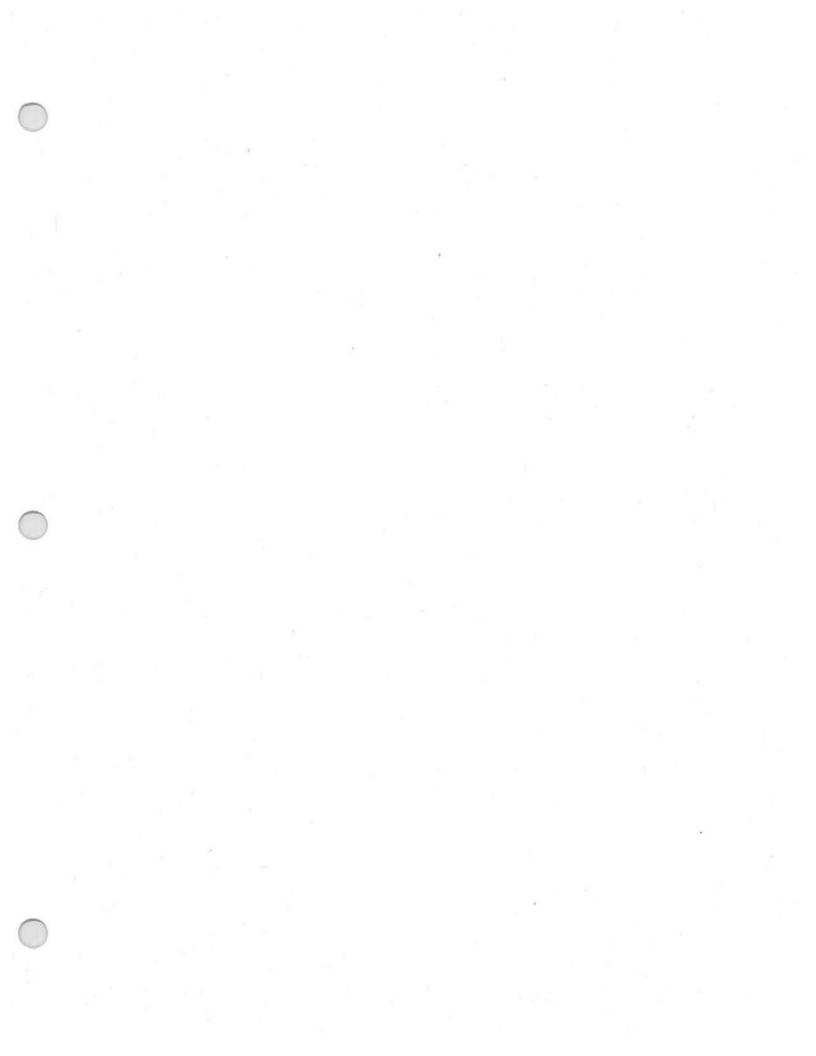
14th day of Octoberham, 2009.

Notary Public

My Commission Expires: May 8, 2012

Molle

My Commission Expires MAY 8,2012



BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION FRANKFORT, KENTUCKY

IN]	RE:				
CO	PETITION OF ATMOS ENERGY CORPORATION FOR APPROVAL OF ADJUSTMENT OF ITS RATES AND REVISED TARIFF DOCKET NO. 2009-0035				
	EARNEST B. NAPIER, P.E.				
	L INTRODUCTION OF WITNESS				
Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.				
A.	My name is Earnest B. Napier. I am Vice President Technical Services of t				
	Kentucky/Mid-States Division of Atmos Energy Corporation ("Atmos Energy"				
	"Company"). My business address is 810 Crescent Centre Drive, Suite 60				
	Franklin, TN 37067-6226.				
	II. SUMMARY OF TESTIMONY				
Q.	PLEASE BRIEFLY SUMMARIZE THE TESTIMONY YOU INTEND T				
	GIVE IN THIS MATTER.				
A.	In my testimony, I will describe Atmos Energy's budgeting process for capit				
	expenditures ("Capex"). My testimony will describe how the Company decid				
	upon and prioritizes its capital expenditures. Specifically, I will discuss t				
	Company's budget for capital expenditures relating to Kentucky for the to				
	period and as forecast for future years. I will also describe the engineering a				
	operational aspects of the Company's proposed Pipe Replacement Progra				
	("PRP") by providing information on the history of the piping systems and				
	description of the proposed methodology the Company will use to manage t				
	PRP.				

III. WITNESS QUALIFICATIONS

2	Q.	PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL
4	Ψ-	BACKGROUND.
5	Α.	I received a Bachelor of Science degree in Civil Engineering from The University
6		of Tennessee in 1982. I am a Registered Professional Engineer in the states of
7		Tennessee, Missouri and Kansas. I have been employed in the utility industry
8		since 1977, predominantly in the natural gas distribution field. I have been
9		employed by Atmos Energy Corporation for over twenty seven (27) years.
10		During my time at Atmos Energy Corporation, I have held several different
11		engineering related positions. I was named Vice President of Technical Services
12		for the Kentucky/Mid-States Division in July of 2007.
13	Q.	WHAT ARE YOUR RESPONSIBILITIES AS THE VICE PRESIDENT OF
14		TECHNICAL SERVICES?
15	A.	I have overall responsibility for decision-making related to technical operations.
16		This includes engineering and system design, safety, compliance, procurement,
17		environmental, measurement, communications, technological infrastructure, and
18		storage operations. I also sponsor Atmos' Compliance Committee and am a
19		member of the Atmos' Utility Operations Council, which sets the Company's
20		standard practices and procedures for construction, maintenance and service. In
21		addition, I am responsible for developing the Division's (including Kentucky)
22		annual capital budget and monitoring capital budgetary compliance. In this
23		regard, it is my role to ensure that the Company's investment in new plant and
24	4	equipment in Kentucky is targeted toward meeting the important goals of public
25		safety, system reliability and efficiency.
26	Q.	HAVE YOU EVER SUBMITTED TESTIMONY BEFORE THE
27		KENTUCKY PUBLIC SERVICE COMMISSION?
28	A.	No.
29	Q.	HAVE YOU EVER SUBMITTED TESTIMONY BEFORE ANY OTHER
30		REGULATORY COMMISSIONS OR AUTHORITIES?

1	A.	Yes, I have submitted written and / or oral testimony before the Georgia Publi
2		Service Commission in Docket Numbers 27163, 27168, 29554 and 30442. I have
3		also submitted written and oral testimony before the Tennessee Regulator
4		Authority in Docket Number 07-00251.
5	Q.	ARE YOU SPONSORING ANY OF THE FILING REQUIREMENTS AND
6		IF SO, WHICH?
7	A.	I am sponsoring the following filing requirements:
8		FR 10(9)(b) Kentucky's most recent capital construction budget containing for
9		fiscal years of construction expenditures.
10		FR 10(9)(c) A complete description of all factors used in preparing Kentucky
11		capital construction budget.
12		FR 10(9)(f) Detailed information for each major construction project
13		constituting more than five percent (5%) of the annual construction
14		budget within the three (3) year forecast.
15		FR 10(9)(g) Detailed information for the aggregate of construction project
16		constituting less than five percent (5%) of the annual construction
17		budget within the three (3) year forecast.
18		FR 10(9)(t) List all commercial or in-house computer software, programs, an
19		models used to develop schedules and work papers associated with
20		this application.
21	Q.	DO YOU ADOPT THESE FILING REQUIREMENTS AND MAKE THE
22		PART OF YOUR TESTIMONY?
23	A.	Yes.
24		
25		IV. CAPITAL BUDGETING PROCESS
26		
27	Q.	WHAT ARE THE OBJECTIVES OF THE COMPANY'S CAPITA
28		BUDGETING PROCESS?
29	A.	The objectives of the Company's capital budgeting process are to:
30		(1) Formalize the process of identifying construction needs and prioritizing
31		capital expenditures;

(2) Assess the economic feasibility of in	ndividual construction projects;
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- (3) Determine overall capital requirements for the planning periods;
 - (4) Reassess long term system maintenance requirements annually; and
- 4 (5) Review past construction projects and work practices, and apply procedural improvements as appropriate.

6 Q. PLEASE DESCRIBE THE PLANNING AND BUDGET PROCESS FOR 7 THE COMPANY'S CAPITAL CONSTRUCTION PROGRAM.

The Company plans its capital expenditures over five fiscal years, with a focused emphasis on the first year of that five-year period. We normally begin this process during our third fiscal quarter (April-May) of each year, some 4 to 5 months prior to the beginning of the next fiscal year. The process is initiated within the Division by a request from my office for a "bottom-up" submission of projects from our operations supervisors and operations managers in Kentucky. All proposed projects, vehicles, and equipment must be identified at a high level by need and cost, and all budgets are prepared based upon meeting the five objectives described above. The proposed projects, vehicles, and equipment are reviewed by Kentucky/Mid-States Division's regional vice presidents of operations for collaborative agreements between the regional vice presidents, operations managers, and myself.

After review, additional information is requested for projects that are determined to be the most eligible for funding and more detailed documentation is requested from the operations and technical services managers on those particular projects. The process is largely complete by late June when projects are entered into the Atmos Energy capital budget system (PlanIt), although finalization of capital expenditures is not completed until late July. During this time, the agreed-to projects have been further substantiated to ensure they meet the appropriate financial criteria and the stated objectives.

The final proposed budget must be reviewed by the Division's senior management, including the Division President. Additional reviews are performed by corporate executive operations management and their staff. High level reviews

- of the division budgets are also performed by the Company's senior executives
 who are presiding members of the Company's Management Committee. The
 Capex budget for Kentucky is not officially approved until it, as part of the
 Company's total Capex budget, is presented to the Company's Board of Directors
 in September of each year. Upon this approval, all approved projects are
 transferred into the Atmos Energy capital tracking system (POWERPLANT) and
- 8 Q. HOW DOES ATMOS PRIORITIZE ITS CAPITAL EXPENDITURES?
- 9 A. Our priorities for capital expenditure, listed in order of importance, are:
- 10 1. Public Safety

System Capacity and Reliability

are ready for appropriation.

- 12 3. Customer Growth
- 4. Facilities Maintenance
- 14 5. Public Works, and
- Support of Long Term Technological Programs.
- 16 Q. WHAT FINANCIAL CRITERIA ARE THE MOST SIGNIFICANT IN
- 17 APPROVING A PROJECT DURING THE CAPITAL BUDGETING
- 18 PROCESS?
- 19 A. We begin work with an overall capital spending goal which we try to work
- 20 within, although variations are permitted if justified. We also use key investment
- 21 criteria to evaluate projects. Any expenditure above targeted levels must be
- 22 justified. Individual projects, and our construction program as a whole, are
- assessed on the basis of their return on investment, return on equity, cost of
- capital, cash flow, new business forecasts, and various capital overheads such as
- 25 labor, benefits, and inflation.
- 26 Q. MUST ALL PROJECTS MEET THE SAME FINANCIAL CRITERIA?
- 27 A. No. We separate projects into growth and non-growth capital expenditures.
- 28 Growth projects are revenue-producing investments for which we can identify a
- 29 stream of revenues, cash flow, return, payback and other standard investment

criteria. Non-growth capital expenditures involve system integrity, equipment, structures, pipeline integrity, system maintenance and reliability projects which are evaluated on a cost/benefit basis. We endeavor to keep our annual non-growth capital expenditures below the level of depreciation. Since these expenditures do not have an associated stream of revenues, our goal is to fund these expenditures through internal financial cash flow. Obviously, there are certain non-growth expenditures which do not impact public safety that can be scheduled into our five-year investment program to ensure that we properly maintain our system while still operating within overall cash flow constraints. Expenditures which impact public safety have always had and will continue to have the highest priority. We take our obligation to build and operate a safe and reliable gas system very seriously. Finally, there are also a number of projects we must fund over which we have little control as to timing, such as public works projects and highway relocations.

15 Q. HOW CAN THE COMPANY JUSTIFY ADDITIONAL EXPENDITURES 16 BEYOND ITS REGULAR CAPITAL BUDGET PROJECTIONS?

A. The Kentucky/Mid-States Division can secure additional funding through Atmos if we can demonstrate that we have potential investments which compare more favorably to competing expenditures in other Atmos business units and are, therefore, more worthy of immediate funding from a purely financial standpoint. Expenditures that impact public safety or compliance projects have the highest priority and are considered mandatory capital projects. Unbudgeted expenditures greater than twenty-five thousand dollars must be reviewed by the Division's senior management, including the Division President. If applicable, high-level reviews of unbudgeted expenditures also are performed by the Company's senior executives, who are presiding members of the Company's Management Committee.

Q. HOW IS THE SHARED SERVICES CAPITAL BUDGET DEVELOPED?

1	A.	The Shared Services capital budget is developed using similar methods and
2		processes employed for the Division's Capital expenditure budget which I have
3		previously described.
4		
5		V. CONTROL & MONITORING OF CAPITAL EXPENDITURES
6		
7	Q.	WHAT ARE THE GOALS OF THE COMPANY'S PROCESS OF
8		CONTROLLING AND MONITORING CAPITAL EXPENDITURE
9		VARIANCES?
10	Α.	Variances from budgeted amounts are inherent in the process of making capital
11		expenditures. Our variance monitoring process exists to institute financial quality
12		control by formalizing the analysis of variances by responsibility center in a
13		process that identifies year-to-date spending variances by project. These reports
14		are received and reviewed every month at the business unit level and on a
15		quarterly basis at the corporate level. The goal is to keep all levels of
16		management informed of spending by category or project relative to budgeted
17		levels and to ensure that corrective action is initiated on a timely basis. This
18		supports decision-making related to the cost and appropriate management of
19		current and future capital projects.
20	Q.	PLEASE DESCRIBE THE COMPANY'S PROCESS FOR
21		CONTROLLING AND MONITORING CAPITAL EXPENDITURE
22		VARIANCES.
23	A.	The Company's process for controlling and monitoring capital expenditure
24		variances is utilized by each operating division as well as by Shared Services. At
25		the division level the Company's capital budgeting system maintains projects in
26.		two broad categories - Blanket Functionals and Specific Projects. The Blanket
27		Functionals include total capital authorizations of a similar type such as new
28		services, leak repair, short main replacements, small integrity/reliability projects,

Specific projects are uniquely identified such as a specific highway

29

etc.

- relocation project, replacement of work equipment, or some larger significant integrity/reliability project.
- Once a project has been entered in the capital budget system an appropriation
 Purpose and Necessity (P&N) may be submitted for authorization. Projects are
 then monitored to ensure they stay within budgeted levels. If during the course of
 a project, field management identifies that the costs of the project will exceed
 approved amounts, a request for supplemental funding may be submitted. All
 expenditures above authorized appropriation, as well as expenditures for

unbudgeted projects or variances on budgeted and approved projects, must be

Each month, various project variance reports are published. Each budget center manager is responsible and held accountable for managing their overall approved capital budget.

approved at the appropriate levels within the Company.

Q. DISCUSS THE VARIANCES INCURRED DURING THE MOST RECENT FISCAL YEAR.

At this time the Company's fiscal year 2009 final capital spending records have not closed, however in fiscal year 2008, the Company's actual capital expenditures in Kentucky were \$17,547,624 resulting in a variance of 6.74% under the 2008 budget. In fiscal year 2008, system integrity spending was approximately \$1 million under budget due mainly to one significant project being cancelled and another project on our 1930's Hopkinsville 10 inch line coming in significantly under original budget estimates. In fiscal year 2007, the total variance was 0.65% or \$109,931 over a budget of \$16,798,201, a variance well within expected tolerance. It is important to note that variances do occur and there are projects that surface which cannot be scheduled by the Company. For example, the Kentucky highway non-reimbursement relocation project schedule was revised and work scheduled for 2007 was instead performed in 2006. This project along with other public improvement projects completed during the 2006 budget year resulted in an increase of \$349,032 over the 2006 budget. In addition, system improvement/system integrity projects such as the replacement

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1	of some of our 1930's Hopkinsville 10 inch pipeline resulted in an increase of
2	\$1,220,220 over budget. In total, the variances in 2006 resulted in a \$16,645,007
3	compared to a budget of \$14,185,245.

Q. WHAT HAS THE COMPANY'S RECENT EXPERIENCE BEEN IN TERMS OF VARIANCES BETWEEN BUDGETED DOLLARS AND ACTUAL DOLLARS SPENT?

7 A. The following table shows Kentucky's historical capital expenditures, including overheads, compared to budget:

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Fiscal	Actual	Budgeted	Over/(Under)	Variance
Year	Dollars	Dollars	Budget, \$'s	(%)
2008	17,547,624	18,815,716	(1,268,092)	(6.74%)
2007	16,908,133	16,798,201	109,931	0.65%
2006	16,645,007	14,185,245	2,495,762	17.3
2005	17,525,670	14,571,690	2,953,980	20.3
2004	20,902,147	18,550,753	2,351,394	12.7

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VI. TEST PERIOD CAPITAL BUDGET

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Q. WHAT IS THE FORECASTED TEST PERIOD USED IN THIS RATE APPLICATION?

15 A. The forecasted test period is April 1, 2010 through March 31, 2011. This represents 6 months of Kentucky's fiscal year 2010 (FY2010) and 6 months of Kentucky's fiscal year 2011 (FY2011).

18 Q. WHAT IS KENTUCKY'S FORECASTED TEST PERIOD CAPITAL 19 BUDGET?

A. Kentucky's forecasted test period's capital budget is \$24.75 million. Kentucky's capital budget is comprised of three components – the direct capital spending for Kentucky for the forecasted test period, the amount allocated to Kentucky

		•
1		resulting from capital spending by the Kentucky/Mid-States Division's general
2		office and the amount allocated to Kentucky resulting from capital spending by
3		the Company's Shared Services (SSU) during the forecasted test period. The
4		amounts which are projected to be closed to plant and comprising additions to
5		SSU rate base are sponsored by Company witness Mr. Christopher Felan. The
6		methodology for allocating SSU and the Division general office rate base
7		amounts to Kentucky is described in the testimony of Company witness Mr. Dan
8		Meziere.
9	Q.	HOW WAS KENTUCKY'S DIRECT CAPITAL BUDGET FOR THE
10		FORECAST PERIOD DEVELOPED?
11	A.	We relied upon the FY2010 capital budget as a baseline for projecting detailed
12		FY2010 through FY2011 capital expenditures for purposes of the test period in
13		this rate application. I also prepared fiscal year capital budget estimates for
14		FY2012.
15	Q.	WHAT IS KENTUCKY'S FY2010 DIRECT CAPITAL BUDGET?
16	A.	The approved FY2010 direct capital budget for Kentucky is \$22.72 million.
17	Q.	WHAT IS KENTUCKY'S FY2011 DIRECT CAPITAL BUDGET AS
18		ESTIMATED IN THE FIVE YEAR PLANNING PROCESS?
19	A.	Kentucky's FY2011 direct capital budget is estimated at \$17.98 million.
20	Q.	HOW DID YOU ADJUST KENTUCKY'S FY2010 DIRECT CAPITAL
21		BUDGET IN ORDER TO PREPARE THE FORECASTED TEST PERIOD
22		CAPITAL BUDGET?
23	A.	The cost of planned and budgeted projects for FY2010, before the application of
24		overheads, was used as a baseline. That amount was approximately \$16.37
25		million. Three factors were evaluated and used to adjust the baseline. These
26		adjustments were necessary in order to reflect the most current information
27		available which would impact our future level of capital spending and thus ensure
28		that the direct capital budget is accurate. These three factors are:
29		1. Changes related to system integrity and system improvement projects;
30		2. Cost increases in materials and labor tied to inflation; and

1		3. An application of overheads attributable to capital projects.
2	Q.	PLEASE DISCUSS EACH OF THESE FACTORS.
3	A.	The change in system improvements reflects an anticipated decrease in capital
4		spending for system improvements below FY2010. Included in the FY2010
5		budget is a one time system improvement project in Bowling Green with an
6		estimated cost of \$5.6 million. We expect to sustain system integrity spending
7		levels in FY2011 and FY2012 with an anticipated increase in cost of material and
8		labor. No major changes in overhead rates are anticipated.
9	Q.	HOW WAS THE DIVISION'S GENERAL OFFICE CAPITAL BUDGET
10		DEVELOPED?
11	A.	The capital budget for the Kentucky/Mid-States Division general office was
12		developed in conjunction with Kentucky's capital budget as well as the capital
13		budgets for all other rate divisions within the Division as part of the Division's
14		total capital budget. The budgeting processes I have described herein applied to
15		all rate division capital budgets which roll up into the Division's total capital
16		budget, including Kentucky and the Division general office.
17	Q.	WHAT IS THE PORTION OF THE DIVISION'S FY2010 CAPITAL
18		BUDGET ALLOCATED TO KENTUCKY?
19	A.	The portion of the approved FY2010 Division's general office capital budget
20		allocated to Kentucky is \$1.09 million.
21	Q.	WHAT ABOUT SUBSEQUENT FISCAL YEARS?
		-
22	A.	Those forecasted amounts are \$0.90 million for FY2011 and \$0.95 million for
23		FY2012.
24	Q.	WHAT IS THE SHARED SERVICES FY2010 CAPITAL BUDGET
25		ATTRIBUTABLE TO KENTUCKY?
26	A.	The portion of the approved FY2010 Shared Services capital budget allocated to
27		Kentucky is \$1.48 million.
28	Q.	WHAT ABOUT SUBSEQUENT FISCAL YEARS?
29	A.	Those forecasted amounts are \$0.77 million for FY2011 and \$0.80 million for

1	FY2012.
-	

2 Q. WHAT KEY NEEDS ARE MET THROUGH THIS PARTICULAR 3 BUDGET?

System improvement, pipeline integrity, and system integrity investments focus on customer safety and system reliability and are our highest priorities for capital budgeting. The next priority is public improvements and state and local public works projects such as highway relocations. The next priority is customer growth. Atmos Energy continues to build good working relationships with developers, economic development boards, and growing communities to meet the needs of the customer and to accommodate customer growth on its system. Next in order of priority, a modern fleet of vehicles and equipment (backhoes, safety equipment, ditchers, first responder equipment, air compressors, welding machines, etc.) allows us to maintain our system and continue to provide a reliable level of service to our customers. To enhance the level of customer service provided in the field, we also continue to make investments in new technology. Technology is a strategic investment that will enable us to continue improving our business processes, hold down operating costs, and meet the changing expectations of our customers.

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VII. PIPE REPLACEMENT PROGRAM ("PRP")

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22 Q. PLEASE SUMMARIZE THE PROPOSED PRP.

As part of our effort to provide the safest, most reliable natural gas service, Atmos Energy has been replacing aging infrastructure for several years. All of the cast iron main in Kentucky has been removed from service as well as many miles of bare steel pipe. However, our system still contains approximately 250 miles of bare steel transmission and distribution mains as well as associated service lines, service risers, meters and appurtenances that present maintenance and risk issues for Atmos Energy and the public. Through its PRP Atmos proposes to replace all

bare steel pipe in its system. Atmos Energy considers these facilities to be aging infrastructure in need of scheduled replacement. Atmos Energy plans to replace these facilities over a period of fifteen (15) years, beginning in April of 2011. The estimated cost of the total program is approximately \$124 million. Annual capital investment is estimated at approximately \$6.7 million in year one and assuming consistent rates of replacement will increase to approximately \$10 million in year fifteen (15) of the PRP.

8 Q. WHY DOES ATMOS ENERGY NEED A PIPE REPLACEMENT PLAN?

A.

As stated above, Atmos Energy's Kentucky gas system still contains approximately 250 miles of bare steel transmission and distribution mains along with the associated service lines, service risers, meters and appurtenances needed to deliver natural gas to our customers. Many of these facilities have reached the point in their service life where it is no longer cost effective to continue to repair due to accelerated corrosion rates. All of the bare steel pipe in the Kentucky system is at least fifty years old and some sections are approaching seventy-five years. Atmos Energy's PRP will improve public safety and reliability of service for our customers. Atmos Energy plans to use a well–planned, systematic approach to replacement that will reduce inconvenience to the public, require fewer unplanned disruptions to traffic for emergency repair, and improve coordination with local and state highway agencies. Public safety will be our highest objective and those pipe sections that need prompt attention will be given priority.

Q. PLEASE DESCRIBE THE PIPE REPLACEMENT COMPONENTS THAT ATMOS PROPOSES TO INCLUDE IN ITS PRP.

A. Atmos proposes to include in the PRP all of the planning, design, replacement construction, investment and retirement costs related to the replacement of the following categories of transmission and distribution main – bare steel (whether or not cathodically protected), cathodically unprotected coated steel, and ineffectively coated steel (whether or not cathodically protected). These facilities will hereinafter be collectively referred to as "bare steel main". Also, as part of the PRP Atmos proposes to include all of the planning, design, replacement

1		construction, investment and retirement costs related to the replacement of all
2		piping from the bare steel main to the customer's meter including curb valves
3		service risers, meter sets and all other related appurtenances that do not mee
4		current material and construction standards or pose other operational issues
5		These facilities will hereinafter be collectively referred to as "bare steel services"
6		Finally, as detailed later in my testimony, Atmos will be taking steps to ensure
7		that the newly installed facilities are appropriately designed and sized. This may
8		necessitate in certain circumstances the replacement of facilities other than bare
9		steel mains and services and those planning, design, replacement construction
10		investment and retirement costs will be included in the PRP as well.
11	Q.	WHAT ARE THE MAIN CAUSES OF LEAKS ON BARE STEEL PIPE?
12	A.	The number one cause of leaks on bare steel pipe is galvanic corrosion
13		Excluding excavation damage, approximately seventy-two percent (72%) of all
14		leaks repaired on Atmos Energy's system over the past several years were caused
15	*	by corrosion.
16	Q.	HOW DOES ATMOS ENERGY MANAGE OR CLASSIFY LEAKS AND
17		PRIORITIZE REPAIRS?
18	A.	Atmos Energy classifies each leak found according to the rules outlined in our
19		Operations and Maintenance Manual. Leaks are graded according to severity
20		Grade 1 being the most severe, through Grade 3. Grade 1 leaks represent ar
21		existing or probable hazard to persons or property that requires immediate repair
22		or continuous action until the conditions are no longer hazardous. A Grade 2 leak
23		is a leak that is recognized as being non-hazardous at the time of detection, but
24		justifies scheduled repair based on probable future hazard. Grade 3 leaks are non-
25		hazardous at the time of detection and can be reasonably expected to remain non-
26		hazardous.
27	Q.	WILL CORROSION LEAKS ON BARE STEEL INCREASE IN THE
28		FUTURE AND DOES THIS INCREASE THE RISK TO PUBLIC
29		SAFETY?

- 1 A. Yes, corrosion leaks on bare steel main will increase in the future. The likelihood
- of leaks occurring increases as the corrosion becomes more general and severe on
- 3 the pipe wall. Each leak found on the system increases the risk to public safety.
- 4 Q. IS ATMOS ENERGY'S GAS SYSTEM CURRENTLY SAFE?
- 5 A. Yes, Atmos Energy's gas system is safe. Leakage rates are managed utilizing the
- 6 leak grading system described above. All leaks are either repaired when found or
- 7 monitored on a predetermined schedule to maintain a high level of public safety.
- 8 However, with the amount of aging bare steel pipe in our system and the
- 9 continuous corrosion threat that exists, Atmos Energy must as a prudent operator
- begin a systematic, accelerated approach to bare steel pipe replacement.
- 11 Q. IS REPLACEMENT THE ONLY REMEDY OR IS THERE ANOTHER
- 12 WAY TO RETARD OR ARREST THE CORROSION PROBLEM
- 13 INHERENT IN BARE STEEL?
- 14 A. In theory a cathodic protection current could be applied to the surface of a bare
- steel piping system to protect it from galvanic corrosion. However, in practice,
- 16 cathodic protection of bare steel systems is not a practical approach. Since the
- amount of direct current that must be applied to a bare steel surface to achieve
- protection is directly proportional to the surface area of the steel being protected,
- 19 current requirements for a bare steel system are very high compared to the current
- 20 requirements of a coated steel system. Introduction of high levels of direct current
- 21 into the soil in urban areas often results in damage to other underground metal
- 22 structures such as water systems, underground tanks, and metal shielded cable
- 23 systems, through a process called stray current corrosion. Even if cathodic
- 24 protection were a possibility to mitigate the ongoing deterioration caused by
- 25 galvanic corrosion, there is no process that could undo or replace the damage that
- has already occurred on a bare steel system.
- 27 Q. PLEASE DESCRIBE THE SYSTEMATIC PIPE REPLACEMENT
- 28 APPROACH ATMOS PLANS TO USE IN ITS PRP.
- 29 A. Atmos will implement a two-pronged approach in its PRP to replace bare steel
- mains. First, Atmos will use leak history and leak grades to determine if the need
- 31 exists to prioritize a main segment replacement. Secondly, Atmos will utilize a

concentrated construction effort by geographic location to replace the remaining bare steel segments. This approach allows Atmos to maximize efficiency in concentrated construction locations while simultaneously maintaining a high level of public safety. Of course, during the concentrated construction effort Atmos will continue to monitor its remaining bare steel main and replace on a prioritized basis any bare steel main segment determined to require a prioritized replacement. The bare steel service aspect of the PRP will generally be accomplished contemporaneously with the associated bare steel main replacement. There are instances, however, when a bare steel service will be replaced through the PRP on an individual basis due to emergency leakage, damage or other relocation or replacement requirement.

12 Q. PLEASE DESCRIBE THE BENEFITS OF UTILIZING THE 13 SYSTEMATIC PIPE REPLACEMENT APPROACH.

This is an efficient installation practice because through the concentrated construction effort construction crews can stage work by continuously shifting the worksite along the pipe being replaced, day in and day out, rather than what is often the case now where crews open and close worksites and relocate labor and equipment across town or across the service territory. Incorporating this type of design and construction approach should result in a per foot installation cost less than that which would be achieved by bidding smaller and more discrete projects. In addition, there are the public benefits of minimizing disruptions in traffic flow by concentrating work in one section of a municipality. At the same time we will monitor our other segments for leakage and needed replacement activity and react accordingly when main segments become problematic from a long range maintenance perspective. Using this approach will enable Atmos Energy to keep the construction cost as low as possible and avoid unnecessary crew movement which results in down time for the construction effort.

Q. WHAT TYPES OF MATERIALS WILL BE USED TO REPLACE THE BARE STEEL?

A.

- 1 A. The majority of replacement piping will be polyethylene plastic where the system
 2 pressures will allow it to be used. All of the other replacement piping will be
 3 cathodically protected coated steel pipe.
- Q. PLEASE DESCRIBE THE MANNER IN WHICH ATMOS ENERGY HAS
 HISTORICALLY ADDRESSED REPLACEMENT OF ITS BARE STEEL
 PIPE.
- A. Atmos Energy has been replacing and retiring bare steel pipe in its system since the 1970s. Atmos Energy replaces pipe segments based on analyses of the segment's historical leak rate. Atmos Energy attempts to identify the worst likely performing segments and replaces those each year. Atmos Energy also replaces short segments of main and service pipe on an emergency basis when it is determined that an effective repair cannot be made.
- 13 Q. DID ATMOS ENERGY EVALUATE ITS INTERNAL RESOURCES
 14 NECESSARY TO IMPLEMENT THE PRP?
 - Yes. Atmos Energy has reviewed internal staffing levels on an annual basis for A. the past decade through a workload process called "blueprint". Utilizing this system allows Atmos Energy to match workload with employee complement. In the initial stages of the PRP we expect to use outside contract labor for the majority of the work. However, with the composite age of our work force in Kentucky, we see the PRP as a prime opportunity to bring in some new talent that will gain a tremendous amount of experience during the replacement of the bare steel pipe. Our blueprint process will assist us in matching complement changes with the increased workload resulting from the PRP. As our existing workforce retires or leaves through normal attrition, this new group of will be ready to step in and maintain the same safe reliable, service that Atmos Energy expects of its' employees. Any additions to staffing will be strategically located in areas to support the PRP. Atmos Energy will continually review its staffing needs to ensure proper support of the PRP.

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Q. WHAT STEPS WILL ATMOS ENERGY TAKE TO MAKE SURE THE NEW SYSTEM IS DESIGNED AND SIZED CORRECTLY FOR THE FUTURE?

- 4 Gas distribution systems are typically planned and designed on a minimum A. 5 twenty-year horizon. Proper planning dictates that Atmos Energy look ahead for 6 engineering and operational purposes as far as possible. The choice and size of 7 replacement pipe will take into account the engineering and other requirements of 8 system design. The PRP presents an opportunity to address pipe sizing issues 9 with a system sized correctly for the current demands and future loads. Atmos 10 Energy will utilize standard natural gas distribution engineering techniques to select the correct pipe size and type for the application. 11
- 12 Q. WHAT STEPS WILL ATMOS ENERGY TAKE TO ACHIEVE 13 EFFICIENCIES AND REDUCE CONSTRUCTION COSTS?
- 14 The large scale projects resulting from Atmos' concentrated construction effort A. 15 will allow us to leverage material purchases, obtain the best construction and 16 restoration contractor costs, and acquire land and right-of-way, when needed, more cost effectively. Moreover, planning, designing and constructing regional 17 18 and system wide facilities will allow Atmos to optimize both the facilities in place 19 necessary to support gas service delivery as well as the size and configuration of 20 the newly installed facilities. This approach will allow us to utilize best construction practices as they are implemented over a widespread part of our 21 22 impacted distribution system to reduce construction costs and allow us to adopt 23 and employ best operating and maintenance practices to reduce future O&M 24 legacy costs.

25 O. HOW WILL THE PRP AFFECT O&M EXPENSE?

A. Atmos Energy anticipates a significant reduction in leakage which, in turn, will impact operations and maintenance expense over the duration of the PRP. Many of the outstanding leaks in the system will be eliminated with the replacement of bare steel pipe. The elimination of leaking pipe and the risks and inconvenience due to emergency repair, will be the largest benefit for our customers.

1 Q. HOW DID ATMOS ENERGY BUDGET ITS CAPITAL PROGRAM FOR 2 BARE STEEL REPLACEMENT IN FISCAL YEAR 2010?

- 3 Specific replacement projects were identified and prioritized based on discussions A. 4 with experienced operating and engineering personnel knowledgeable of the 5 leakage rate and construction factors influencing public safety and reliability. A budget of approximately \$13.1 million was developed for all system integrity 6 7 projects. This amount includes bare steel main replacement, leak repair, service 8 line, meter and meter set replacements and all other types of system integrity 9 projects normally included in this budget category. The replacement budget includes finances for both planned projects and those main and service facilities 10 11 requiring replacement on an emergency basis.
- 12 Q. WHAT IS THE EXPECTED BUDGET FOR THE PRP IN FUTURE YEARS?
- 14 Atmos Energy estimates it will spend approximately \$124 million over a period of fifteen (15) years beginning in April 2011. Future projects and annual budgets 15 16 will vary somewhat as we replace the highest priority bare steel pipe based on system condition and performance. While public safety and potential risk are 17 always the primary considerations of project selection, the timing and extent of 18 19 replacement cost recovery can impact the scope of replacement projects in any given year. Fair and timely investment recovery via the "PRP Rider," explained in 20 21 Atmos Energy witness Smith's testimony, provides a critical and predictable base 22 of capital to finance our PRP over approximately the next fifteen (15) years. The fiscal year 2012 capital replacement program will be the first full year of Atmos 23 Energy's PRP. In the testimony of Atmos Energy witness Mr. Waller, he has 24 25 described the timing of proposed annual filings related to the PRP.
- 26 Q. IN PLANNING THE PRP, WERE ALTERNATIVELY DEFINED
 27 LENGTHS OF THE PROGRAM CONSIDERED, AND WHY WAS A
 28 FIFTEEN YEAR PERIOD SELECTED?
- 29 A. Various program lengths were evaluated, but the duration of fifteen years was 30 chosen because it matched the best combination of risk (the safe and reliable 31 delivery of natural gas), and resources needs (internal/external labor, material,

capital, etc.). Although Atmos Energy believes the bare steel mains, services, meters, pressure regulating equipment and associated equipment necessary for safe efficient gas distribution operations should be replaced as expediently as possible, internal and external resource constraints have driven us to choose fifteen years as the most reasonable program duration. Atmos Energy has significant experience in other state jurisdictions with replacement programs of this type. We know, based on those other programs, we can efficiently manage this annual amount of spending and replacement. Atmos Energy will continually monitor and evaluate the performance and effectiveness of the replacement program and make adjustments as necessary to ensure safe and reliable delivery of service.

12 Q. WHAT ASSUMPTIONS ARE BEHIND THE COST ESTIMATE OF \$124 13 MILLION?

As I mentioned earlier, this dollar estimate captures all of the planning, design, replacement construction and retirement of approximately 250 miles of bare steel main as well as the bare steel services. The total cost estimate is based on current dollar value adjusted annually for inflation.

18 Q. WHAT ARE THE BENEFITS OF THE PRP, COMPARED WITH 19 ATMOS ENERGY'S HISTORICAL REPLACEMENT PROGRAM?

Public safety is enhanced because the PRP will greatly reduce the increasing risk associated with aging facilities exposed to continuous corrosion forces. For municipalities and state highway departments, the PRP provides a systematic and predictable schedule of construction activities and minimizes disruption to traffic, roads and highways. In some cases it may be possible to coordinate projects around other municipal planned infrastructure improvements such as road replacement, repaving, and sewer and water replacement thus providing overall benefits of public convenience and cost savings to local neighborhoods and communities. Additional cost savings will be achieved through a planned approach to pipe sizing.

Q. WHAT ARE THE ECONOMIC BENEFITS OF THE PRP?

A.

1	٨	A systematic replacement approach produces efficiency gains allowing more
1	A.	A systematic repracement approach produces efficiency gains anowing more
2		main to be replaced for the same price. Atmos Energy will also be able to work
3		through its pipeline supplier to purchase larger quantities of construction
4		materials, resulting in lower cost. Atmos Energy expects operations and
5		maintenance expenses to decline over time by reducing problematic pipe having
6		corrosion leaks.

7 Q. WHAT ARE THE POTENTIAL ECONOMIC DEVELOPMENT 8 BENEFITS OF THE PRP?

- A. A possible benefit of the PRP is the potential for improving economic development in many communities. Through the PRP Atmos Energy plans to eliminate many low pressure systems currently in service which significantly limits the size of the load that can be added. While the existence of a high pressure system does not necessarily mean there will be economic development, should economic development occur, the higher pressure system will enable Atmos to serve larger loads than the current low pressure systems allow.
- 16 Q. HOW DOES THE CUSTOMER BENEFIT FROM ATMOS ENERGY'S PRP?
- A. Atmos Energy will replace deteriorating main and service pipe and enhance the safety of its system by ensuring replacement of facilities with new, longer lasting and safer materials. Atmos Energy will be able to continue to provide reliable gas service and possibly increase the system capacity to support economic development efforts.
- 23 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 24 A. Yes.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF)	
RATE APPLICATION OF)	Case No. 2009-00354
ATMOS ENERGY CORPORATION)	

CERTIFICATE AND AFFIDAVIT

The Affiant, Earnest B. Napier, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2009-00354, in the Matter of the Rate Application of Atmos Energy Corporation, and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct pre-filed testimony.

Affiant further states that he will be present and available for cross examination for such additional direct examination as may be appropriate at any hearing in Case No. 2009-00354 scheduled by the Commission, at which time affiant will further reaffirm the attached testimony as his direct testimony in such case.

STATE OF TENNESSEE COUNTY OF WILLIAMSON

SUBSCRIBED AND SWORN to before me by LAKNEST B. NAPICA on this the 14th day of October, 2009.

Notary Public

My Commission Expires: MAY 8, 2012

My Commission Expires MAY 8, 2012

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF GAS AND ELECTRIC)			
RATES OF LOUISVILLE GAS AND)	CASE	NO.	90-158
ELECTRIC COMPANY)			

TABLE OF CONTENTS

COMMENTARY2
TEST PERIOD2
NET ORIGINAL COST RATE BASE
Trimble County3
Fuel Inventory7
Materials, Supplies, and Prepayments8
Stores Expense9
Gas Stored Underground9
Cash Working Capital Allowance
Reproduction Cost Rate Base11
CAPITAL1
PROPOSED PHASE II PROCEEDING
REVENUES AND EXPENSES
Revenue Normalization - Electric
Revenue Normalization - Gas
Fuel Cost Recovery
Labor and Labor-Related Costs23
Wages and Salaries22
FICA Taxes24

Unemployment Taxes24
Health Insurance
Pensions
Dental Insurance25
Group Life Insurance26
401(k) Thrift Savings Plan
Supplemental Executive Retirement Plan27
Amortization of Downsizing Costs28
Storm Damage Expenses29
Provision for Uncollectible Accounts30
Location of Gas Service Lines31
Headwater Benefit Assessment31
Depreciation and Amortization Expense
Property Taxes33
EPRI Membership Dues
EEI Membership Dues35
New Office Expenses
Holding Company Expenses
Trimble County Marketing Costs36
State Sales Taxes
Office Supplies and Professional Services Expenses37
Miscellaneous Expense Adjustments38
Amortization of Management Audit Fee
Annualization of Year-End Customers40
Directors and Officers Liability Insurance40
Workers' Compensation Insurance41
Amortization of Investment Tax Credits

Flowback of Unprotected Federal Excess Deferred Taxes42
State Income Tax Rate Change43
Tax Adjustment for Other Interest Expense43
Interest Synchronization44
RATE OF RETURN45
Capital Structure45
Cost of Debt and Preferred Stock47
Return on Equity48
Rate of Return Summary54
REVENUE REQUIREMENTS54
PRICING AND TARIFF ISSUES55
Electric Cost-of-Service Study55
Gas Cost-of-Service Study58
Revenue Allocation63
Electric Rate Design64
Cable Television Attachment Charges ("CATV")68
Gas Rate Design70
Late Payment Charges72
Transportation Service/Standby Service74
Pipeline Demand Charges
Fuel Adjustment Clause76
Tariff Changes76
OTHER ISSUES
Management Audit
Energy Conservation Programs78
Cane Run Unit No. 3 ("Cane Run No. 3")80
Ohio Valley Electric Corporation ("OVEC") Power Agreement 81

Repor	ting	for	the	Holding	Company	• • • • • • • • • • • •	82
SUMMARY							

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF GAS AND ELECTRIC RATES OF LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 90-158

ORDER

On June 29, 1990, Louisville Gas and Electric Company ("LGSE") filed an application with the Commission requesting authority to increase its electric and gas rates for service rendered on and after August 1, 1990. The proposed rates would increase annual electric revenues by \$31,015,938, an increase of 6.22 percent, and annual gas revenues by \$3,837,454, an increase of 2.24 percent. These increases represent an annual increase in total operating revenues of \$34,853,392, or 5.43 percent, based on normalized test-year sales. This Order grants an increase in annual electric revenues of \$5,451,758, an increase of 1.17 percent, and an increase in annual gas revenues of \$524,487, an increase of .30 percent. These increases represent an annual increase in total operating revenues of \$5,976,245, or .93 percent, based on normalized test-year sales.

The Commission granted motions to intervene filed by the Attorney General, by and through his Utility and Rate Intervention Division ("AG"); Jefferson County ("Jefferson"); the city of Louisville ("Louisville"); the Department of Defense of the United States ("DOD"); the Kentucky Industrial Utility Customers

("KIUC"); the Paddlewheel Alliance ("Paddlewheel"); the Kentucky Cable Television Association, Inc. ("KCTA"); the Metro Human Needs Alliance, Inc., which assists low-income households ("MHNA"); the International Brotherhood of Electrical Workers, Local 2100; and Reynolds Metals Company. The Commission suspended the proposed rate increase through December 31, 1990 in order to conduct an investigation into the reasonableness of the proposed rates. A public hearing was held in the Commission's offices in Frankfort, Kentucky, on November 7-9, 19-21, and 26, 1990 with all parties of record represented. Simultaneous briefs were filed on December 14, 1990. All information requested during the hearing has been submitted.

COMMENTARY

LGSE is a privately owned electric and gas utility which generates, transmits, distributes, and sells electricity to approximately 321,300 consumers in Jefferson County and in portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble counties. LGSE distributes and sells natural gas to approximately 243,400 consumers in Jefferson County and in portions of Barren, Bullitt, Green, Hardin, Hart, Henry, Larue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Trimble, and Washington counties.

TEST PERIOD

LG&E proposed the 12-month period ending April 30, 1990 as the test period for determining the reasonableness of the proposed rates. LG&E also proposed to reflect the impact of the commercialization of the Trimble County Unit No. 1 ("Trimble

County") Generating Plant which was scheduled for late December 1990. Jefferson, Louisville, and Paddlewheel ("Jefferson et al.") and KIUC opposed this approach, stating that LG&E had created a hybrid test year which was neither fully historic nor fully projected. The Commission believes it is reasonable to utilize the 12-month period ending April 30, 1990 as the test period in this proceeding. In utilizing the historic test period, the Commission has given full consideration to appropriate known and measurable changes.

NET ORIGINAL COST RATE BASE

Trimble County

LGSE proposed a total company net original cost rate base of \$1,444,036,873. Trimble County was reflected in rate base by including test year end Construction Work in Progress ("CWIP") of \$677,170,687, plus estimated additional expenditures through December 31, 1990 of \$37,829,317, less \$178,750,000 to reflect the 25 percent disallowance for Trimble County ordered by the Commission in Case No. 9934. LG&E also included in its proposed accumulated depreciation the first year depreciation expense on the December 31, 1990 estimated level of investment in Trimble County, exclusive of the 25 percent disallowance. LG&E cited two reasons for including Trimble County in the net original cost rate First, it stated that the Trimble County expenditures are known and measurable; and second, it claimed that the Settlement Agreement, Article IX, approved in Case No. 10320, 2 provide an

Case No. 9934, A Formal Review of the Current Status of Trimble County Unit No. 1, Order dated July 1, 1988.

absolute right to recover 75 percent of its Trimble County investment, including depreciation.

While the AG, Jefferson et al., and RIUC all filed testimony opposing LG&E's proposed treatment of Trimble County, none of these intervenors prepared a net original cost rate base. Their testimony focused on the impact that LG&E's proposals had on total capitalization, discussed later in this Order.

The Commission finds that the post test-year Trimble County expenditures are not known and measurable but, rather, are a moving target. On numerous occasions during the course of this case, LG&E revised its estimated December 31, 1990 level for Trimble County CWIP. In fact, LG&E's most recent revision discloses that almost \$11,000,000 of Trimble County CWIP will not be spent until after January 1, 1991.

In proposing this rate base treatment for Trimble County, LG&E has ignored a basic concept of rate-making, the matching principle. While all rate base items except Trimble County are established at actual April 30, 1990 levels, LG&E has included a post test-year plant addition for Trimble County CWIP and the related accumulated depreciation at the estimated December 31, 1990 level. The Commission has a well-established, rate-making policy on the inclusion of post test-period plant additions. All utilities under the Commission's jurisdiction were given notice that, if a historic test period is used, adjustments for post

Case No. 10320, An Investigation of Electric Rates of Louisville Gas and Electric Company to Implement a 25 Percent Disallowance of Trimble County Unit No. 1, Order dated October 2, 1989.

test-period plant additions should not be requested unless all revenues, expenses, rate base, and capital items have been updated to the same period as the plant additions. LG&E acknowledged that it was aware of this policy but argued that it should not apply to this case because the policy was announced after the Settlement Agreement was signed on August 11, 1989.

The Commission is not persuaded by LG&E's argument. The date that the Settlement Agreement was signed has no particular significance in determining the applicability of the rate-making policy announced on August 22, 1989 in Case Nos. 10201⁴ and 10481. The Settlement Agreement did not become binding and enforceable until approved by the Commission on October 2, 1989, six weeks after the Commission declared that:

Therefore, in cases filed after this decision is issued, the Commission gives notice to Columbia [Kentucky-American] and other utilities under its jurisdiction that: 1) adjustments for post test-period additions to plant in service should not be requested unless all revenues, expenses, rate base, and capital items have been updated to the same period as the plant additions. . . 5

Case No. 10481, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on February 2, 1989, Order dated August 22, 1989, page 5.

Case No. 10201, Adjustment of Rates of Columbia Gas of Kentucky, Inc., Order dated August 22, 1989.

Case No. 10201, Order dated August 22, 1989, page 6; and Case No. 10481, Order dated August 22, 1989, page 5.

This rate-making policy, having been announced before the Settlement Agreement was approved, and long before this rate case was filed, is applicable and controlling. Further, there is no language in the October 2, 1989 Order approving the Settlement Agreement that allows LG&E to disregard this policy.

Nevertheless, this Commission also recognizes that Trimble County represents a significant addition to LG&E's utility plant in service. By the date the rates authorized in this Order take effect, Trimble County will be in commercial operation and all Trimble County expenditures will be reclassified from CWIP to plant-in-service. Therefore, the Commission must consider the commercialization of a major plant addition and at the same time adhere to rate-making concepts, time tested for fairness and reasonableness.

We believe it fair and reasonable in this instance to include in LG&E's net original cost rate base the test-year-end Trimble County CWIP. This amount, net of the 25 percent disallowance, is \$507,878,016. This rate-making treatment is essentially the same that LG&E has received throughout the construction of Trimble County. The Commission also finds it reasonable in this instance to allow depreciation expense on 75 percent of the Trimble County CWIP balance as of the end of the test year. The first year depreciation expense has been included in the accumulated depreciation used in determining the net original cost rate base. This approach properly recognizes the known and measurable fixed cost associated with the commercialization of Trimble County. Commission cannot and will not include in rate base the post

test-period plant additions for Trimble County or the related first year depreciation expense. To do otherwise would disregard established, and we feel fair, just and reasonable rate-making practices enunciated and adopted in prior Commission decisions concerning post test-period plant additions.

Fuel Inventory

LGSE proposed to include \$14,297,235 as fuel inventory in its rate base calculations. This amount represents the test-year end balance for the fuel inventory account. During the hearing, LGSE indicated that it began to purchase coal for Trimble County in January 1990, but had not adjusted the fuel inventory to reflect a 25 percent disallowance of the Trimble County coal. The AG proposed to remove 25 percent of the increase in the fuel inventory between April 30, 1989 and April 30, 1990, stating the entire increase had to be related to Trimble County.

Based on a monthly account balance for fuel inventory review, the Commission believes it is more appropriate to use a 13-month average balance for fuel inventory in the calculation of rate base. The use of a 13-month average balance is consistent with our usual practice. The Commission also believes it is reasonable to remove from the fuel inventory 25 percent of the coal inventory related to Trimble County coal. The 13-month average balance for fuel inventory, including the Trimble County coal was \$10,280,683.6 The Commission has calculated a 13-month average balance, removing the Trimble County coal from each monthly

Response to Commission's Order dated June 29, 1990, Item 9.

balance, and finds that \$10,270,961 should be used in the calculation of rate base.

Materials, Supplies, and Prepayments

In determining its net original cost rate base, LG&E used the test-year end balances for materials, supplies, and prepayments. The AG proposed to remove 25 percent of the increase in materials supplies between April 30, 1989 and April 30, 1990, stating and entire increase had to be related to Trimble County. The Commission has reviewed the monthly account balances for these accounts, and as discussed previously, believes it is more appropriate to use a 13-month average balance for these accounts in the calculation of rate base. The Commission also believes it is reasonable to remove from materials and supplies 25 percent of any amounts related to Trimble County. During the hearing, LG&E indicated that \$1,945,0007 was included in materials and supplies The 13-month average balance for materials for Trimble County. and supplies, including the Trimble County materials and supplies, \$32,691,260.8 The Commission would prefer to adjust the Trimble County amounts out on a monthly basis, and then compute the 13-month average. In this instance, the detailed information

Transcript of Evidence ("T.E."), Volume IV, November 19, 1990, pages 181 and 182.

⁸ Response to Commission's Order dated June 25, 1990, Item 9.

is not available. Therefore, the Commission has deducted $$486,250^9$ from the \$32,691,260 average, and included \$32,205,010 in rate base for materials and supplies. We included $$748,304^{10}$ for prepayments in our calculation of rate base.

Stores Expense

The AG also proposed to remove 25 percent of the increase in stores expense between April 30, 1989 and April 30, 1990, for the same reason stated in his adjustment to materials and supplies. At the hearing, LG&E stated that \$434,000 in stores expense was related to Trimble County. 11 The Commission believes it is appropriate to remove 25 percent of its Trimble County stores expense from the rate base calculations. The test-year-end balance of \$5,790,584 has been reduced by \$108,50012 to reflect the removal of the 25 percent Trimble County stores expense.

Gas Stored Underground

LG&E proposed to include \$20,450,243 as gas stored underground in its calculation of rate base. This amount represented a 12-month average balance of the gas stored underground account. Again we believe it is more reasonable to use the 13-month average balance, and have included \$19,515,080 as gas stored underground in the calculation of rate base.

^{9 \$1,945,000} x 25 percent = \$486,250.

Response to Commission's Order dated June 29, 1990, Item 9.

¹¹ T.E., Volume IV, November 19, 1990, pages 181 and 182.

¹² \$434,000 x 25 percent = \$108,500.

Cash Working Capital Allowance

LGSE determined its cash working capital allowance using the 45 day or 1/8 formula methodology. This Commission has traditionally used this approach in rate cases and do again here. We have adjusted the allowance for cash working capital to reflect the accepted pro forma adjustments to operation and maintenance expenses.

In determining the cash working capital allowance, LGEE deducted from the operation and maintenance expenses the gas supply expenses. The level of gas supply expenses removed did not equal the amount LGEE deducted in its operating expense adjustment for gas supply expenses. It is best to use the same amount in both adjustments. Therefore, we have used the operating expense adjustment level of gas supply expenses in the calculation of the cash working capital allowance.

Based upon the previous findings, we have determined the net original cost rate base for LG&E at April 30, 1990 to be as follows:

	Electric	Gas	Total
Total Utility Plant Add:	\$1,915,177,722	\$221,751,683	\$2,136,929,405
Materials & Supplies Gas Stored	46,804,173	1,353,882	48,158,055
Underground	0	19,515,080	19,515,080
Prepayments	621,092	127,212	748,304
Cash Working Capital	32,815,128	4,441,938	37,257,066
Subtotal	\$ 80,240,393	\$ 25,438,112	
Deduct:	7 3372337333	,,,	,
Reserve for			
Depreciation	529,783,546	84,484,852	614,268,398
Customer Advances	1,572,719	5,134,306	6,707,025
Accumulated Deferred	1,5/4//12	3/234/300	0,101,023
Taxes	193,385,140	19,093,760	212,478,900
	193,363,140	13,033,700	212,4/6,900
Investment Tax		407 400	3 554 330
Credit (Prior Law)	1,127,320	427,400	1,554,720
Subtotal	\$ 725,868,725	\$109,140,318	\$ 835,009,043
NET ORIGINAL COST			
rate base	\$1,269,549,390	<u>\$138,049,477</u>	\$1,407,598,867

Reproduction Cost Rate Base

presented 8 reproduction cost rate of \$2,605,266,805,13 which included electric facilities of \$2,238,145,899 and gas facilities of \$367,120,906. LG&E estimated the value of plant in service, plant held for future use, and CWIP at the end of the test year. LGSE also reflected the same adjustments it had included in its net original cost rate base. We have given consideration to the proposed reproduction cost rate base.

CAPITAL

LG&E proposed a total capitalization of \$1,384,481,820.14

Included in the total capitalization were five adjustments, which

¹³ Fowler Direct Testimony, Exhibit 5.

¹⁴ Fowler Direct Testimony, Exhibit 2, page 1 of 2.

LG&E allocated on a pro rata basis to all components of capital. The five adjustments were for the Job Development Investment Tax Credit ("JDIC"), the 25 percent disallowance of test year Trimble County CWIP, the unamortized balance of extraordinary retirements as determined by the Commission in Case No. 10064, 15 the estimated additional expenditures for Trimble County through December 31, 1990 net of the 25 percent disallowance, and the capital costs relating to LG&E's new office building.

The AG proposed a total capitalization of \$1,352,739,019.16 The AG added to total debt capital the difference between the 12-month average balance of gas stored underground and the April 30 - 1990 balance. The AG deducted from common equity: the entire 25 percent disallowance of test-year Trimble County CWIP and 25 percent of the net increase in fuel and supplies increases. After making these adjustments, the AG allocated on an adjusted pro rata basis the JDIC. the unamortized balance of extraordinary retirements, and the capital costs relating to LG&E's new office The AG stated that the adjustment to debt capital was building. necessary because the test-year end balance was not representative of the 12-month average balance, and it was logical to assume that the gas balances were financed by short-term debt since they varied greatly during the test year. The AG's proposal to remove

Case No. 10064, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company, Order dated July 1, 1988.

DeWard Direct Testimony, Exhibit TCD-1, Schedule 3.

the 25 percent Trimble County CWIP disallowance totally from common equity was based on the Settlement Agreement approved in Case No. 10320, which assigned any benefits, profits, or entitlements realized on the disallowed 25 percent of Trimble County to the shareholders of LG&E. The AG stated that LG&E had put itself at risk for both the costs and rewards related to the 25 percent disallowance. MHNA supported the AG's position on this issue. The AG stated that it was logical that LG&E would begin to increase levels of fuel and supplies for Trimble County and that 25 percent of those increases should also be removed.

KIUC proposed a total capitalization of \$1,356,100,000. 18

KIUC began with LG&E's total proposed capitalization and removed the pro rata allocation of the estimated additional expenditures for Trimble County through December 31, 1990. KIUC stated that LG&E had created a hybrid historic and forecasted test year, inconsistently relying upon actual historic costs in some instances and totally forecasted costs in other instances. 19

Jefferson et al. did not propose an amount for total capitalization, but took issue with LG&E's proposal to include the estimated additional expenditures for Trimble County through December 31, 1990. Jefferson et al. stated that LG&E's application had to be evaluated using the historic test year

¹⁷ Brief of MHNA, pages 7 and 8.

¹⁸ Kollen Direct Testimony, Table 6, page 42.

¹⁹ Id., page 13.

approach, and these additional expenditures did not constitute known and measurable items.

The Commission does not agree that an adjustment to the capitalization is necessitated by the use of an average balance for gas stored underground in the rate base determination. Nor do we agree with the argument that LG&E finances its gas stored underground exclusively through debt capital. In determining the capitalization of a utility, the Commission establishes the overall embedded capital needs which includes working capital items which vary in value throughout the course of a 12-month test period. These variations are sufficient to compensate LG&E for the monthly variations in gas stored underground. Such an adjustment is not necessary in this case.

Concerning the AG's proposal to remove the entire 25 percent disallowance of Trimble County CWIP from common equity, the Commission has ruled in prior cases that the investment in utility plant cannot be traced to specific capital sources. The AG presented no evidence to demonstrate that this investment actually came from common equity alone. Trimble County's construction has been financed by all components of capital, not solely by common equity. It is reasonable to allocate the disallowance on a pro rata basis, in order to reflect this fact. The Commission notes the inconsistency of the AG's position on this adjustment. While proposing a higher level of debt for capitalization, this higher level of debt was not reflected in the AG's proposed rate of return.

The Commission has determined that LGsE's total test-year end capitalization should be \$1,355,523,360. The Commission has accepted all of LGsE's proposed adjustments to capitalization with the exception of the estimated additional expenditures on Trimble County through December 31, 1990. As has been discussed earlier in this Order, the Commission has determined that it is not reasonable nor equitable to include these estimated expenditures in rate base without concurrent adjustments to revenues and expenses. Likewise, capitalization must reflect only the level of Trimble County expenditures as of test-year end. The Commission has also adjusted the capitalization for the amount removed from rate base relating to the Trimble County coal inventory, materials and supplies, and stores expense.

PROPOSED PHASE II PROCEEDING

LGSE proposed a "Phase II" proceeding in addition to the As proposed, Phase II would establish a rate case. process whereby LG&E could recover the allowable 75 percent portion of operation and maintenance expenses associated with the operation of Trimble County. Four areas would be addressed in Phase II. LG&E proposed to file with the Commission calculations annualizing the first three months of actual operating and maintenance Trimble County, as adjusted expenses at unrepresentative costs. Operating expenses would be reduced by any Trimble County labor expenses recovered in this proceeding. Operating and maintenance expenses would also be reduced by 25 percent of the administrative and general expenses associated with the operation of Trimble County. Additional adjustments would be

made to reduce the operating and maintenance expenses by the net revenues realized from off-system sales attributable to the allowable 75 percent portion of Trimble County and depreciation on Cane Run Unit No. 3, if the unit has been retired. 20 LG6E offered this process as a means to avoid the expenses and time associated with additional rate case proceedings, reduce the effects of regulatory lag, avoid the problems associated with a forecasted test year proceeding, and benefit LG6E's customers by allowing it to avoid future rate filings for a period of time. 21

The AG, KIUC, and Jefferson et al. are opposed to the Phase II proposal. The AG questioned LGaE's willingness to provide information necessary to revaluate such a filing and how representative three months of operational data and off-system sales would be on a going forward basis. 22 KIUC characterized it as an attempt to inappropriately accelerate its Trimble County cost recovery and that the plan was premature and poorly designed. 23 Jefferson et al. cited problems with the three months chosen for annualization, the complexity of calculating the annualization, and how known and measurable the final results would be. 24DOD stated that the proposal was too narrow in scope. 25

Powler Direct Testimony, page 31.

²¹ Id., page 3.

²² DeWard Direct Testimony, pages 53 and 54.

²³ Kollen Direct Testimony, pages 5 and 22.

²⁴ Kinloch Direct Testimony, pages 15 and 16.

²⁵ Brief of DOD, page 11.

The Commission does not believe it is reasonable to accept the Phase II proposal. The abbreviated proceeding would make it difficult to properly match revenues, expenses, rate base, and capital items. Significant non-Trimble County events would be excluded from Phase II. There is insufficient evidence to demonstrate that an annualization of three months of actual Trimble County data would be representative of going forward conditions.

REVENUES AND EXPENSES

For the test period, LG&E had actual net operating income of \$121,674,031.²⁶ LG&E originally proposed several pro forma adjustments to revenues and expenses to reflect more current and anticipated operating conditions which resulted in an adjusted net operating income of \$122,043,734.²⁷ Subsequently, LG&E proposed several correcting adjustments. The proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications.

Revenue Normalization - Electric

LGEE proposed normalized electric operating revenues of \$502,388,879 based on the rates in effect at the end of the test year. In normalizing its electric revenues, LGEE made adjustments to reflect year-end customers, to eliminate a non-recurring refund, and to eliminate the effect of changing to the unbilled method of recording revenues midway through the test year.

²⁶ Fowler Direct Testimony, Exhibit 1, page 1 of 3.

²⁷ Id., page 3 of 3.

KIUC proposed an adjustment to increase normalized electric revenues by \$4,896,459 to recognize for rate-making purposes the initial booking of unbilled revenues reported by LG&E in January The adjustment proposed by KIUC reflects a 3-year 1990. amortization of LG&E's initial booked amount of \$14,689,378. contends that a one-time event such as LG&E's initial booking of unbilled revenues should be given rate-making treatment consistent with that afforded the one-time downsizing for which LG&E proposed a 3-year amortization. KIUC maintains that both the downsizing costs and the initial booking of unbilled revenues should either amortized and included in the determination of LG&E's revenue requirements or otteated as one-time, non-recurring events that were booked during the test year, will not impact future earnings, and should be excluded from the determination of LG&E's revenue requirements.

LG&E's proposed adjustments are reasonable for determining normalized electric revenues. No adjustment should be made to amortize the amounts included in LG&E's initial booking of unbilled revenues. The initial booking is a one-time occurrence recorded during the test year that will not impact future periods during which the approved rates will be in effect.

Revenue Normalization - Gas

LG&E proposed normalized gas operating revenues of \$194,585,467 based on the rates in effect at the time of filing its application. In normalizing its gas revenues, LG&E made adjustments to reflect normal weather conditions and year-end customers. LG&E eliminated the effect of changing to the unbilled

method of recording revenues and adjusted its gas cost revenues to \$130,285,428 based on its wholesale gas cost in effect at the time the application was filed.

KIUC proposed an adjustment to increase LG&E's normalized gas revenues by \$5,034,036 to reflect a 3-year amortization of LG&E's initial booking of unbilled revenues. This was the same adjustment KIUC proposed for LG&E's electric revenues. For the same reasons previously cited in the discussion of electric revenues, the Commission finds that no adjustment should be made.

LGEE's normalized gas operating revenues have been reduced by \$11,289,435 to \$183,296,032 based on LGEE's latest gas cost adjustment effective. November 1, 1990.²⁸ This includes gas cost revenues of \$118,995,993 based on LGEE's current cost of gas. LGEE's purchased gas expense has also been reduced to this amount to reflect the current gas cost adjustment. With this adjustment, LGEE's gas operating revenues will be properly normalized for rate-making purposes.

Fuel Cost Recovery

On an adjusted basis, LG&E's electric fuel cost exceeded its fuel cost recovery by \$1,737,240 during the test year. The AG proposed an adjustment to reduce fuel expense by \$1,737,240 in order to match fuel cost and fuel cost recovery to ensure that the test-year under-recovery of fuel costs did not impact the setting of base rates in a non-fuel cost rate proceeding.

Case No. 10064-J, The Notice of Purchased Gas Adjustment Filing of Louisville Gas and Electric Company, Order dated November 1, 1990.

LGEE maintains that the AG's adjustment was based on an erroneous understanding of the fuel adjustment clause ("FAC"). LGEE contends that the timing difference that exists between the incurrence of fuel costs and the recovery of fuel costs prohibits a matching of fuel cost and fuel revenues in any 12-month period. LGEE recounts that these types of adjustments have not been made in its past rate cases because the FAC was not designed to match revenues with expenses but was designed to track a variable cost outside of a general rate proceeding.

approved in Administrative Case No. 30929 will improve the match between fuel cost and fuel revenues but will not provide for a full reconciliation of costs and that the proposed adjustment would deprive LGSE of the opportunity to fully recover its costs.

It is true that the current FAC does not produce an absolute synchronization of fuel costs and fuel cost recovery. Nor does it result in a full reconciliation of costs that will produce a precise matching of fuel costs and fuel revenues in any 12-month reporting period. The current FAC, however, with the over- and under-recovery mechanism approved in Administrative Case No. 309 is fully recovering, meaning that all allowable fuel costs will, over time, be recovered through the clause.

In the past, the FAC tracked fuel costs for one month in order to determine an adjustment factor that would be applied to a

Administrative Case No. 309, An Investigation of the Fuel Adjustment Clause Regulation 807 KAR 5:056, Order dated December 18, 1989 and Order dated April 16, 1990.

subsequent month's kilowatt-hour sales. This factor, applied with a 2-month lag to a different level of sales, would produce an over- or under-recovery for the billing month that was not tracked, or reconciled, in subsequent months. Once incurred, a monthly over- or under-recovery was lost, either to the utility or the ratepayer, and was not subject to true-up at a later date.

The over- and under-recovery mechanism now in place ensures that a given month's over- or under-recovery will be tracked and included in the utility's fuel cost calculation in a later month. The result is a fully recovering FAC through which all allowable fuel costs will, over time, be recovered. With recovery of fuel costs through the FAC assured, it is improper to include the over- or under-recovery of a given test year in the determination of a utility's revenue requirements. Therefore, an adjustment should be made to eliminate LGSE's test-year under-recovery of \$1,737,240.

Labor and Labor-Related Costs

LG&E proposed adjustments to increase the test-year operating expenses by \$3,570,447 for labor and labor-related costs. The actual cost items and the proposed adjustments to combined gas and electric operations are as follows:

	Total
Wages and Salaries	\$4,010,669
FICA Taxes	334,829
Federal Unemployment	21,262
State Unemployment	41,348
Health Insurance	(636,899)
Pensions	(462,358)
Dental Insurance	29,463
Group Life Insurance	232,133
_	\$3,570,447

Wages and Salaries. LGSE proposed to increase wages and by \$4,010,669. The proposed increase reflected the effects of base wage increases granted to non-union employees during the test year, a lump sum transition payment to non-union employees during the test year, a 3 percent wage increase for union employees effective November 12, 1990, and a change in the labor capitalization rate due to the future commercialization of Trimble County. LG&E's adjustment included the annualization of the actual test-year-end levels of wages for each employee group. The November wage increase was applicable to all of LG&E's union employees, including those identified as "project temporaries" who work at Trimble County. Instead of using its test-year actual labor capitalization rate, LGSE used the capitalization rate for the month of April 1990 and adjusted it to reflect the changes expected in labor operating expenses due to the commercialization of Trimble County. This adjusted labor capitalization rate was included in all of LG&E's labor and labor-related cost adjustments.

The AG disagreed with three components of LG&E's proposed adjustment: (1) allowing the 3 percent union wage increase for the project temporaries, citing LG&E's statements that these employees would no longer be employed once Trimble County was in commercial operation; (2) the inclusion of the lump sum transition payment to non-union employees, stating that future incentive payments were not known and measurable and not appropriate for inclusion; and (3) the use of the adjusted April 1990 capitalization rate, inasmuch as LG&E had not established that

April was a representative month and that LGEE was attempting to recover Trimble County costs without making necessary adjustments to off-system sales and expenses.

KIUC recommended that all non-Trimble County pre- and post-test-year adjustments proposed by LG&E be rejected as inconsistent with the basic underlying concepts of determining the test year basis for fair, just, and reasonable rates. 30 KIUC included the November 1990 union wage increase in this group of adjustments. KIUC further argued that all pro forma adjustments proposed by LG&E be rejected in the absence of a complete set of appropriate pro forma adjustments to non-Trimble County operating income and rate base. 31

LG&E's proposed adjustment to wages and salaries is reasonable, except for two issues. While the November union wage increase is based on the union contract, the Commission does not believe it is appropriate to allow the 3 percent increase for the Trimble County project temporaries. This particular group of employees will be terminated once Trimble County is completed. 32 The use of the adjusted April 1990 labor capitalization rate proposed by LG&E is not acceptable. The adjustment of the rate to reflect what is expected to happen when Trimble County is commercialized is not appropriate. In light of the Commission's decision to include only the level of investment in Trimble County

³⁰ Kollen Direct Testimony, page 25.

³¹ Id., page 29.

³² T.E., Volume IV, November 19, 1990, page 268 and 269.

as of test-year end, it is not appropriate to use the estimated labor capitalization rate. However, we have used the actual labor capitalization rate for the last month of the test year, April 1990, without the Trimble County adjustment. The April 1990 labor capitalization rate was 32.09 percent 33 which reduces LG4E's test-year wages and salaries by \$475,505.

FICA Taxes. LG&E proposed to increase its FICA taxes to reflect increases in total wages and salaries, a change in the FICA taxable wage base, and a change in the FICA tax rate. The Commission has reviewed LG&E's calculations for the FICA taxes. It appears that LG&E did not include in its calculations the effects of the November 1990 union wage increase. Wage adjustments and payroll tax adjustments should be determined in a consistent manner and reflect the same wage increases. Based on the Commission's decisions concerning the wage and salary adjustment, the FICA taxes have been recalculated which increases LG&E's test-year FICA taxes by \$133,583.

Unemployment Taxes. In calculating its proposed increase to federal and state unemployment taxes, LG&E followed the methodology outlined by the Commission in Case No. 10064. The proposed adjustment is reasonable, except for the labor capitalization rate. Using the actual April 1990 labor

Response to the Commission's Order dated June 29, 1990, Item 16(d), page 7 of 16, \$3,314,676 / \$10,330,308 = 32.09 percent.

capitalization rate, federal unemployment insurance should be increased \$14,701 and state unemployment insurance should be increased \$33,850 over the test-year actual expense.

Health Insurance. LG&E's proposed reduction in health insurance costs reflected its efforts in controlling its medical benefit costs, which had been an issue in LG&E's last two general rate cases. The AG opposed the use of the adjusted April 1990 labor capitalization rate in the calculation of this adjustment. Using the actual April 1990 labor capitalization rate, it is reasonable to reduce the test-year health insurance expense by \$1,003,962.

Pensions. LG&E's proposed pension expense adjustment included the results of its latest actuarial study. The AG disagreed with incorporating the results of this study in the adjustment, stating that a change in wage assumptions was not an appropriate reason to ask ratepayers to bear the additional expense. The AG also opposed the use of the adjusted labor capitalization rate. Except for the labor capitalization rate utilized, the pension adjustment is reasonable, resulting in a \$566,651 decrease in test-year pension expense.

Dental Insurance. The AG again opposed the use of the adjusted labor capitalization rate in determining the adjustment to dental insurance. The Commission believes that the dental insurance expense is reasonable, except for the labor capitalization rate utilized, and has determined the test-year dental insurance expense should be decreased by \$7,909.

Group Life Insurance. In determining its proposed increase to group life insurance expense, LGSE followed the methodology outlined by the Commission in Case No. 10064. Included in the calculations were the total November 1990 union wage increase and the adjusted April 1990 labor capitalization rate. For the same reasons stated concerning the wage and salary adjustment, the AG opposed the inclusion of the union wage increase for the Trimble County project temporaries and the adjusted labor capitalization rate. In accordance with our decision on the wage and salary adjustment, we have excluded the union wage increase for the project temporaries and utilized the actual April 1990 labor capitalization rate in making this adjustment, which increases the test-year group life insurance expense by \$206,187.

expenses for labor-related costs was the employer's share of its 401(k) thrift savings plan ("401(k) plan"), which totalled \$449,029. This amount represented LGsE's match to amounts deferred by its non-union employees who participated in the 401(k) plan. LGsE proposed no adjustment to the test-year expense. LGsE noted that the 401(k) plan was available only to non-union employees, and very little of the matching share amount would be appropriate to capitalize. 34

The AG proposed to reduce the test-year expense to reflect the capitalization of the expense at the test-year actual labor

³⁴ T.E., Volume IV, November 19, 1990, pages 304 and 305.

capitalization rate, and that it was inappropriate to totally expense this item. 35

The Commission's initial concern that LG&E had not adjusted the test-year expense to reflect the effects of its corporate reorganization, which occurred during the test year, was allayed by LG&E's schedule which showed the annualized test-year-end employer match to be \$385,349.³⁶ We find it reasonable to include \$385,349 in expenses for the 401(k) plan, which generates a reduction of \$63,680 in test-year expense.

Supplemental Executive Retirement Plan. The AG proposed an adjustment removing the test-year expense of LG&E's Supplemental Executive Retirement Plan ("SERP"): The AG stated that the SERP was designated for certain key employees, and in light of the overall compensation and fringe benefits available to those employees, the costs of the SERP should not be borne by ratepayers. We agree, which reduces expenses by \$247,922.

The Commission has noted in this proceeding several references by LG&E to its analysis and outside evaluations of portions of its labor and labor-related costs. In past orders the Commission has encouraged this type of evaluation, as did the management audit in several recommendations. However, LG&E has not yet performed an overall, comprehensive evaluation of its total compensation and fringe benefits package. Such an

³⁵ DeWard Direct Testimony, page 31.

Responses to Data Requests from Hearing, filed December 5, 1990, Item 18.

evaluation would compare LG&E's total compensation and fringe benefits package with other utilities as well as with other industries in its general service area. LG&E should undertake such an analysis of its total compensation and fringe benefits package as soon as possible.

Amortization of Downsizing Costs

During the last quarter of 1989, LG&E undertook a corporate reorganization which resulted in a workforce reduction of 174 exempt and non-exempt employees. Throughout this proceeding, this corporate reorganization has been referred to as a "downsizing." The costs associated with this downsizing totalled \$9,486,550 and were composed of separation allowance payments, enhanced early retirement benefits, post-retirement health care provisions, and a gain on the purchase of retired employees' annuities. 37 LG&E proposed to amortize these costs over a 3-year period, and pointed out that the annual amortization would not exceed the expected annual savings resulting from the downsizing. 38

The AG stated that LG&E had incurred or accrued these costs during the test year, had expensed these items during the test year, that these costs would not be occurring on a going forward basis, 39 and recommended removing the test-year downsizing costs in total and not allow amortization.

³⁷ Fowler Direct Testimony, page 18.

³⁸ Id., page 19.

³⁹ DeWard Direct Testimony, pages 28 and 29.

KIUC recommended that the downsizing costs be amortized over a 10-year period linked to the Commission's acceptance of KIUC's proposals concerning unbilled revenues. KIUC stated that if its proposals concerning unbilled revenues was not accepted, the Commission should disallow recovery of the downsizing costs as a matter of consistency. 40

LGSE incurred and recorded the downsizing costs in the test year. LGSE has already recovered these costs from its ratepayers. While adjustments in its workforce will occur, it is highly unlikely that LGSE will be involved with a downsizing of this magnitude on a recurring basis. We have removed the entire \$9,486,550 of downsizing costs for rate-making purposes.

Storm Damage Expenses

LGSE proposed an adjustment to increase storm damage expenses by \$723,291. LGSE calculated its adjustment by averaging the actual storm damage expenses for the last 5 calendar years and comparing the average to the test-year actual expense. The methodology was essentially the same as was used by the Commission in Case No. 10064.

Jefferson et al. performed an analysis of LG&E's storm damage expenses for the past 15 years and determined that the test-year expense level was not below normal. Jefferson et al. arrived at the same conclusion using the 5-year period LG&E used but substituting two abnormal years with two normal years of expenses.

⁴⁰ Kollen Direct Testimony, page 25.

As the Commission noted in Case No. 10064, the random occurrence of severe storm damage cannot be accurately predicted. The Commission finds it is appropriate to include for rate-making purposes a level of storm damage expense which reflects a on-going level of expense. reasonable. Traditionally, the Commission has used historic averages in determining this reasonable level of expense. In this proceeding, the Commission has available the actual storm damage expenses for the past 15 calendar years. However, simply taking the average of an historic period would not recognize the effects of inflation when looking In Case No. 90-04141 the at such a long period of time. Commission computed storm damage expenses by taking a 10-year average of actual expenses, adjusted for inflation by using the Consumer Price Index - Urban. We feel this approach the more reasonable and the preferred methodology to be used in determining this adjustment, which results in a \$520,533 increase in storm damage expenses.

Provision for Uncollectible Accounts

LG&E proposed an increase of \$100,000 to the test-year level of uncollectible accounts expense based on its analysis of the appropriate total annual provision. The proposed increase was determined using LG&E's actual 1990 accrual rate for the provision.

Case No. 90-041, An Adjustment of Gas and Electric Rates of the Union Light, Heat and Power Company, Order dated October 2, 1990.

Jefferson et al. opposed the increase to the expense, citing the fact that LG&E's actual charge-off history and accruals for uncollectible accounts over the past 5 years have experienced significant decreases in overall percentage.

The Commission believes it is best to leave the uncollectible accounts expense at the test-year level.

Location of Gas Service Lines

LG&E proposed an increase of \$152,000 in expenses related to the location of customer owned service lines on private property. LG&E stated that this adjustment reflects the additional costs that it expects to incur as a result of placing temporary markings to locate customer service lines. 42 The Commission finds that LG&E has not adequately explained or supported the necessity for this proposed adjustment. Therefore, the Commission has not included the proposed increase in expense. The Commission is not attempting to limit this activity. However, in determining the reasonable level of expense on an on-going basis, consideration must be given to whether the activity involves an item which should be expensed or capitalized. LG&E did not provide specific evidence to allow a thorough analysis of this issue.

Headwater Benefit Assessment

LG&E proposed an increase of \$108,033 in expenses to reflect the first year of a 3-year amortization of its Federal Energy Regulatory Commission ("FERC") headwater benefit assessment. The total amount of \$324,098 reflects LG&E's initial FERC payment

⁴² Fowler Direct Testimony, page 21.

pending LG&E challenges to FERC's original assessment of \$3,600,000. LG&E recorded this payment as a deferred debit.

KIUC claimed that LGSE had no regulatory authority to defer this cost for future recovery. KIUC further stated that LGSE selectively identified this cost as recoverable since it was not specifically identified as an expense in its last rate case. Under established rate-making theory, LGSE must bear the risks and rewards of such costs as long as specific regulatory authority for differing treatment is absent. KIUC argues that by allowing this adjustment, the Commission would establish a precedential basis for future manipulation of actual earnings and improper increases in revenue requirements in future rate cases.

Given that LG&E has not heretofore recovered this payment from its ratepayers, we find it reasonable to allow LG&E to amortize the headwater benefit assessment over a 3-year period. Depreciation and Amortization Expense

LG&E proposed to increase depreciation expense by \$15,333,843 in order to annualize the test-year-end level of expense and to reflect the first year of depreciation expense on Trimble County. Of the total adjustment, \$15,171,389 was for electric and \$162,454 was for gas. Included in the annualization calculations were the effects of LG&E's recently completed depreciation studies of the electric and gas plant in service. The increase in the electric depreciation reflected first year depreciation expense based on estimated total cost of \$715,000,000 adjusted for the 25 percent disallowance.

The AG, KIUC, and Jefferson et al. all opposed this inclusion stating that LG&E wanted to treat Trimble County in a vacuum, 43 that LG&E's proposed treatment lacked consistency, 44 and that LG&E's adjustment for Trimble County expenses did not meet the known and measurable standard. 45

Although the first year depreciation expense based on the CWIP as of April 30, 1990 is allowed, <u>supra</u>, we do not include any depreciation expense on the additional expenditures incurred after test-year-end. This allowance, together with other components of LGEE's proposed adjustment we find reasonable and should be included in expenses, which results in increased depreciation and amortization expenses of \$14,431,836, \$14,269,382 electric and \$162,454 gas.

Property Taxes

LG&E proposed to increase its property tax expense by \$982,754 based on the 75 percent recoverable portion of the total expected expenditures for Trimble County estimated at \$715,000,000.

The AG, KIUC, and Jefferson et al. opposed the proposed adjustment for the same reasons they expressed concerning the Trimble County depreciation adjustment.

Consistent with our other decisions relating to Trimble County, we have included a portion of the fixed costs of Trimble

⁴³ DeWard Direct Testimony, page 48.

⁴⁴ Kollen Direct Testimony, page 19.

⁴⁵ Kinloch Direct Testimony, page 11.

County to allow an increase in property taxes related to the balance of Trimble County CWIP as of April 30, 1990, which increases the test-year property tax expense by \$931,857.46

EPRI Membership Dues

LGSE proposed an increase of \$1,311,826 to expenses representing the projected 3-year average of the annual membership dues LGSE will pay the Electric Power Research Institute ("EPRI"). In order for LGSE to access the research and development programs and materials produced by EPRI, LGSE became a member of EPRI in July 1990. LGSE's evidence showed that the annual costs of its membership in EPRI would be offset by the benefits it receives from EPRI. The full membership dues are phased-in over a 3-year period, and LGSE's proposed adjustment reflects the average of those first 3 years' dues as calculated for 1990.

The AG opposed the proposed adjustment because LG&E had not quantified any cost savings attributable to its membership in EPRI. KIUC opposed the adjustment because LG&E had not proposed all appropriate pro forma adjustments. Jefferson et al. recommended the Commission withhold ratepayer support of EPRI until EPRI's restrictive membership policy is changed or, at a minimum, the Commission should exclude that portion of EPRI's dues relating to nuclear research.

LGSE should have quantified expected cost savings and included those offsetting savings. The payment of the membership dues was clearly a post-test year transaction and the benefits

⁴⁶ Fowler Direct Testimony, Exhibit 1, Schedule E, line 3.

will likewise be reflected in reductions of future costs. In order to properly include the dues in this case, the cost savings expected from membership should have also been included. Because these expected savings were not shown, we feel compelled to exclude this proposed increase in expenses. The Commission realizes that utilities need to undertake research and development projects, and we are not opposed to including the costs of those projects when they are determined to be reasonable and benefits are demonstrated and factored into the proposed revenues and expenses.

EEI Membership Dues

During the test year, LG&E recorded as operating expense membership dues of \$178,779 to the Edison Electric Institute ("EEI"). In Case No. 10054, the Commission excluded the membership dues to EEI because LGSE had failed to show that its membership in EEI was of direct benefit to its ratepayers. 47 The to reduce the test year expense for various AG proposed EEI-related activities it considered inappropriate. Jefferson et al. proposed that all EEI dues be removed from the test year because EEI was a utility industry lobbying organization. Although LG&E gave three examples of ratepayer benefits derived from its membership in EEI, it still has not adequately shown that there is a direct ratepayer benefit from membership in EEI. As LG&E acknowledged, all of the major benefits associated with EEI

⁴⁷ Case No. 10064, final Order dated July 1, 1988, page 60.

membership are available to LG&E independent of EEI. Further, EEI's lobbying activities are clearly a below-the-line expense.

New Office Expenses

In keeping with LG&E's position to exclude all costs associated with the relocation to the new corporate headquarters, an additional \$2,489⁴⁸ in legal costs related to the headquarters relocation which were inadvertently included in the test year have been excluded.

Holding Company Expenses

In keeping with the Commission's Order in Case No. 89-374, 49 \$6,612⁵⁰ in legal expenses incurred for the LG&E Energy Corporation ("Holding Company"). included in test-year operating expenses has been disallowed.

Trimble County Marketing Costs

Test-year costs of \$156,434⁵¹ associated with marketing the 25 percent disallowed portion of Trimble County has been excluded, decreasing operating expenses by \$156,323. The AG had proposed to remove \$500,000 in Trimble County expenses, but produced no evidence to support his assumptions.

Responses to Data Requests from Hearing, filed December 5, 1990, Item 9.

Case No. 89-374, Application of Louisville Gas and Electric Company for an Order Approving an Agreement and Plan of Exchange and to Carry Out Certain Transactions in Connection Therewith, Order dated May 25, 1990.

Responses to Data Requests from Hearing, filed December 5, 1990, Item 8.

⁵¹ LG&E Hearing Exhibit No. 16.

State Sales Taxes

LGEE proposed to increase its state sales tax expense by \$163,000 to reflect the change in the Kentucky sales taxes rate effective July 1, 1990. Although KIUC opposed this adjustment on the grounds that LGEE had not made necessary the pro forma adjustments. The Commission believes it is reasonable to reflect this change in the state sales tax rate and has increased the state sales tax expense by \$163,000.

Office Supplies and Professional Services Expenses

The AG proposed to reduce LGSE's test-year expenses for office supplies and professional services by \$1,818,791. This amount represented a reduction to the levels recorded in the year prior to the test year. The AG argued that LGSE had failed to meet its burden of proof in justifying these expense increases, and advocated the Commission further decrease LGSE's test-year expenses to reflect information provided subsequent to the hearing as well as improper items of expense included by LGSE but not detected by the AG.⁵²

The Commission has reviewed the account description in the Uniform System of Accounts ("USoA") for Account No. 921, Office Supplies and Expenses. This account can include charges for items such as printing, stationary, meals, traveling, and incidental expenses. However, expenses charged to any account must be evaluated on the reasonableness of the charge and how appropriate it is to include the charge for rate-making purposes. The charges

⁵² Brief of AG, page 1.

questioned by the AG were recorded in subaccounts of Account No. 921 which were periodically "zeroed out." Thus, these charges were not included in the test-year balance for Account No. 921. Given the information available, the Commission finds reasonable the test-year level of expense recorded in Account No. 921.

Concerning the professional services, LG&E has shown that it had already removed or reduced several of these charges in its pro The Commission has specifically reviewed the forma adjustments. invoices provided to the AG for test-year legal charges. LG&E edited many of these invoices and provided only very brief descriptions for the edited items. LG&E claimed that it could not disclose the nature of certain legal activities under the attorney-client privilege. The invoices included charges for numerous proceedings involving Trimble County and other major issues before or with the Commission. The Commission believes it is reasonable to remove the charges for the numerous Commission related proceedings since this level of activity should not be as large with the completion of Trimble County, on a going forward basis. We have also removed charges relating to the invoices where descriptions have been omitted, reducing test-year professional services expense by \$294,676.

Miscellaneous Expense Adjustments

The AG proposed to reduce miscellaneous expenses by \$314,903. Included in this proposed adjustment were contributions, economic development donations, moving expenses, and commitment fees recorded above the line, which the AG argues were not the ratepayers responsibility. The AG also argued that LG&E's

commitment fees should not be as high as in the past, since these fees had been related to the financing needs of Trimble County.

We have removed the contributions, economic development donations, and the moving expenses from the test-year expenses. The Commission traditionally has excluded above the line contributions and donations from rates; and we have not been persuaded that the moving expenses incurred in the test year represent a recurring item of expense. However, it is reasonable to include the test year level of commitment fees, because LGSE will be incurring commitment fees for its financing requirements on a recurring basis. Taken together this reduces test-year miscellaneous expenses by \$151,507.

Amortization of Management Audit Fee

In Case No. 10064, the Commission approved LG&E's request to amortize the cost of the Management Audit over a 3-year period. This resulted in an annual amortization of \$194,000.⁵³ As of the end of the test year, \$226,333⁵⁴ remained to be amortized. At the present amortization rate, LG&E would have recovered the cost by the middle of 1991.

LG&E should recover the total cost of the management audit but it is not entitled to recover in excess of its cost, requiring the amortization rate to now be adjusted. The annual amortization rate for rate-making purposes should be \$75,444 based on a 3-year amortization of the unamortized cost at test-year-end.

⁵³ Case No. 10064, Order dated July 1, 1988, page 62.

⁵⁴ April 1990 Monthly Report, page 28.

Considering that the amortization has continued during the course of these proceedings, LG&E will recover its entire cost by the middle of 1992 at the \$75,444 annual amortization rate. Test-year expenses have been reduced by \$118,560 to reflect this adjustment. Annualization of Year-End Customers

LG&E proposed an increase in operating expenses of \$1,118,728 to reflect the increase in expenses related to annualizing the number of customers at test-year-end. This adjustment corresponded to a similar adjustment to operating revenues.

The AG proposed an increase in operating expenses of \$947,065. The AG made several adjustments to the operating expenses used in the calculation of the proposal, stating that several expenses included by LGSE had not been shown to vary with the number of customers. The AG further stated that absent an LGSE study which showed that expenses increased with customer growth revenues, any adjustment based on an operating ratio is not known and measurable. 55

The Commission specifically used the operating ratio methodology in Case No. 10064 and LG&E has followed that methodology in preparing its proposal. We have accepted LG&E's proposed adjustment.

Directors and Officers Liability Insurance

The AG proposed to reduce expenses by \$245,943 to reflect the assignment of 50 percent of the cost of directors and officers liability insurance to the shareholders of LGLE. The AG argued

⁵⁵ DeWard Direct Testimony, page 33.

that the protection provided by the insurance was for both the shareholder and ratepayer. While there may be some benefits to shareholders, the main beneficiaries are the ratepayers. This insurance allows LG&E to induce highly qualified individuals to serve on its Board of Directors. We feel it is not proper or reasonable to include this adjustment.

Workers' Compensation Insurance

The AG proposed to reduce expenses by \$536,187 to reflect a portion of the Workers' Compensation insurance expense recorded in the test year as capitalized. The AG stated that it was unclear whether LG&E was capitalizing any of the Workers' Compensation insurance costs, but that such an adjustment was appropriate. LG&E indicated that it was in fact capitalizing its Workers' Compensation insurance costs. The Commission believes the amount included as workers' compensation insurance expense is reasonable.

Amortization of Investment Tax Credits

LG&E proposed to increase the amortization of investment tax credits ("ITC") by \$1,554,000. The proposal reflected the change in depreciation rates used by LG&E and the amortization of ITCs attributable to Trimble County. The proposal reflected Trimble County ITCs for plant to be in service as of December 31, 1990.

The AG, KIUC, and Jefferson et al. opposed the inclusion of the Trimble County ITC amortization for the same reasons expressed

⁵⁶ T.E., Volume IV, November 19, 1990, page 185.

concerning LG&E's proposed adjustment to depreciation expense related to Trimble County.

As discussed earlier in this Order, it is reasonable to notude Trimble County CWIP as of test-year end and the related first year depreciation expense in rates. Likewise, it is reasonable to include the amortization on the Trimble County ITCs related to the April 30, 1990 balance of CWIP, which increases the amortization of ITCs by \$1,507,000.57

Flowback of Unprotected Federal Excess Deferred Taxes

In Case No. 10064, the Commission ordered LGEE to amortize \$4,749,500 in unprotected federal excess deferred taxes and \$4,385,600 in state tax deficiencies over a 5-year period. 58 The AG claimed that LGEE did not appear to be in conformity with the Order in Case No. 10064 and proposed that the test year flowback of the unprotected federal excess deferred taxes be increased by \$162,300. LGEE stated that it had changed the amount of the federal amortization due to the discovery of some errors in the amounts originally provided to the Commission in Case No. 10064, but even after the discovery of these errors, it had not informed the Commission of the change. LGEE filed information concerning the change in the amount of unprotected excess deferred taxes and its change in the amortization amount.

The Commission has reviewed the account information. It appears that both amortization amounts have been changed, not just

⁵⁷ Fowler Direct Testimony, Exhibit 1, Schedule Y, line 5.

 $^{^{58}}$ Case No. 10064, Order dated July 1, 1988, page 61.

the amortization for the federal excess deferred taxes. Insufficient information has been provided to justify a change in the federal amortization as ordered in Case No. 10064. The flowback of unprotected federal excess deferred taxes is restored to the level ordered in Case No. 10064 by \$162,300.

State Income Tax Rate Change

LG&E proposed three adjustments to reflect the change in the Kentucky income tax rate, which became effective January 1, 1990. The adjustments were an increase in state income tax of \$508,000; an increase in deferred state income tax of \$42,000; and an increase in the amortization of cumulative state deferred tax of \$512,000. In all three adjustments, LG&E computed the corresponding savings in federal income taxes relating to the state income tax rate change.

The methodology used to reflect the change in the state income tax rates is reasonable. But, based on the information provided, these adjustments require recalculations to reflect the level of state tax deficiency identified in Case No. 10064. The state income tax is increased by \$508,000; deferred state income tax increased by \$41,473; and the amortization of cumulative state deferred tax increased by \$446,582.

Tax Adjustment for Other Interest Expense

LGSE proposed to increase income tax expense by \$198,430 to reflect the income taxes applicable to other interest expense. In Case No. 10064, the Commission determined that LGSE could not recover other interest expense from ratepayers. Because LGSE could not recover this expense from ratepayers, LGSE claims that

the ratepayers should not receive any corresponding income tax benefits. We do not agree. According to the USoA, other interest expense is recorded below the line.

It is not proper to make the proposed adjustment to income tax expense without supporting documentation which shows LG&E included other interest expense in the determination of its above-the-line income tax expense.

Interest Synchronization

LGSE proposed two adjustments in order to determine its interest synchronization. The first adjustment annualized the interest expense on debt, and the second reflected the allocation of JDIC on the computation. Traditionally, the Commission has applied the cost rates applicable to the long-term debt and short-term debt components of the capital structure in order to compute an interest adjustment. This was the approach the Commission used in Case No. 10064. The debt components utilized in this computation reflect the effects of the JDIC allocation and reductions to capital structure due to the 25 percent Trimble County disallowance and the capital costs of LG&E's new office Using the adjusted capital structure allowed, the building. Commission has computed an interest reduction of \$1,193,023 which results in an increase to income taxes of \$470,588.

Following the approach used in Case No. 10064, the Commission has applied the combined state and federal income tax rate of 39.445 percent to the accepted pro forma adjustments. The Commission finds that combined operating income should be increased by \$6,639,060 to \$130,376,955.

The adjusted net operating income is as follows:

Electric	Gas	Total
\$502,388,881 384,835,893	\$183,296,032 170,472,065	\$685,684,913 555,307,958
\$117,552,988	\$ 12,823,967	\$130,376,955
	\$502,388,881 384,835,893	\$502,388,881 \$183,296,032 384,835,893 170,472,065

RATE OF RETURN

Capital Structure

LG&E proposed an adjusted end-of-test-year capital structure containing 43.13 percent long-term debt, 4.69 percent short-term debt, 8.22 percent preferred stock, and 43.96 percent common equity. Year-end, long-term debt was adjusted to reflect: (1) the retirement of \$16,000,000 of 4 7/8 percent First Mortgage Bonds, Series due October 1, 1990; 59 (2) the scheduled redemption of \$750,000 of 1975 Pollution Control Bonds due September 1, 1990; 60 and (3) the refinancing of \$25,000,000 of Series J 1985 Pollution Control Bonds at 8.25 percent interest with 1990 bonds at 7.45 percent interest. 61 The retirement of the \$16,000,000 of 4 7/8 percent First Mortgage Bonds and the redemption of the Control \$750,000 1975 Pollution Bonds were reflected as adjustments to short-term debt. The refinancing of the 1985

⁵⁹ Fowler Direct Testimony, Exhibit I, Schedule V.

⁶⁰ Id.

⁶¹ T.E., Volume IV, November 19, 1990, page 11.

Series J Pollution Control Bonds with 1990 bonds did not affect the capital structure.

LG&E decreased year-end preferred stock and increased common equity by \$1,033,459, the discount and expense associated with the preferred stock issues.⁶² LG&E also decreased common equity by \$9,251,593 to reflect the adjustment to retained earnings for unbilled revenues as discussed previously in this Order.⁶³

The AG proposed a capital structure containing 43.11 percent long-term debt, 4.69 percent short-term debt, 8.30 percent preferred stock, and 43.90 percent common equity. 64 The difference in the AG's proposal and LG&E's proposal is that the AG proposed to exclude unamortized premiums, discounts, and expenses. The AG claims these amounts are not a part of the permanent financing of a utility. Moreover, the AG disagreed with LG&E's adjustment to place the preferred stock discount and expense in the weighted average of preferred stock. 65 The AG maintained that the preferred stock discount and expense was properly recorded in the capital stock account and should remain in the weighted average of common equity.

Premiums, discounts, and other expenses of issuing securities are an integral part of the financing of a utility and should be

⁶² Powler Direct Testimony, page 1 of 2.

^{63 &}lt;u>Id.</u>, page 1.

⁶⁴ Weaver Direct Testimony, Exhibit, Statement 17.

⁶⁵ Id., page 30.

reflected as such in the capital structure. LG&E's adjustment to place the discount and expenses associated with preferred stock in the preferred stock structure is appropriate. The Commission finds LG&E's capital structure is as follows:

	Percent
Long-Term Debt	43.13
Short-Term Debt	4.69
Preferred Stock	8.22
Common Equity	43.96
Total Capital	100.00%

Cost of Debt and Preferred Stock

LG&E proposed a cost of long-term debt of 7.72 percent after adjustments for the refinancing of the \$25,000,000 1985 First Mortgage Bonds. The AG proposed a cost of long-term debt of 7.79 percent 67 but did not include an adjustment for refinancing the 1985 First Mortgage Bonds. To arrive at its cost of long-term debt, LG&E included the unamortized premium on bonds in long-term debt and adjusted interest expense by the amortization of expenses, premiums, and the loss on reacquired debt. The AG did not include the unamortized premium on bonds in long-term debt and adjusted interest expense by the amortization of the expenses and

⁶⁶ Calculated from Fowler Direct Testimony, Exhibit 2, page 1; and T.E., Volume IV, November 19, 1990, page 11.

Weaver Response to LG&E, 17.

Fowler Direct Testimony, Exhibit 2, page 1; and Exhibit 1, Schedule V.

premium but did not adjust interest expense by the amortization of the loss on reacquired debt. 69

It is more appropriate to adjust long-term debt by the unamortized premium on bonds and to adjust interest expense by the amortization of the loss on reacquired debt. We find the cost of long-term debt to be 7.72 percent.

LG&E proposed the cost of short-term debt to be 8.38.70 The AG proposed the cost of short-term debt to be 8.43.71 The AG subsequently agreed with a cost of 8.38, and the Commission concurs.

 ${\tt LG\&E^{72}}$ and the ${\tt AG^{73}}$ both agreed that the cost of preferred stock is 8.09 percent and the Commission concurs.

Return on Equity

LG&E proposed a return on equity ("ROE") in the range of 13.0 to 13.5 percent, ⁷⁴ and subsequently revised its expected cost of equity to be in the range of 13.25 to 13.75 percent. ⁷⁵ The AG proposed a range of 12.0 to 12.5 percent. ⁷⁶ KIUC proposed an ROE

⁶⁹ Weaver Direct Testimony, Exhibit, Statement 15.

⁷⁰ Fowler Direct Testimony, Exhibit 2, page 1.

⁷¹ Weaver Direct Testimony, Exhibit Statement 16, page 2.

⁷² Fowler Direct Testimony, Exhibit 2, page 1.

⁷³ Weaver Direct Testimony, Exhibit, Statement 17.

⁷⁴ Olson Direct Testimony, page 36.

⁷⁵ Olson Supplemental Testimony, page 18.

⁷⁶ Weaver Direct Testimony, page 28.

of 11.7 percent. 77 Jefferson et al. proposed an ROE in the range of 11.0 to 11.5 percent. 78

To determine the ROE, LG&E used a discounted cash flow ("DCF") analysis. In addition, LG&E utilized an interest premium calculation and DCF study of eight other electric utilities as a check on the results of its DCF analysis. LG&E adjusted the results for financing costs and to show additional margin.

In its DCF analysis, LG&E used a dividend yield of 7.57 percent⁷⁹ based on a projected dividend rate of \$2.84 and a 6-month high/low stock price average during the period May 1 - October 26, 1990.⁸⁰ LG&E relied on three methods of analysis to determine its restimated growth rate: 1) a study of past and current trends in dividends, earnings and book value; 2) retention or internal growth; and 3) estimates of expected growth available from security analysts.⁸¹ Based on its analysis, LG&E opined that investors expect growth of 4.75 to 5.25 percent.⁸² Overall, LG&E's DCF analysis produced a return requirement of 12.32 to 12.82 percent.⁸³

⁷⁷ Baudino Direct Testimony, page 26.

⁷⁸ Kinloch Direct Testimony, page 22.

⁷⁹ Olson Supplemental Testimony, page 17.

⁸⁰ Id.

⁸¹ Olson Direct Testimony, page 23.

⁸² Id., page 29.

⁸³ Olson Supplemental Testimony, page 17.

Using an interest premium approach as a first check on its DCF analysis, LG&E concluded its cost of common equity to be 14.5 percent. The risk premium of investors was estimated to be 4.75 percent. This was added to the current yield to maturity on Double A bonds of 9.8 percent. 84 As a second check of its results, LG&E performed a DCF study of eight selected utilities. The results indicated an investor requirement of 12.48 to 12.98 percent. 85

LGSE determined that the results of its DCF analysis were not in fact the returns required by investors. LGSE applied an 8 percent premium to its DCF results to compensate for financing cost and market pressure. 86 LGSE concluded that its required ROE --- should be 13.25 to 13.75 percent. 87

To perform a DCF analysis, the AG selected 5 companies he considered to be of comparable risk to LG&E. The companies considered were combination gas and electric companies reported in Value Line with characteristics similar to LG&E in capital structure ratios, total assets, fuel mix, electric vs. gas revenue distribution, betas, stock ratings, and bond ratings. According to the AG's analysis, LG&E has a slightly greater amount of risk from its capital structure and operating leverage than the

⁸⁴ Olson Direct Testimony, pages 32-33.

⁸⁵ Olson Supplemental Testimony, page 18.

⁸⁶ Olson Direct Testimony, page 36.

⁸⁷ Olson Supplemental Testimony, page 18.

⁸⁸ Weaver Direct Testimony, page 6.

comparison group but this risk is offset by the greater risk of the comparison group from acid rain legislation. 89

The AG used four methods of calculating growth for its DCF analysis. The methods used were: 1) compound growth rate in dividends per share; 2) compound growth rate in earnings per share; 3) compound growth rate in book value per share; and 4) earnings retention ratio multiplied by ROE. Based on these calculations, the AG's recommended growth rate was 4.0 to 4.5 percent. 90

The AG calculated a dividend yield from June 29, 1990 through September 7, 1990 of 7.44 percent for LGSE and 7.75 percent for the comparison group. 91 The AG employed these yields in its DCF analysis to reflect greater uncertainty caused by the Middle East situation. 92 The results of the AG's DCF analysis yielded an ROE for LGSE of 11.74 to 12.27 percent and 12.06 to 12.60 percent for the comparable companies. 93 Based on these results the AG determined LGSE's required ROE to be within a range of 12.0 to 12.5 percent. 94

KIUC performed a DCF analysis using the same eight companies that LGSE used in its DCF study of companies companies and a risk

⁸⁹ Id., page 18.

⁹⁰ Id., page 25.

⁹¹ Id., page 26.

⁹² Id.

⁹³ Id., page 27.

⁹⁴ Id., page 28.

premium analysis. KIUC calculated a 6-month average dividend yield during the period from February through July 1990 of 7.22 percent for the comparison group⁹⁵ and 7.28 percent for LG&E. 96 Averaging the Institutional Brokers Estimate System ("IBES") earnings growth project, Value Line compound dividend growth rate from 1990 to 1994, and Value Line compound earnings per share growth rate from 1990 to 1994 resulted in an expected growth rate of 4.28 percent for the comparison group 97 and 3.46 percent for LG&E. 98 To complete the DCF equations, KIUC applied one-half the growth rate to the historical dividend yields to arrive at a ROE for the comparison group of 11.65 percent 99 and 10.87 percent for LGSE. 100 KIUC opined that its DCF cost of equity for LGSE was too conservative given the DCF cost of equity for the comparison KIUC found the comparison group results were not understated based on a sustainable growth calculation it performed as a check. 102

In addition, KIUC performed a risk premium analysis as a supplementary check on its DCF analysis. Adding a risk premium of

⁹⁵ Baudino Direct Testimony, page 11.

⁹⁶ Id., page 18.

^{97 &}lt;u>Id.</u>, page 13.

^{98 &}lt;u>Id.</u>, page 19.

^{99 &}lt;u>Id.</u>, page 16.

¹⁰⁰ Id., page 20.

¹⁰¹ Id., page 21.

^{102 &}lt;u>Id.</u>, page 25.

2.11 percent to the 9.65 percent average yield of LG&E's first mortgage bonds for February and July 1990 resulted in a cost of equity for LG&E of 11.76 percent. 103 In its final analysis, KIUC averaged the results of its DCF for comparison companies and its risk premium analysis to arrive at its estimate of 11.7 percent as a fair rate of return for LG&E. 104

Jefferson et al. opined that an ROE between 11.0 and 11.5 percent would offer LG&E's shareholders a fair return on their investment. This was based on a review of returns recently granted by other Commissions as published in Public Utilities

Fortnightly and KIUC's assessment of LG&E's level of risk as compared to the named utilities.

The 8 percent premium proposed by LG&E to adjust for flotation cost and market pressure would overstate LG&E's cost of capital. LG&E is rated a solid Aa/AA by Moody's and Standard and Poor and thus can be considered less risky than the average utility investment. Pressure to finance ongoing construction is declining and by its own admission, LG&E is in a one-of-a-kind position to perform under the Clean Air Act. However, the current state of the economy is timorous. The Commission, having considered all of the evidence, including current economic conditions, finds that an ROE of 12.25 to 12.75 percent is fair, just, and reasonable. An ROE in this range would allow LG&E to

^{103 &}lt;u>Id</u>., page 24.

¹⁰⁴ Id., page 26.

¹⁰⁵ Kinloch Direct Testimony, page 22.

attract capital at a reasonable cost and maintain its financial integrity to ensure continued service and provide for necessary expansion to meet future requirements, and also result in the lowest possible cost to ratepayers. A return of 12.5 percent will best meet the above objectives.

Rate of Return Summary

Applying the rates of 7.79 percent for debt, 8.09 percent for preferred stock, and 12.50 percent for common equity to the capital structure produces an overall cost of capital of 9.89 percent, which we find to be fair, just, and reasonable. This cost of capital produces a rate of return on LG&E's net original cost rate base of 9.52 percent which the Commission finds is fair, just, and reasonable.

REVENUE REQUIREMENTS

The Commission has determined that LGSE needs additional annual operating income of \$3,618,915 to produce a rate of return of 12.50 percent on common equity based on the adjusted historical test year. After the provision for state and federal taxes, there is an overall revenue deficiency of \$5,976,245 the amount of additional revenue granted. The net operating income necessary to allow LGSE the opportunity to pay its operating expenses and fixed costs and have a reasonable amount for equity growth is \$133,995,870. A breakdown between electric and gas operations of the required operating income and the increase in revenue allowed is as follows:

	Electric	Gas	Total
Net Operating Income Found Reasonable Adjusted Net Operating	\$120,854,300	\$ 13,141,570	\$133,995,870
Income	117,552,988	12,823,967	130,376,955
Net Operating Income Deficiency	3,301,312	317,603	3,618,915
Gross Up Revenue Factor for Taxes [1.0039445]	.60555	.60555	.60555
Additional Revenue Required	5,451,758	524,487	5,976,245

The additional revenue granted will provide a rate of return on the net original cost rate base of 9.52 percent and an overall return on total capitalization of 9.89 percent.

The rates and charges in Appendix A are designed to produce gross operating revenues, based on the adjusted test year, of \$691,661,158. These operating revenues include \$507,840,639 in electric revenues and \$183,820,519 in gas revenues. The gas operating revenues reflect the most recent gas cost adjustment approved in Case No. 10064-J.

PRICING AND TARIFF ISSUES

Electric Cost-of-Service Study

LGSE presented a fully embedded time-differentiated electric cost-of-service study for the purpose of allocating costs among the classes of service on the basis of cost incurrence. The study used a base-intermediate-peak ("BIP") method to allocate production and transmission costs to costing periods and to customer classes. The BIP methodology, which was approved by the

Commission in Case Nos. 8616, 106 8924, 107 and 10064, 108 was described by LG&E in the following manner:

The cost assignments to the base period were established on the basis of the relationship of the minimum demand the maximum demand. This recognized that some level capacity is always present to meet customer needs. Base costs were allocated among classes based on their individual contribution to the average system demand. Intermediate peak costs were determined on the basis of the maximum winter peak demand over and above the average demand. Such costs were then assigned to the winter peak period based on the relationship of the number of hours in that period to the total hours in both the winter and summer peak periods. Costs were then allocated among customer classes according to each class's contribution to the winter peak demand. The remaining production and transmission costs were assigned to the summer peak period and allocated on the basis of each class's contribution to the summer peak demand. 109

All other electric cost-of-service methodologies used by LG&E are essentially the same as those approved by the Commission in LG&E's last two rate cases.

KIUC recommended that demand-related costs be allocated to customer classes using the Probability of Peak ("POP") method. This method represents a type of coincident peak allocation in which each class's contribution to the utility's twelve monthly

¹⁰⁶ Case No. 8616, General Adjustment in Electric and Gas Rates of Louisville Gas and Electric Company, Order dated March 2, 1983, pages 33-34.

¹⁰⁷ Case No. 8924, General Adjustment in Electric and Gas Rates of Louisville Gas and Electric Company, Order dated May 16, 1984, pages 37-38.

¹⁰⁸ Case No. 10064, Order dated July 1, 1988, pages 81-84.

¹⁰⁹ Walker Direct Testimony, pages 11-12.

system peaks are weighted by a given month's relative probability of attaining the annual system peak. 110 KIUC concluded that LG&E's electric cost-of-service study could not be used because it does not properly assign costs to customer classes. KIUC argued that the BIP method is deficient because it allocates a portion of demand-related production and transmission costs on an energy basis and assigns too much of the remaining weight to LG&E's winter system peak. 111

According to LG&E, the POP method proposed by KIUC results in an assignment of nearly 90 percent of the weight of production and transmission costs to the coincident peaks that occurred during the summer months of July and August, with over 97 percent assigned to the June-September period. LG&E further contended that the POP method leads directly to a class allocation in which the lighting schedules, Rates PSL, OL, and SLE, are assigned no portion of the production and transmission demand-related costs even though customers served under those rate schedules have access to power whenever they desire it. LII KIUC even stated that "demand-related fixed costs are incurred due to the utility's obligation to provide service when requested". LG&E stated that the BIP method is superior to the POP method in reflecting

¹¹⁰ Kalcic Direct Testimony, page 11.

^{111 &}lt;u>Id.</u>, page 10.

¹¹² Brief of LG&E, page 122.

¹¹³ Id., pages 122-123.

¹¹⁴ Kalcic Direct Testimony, page 8.

the realities of cost incurrence on its system and should be used in the analysis of cost of service. 115

The Commission continues to believe that the BIP method is appropriate as a means of allocating production and transmission costs to the customer classes. The BIP method recognizes that LGEE's embedded production and transmission costs were incurred to meet all customer demand, not just that which is coincident with system peak. KIUC's proposed POP method places too much weight on coincident peak demand. If any customer has access to electricity whenever it is demanded, that customer should bear the responsibility of some portion of demand-related costs.

LG&E's relectric cost-of-service study is acceptable and should be used as a starting point for electric rate design.

Gas Cost-of-Service Study

LG&E filed a fully embedded gas cost-of-service study to allocate costs among the classes of service on the basis of cost incurrence and to determine the relative contribution that each rate class makes to overall return on net rate base. Pursuant to a Commission directive in Case No. 10064, LG&E disaggregated its customers in this cost-of-service study into the following classes: Residential Rate G-1, Commercial Rate G-1, Industrial Rate G-1, Commercial Rate G-6, and Fort Knox

¹¹⁵ Brief of LG&E, page 123.

Special Contract. 116 For purposes of this study, LG&E combined the sole customer served under Uncommitted Gas Service Rate G-7 with Industrial Rate G-6. 117 LG&E stated, however, that the provision of service to Rate G-7 customers is markedly different from that provided to Rate G-6 customers. 118

LGSE did not disaggregate the customer classes further into transportation and sales categories. LGSE contended that since all transportation customers may purchase any portion of their annual gas requirements under the applicable sales rate schedules, and since all but one of its transportation customers purchased sales gas during the test year, a disaggregation of transportation customers would be unnecessary. 119

LG&E's cost-of-service model consists of the following steps:

(1) costs are assigned to the major functional groups (underground storage, transmission, distribution general, distribution structures, distribution mains, distribution services, distribution meters, customer accounting, and customer services);

(2) functionalized costs are then classified into demand, commodity, and customer components; and then (3) classified costs

In the Commission's Order in Case No. 10064 dated July 1, 1988, at page 81, LG&E was directed to address, in its next rate case, an assertion made by KIUC that LG&E's cost-of-service study did not fully disaggregate its various classes of customers.

¹¹⁷ Walker Exhibit 2, page 1.

¹¹⁸ Id.

¹¹⁹ Brief of LG&E, page 125.

are allocated to LG&E's rate classes. 120 LG&E's gas cost-of-service methodologies are consistent with those approved by the Commission in Case No. 10064.

The AG criticized several allocation methodologies used by LG&E and suggested alternative allocation factors. The AG, however, did not conduct a cost-of-service study incorporating his recommended allocation factors. 121

The AG proposed to allocate exactly half of the demand-related underground storage and transmission costs on the basis of extreme winter seasonal requirements and design-day demand, the same factor LGSE used to allocate all of the storage and transmission—demand costs in its cost-of-service study. The AG recommended that the other half be allocated on the basis of total class usage. 122

Similarly, the AG proposed to allocate half of the commodity-related storage and transmission costs on the basis of design-day demand, with the other half allocated on the basis of total class usage. 123

The AG proposed to allocate one-third of the costs associated with distribution structures and equipment on the basis of class

¹²⁰ Walker Exhibit 2, page 2.

¹²¹ T.E., Volume VII, November 26, 1990, pages 12-13.

¹²² Sheehan Direct Testimony, pages 10-11.

¹²³ Id., page 12.

design-day demand, with the remaining two-thirds allocated on the basis of total class usage. 124

Finally, the AG recommended substituting a usage-based allocator or a different customer-based allocator for LGEE's customer-based allocator for the allocation of costs associated with customer accounting and customer service expenses. 125

The AG has provided no evidence to support the reasonableness of his cost-of-service allocation methodologies. In fact, when asked to explain the basis for one of his proposed methodologies, the AG's witness vaguely characterized it as "rule of thumb" and "reasonable at a first glance." He also indicated that some of his other recommended methodologies could be similarly. described. 127 Explanations such as that hardly support the reasonableness of the AG's recommended allocation methodologies. Furthermore, the AG is unable to quantify the effect his rates of return. 128 recommendations will have on class Considering the lack of support for the AG's recommendations, the Commission is unable to adopt them as alternatives to LGLE's allocation methodologies.

KIUC criticized LG&E's gas cost-of-service study because it does not establish separate classes for transportation customers

¹²⁴ Id., page 14.

^{125 &}lt;u>Id</u>., pages 16-19.

¹²⁶ T.E., Volume VII, November 26, 1990, page 54.

¹²⁷ Id., pages 55-56.

^{128 &}lt;u>Id.</u>, page 58.

and sales customers. It contended this absence renders the study useless with respect to the design of cost-based transportation rates. 129

KIUC asserted that the cost incurrence characteristics of transportation service are significantly different from those of sales service based on an analysis of load factor and customer size data for G-1 and G-6 sales and transportation customers.

KIUC contended that the larger load factors and customer sizes of transportation customers indicate "radically different" cost incurrence, 130 and asserted that the gas cost-of-service study should disaggregate transportation customers from sales customers.

*KIUC presented an alternative gas cost-of-service study in which commercial and industrial G-1 and G-6 customers are disaggregated further into separate sales classes and transportation classes. With respect to the allocation methodologies utilized to assign costs to these classes, KIUC adopts the same methodologies employed by LG&E in its study. 131

RIUC's reliance on load factor and customer size data to prove a significant difference in cost incurrence characteristics is not sufficient to convince the Commission that such an extreme cost differential exists. LG&E has clearly shown that all but one of its transportation customers also relied upon and used sales

¹²⁹ Eisdorfer Direct Testimony, page 3.

¹³⁰ Id., page 6.

^{131 &}lt;u>Id.</u>, pages 8-9.

service to some degree during the test year. 132 This ability of transportation customers to rely upon and use sales services is a privilege not adequately considered by KIUC in its analysis. Nor does KIUC's analysis acknowledge that LG&E's distribution system is constructed in a manner so as to provide sales service to these customers whenever such service is demanded. These factors must be considered when attempting to determine differences in cost incurrence characteristics between customers. KIUC's evidence lacks such consideration and analysis.

LGEE has stated that certain differences exist in the provision of service to Rate G-6 customers and Rate G-7 customers. 133 Yet LGEE combined its one G-7 customer with the Rate G-6 class for purposes of its cost-of-service study. LGEE should, in subsequent cost-of-service studies, fully disaggregate Rate G-7 customers from those served under Rate G-6.

LG&E's gas cost-of-service study is acceptable and should be used as a starting point for gas rate design.

Revenue Allocation

Based on the results of its electric cost-of-service study, LG&E proposed to allocate increases to all customer classes ranging from 7.4 percent for the residential and street and outdoor lighting classes to 5.9 percent for the general service and special contract classes. LG&E indicated that its allocation

¹³² T.E., Volume VII, November 26, 1990, page 93.

¹³³ Walker Exhibit 2, page 1.

methodology was designed to achieve a better balance between class rates of return while maintaining rate stability and continuity.

LGSE proposed to allocate the full amount of the gas increase to the General Service ("G-1") rate. This proposal was based on the results of LGSE's cost-of-service study which showed that the rate of return for the residential class, which is served under the G-1 rate schedule, was significantly below rates of return for other classes. LGSE proposed no increases for its interruptible rate classes, G-6 and G-7, or for the Fort Knox special contract.

AIUC, based on its electric cost-of-service study, proposed allocations ranging from a 5.6 percent decrease for Carbon Graphite, a contract customer, to a 13.1 percent increase for the residential class. On gas, KIUC proposed decreases for G-1 and G-6 industrial transportation customers. The amount of the decreases were dependent on the amount by which the Commission reduced LG&E's requested gas increase. None of the other intervenors offered specific allocation recommendations.

LG&E's allocation proposals are supported by its cost-of-service analyses and are consistent with the Commission's goals of gradualism and rate continuity. Having accepted LG&E's cost-of-service studies, the Commission finds that the resulting allocation proposals produce an equitable distribution of the revenue increases granted and shall be reflected in the rate design approved herein.

Electric Rate Design

LG&E proposed generally uniform increases in customer, demand and energy charges with some changes in its existing tariffs and

rate design. The changes included: switching from a minimum bill to a customer charge for its water heating, space heating, and traffic lighting rates; changes in demand ratchets that would impact the billing demands for large commercial and industrial customers; seasonal billing demands for industrial customers served under rate LP; and making time-of-day rates available for smaller sized industrial and commercial customers. In addition, LG&E proposed changes in Public Street Lighting ("PSL") and Outdoor Lighting ("OL") rates to equalize the prices, by lumens of output, between mercury vapor and high pressure sodium lights. LG&E also proposed to revise its interruptible service rider by increasing the monthly demand credit to \$3.30 per KW.

Louisville opposed LG&E's proposed changes to the PSL rates contending that the marginal cost pricing methodology employed by LG&E unfairly impacted Louisville with its older, more fully depreciated street lighting system. Louisville recommended an alternative rate schedule based on embedded costs and proposed to be separated from LG&E's other PSL customers either through a special contract or by establishing a separate tariff classification.

Jefferson et al. proposed changing LG&E's residential rate structure from a flat summer rate and declining block winter rate to inverted block rates in both summer and winter. Jefferson et al. opines that LG&E was deficient in its response to the Commission's directive in Case No. 10064 that LG&E address the issues of inverted block rates in the summer and declining block

winter rates. 134 Jefferson et al., based on its analysis of LG&E's cost-of-service study, contends that LG&E's temperature-sensitive loads (summer air conditioning and winter heating) have a major impact on LG&E's costs and the allocation of those costs. Jefferson et al. proposes that LG&E's cost recovery, through rates, should also reflect the impact of these temperature-sensitive loads.

Jefferson et al.'s proposal would reduce LG&E's energy rate for the first 600 KWH to 5.435¢ on a year-round basis compared to LG&E's existing rates of 6.402¢ and 5.833¢ in the summer and winter, respectively. Jefferson et al. would increase the rate for sales over 600 KWH to 8.189¢ in the summer and 6.227¢ in the winter compared to the existing rates of 6.402¢ in summer, and 4.528¢ in winter. These rates were based on Jefferson et al.'s analysis of LG&E's temperature-sensitive costs using the base, winter, and summer demands from LG&E's cost-of-service study and using one month of the test year, October 1989, as the measure of LG&E's non-temperature-sensitive load.

LGSE argues that while unit costs are higher in the summer than in the winter there is no load research evidence to support Jefferson et al.'s proposal. LGSE contends that its existing rate design reflects the differences in summer and winter unit costs and, through the declining block winter rate, attempts to reduce the average unit cost by spreading fixed costs over greater sales volumes. LGSE further contends that deficient recovery of

¹³⁴ Case No. 10064, Order dated August 10, 1988.

customer costs through the customer charge requires these costs to be recovered in the initial usage steps to prevent large users from paying a disproportionate share of these costs. Finally, LGSE argues that its declining block winter rates should be continued to promote off-peak loads and that customer acceptance and revenue stability must be included in any consideration of rate design changes.

The Commission finds most of LG&E's rate design changes proper and reasonable. On PSL and OL rates, the Commission finds LG&E's alternative proposal proper and reasonable. The alternative proposal, to which Louisville agreed, results in approximately equal percentage increases for existing lights, be they mercury vapor or high pressure sodium. 135 For mercury vapor lights installed in the future, the rates would be higher, based on LG&E's marginal costs, while for new high pressure sodium lights the rates would equal the rates for existing lights.

The Commission is not persuaded that LG&E's residential rates should be redesigned in the precise manner proposed by Jefferson et al.; however, we find that a change resulting in an inverted block summer rate is appropriate. The Commission finds there to be substantial support for Jefferson et al.'s proposed inverted summer rates. LG&E is a strong summer peaker with a significant amount of capacity installed to meet its residential air conditioning load. As LG&E pointed out, its unit costs are higher in the summer than in the winter largely due to the relatively

¹³⁵ T.E., Volume V, November 20, 1990, page 111.

small increment of energy sales associated with the capacity required to meet its air conditioning demands. These summer load characteristics indicate that LG&E's temperature—sensitive load is a major contributor to its generating and transmission costs and point out the need for long-term reductions in peak demand that can translate into lower future costs.

The Commission considers reduced peak demand, improved system load factor, and lower unit costs to be common goals that are in the best interest of all parties. To that extent, we are not persuaded that LG&E's winter rate design should be modified. Increased off-peak loads can produce many of the same benefits as reduced on-peak loads.

In recognition of concerns about cost recovery, customer acceptance, and revenue stability we have chosen a moderate approach to the implementation of an inverted block summer rate. The summer energy rate will remain unchanged for the first 600 KWH usage; the summer energy charge increase will be assigned in total to the usage in excess of 600 KWH. Given the relatively small number of KWH sold in relation to the capacity needed to meet air conditioning demands, this increase should not affect LG&E's revenue stability.

Cable Television Attachment Charges ("CATV")

LG&E proposed increasing its charges for CATV pole attachments by approximately 35 percent. LG&E's calculation of these charges was based on the formula established by the

¹³⁶ Walker Direct Testimony, page 22.

Commission in Administrative Case No. 251137 with an added cost component for tree trimming expense.

KCTA opposed the increase contending that LGsE's allocation of the entire amount of tree trimming expense included in Account 593.004. Tree Trimming of Electric Distribution Routes, to poles was improper. KCTA opined that the vast majority of the expense goes not to clear space for poles, but to clear space for LGsE's overhead conductions and services and for clearing a path for the span of lines between the poles. KCTA proposed allocating the tree trimming expense based on LGsE's investment in poles compared to its combined investment in poles, overhead conductors, and services thereby increasing LGsE's pole attachment charges by approximately 14 percent. KCTA also proposed that the approved pole attachment rates be calculated using the overall rate of return approved by the Commission in this case.

LGSE argued that since the cable television lines are strung between the poles, those lines are benefited by the tree trimming that clears the path between the poles. LGSE also pointed out that pole attachment charges are assessed through a formula, based on the percentage of usable space, that uses an allocation factor to derive the appropriate charge.

The clearing of the span between the poles inures to the benefit of all parties whose lines cover the span, be they

¹³⁷ Administrative Case No. 251, The Adoption of a Standard Methodology for Establishing Rates for CATV Pole Attachments, Order dated August 12, 1982.

electric, telephone, or CATV. As such, the full amount of the tree trimming expense is properly includible in calculating the O & M component of the annual carrying cost used to derive the pole attachment charge. Applying the annual carrying charge to an allocated fix cost component, derived using the percentage of usable space, effectively allocates the O&M component of the annual carrying charge. The result is a pole attachment charge which reflects an equitable allocation and recovery of LG&E's costs. The pole attachment charges proposed by LG&E, modified to reflect the overall rate of return of 9.89 percent, are granted.

Gas Rate Design

For the G-1 class, LG&E proposed to increase customer charges by approximately 24 percent and commodity charges by approximately 1.8 percent. This proposal reflected the results of LG&E's cost-of-service study and the need to improve the residential rate of return. LG&E maintains that since the average residential usage is significantly smaller than the usage of the commercial and industrial classes served under Rate G-1, the customer charge, rather than the commodity charge, is the appropriate rate to increase for the purpose of achieving a better balance between class rates of return.

The AG opposed the proposed increase in the residential customer charge from \$4.35 to \$5.40, taking issue with several of LG&E's cost allocators used in arriving at its customer costs. The AG argued that the proposal acted as a disincentive for conservation by placing the bulk of the increase on the fixed portion of the customer's bill. The AG calculated a customer cost

of \$3.75 and opined that the existing charge of \$4.35 was more than adequate.

Jefferson et al. maintained that the customer charge increase would overly burden the small, lower income customers in the residential class. Jefferson et al. argued that LG&E's stated intention of increasing the residential class rate of return was improper because the lower risk associated with serving the residential class should translate into a lower rate of return. Jefferson et al. proposed a rate design that included increasing the customer charge by 2.4 percent, the amount of the overall requested G-1 rate increase.

- Although .. LG&E's ... proposal for increasing the customer charge may be logical and reasonable, the amount of the increase is not consistent with the Commission's goals of rate continuity and While there is a lower risk associated with serving the residential class some increase in the residential class rate of return is warranted. As a means of achieving this increase in return, it is proper to assign the majority of the revenue increase to the customer charge. Given the magnitude of the increase, the Commission will assign the customer charge an increase of approximately 2.5 times the overall G-1 percentage increase, exclusive of gas cost revenues. The revenue increase of .9 percent results in a customer charge increase of 2.3 percent, producing a residential customer charge of \$4.45. non-residential customer charge will increase by a similar percentage, from \$8.70 to \$8.90.

Late Payment Charges

The AG proposed that LG&E's late payment charge be abolished. The AG argued that the charge was not cost-justified and that LG&E had not shown that the charge served as an incentive for prompt payment.

Jefferson et al. proposed a plan to change the way LGSE credits partial payments as a means of reducing the number of late payment charges imposed on customers with past due account balances. At present, LGSE credits partial payments first to the customer's past due balance, then to the current month's bill. Jefferson et al. pointed out that this procedure results in a customer being assessed a late payment charge when it makes a partial payment sufficient to cover its current month's bill because, after the payment is credited to the customer's past due balance, the remainder is not enough to cover the current month's balance. Jefferson et al. argued that this change would encourage customers to make timely payments on their current balances knowing there would be no late payment penalty assessed in a subsequent month when the current month's bill was paid in full.

LGSE argued that the existing procedure serves as an incentive for customers to pay off their past due balances and that the late payment charge functions as an incentive to encourage timely payments. LGSE also argued that if the late payment charge were abolished, the loss of the associated revenues would have to be incorporated into the rates charged all customers.

LG&E's late payment charge has been in its tariffs for many years. The AG performed no analysis on the effectiveness of this charge as an incentive for timely payment of bills. The Commission finds, as it did in LG&E's last rate case, 138 that the late payment charge serves as an incentive and has an important role in LG&E's bill collection strategy.

The arguments of Jefferson et al. to change the way LG&E credits partial payments are persuasive. The Commission finds Jefferson et al.'s plan to be a means of minimizing the instances of recurring late payment charges for customers experiencing payment problems. When a customer can pay the current month's bill plus make a payment toward its past due balance, the customer should not be assessed still another late payment charge.

The Commission is mindful of LGEE's concerns implementation of Jefferson et al.'s proposal could result in customer laxity toward the payment of past due balances. considering those concerns, the Commission notes that LGSE retains the ability to terminate service if payment is not eventually made. However, to minimize the need for such actions, the Commission will make the following modification to Jefferson et al.'s proposal to create an incentive for customers to reduce their past due balances: When a customer with a past due balance makes a partial payment sufficient to pay the bill for the current month's usage, plus pay \$10.00 or 5 percent of the outstanding past due balance, whichever is greater, LG&E shall credit the

¹³⁸ Case No. 10064, Order dated April 20, 1989.

payment to the current month's bill first, then credit the remainder to the past due balance. Crediting the current month's bill first will eliminate the assessment of a late payment penalty on the current month's bill, and requiring some payment toward the past due balance as a prerequisite for such crediting provides the customer an incentive to reduce the past due balance. The Commission finds that such a plan is a reasonable modification to LG&E's current collection procedures and should be approved. LG&E is hereby directed to implement this change in the way it credits partial payments concurrent with the effective date of this Order. Transportation Service/Standby Service

**KIUC: recommended that LGLE's tariffs be modified to make standby service optional for all gas transportation customers. KIUC claimed that, under LGLE's existing tariffs, transportation service exclusive of standby service was limited to Rate T transportation customers taking sales service under Rate G-7, Uncommitted Gas Service. KIUC argued that this prerequisite effectively forced transportation customers to take standby service under Rate TS which is available to customers served under sales rates G-1 and G-6.

LGSE contends that Rate T is available to G-1 and G-6 sales customers but that a customer served on Rate T will have no standby or back-up protection for its Rate T volumes other than the G-7 rate for uncommitted gas service. 139 LGSE maintains that

¹³⁹ T.E., Volume II, November 9, 1990, pages 115-116.

KIUC has misinterpreted the Rate T tariff regarding the precondition of being a G-7 sales customer.

Commission can understand KIUC's reading and of the Rate T tariff language which states "available to commercial and industrial customers serviced under Rate G-7. . . " to mean that being a G-7 sales customer is required in order to receive transportation service under Rate T. We also understand LG&E's explanation that the intent of the tariff is to indicate that for customers taking transportation service under Rate T, LG&E will not be obligated to provide standby quantities other than the uncommitted gas available under Rate G-7. Some modification of the tariff language regarding the availability of Rate T is needed to eliminate this misunderstanding. above-quoted reference to Rate G-7 should be eliminated and a description of the limited protection of uncommitted gas offered under Rate G-7 should be added. LG&E should so modify this tariff when it files its revised tariffs setting forth the rates approved in this proceeding.

Pipeline Demand Charges

KIUC proposed that the pipeline supplier's demand component of LG&E's G-6 rates be reduced. KIUC opined that G-6 customers, being subject to interruption during the winter, have a lower quality of service than G-1 customers, and that this lower quality of service should be reflected in lower rates. We do not agree.

Rate G-6 customers are subject to interruption for only 90 days during the winter season. LG&E's pipeline demand costs are

lower due both to its storage capabilities and the interruptibility of rate G-6 customers.

KIUC presented no evidence or analysis to support its argument. G-6 customers receive firm service for all but 90 days of the year. The quality of their service is not significantly different than that of G-1 customers. In addition, LG&E's lower pipeline demand costs are flowed through to all customers, both firm and interruptible, regardless of whether the lower cost results from LG&E's storage capabilities or the interruptibility of its G-6 customers.

Fuel Adjustment Clause

the base energy charges contained in LG&E's tariffs. KIUC argued that fuel costs should be recovered solely through the operation of the fuel clause and should be shown separately from non-fuel costs.

We disagree. The fuel clause regulation, 807 KAR 5:056, requires the establishment of a level of fuel costs in base rates such that, at the time of setting the base rates, the fuel adjustment factor will be equal to zero.

Tariff Changes

The Commission has addressed a number of specific rate design and tariff changes proposed either by LG&E or the intervenors. Several of the changes proposed by LG&E include text additions, deletions, or revisions which were not challenged by any party. The Commission has reviewed all such changes and finds they should

be approved. Due to their voluminous nature, these text changes are not included in the Appendix.

OTHER ISSUES

Management Audit

While the Commission is encouraged by the organizational efficiencies and expected savings described by LG&E concerning its work force, the Commission remains concerned that all aspects supporting LG&E's organization structure are not in place. LG&E has indicated that the restructuring or downsizing dealt primarily with management employees. 140 LG&E has apparently not completed its evaluation of human resources needs and systems, but has begun a process of continuous improvement recognizing that the changes will take time to implement properly. 141 LG&E further indicated that this was the first year that organizational development had been seriously included in LG&E's five year plan and that a manpower planning process was currently being designed for implementation in January 1991. 142

The Commission fully expects LG&E to pursue in a prompt and expeditious manner the organizational and operational efficiencies described during this proceeding. LG&E's efforts in this area will be monitored by the Commission through the normal management audit follow-up process.

¹⁴⁰ T.E., Volume II, November 8, 1990, page 126.

¹⁴¹ Wood Direct Testimony, page 4.

¹⁴² T.E., Volume II, November 8, 1990, page 200.

LG&E also discussed the 4KV conversion program stating that the program was scheduled for completion in approximately the year 2004. 143 Because of the savings estimated by LG&E in an internal study, the Commission encourages LG&E to continue its dialogue with the Management Audit Staff regarding the optimal conversion schedule during the management audit follow-up process.

Energy Conservation Programs

Paddlewheel proposed that the Commission establish a task force to design and administer capacity-avoiding conservation programs for LG&E. Paddlewheel suggested that the task force include LG&E Staff, Commission Staff, traditional intervenors, and conservation experts located in LG&E's service territory. Paddlewheel opined that the Commission, or specifically Commission regulations, have impeded the development of conservation programs in Kentucky. Paddlewheel recommended that the Commission provide utilities incentives for conservation by allowing conservation expenditures to be treated as rate base investments on which a utility can earn a return rather than as operating expenses for it will be reimbursed. which Subsequent to the hearing, Paddlewheel filed a motion requesting the Commission enter an Order formally establishing a task force.

LG&E indicated it was interested in expanding its energy conservation programs and would agree with Paddlewheel that rate base treatment of conservation expenditures would serve as an incentive to encourage utilities to design and implement new

¹⁴³ T.E., Volume III, November 9, 1990, page 199.

conservation programs. LG&E also indicated it would like to participate in a collaborative process (task force) to develop new conservation programs.

The Commission endorses the proposal to establish a task force for the purpose of designing and overseeing new conservation programs at LG&E. The Commission is also agreeable to allowing utilities to earn a return on conservation expenditures as an incentive to encourage development of such programs.

The Commission notes that neither at present nor in the past has it had a regulation or policy that acted as a deterrent to utilities making conservation expenditures. In fact, over 9 years ago the Commission statedy "We have in mind an aggressive conservation program, which sees expenditures on conservation not an unfortunate necessity or misguided effort, but rather as an investment, and as such an alternative to investment in added generating capacity."144 (emphasis in original) We encourage LG&E and interested intervenors to begin discussion on these matters for the purpose of establishing general goals and establishing a task force. including Commission Staff, to develop new conservation programs for LG&E. However, nothing in Paddlewheel's motion convinces the Commission that there is a present need to order the establishment of such a task force.

¹⁴⁴ Case No. 8177, General Adjustment of Electric Rates of Kentucky Utilities Company, Order dated September 11, 1981.

Cane Run Unit No. 3 ("Cane Run No. 3")

KIUC and Jefferson et al. recommend that LG&E be prohibited from retiring Cane Run No. 3 until an independent evaluation of the unit could be performed to determine its reliability and possible renovation to extend its active service life. Jefferson et al. also proposed that the Commission establish a process requiring a certificate of decommissioning be obtained by a utility prior to retiring a generating unit. After the hearing in this case, Paddlewheel moved to establish a case in order to investigate the status of Cane Run No. 3.

retire, Cane Run No. 3 until an independent evaluation was performed on the unit, either by someone chosen by the Commission or selected by agreement of the company and the intervenors. 145 LGEE did, however, have some questions as to the cost and payment for the evaluation and the time frame within which the study might be performed.

The Commission endorses the proposal agreed to by LG&E that an independent party be selected to perform an evaluation of Cane Run No. 3 prior to its retirement from service. LG&E should begin the process of selecting an independent expert to perform the evaluation. In the event that LG&E and the intervenors are unable to agree on an expert, the Commission will facilitate the selection. The cost, as with any outside service, should be borne by LG&E, with rate recovery at some future point. The Commission

¹⁴⁵ T.E., Volume I, November 7, 1990, page 167.

would expect the evaluation to be completed prior to the time of LG&E's initial filing under the integrated resource planning regulation in late 1991. The Commission finds no need to establish a case at this time. Accordingly, Paddlewheel's motion will be denied.

Ohio Valley Electric Corporation ("OVEC") Power Agreement

LGEE is one of 15 owners of OVEC, an electric utility which sells power to the Department of Energy ("DOE") under a contract that expires in October 1992. If the DOE contract is not renewed in 1992, the OVEC power reverts to its owners. LGEE would have rights to 165 MW of OVEC capacity if the contract is not renewed.

reasonable steps to enhance the usefulness of the OVEC surplus capacity. KIUC proposed that the Commission hold LG&E financially responsible for the OVEC capacity by refusing to allow additional Trimble County capacity, or other capacity, in rate base so long as LG&E's surplus OVEC entitlement results in sufficient capacity to offset the need for additional Trimble County capacity.

LG&E should take reasonable steps to enhance the usefulness of surplus OVEC capacity and all other available capacity, be it through upgrading its hydro capacity or extending the useful life of Cane Run No. 3. All of these planning issues, and any new conservation programs, can be reviewed under the integrated resource planning regulation. As part of that review, and in future rate cases, the Commission will require that LG&E fully explore OVEC capacity, as well as other capacity alternatives, prior to allowing additional Trimble County capacity in rate base.

Reporting for the Holding Company

In the final Order in Case No. 89-374, the Commission indicated that LG&E should provide certain reports to the Commission concerning the activities of the Holding Company. Since the issuance of that Order, LG&E has become a subsidiary of the Holding Company, as was envisioned in the application in Case No. 89-374. The final Order in Case No. 89-374 did not contain a specific date on which LG&E was to begin providing the listed reports. LG&E should begin filing these reports immediately. Reports due annually should begin with calendar year 1990, and reports due quarterly should begin with the quarter ending. December 31, 1990. These reports should be filed with the Commission within 30 days after the end of the reporting period.

SUMMARY

After consideration of all matters of record, the evidence, and being otherwise sufficiently advised, the Commission finds that:

- 1. The rates in the Appendix, attached hereto and incorporated herein, are the fair, just, and reasonable rates for LG&E to charge for service rendered on and after January 1, 1991.
- 2. The rates proposed by LG&E would produce revenue in excess of that found reasonable herein and should be denied.

IT IS THEREFORE ORDERED that:

1. The rates in the Appendix be and they hereby are approved for service rendered by LG&E on and after January 1, 1991.

- 2. The rates proposed by LG&E are hereby denied.
- 3. The tariff changes authorized herein are approved for service rendered on and after January 1, 1991.
- 4. Paddlewheel's motions to establish cases to designate a conservation task force and to investigate the status of Cane Run No. 3 be and they hereby are denied.
- 5. Within 30 days from the date of this Order, LG&E shall file with the Commission revised tariff sheets setting out the rate and tariff changes approved herein.
- 6. Annual reports concerning the Holding Company shall begin with calendar year 1990, while quarterly reports concerning the Holding Company shall begin with the quarter ending December 31, 1990. LG&E shall file these reports 30 days after the end of the reporting period.

Done at Frankfort, Kentucky, this 21st day of December, 1990.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 90-158 DATED 12/21/90

The following rates and charges are prescribed for the customers in the area served by Louisville Gas and Electric Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

ELECTRIC SERVICE

RESIDENTIAL RATE (RATE SCHEDULE R)

RATE:

Customer Charge: \$3.29 per meter per month

Winter Rate: (Applicable during 8 monthly billing

periods of October through May)

First 600 kilowatt-hours per month 5.905¢ per KWH Additional kilowatt-hours per month 4.584¢ per KWH

Summer Rate: (Applicable during 4 monthly billing periods

of June through September)

First 600 kilowatt-hours per month 6.402¢ per KWH Additional kilowatt-hours per month 6.555¢ per KWH

WATER HEATING RATE (RATE SCHEDULE WH)

RATE:

Customer Charge: \$0.93 per meter per month.

All kilowatt-hours per month 4.339¢ per KWH

Minimum Bill: The customer charge.

GENERAL SERVICE RATE (RATE SCHEDULE GS)

RATE:

Customer Charge:

\$3.89 per meter per month for single-phase service \$7.78 per meter per month for three-phase service

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

All kilowatt-hours per month

6.317¢ per KWH

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All kilowatt-hours per month

7.102¢ per KWH

SPECIAL RATE FOR ELECTRIC SPACE HEATING SERVICE RATE SCHEDULE GS

RATE:

Customer Charge:

\$2.24

For all consumption recorded on the separate meter during the heating season the rate shall be 4.568¢ per kilowatt-hour.

Minimum Bill: The customer charge. This minimum charge is in addition to the regular monthly minimum of Rate GS to which this rider applies.

LARGE CONMERCIAL RATE (RATE SCHEDULE LC)

RATE:

Customer Charge: \$17.09 per delivery point per month

Demand Charge:

Secondary Primary
Distribution Distribution

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

All kilowatts of billing \$7.33 per KW \$5.68 per KW demand per month per month

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All kilowatts of billing \$10.43 per KW \$8.53 per KW demand per month

Energy Charge:

All kilowatt-hours per month 3.139¢

LARGE COMMERCIAL TIME-OF-DAY RATE

RATE:

Customer Charge: \$18.92 per delivery point per month

Demand Charge:

Basic Demand Charge
Secondary Distribution \$3.71 per KW per month
Primary Distribution \$2.01 per KW per month

Peak Period Demand Charge
Summer Peak Period \$6.72 per KW per month
Winter Peak Period \$3.57 per KW per month

Energy Charge: 3.139¢ per KWH

INDUSTRIAL POWER (RATE SCHEDULE LP)

RATE:

Customer Charge: \$42.22 per delivery point per month

Demand Charge:

Secondary Primary Transmission
Distribution Distribution Line

Winter Rate: (Applicable during 8monthly billing periods of October through May)

All kilowatts of \$8.19 per KW \$6.24 per KW \$5.03 per KW billing demand per month per month

Summer Rate:
(Applicable during 4monthly billing periods
of June through September)

All kilowatts of \$10.82 per KW \$8.88 per KW \$7.66 per KW billing demand per month per month

Energy Charge:

All kilowatt-hours per month 2.716¢ per KWH

INTERRUPTIBLE SERVICE

RATE:

The monthly bill for service under this rider shall be determined in accordance with the provisions of either Rate LC, Rate LC-TOD, Rate LP, or Rate LP-TOD, except there shall be an interruptible demand credit of \$3.30 per kilowatt per month.

INDUSTRIAL POWER TIME-OF-DAY RATE (RATE SCHEDULE LP-TOD)

RATE:

Customer Charge: \$44.31 per delivery point per month	Customer	Charge:	\$44.31	per	delivery	point	per	month
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Demand Charge:

Basic Demand Char

Secondary Distribution	\$5.32	per	KW	per	month
Primary Distribution	\$3.34	per	KW	per	month
Transmission Line	\$2.13	per	KW	per	month

Peak Period Demand Charge:

Summer	Peak	Period	\$5.57	per	KW	per	month
Winter	Peak	Period					month

Energy Charge:

2.708¢ per KWH

OUTDOOR LIGHTING SERVICE (RATE SCHEDULE OL)

RATE:

Rate Per Month Per Unit

Overhead Service Mercury Vapor	
100 watt* \$6.92 \$ -0-	
175 watt 7.83 9.23	
250 watt 8.87 10.32	
400 watt 10.80 12.37	
1000 watt 19.69 22.32	
High Pressure Sodium Vapor	
100 watt \$7.69 \$7.69	
150 watt 9.84 9.84	
250 watt 11.62 11.62	
400 watt 12.27 12.27	
Underground Service	
Mercury Vapor	
100 Watt - Top Mounted \$12.06 \$12.81	
175 Watt - Top Mounted 12.83 13.81	

High Pressure Sodium Vapor

100 Watt - Top Mounted	\$14.19	\$14.19
150 Watt	19.33	19.33
250 Watt	22.17	22.17
400 Watt	24.40	24.40

^{*} Restricted to those units in service on 5-31-79.

Special Terms and Conditions:

Company will furnish and install the lighting unit complete with lamp, fixture or luminaire, control device and mast arm. The above rates for overhead service contemplate installation on an existing wood pole with service supplied from overhead circuits only; provided, however, that when possible, floodlights served hereunder may be attached to existing metal street lighting standards supplied from overhead service. If the location of an existing pole is not suitable for the installation of a lighting unit, the Company will extend its secondary conductor one span and install an additional pole for the support of such unit. The customer to pay an additional charge of \$1.64 per month for each such pole so installed. If still further poles or conductors are required to extend service to the lighting unit, the customer will be required to make a non-refundable cash advance equal to the installed cost of such further facilities.

PUBLIC STREET LIGHTING SERVICE (RATE SCHEDULE PSL)

RATE:

Rate Per Month Per Unit

Installed	Prior to	Installed	
January 1	1, 1991	December 31	, 1990

Type of Unit

Overhead Service

Mercury Vapor		
100 Watt (open bottom		
fixture)	\$6.22	\$ -0-
175 Watt	7.28	9.05
250 Watt	8.28	10.15
400 Watt	9.90	12.20
400 Watt (underground		
pole)	14.31	-0-
1000 Watt	18.39	22.07

High Pressure Sodium Vapor		
150 Watt	8.90	8.90
250 Watt	10.66	10.66
400 Watt	11.10	11.10
Underground Service		
Mercury Vapor		
100 Watt - Top Mounted	10.16	12.55
175 Watt - Top Mounted	11.12	13.63
175 Watt	15.09	21.47
250 Watt	16.12	22,57
400 Watt	18.96	24.62
400 Watt on State of	1000	
KY Pole	11.21	-0-
	11.51	
High Pressure Sodium Vapor		
100 Watt - Top Mounted	11.17	11.17
150 Watt	19.32	19.32
250 Watt	20.50	20.50
250 Watt on State of		
KY Pole	10.48	-0-
400 Watt	21.95	21.95
	21.33	41.73
Incandescent		
1500 Lumen	8.29	-0-
6000 Lumen	10.91	-0-

STREET LIGHTING ENERGY RATE (RATE SCHEDULE SLE)

RATE:

\$3.972¢ per kilowatt hour

TRAFFIC LIGHTING ENERGY RATE (RATE SCHEDULE TLE)

RATE:

Customer Charge:

\$2.45 per meter per month

All kilowatt-hour per month

4.992¢ per KWH

Minimum Bill

The customer charge.

SPECIAL CONTRACT FOR ELECTRIC SERVICE CARBON GRAPHITE SPECIAL CONTRACT

Demand Charge

Primary Power (28,500 KW) Secondary Power (Excess KW) \$11.82 per KW per month \$5.91 per KW per month

Demand Credit for Primary
Interruptible Power (24,500 KW)

\$3.30 per KW per month

Energy Charge All KWH

1.946¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE E. I. DUPONT DE NENOURS SPECIAL CONTRACT

Demand Charge

\$11.14 per KW of billing demand per month

Energy Charge

2.012¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE FORT KNOX SPECIAL CONTRACT

Demand Charge

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

All KW of Billing Demand

\$6.32 per KW per month

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All KW of Billing Demand

\$8.52 per KW per month

Energy Charge: All KWH per month

2.605¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE LOUISVILLE WATER COMPANY SPECIAL CONTRACT

Demand Charge

\$7.62 per KW of billing demand per month

Energy Charge

2.138¢ per KWH

GAS SERVICE

The Gas Supply Cost component in the following rates has been adjusted to incorporate all changes through Case No. 10064-J.

GENERAL GAS RATE

RATE:

Customer Charge:

\$4.45 per delivery point per month for residential service

\$8.90 per delivery point per month for non-residential service

Charge Per 100 Cubic Feet:

Distribution Cost Component 11.075¢
Gas Supply Cost Component 27.323¢

Total Charge Per 100 Cubic Feet 38.398¢

SUMMER AIR CONDITIONING SERVICE UNDER GAS RATE G-1

RATE:

The rate for "Summer Air Conditioning Consumption," as described in the manner hereinafter prescribed, shall be as follows:

Charge Per 100 Cubic Feet:

Distribution Cost Component Gas Supply Cost Component	6.075¢ 27.323¢
Total Charge Per 100 Cubic Feet	33.3986

GAS TRANSPORTATION SERVICE/STANDBY RATE TS

RATE:

In addition to any and all charges billed directly to Company by other parties related to the transportation of customer-owned gas, the following charges shall apply:

Administrative Charge: \$90.00 per delivery point per month.

	<u>G-1</u>	<u>G-6</u>
Distribution Charge Per Mcf Pipeline Supplier's Demand Component	\$1.1075 .2032	\$0.5300 .2032
Total	\$1.3107	\$0.7332

Common Equity Ratios for Companies In VanderWeide Proxy Group

Chesapeake Utilities [1]		45.4%
New Jersey Resources [2]		49.0%
NiSource, Inc. [3]	Unavailable	
Northwest Nat. Gas (Oregon)[4]		50.0%
Northwest Nat. Gas (Washington)[5]		51.0%
Northwest Nat. Gas (NW Natural) [6]		49.5%
ONE Gas, Inc. [7]		60.1%
South Jersey Industries [8]		50.2%
Southwest Gas [9]	Unavailable	
Spire, Inc. [10]		52.2%
UGI Corp. [11]	w	44.5%
		4
AVERAGE	ş .	50.2%
MIDPOINT OF RANGE	*	50.0%

NOTES:

- [1] Source: Chesapeake Utilities Corp. Form 10-K, FY ending Dec. 31, 2018, Filed Feb. 27, 2019, p. 21.
- [2] Source: New Jersey Resources Corp. Form 10-K, FY ending Sept. 30, 2018, Filed Nov. 20, 2018, p. 54.
- [3] Not available in Form 10K filings for NiSource, Inc.
- [4] Source: Northwest Natural Gas Co. Form 10-K, FY ending Dec. 31, 2018, Filed March 1, 2019, p. 35. Common Equity Ratios for the Oregon and Washington Northwest Natural Gas utilities were derived from capital structures approved by regulatory commissions, while the capital structure for NW Natural is as-filed in that utility's pending rate case.
- [5] Id.
- [6] Id.
- [7] Source: ONE Gas, Inc. Form 10-k, FY ending Dec. 31, 2018, Filed Feb. 20, 2019, p. 29.
- [8] Source: South Jersey Industries, Inc. Form 10-K, FY ending Dec. 31, 2018, Filed Feb. 28, 2019, p. 60.
- [9] Not available in Form 10-K filings for Southwest Gas Holdings, Inc., or Southwest Gas Corp.
- [10] Source: Spire, Inc. Form 10-K, FY ending Sept. 30, 2018, Filed Nov. 15, 2018, p. 44
- [11] Source: UGI Corporation Form 10-K, FY ending Sept. 30, 2018, Filed Nov. 20, 2018, p. 31.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy)	
Kentucky, Inc., for: 1) An Adjustment of the)	
Natural Gas Rates; 2) Approval of a)	Case No. 2018-00261
Decoupling Mechanism; 3) Approval of New)	
Tariffs; and 4) All Other Required Approvals,)	
Waivers, and Relief.)	

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC

August 31, 2018

TABLE OF CONTENTS

		PAGE
I.	INTRODUCTION	1
n.	DISCUSSION	2
III.	CONCLUSION	16
Attac	chments:	
JJS-1	 2017 Depreciation Study - Calculated Annual Depreciation Acc Gas Plant as of December 31, 2017 	ruals Related to
Anne	endix A – Qualification Statement	

I. INTRODUCTION

- 1 Q. PLEASE STATE YOUR NAME AND ADDRESS.
- 2 A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill,
- Pennsylvania, 17011.
- 4 Q. ARE YOU ASSOCIATED WITH ANY FIRM?
- 5 A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate
- 6 Consultants, LLC (Gannett Fleming).
- 7 Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT
- 8 FLEMING?
- 9 A. I have been associated with the firm since college graduation in June 1986.
- 10 Q. WHAT IS YOUR POSITION WITH THE FIRM?
- 11 A. I am a Senior Vice President.
- 12 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?
- 13 A. I am testifying on behalf of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or
- the Company).
- 15 Q. PLEASE STATE YOUR QUALIFICATIONS.
- 16 A. I have 32 years of depreciation experience which includes giving expert testimony in
- over 290 cases before 40 regulatory commissions, including this Commission. Please
- refer to Appendix A for my qualifications.
- 19 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
- 20 **PROCEEDING?**

A. My testimony will support and explain the depreciation study conducted under my direction and supervision for the gas utility plant of Duke Energy Kentucky, Inc. The

II. <u>DISCUSSION</u>

4 Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.

study represents all gas plant assets.

- 5 A. Depreciation refers to the loss in service value not restored by current maintenance,
- 6 incurred in connection with the consumption or prospective retirement of utility plant
- 7 in the course of service from causes which are known to be in current operation,
- against which the Company is not protected by insurance. Among the causes to be
- given consideration are wear and tear, decay, action of the elements, obsolescence,
- changes in the art, changes in demand and the requirements of public authorities.
- 11 Q. PLEASE IDENTIFY EXHIBIT JJS-1.
- 12 A. Exhibit JJS-1 is a report entitled, "2017 Depreciation Study Calculated Annual
- Depreciation Accruals Related to Gas Plant as of December 31, 2017." This report
- sets forth the results of my depreciation study for Duke Energy Kentucky, Inc.
- 15 Q. IS EXHIBIT JJS-1 A TRUE AND ACCURATE COPY OF YOUR
- 16 **DEPRECIATION STUDY?**
- 17 A. Yes.

3

- 18 Q. DOES EXHIBIT JJS-1 ACCURATELY PORTRAY THE RESULTS OF
- 19 YOUR DEPRECIATION STUDY AS OF DECEMBER 31, 2017?
- 20 A. Yes.

Q. WHAT WAS THE PURPOSE OF YOUR DEPRECIATION STUDY?

2 A. The purpose of the depreciation study was to estimate the annual depreciation
3 accruals related to gas plant in service for ratemaking purposes and determine
4 appropriate average service lives and net salvage percents for each plant account.

5 Q. PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.

A.

The Depreciation Study is presented in nine parts. Part I, Introduction, presents the scope and basis for the Depreciation Study. Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating survivor curves. Parts III and IV set forth the analysis for determining service life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account.

The Depreciation Study also includes several tables and tabulations of data and calculations. Table 1 on pages VI-4 and VI-5 of the Depreciation Study presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2017, the book depreciation reserve, and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VIII-2 presents the results of the net salvage analysis. The section beginning on page IX-2

1		presents the depreciation calculations related to surviving original cost as of
2		December 31, 2017.
3	Q.	PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION
4		STUDY.
5	A.	I used the straight line remaining life method of depreciation, with the average
6		service life procedure for all plant assets except some general plant accounts. The
7		annual depreciation is based on a method of depreciation accounting that seeks to
8		distribute the unrecovered cost of fixed capital assets over the estimated remaining
9		useful life of each unit, or group of assets, in a systematic and rational manner.
10		For General Plant Accounts 2910, 2911, 2940, 2970 and 2980, I used the
11		straight line remaining life method of amortization. The annual amortization is based
12		on amortization accounting that distributes the unrecovered cost of fixed capital
13		assets over the remaining amortization period selected for each account and vintage.
14	Q.	HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL
15		DEPRECIATION ACCRUAL RATES?
16	A.	I did this in two phases. In the first phase, I estimated the service life and net salvage
17		characteristics for each depreciable group, that is, each plant account or subaccount
18		identified as having similar characteristics. In the second phase, I calculated the
19		composite remaining lives and annual depreciation accrual rates based on the service
20		life and net salvage estimates determined in the first phase.
21	Q.	PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION
22		STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET
23		SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.

	1 A .	The service life and net salvage study consisted of compiling historic data from
:	2	records related to Duke Energy Kentucky's plant; analyzing these data to obtain
	3	historic trends of survivor and net salvage characteristics; obtaining supplementary
	4	information from Duke Energy Kentucky's management, and operating personnel
,	5	concerning practices and plans as they relate to plant operations; and interpreting the
(6	above data and the estimates used by other gas utilities to form judgments of average
í	7	service life and net salvage characteristics.
1	8 Q.	WHAT HISTORIC DATA DID YOU ANALYZE FOR THE PURPOSE OF
9	9	ESTIMATING SERVICE LIFE CHARACTERISTICS?
10) A.	I analyzed the Company's accounting entries that record plant transactions during the
1	ı	period 1956 through 2017. The transactions included additions, retirements, transfers
12	2	and the related balances. The Company records also included surviving dollar value
13	3	by year installed for each plant account as of December 31, 2017.
14	4 Q .	WHAT METHOD DID YOU USE TO ANALYZE THIS SERVICE LIFE
1:	5	DATA?
10	6 A.	I used the retirement rate method. This is the most appropriate method when aged
11	7	retirement data are available, because this method determines the average rates of
18	3	retirement actually experienced by the Company during the period of time covered by
19	•	the study.
20	Q .	PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE
2	1	METHOD TO ANALYZE DUKE ENERGY KENTUCKY'S SERVICE LIFE
22	2	DATA.

1	A.	I applied the retirement rate method to each different group of property in the study.
2		For each property group, I used the retirement rate method to form a life table which,
3		when plotted, shows an original survivor curve for that property group. Each original
4		survivor curve represents the average survivor pattern experienced by the several
5		vintage groups during the experience band studied. The survivor patterns do not
6		necessarily describe the life characteristics of the property group; therefore,
7		interpretation of the original survivor curves is required in order to use them as valid
8		considerations in estimating service life. The Iowa-type survivor curves were used to
9		perform these interpretations.
10	Q.	WHAT IS AN "IOWA-TYPE SURVIVOR CURVE" AND HOW DID YOU
11		USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE
12		CHARACTERISTICS FOR EACH PROPERTY GROUP?
13	A.	Iowa type curves are a widely used group of generalized survivor curves that contain
14		the range of survivor characteristics usually experienced by utilities and other
15		industrial companies. The Iowa curves were developed at the Iowa State College
16		Engineering Experiment Station through an extensive process of observing and
17		classifying the ages at which various types of property used by utilities and other
2.00		classifying the ages at which various types of property ased by admitted and other
18		industrial companies had been retired.
18 19		
		industrial companies had been retired.

the observed rates of retirement and the outlook for future retirements.

22

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 70-R3 indicates an average service life of seventy years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 3, for the mode (possible modes for R type curves range from 1 to 5).

A.

Q. WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF SIGNIFICANT PRODUCTION FACILITIES?

I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates. The interim survivor curve describes the rate of retirement related to the replacement of elements of the facility, such as, for a power plant, the retirement of assets such as pumps, motors and piping that occur during the life of the facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

1	Q.	IS THIS APPROACH WIDELY ACCEPTED FOR ESTIMATING THE
2		SERVICE LIVES OF PRODUCTION FACILITIES?
3	A.	Yes. The life span technique has been used previously for Duke Energy Kentucky.
4		My firm has also used the life span technique in performing depreciation studies
5		presented to many other public utility commissions across the United States and
6		Canada.
7	Q.	HOW ARE THE LIFE SPANS ESTIMATED FOR DUKE ENERGY
8		KENTUCKY'S PRODUCTION FACILITIES?
9	A.	The life span estimates are based on informed judgment that incorporates factors for
10		each facility such as the technology of the facility, management plans and outlook for
11		the facility, and the estimates for similar facilities for other utilities.
12	Q.	ARE THE FACTORS CONSIDERED IN YOUR ESTIMATES OF SERVICE
13		LIFE AND NET SALVAGE PERCENTS PRESENTED IN EXHIBIT JJS-1?
14	A.	Yes. A discussion of the factors considered in the estimation of service lives and net
15		salvage percents are presented in Part III and Part IV of Exhibit JJS-1.
16	Q.	DID YOU PHYSICALLY OBSERVE DUKE ENERGY KENTUCKY'S
17		PLANT AND EQUIPMENT AS PART OF YOUR DEPRECIATION STUDY?
18	A.	Yes. I made a field review of Duke Energy Kentucky's property during March 2018
19		to observe representative portions of plant. I have also made field visits during prior
20		studies since the early 1990s. Field reviews are conducted to become familiar with
21		Company operations and obtain an understanding of the function of the plant and
22		information with respect to the reasons for past retirements and the expected future

.1		causes of retirements. This knowledge was incorporated in the interpretation and
2		extrapolation of the statistical analyses.
3	Q.	WOULD YOU PLEASE EXPLAIN THE CONCEPT OF "NET SALVAGE"?
4	A.	Net salvage is a component of the service value of capital assets that is recovered
5		through depreciation rates. The service value of an asset is its original cost less its net
6		salvage. Net salvage is the salvage value received for the asset upon retirement less
7		the cost to retire the asset. When the cost to retire exceeds the salvage value, the
8		result is negative net salvage.
9	7	Inasmuch as depreciation expense is the loss in service value of an asset
10		during a defined period, e.g. one year, it must include a ratable portion of both the
11		original cost and the net salvage. That is, the net salvage related to an asset should be
12		incorporated in the cost of service during the same period as its original cost so that
13		customers receiving service from the asset pay rates that include a portion of both
14		elements of the asset's service value, the original cost and the net salvage value.
15		For example, the full recovery of the service value of a \$2,000 regulator will
16		include not only the \$2,000 of original cost, but also, on average, \$550 to remove the
17		regulator at the end of its life and \$50 in salvage value. In this example, the net
18		salvage component is negative \$500 (\$50 - \$550), and the net salvage percent is
19		negative 25% ((\$50 - \$550)/\$2,000).
20	Q.	PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE
21		PERCENTAGES.
22	A.	The net salvage percentages estimated in the Depreciation Study were based on
23		informed judgment that incorporated factors such as the statistical analyses of

1		historical net salvage data; information provided to me by the Company's operating
2		personnel, general knowledge and experience of the industry practices; and trends in
3		the industry in general. The statistical net salvage analyses incorporates the
4		Company's actual historical data for the period 1980 through 2017, and considers the
5		cost of removal and gross salvage ratios to the associated retirements during the 38-
6		year period. Trends of these data are also measured based on three-year moving
7		averages and the most recent five-year indications.
8	Q.	WERE THE NET SALVAGE PERCENTAGES FOR PRODUCTION
9		FACILITIES BASED ON THE SAME ANALYSES?
10	A.	Yes, for the interim net salvage estimates. The net salvage percentages for production
11		facilities were based on two components, the interim net salvage percentage and the
12		final net salvage percentage. The interim net salvage percentage is determined based
13		on the historical indications from the period 1980 to 2017 of the cost of removal and
14		gross salvage amounts as a percentage of the associated plant retired. The final net
15		salvage or dismantlement component was determined based on the retirement
16		activities associated with the assets anticipated to be retired at the concurrent date of
17		final retirement.
18	Q.	HAVE YOU INCLUDED A DISMANTLEMENT OR DECOMMISSIONING
19		COMPONENT INTO THE OVERALL RECOVERY OF PRODUCTION
20		FACILITIES?
21	A.	Yes. A dismantlement or decommissioning component has been included to the net
22		salvage percentage for gas production facilities.

CAN YOU EXPLAIN HOW THE FINAL NET SALVAGE COMPONENT IS O.

INCLUDED IN THE DEPRECIATION STUDY? 2

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A. Yes. The dismantlement component is part of the overall net salvage for each location within the production assets. Based on studies for other utilities and the cost estimates of Duke Energy Kentucky, it was determined that the dismantlement or decommissioning costs for gas production facilities is best calculated by dividing the dismantlement cost by the surviving plant at final retirement. These amounts at a location basis are added to the interim net salvage percentage of the assets anticipated to be retired on an interim basis to produce the weighted net salvage percentage for each location. The detailed calculations of the overall net salvage for each location is set forth on page VIII-3 of the Depreciation Study.

12 Q. WHAT IS THE **BASIS** OF THE DISMANTLEMENT OR **DECOMMISSIONING COST ESTIMATES?**

The decommissioning cost estimates are based on a decommissioning study of the production site performed by Arcadis, U.S., Inc. This estimate is based on the current cost to decommission the facility. However, the costs to decommission the production plant have tended to increase over time (as have construction costs in general). For this reason, in order to recover the full decommissioning cost, all costs need to be escalated to the time of retirement. The calculations of the escalation of these costs have been provided in the table set forth on page VIII-2 of the Depreciation Study.

1	Q.	PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU
2		USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED
3		COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION
4		ACCRUAL RATES.
5	A.	After I estimated the service life and net salvage characteristics for each depreciable
6		property group, I calculated the annual depreciation accrual rates for each depreciable
7		group based on the straight line remaining life method, using remaining lives
8		weighted consistent with the average service life procedure. The calculation of annual
9		depreciation accrual rates were developed as of December 31, 2017.
10	Q.	PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD
11		OF DEPRECIATION.
12	A.	The straight line remaining life method of depreciation allocates the original cost of
13		the property, less accumulated depreciation, less future net salvage, in equal amounts
14		to each year of remaining service life.
15	Q.	PLEASE DESCRIBE THE AVERAGE SERVICE LIFE PROCEDURE FOR
16		CALCULATING REMAINING LIFE ACCRUAL RATES.
17	A.	The average service life procedure defines the group or account for which the
18		remaining life annual accrual is determined. Under this procedure, the annual accrual
19		rate is determined for the entire group or account based on its average remaining life
20		and the rate is then applied to the surviving balance of the group's cost. The average
21		remaining life of the group is calculated by first dividing the future book accruals
22		(original cost less allocated book reserve less future net salvage) by the average
23		remaining life for each vintage. The average remaining life for each vintage is

derived from the area under the survivor curve between the attained age of the vintage and the maximum age. The sum of the future book accruals is then divided by the sum of the annual accruals to determine the average remaining life of the entire group for use in calculating the annual depreciation accrual rate.

5 Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.

A.

Amortization accounting is used for accounts with a large number of units, but small asset values. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, depreciation accounting is difficult for these assets because periodic inventories are required to properly reflect plant in service. Consequently, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period which represents an anticipated life during which the asset will render service. For example, in amortization accounting, assets that have a 20-year amortization period will be fully recovered after 20 years of service and taken off the Company books, but not necessarily removed from service. In contrast, assets that are taken out of service before 20 years remain on the books until the amortization period for that vintage has expired.

1	Q.	AMORTIZATION ACCOUNTING IS BEING IMPLEMENTED FOR WHICH
2		PLANT ACCOUNTS?
3	A.	Amortization accounting is only appropriate for certain General Plant accounts.
4		These accounts are 2910, 2911, 2940, 2970 and 2980 which represent approximately
5		one percent of depreciable plant.

Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE THE DEVELOPMENT OF THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF PROPERTY IN YOUR DEPRECIATION STUDY.

A. I will use Account 2763, Mains – Plastic, as an example because it is one of the largest depreciable groups and represents an easily understood asset.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data were compiled from 1975 through 2017 and analyzed in periods that best represent the overall service life of this property. The life table for the 1975-2017 experience band is presented in the depreciation study on pages VII-35 and VII-36. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-35 of Exhibit JJS-1, shows \$15,215 retired during age interval 0.5-1.5 with \$149,178,146 exposed to retirement at the beginning of the interval. Consequently, the retirement ratio is 0.0001 (\$15,215/\$149,178,146) and the survivor ratio is 0.9999 (1-0.0001). The life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 70-R3, on page VII-34 of Exhibit JJS-1.

The combined net salvage percent for all mains accounts is presented on pages VIII-9 and VIII-10. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1980 through 2017. The 38-year period experienced \$1,973,850 (\$2,080,326 - \$4,054,176) in net salvage for \$13,794,633 plant retired. The result is negative net salvage of 14 percent (\$1,973,850/\$13,794,633). Recent trends have shown indications of negative 39 percent, therefore, it was determined that based on industry ranges, historical indications and Company expectations, that negative 20 percent was the most appropriate estimate. The negative 20 percent estimate balances the overall average of 14 percent and more recent averages of negative 39 percent.

A.

My calculation of the annual depreciation related to original cost of gas utility plant at December 31, 2017 for Account 2763 is presented on pages IX-14 and IX-15 of Exhibit JJS-1. The calculation is based on the 70-R3 survivor curve, 20% negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to Table 1 on page VI-4.

Q. DESCRIBE HOW THE COMPANY'S NATURAL GAS AMI/AMR GAS MODULES ARE TREATED IN THE DEPRECIATION STUDY?

The natural gas advanced metering infrastructure/automated meter reading modules (AMI/AMR) are accounted for within Account 2970 – Communication Equipment.

The proposed life for this account is 15 years. This is consistent with the

useful/depreciable life approved for the AMI/AMR modules as part of Case No. 1 2016-152 (AMI Deployment Case). 2 HAVE YOU DEVELOPED RATES FOR FUTURE ASSETS? Q. 3 A. Yes. There are plans to add new assets to Account 2911, Office Furniture and 5 Equipment and Account 2921, Transportation Equipment – Trailers. The existing assets are fully depreciated. The rates for these assets will be based on the amortization period or interim survivor curve for each account presented on page VI-7 4 of Exhibit JJS-1. Additionally, new rates were developed for assets in Account 8 9 2920 and Account 2960 which currently do not have existing assets. The assets will be based on the interim survivor curve and net salvage percent. 10 The interim survivor curve and net salvage percent for Account 2920 is 12-S3 11 and 0%, respectively. For Account 2960, the interim survivor curve is 14-R1.5 and 12 13 the net salvage percent is positive 5%. III. CONCLUSION Q. WAS EXHIBIT JJS-1 PREPARED UNDER YOUR DIRECTION AND 14 **CONTROL?** 15

Yes.

16

A.

- 1 Q. IN YOUR OPINION, ARE THE DEPRECIATION AND AMORTIZATION
- 2 RATES SET FORTH IN EXHIBIT JJS-1 THE APPROPRIATE RATES FOR
- THE COMMISSION TO ADOPT IN THIS PROCEEDING FOR DUKE
- 4 ENERGY KENTUCKY?
- 5 A. Yes. These rates appropriately reflect the rates at which the costs of Duke Energy
- 6 Kentucky's assets are being consumed over their useful lives. These rates are an
- 7 appropriate basis for setting gas rates in this matter and for the Company to use for
- 8 booking depreciation and amortization expense going forward.
- 9 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 10 A. Yes.

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)	
)	SS:
COUNTY OF CUMBERLAND)	

The undersigned, John J. Spanos, Senior Vice President, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

Subscribed and sworn to before me by John J. Spanos on this 9th day of

My Commission Expires: February 20, 2019

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL

Cheryl Ann Rutter, Notary Public
East Pennsboro Twp., Cumberland County

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	
KENTUCKY, INC. FOR AUTHORITY TO 1) ADJUST)	CASE NO.
NATURAL GAS RATES 2) APPROVAL OF A)	2018-00261
DECOUPLING MECHANISM 3) APPROVAL OF)	
NEW TARIFFS 4) AND FOR ALL OTHER)	
REQUIRED APPROVALS, WAIVERS, AND RELIEF)	

ORDER

Duke Energy Kentucky, Inc. (Duke Kentucky), is a combination natural gas and electric utility operating in northern Kentucky. Duke Kentucky engages in purchasing, selling, storing, and transporting natural gas to approximately 99,500 customers in Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton counties in northern Kentucky. Duke Kentucky also generates, transmits, distributes, and sells electricity to approximately 140,600 consumers in Boone, Campbell, Grant, Kenton, and Pendleton counties. Its most recent general rate increase for its natural gas operations was granted in Case No. 2009-00202.

¹ Application at 2; Direct Testimony of Amy B. Spiller (Spiller Testimony) at 4.

² Application at 2; Case No. 2017-00321, Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Electric Rates; 2) Approval of an Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) All Other Required Approvals and Relief (Ky. PSC April 13, 2018) at 1.

³ Spiller Testimony at 3; Case No. 2009-00202, *Application of Duke Energy Kentucky, Inc. for an Adjustment of Rates* (Ky. PSC Dec. 29, 2009).

BACKGROUND

On August 31, 2018, Duke Kentucky filed an application requesting to increase its natural gas base rate revenue to a new total of \$105.9 million, which reflects an increase from its current revenue of approximately \$10.5 million.⁴ The monthly residential natural gas bill increase due to the proposed natural gas base rates would be 10.2 percent, or approximately \$5.78, for an average customer using 5,300 cubic feet of natural gas.⁵ Duke Kentucky subsequently revised its proposed revenue increase to approximately \$9.59 million.⁶ Duke Kentucky submitted a depreciation study in support of its application and requests that its proposed depreciation rates be approved.⁷

Duke Kentucky states that the primary reason for the requested rate increase is that its earned rate of return on rate base obtained from its current natural gas operations is 4.66 percent, which is inadequate to enable Duke Kentucky to continue providing safe and reliable service to its customers.⁸ Duke Kentucky further asserts that this rate of return is insufficient to afford Duke Kentucky a reasonable opportunity to earn a fair return on its investment property that is used to provide such service while attracting necessary capital at reasonable rates.⁹

⁴ Application at 4.

⁵ Id. at 45.

⁶ Rebuttal Testimony of Sarah E. Lawler at 11.

⁷ Application at 4.

⁸ Id. at 6.

⁹ ld.

In addition to the base rate increase, Duke Kentucky is requesting a waiver pursuant to KRS 278.210 and 807 KAR 5:022 Section 3(4)(a),¹⁰ to amend its natural gas meter testing schedule from a ten-year testing parameter to a fifteen-year schedule for positive-displacement meters rated capacity up to and including 500 cubic feet per hour. Duke Kentucky asserts that this request would align the testing timeline with the useful/depreciable life of the natural gas advanced/automated meter reading (AMR) modules as approved in Case No. 2016-00152.¹¹

Duke Kentucky also proposes to clarify language in several tariffs and service regulations, as well as to establish and implement a new decoupling mechanism.¹² Duke Kentucky is proposing to implement a weather normalization adjustment (WNA) mechanism that will be applicable to customers served under Rate Schedules Residential Service (RS) and General Service (GS).¹³ Duke Kentucky contends that the proposal is similar to other WNA mechanisms that have been approved by this Commission for other natural gas utilities.¹⁴ Duke Kentucky asserts that the WNA is designed to adjust residential and commercial natural gas sales to reflect normal temperatures on a real-

¹⁰ Duke Kentucky initially requested a waiver of 807 KAR 5:022 Section 8(5) in both its Application and in the Direct Testimony of Tyler Barbare's (Barbare Testimony). However, in Commission Staff's Second Request for Information (Staff's Second Request), Item 20, Duke Kentucky was asked to provide the correct regulation that it was seeking a waiver from because 807 KAR 5:022, Section 8(5) no longer existed. Duke Kentucky confirmed that it was seeking a waiver of 807 KAR 5:022, Section 3(4)(a).

¹¹ Application at 14; See: Barbare Testimony at 3; See also: Case No. 2016-00152, Application of Duke Energy Kentucky, Inc. for (1) A Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatment; and (3) All Other Necessary Waivers, Approvals, and Relief (Ky. PSC May 25, 2017).

¹² Application at 5.

¹³ Id. at 12.

¹⁴ Id. at 12-13.

time basis.¹⁵ The WNA thus acts to mitigate the volatility of that portion of the customers' natural gas bill arising from Duke Kentucky's natural gas distribution charges, which are affected by variation in temperatures.¹⁶ Duke Kentucky states that the WNA, therefore, can serve to dampen the impact of temperature variations on customers' bills by adjusting the Duke Kentucky distribution portion of the bill based on normal temperatures from November through April of the applicable winter heating season.¹⁷ Moreover, Duke Kentucky asserts that the WNA will serve to mitigate fluctuations in its earnings that would otherwise be affected by temperature variations.¹⁸ Duke Kentucky proposes to file a report on the operation of the WNA during the preceding winter heating season by June 30 of each year.¹⁹ The annual report will be similar to WNA reports filed by other jurisdictional natural gas utilities regarding their WNA clauses.²⁰

Lastly, Duke Kentucky is requesting approval to cancel and withdraw the Accelerated Service Replacement Program Rider (Rider ASRP), due to the revenue recovery associated with this rider being rolled over into base rates.²¹

By letter dated September 10, 2018, the Commission notified Duke Kentucky that its application met the minimum filing requirements and had been deemed filed as of

¹⁵ Id. at 13.

^{16 /}d.

¹⁷ Id.

¹⁸ Id.

¹⁹ Id.

²⁰ Id.

²¹ Direct Testimony of Gary J. Hebbeler at 3.

August 31, 2018. Pursuant to KRS 278.190(2), the Commission issued an Order on September 17, 2018, suspending the effective date of Duke Kentucky's proposed rates for six months, up to and including, March 31, 2019. Further, the September 17, 2018 Order established a procedural schedule for the processing of this matter, providing for a deadline for filling of intervention requests; two rounds of discovery upon Duke Kentucky's application; a deadline for the filling of intervenor testimony; one round of discovery upon any intervenor testimony; and an opportunity for Duke Kentucky to file rebuttal testimony. The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (Attorney General) is the only intervenor in the pending case.

The Commission held an information session and public meeting for the purpose of taking public comments on January 24, 2019, at Dixie Heights High School in Edgewood, Kentucky. On January 30, 2019, Duke Kentucky filed a Motion for Approval of Joint Stipulation and Recommendation, stating that Duke Kentucky and the Attorney General had successfully negotiated an agreement by which all the issues presented in the application were fully resolved. Duke Kentucky contemporaneously filed the Joint Stipulation and Recommendation (Joint Stipulation), as well as Supplemental Testimony of William Don Wathen, Jr., in support of the Joint Stipulation. Duke Kentucky asserts that the Joint Stipulation produces fair, just, and reasonable rates. A formal hearing was held at the Commission's offices on February 5, 2019, for the purposes of crossexamination of witnesses regarding the Joint Stipulation. Duke Kentucky provided responses to Commission Staff's Post-Hearing Requests for Information on February 22 and March 8, 2019. The matter now stands submitted for a decision.

JOINT STIPULATION

The Joint Stipulation reflects the proposed agreement of Duke Kentucky and the Attorney General (also referred to as the parties) to resolve all issues associated with the pending application. A summary of the provisions contained in the Joint Stipulation is as follows:

- Duke Kentucky's total natural gas base revenue will increase by \$7,364,074.
- Duke Kentucky's natural gas revenue requirement will be calculated using the rate base approach as proposed in the application.
- Duke Kentucky's proposal to implement a WNA mechanism and Rider WNA is approved as filed.
- Duke Kentucky's residential customer charge will be increased by \$0.50, to \$16.50 per month. The customer charges for Duke Kentucky's other rate classes will be adjusted as proposed in the application. The remainder of the increase allocable to each rate class will be allocated to the volumetric charge.
- The settled upon revenue requirement is based on a Return on Equity (ROE) of 9.70 percent.
- Duke Kentucky's average long-term debt rate for the forecasted test period is 4.36 percent and is reflective of an update for the actual cost of an issuance that had been projected in the application.
- Duke Kentucky's rate base calculation includes cash working capital based upon the 1/8th Operations and Maintenance (O&M) method and will reflect the changes in O&M agreed to in the Joint Stipulation.
- Duke Kentucky's proposed capital structure will be approved as filed.
- Duke Kentucky's proposed tariff language changes, as amended and agreed upon through Duke Kentucky's responses to discovery submitted by Commission Staff, will be approved.
- Duke Kentucky's proposal to extend its meter testing cycle from a ten-year testing cycle to a fifteen-year testing cycle is approved. The agreed-upon revenue requirement calculation includes an adjustment of approximately \$340,000 to reflect the O&M savings expected from moving to the fifteen-

year testing cycle. If this meter testing cycle extension is not approved by the Commission, then the parties agree that Duke Kentucky's test year revenue requirement should be increased by \$340,000 before gross-up.

- Duke Kentucky will recover its actual costs for deferred integrity management pressure testing as was authorized in Case No. 2016-00152.
 Duke Kentucky and the Attorney General agree to an extended amortization period for these deferred expenses of ten years, contingent upon the Commission allowing Duke Kentucky to accrue carrying costs at its longterm debt rate of 4.36 percent.
- The parties agree that Duke Kentucky's proposed test year revenue requirement should reflect the benefit of revenue from "No Notice" Transportation service that was inadvertently excluded from the application. Incorporating the revenue from this source reduces the requested increase in base rates by \$603,445 before gross-up.
- Duke Kentucky agreed to reduce certain test year expenses related to payroll, payroll taxes, and employee benefits including but not limited to: the exclusion of expenses for 401(k) matching for union employees also in the defined pension plan, expenses related to employee compensation paid in the form of restricted stock units, and contributions to certain benefits programs above a certain threshold.
- Duke Kentucky will amortize the liability associated with the 2018 ASRP Federal Income Tax (FIT) deferral over a period of five years, without carrying costs.
- Duke Kentucky's rate case expense associated with this proceeding will be amortized over a period of five years, without carrying costs, beginning with the effective date of the revised tariffs.
- Duke Kentucky and the Attorney General agree to a reduction in Duke Kentucky's pro forma adjustment for costs related to projected ongoing incremental integrity management programs that were not identified until after the preparation of the budget. In order for Duke Kentucky to continue to perform these necessary safety improvements, they agree to an adjustment of \$532,744 to O&M instead of the approximately \$1.065 million proposed in the application.
- Duke Kentucky and the Attorney General agree to change Duke Kentucky's fee for reconnection service to \$75. The increase in miscellaneous revenue from this change is projected to reduce Duke Kentucky's base revenue requirement by approximately \$44,136. If the Commission does not approve of this fee increase, or modifies the proposed increase, then the revenue requirement to be collected in base rates would need to be

adjusted (increased) to reflect the reduction in assumed miscellaneous revenue.

- Duke Kentucky's depreciation rates will be approved as filed in the application utilizing the Average Life Group (ALG) methodology.
- Duke Kentucky's proposal to end and "roll into rate base" its Accelerated Service Line Replacement Program (ASRP) and to eliminate the Rider ASRP mechanism is approved. The agreed-upon base revenue requirement assumes the rolling into base rates of previously approved ASRP expenses currently being collected separately in Rider ASRP.
- Duke Kentucky and the Attorney General agree to the allocation of the base revenue requirement as shown in the Joint Stipulation, Attachment D, such that there is a band of no more than 15 percent higher or lower than the system average cost to any rate class.
- All other items not specifically mentioned are approved as filed in Duke Kentucky's application.

ANALYSIS AND FINDINGS

The Commission's statutory obligation when reviewing a rate application is to determine whether the proposed rates are "fair, just, and reasonable." Even though Duke Kentucky and the Attorney General have filed a Joint Stipulation that purports to resolve all of the issues in the pending application, the Commission cannot defer to the parties as to what constitutes fair, just, and reasonable rates. The Commission must review the record in its entirety, including the Joint Stipulation, and apply its expertise to make an independent decision as to the level of rates, including terms and conditions of service, that should be approved. To satisfy its statutory obligation, in this case, the Commission has performed its traditional ratemaking analysis, which consists of reviewing the reasonableness of each revenue and expense adjustment proposed or justified by the record, along with a determination of a fair ROE.

²² KRS 278.030(1).

Based upon its review of the Joint Stipulation, the attachments thereto, and the case record including intervenor testimony, the Commission finds that, with the modifications discussed below, the Joint Stipulation is reasonable and in the public interest. The Commission finds that the Joint Stipulation was the product of arm's-length negotiations among knowledgeable, capable parties and should be approved, with the modifications delineated below. Such approval is based solely on the reasonableness of the modified Joint Stipulation as a whole and does not constitute a precedent on any individual issue.

Revenue and Expenses

For the forecasted test period, Duke Kentucky reported actual net operating income from its natural gas operations of \$13,154,573.²³ Duke Kentucky proposed 13 adjustments to revenues and expenses to reflect more current and anticipated operating conditions, resulting in an adjusted net operating income of \$14,626,290.²⁴ In addition to the originally proposed 13 adjustments, Duke Kentucky has agreed, through the Joint Stipulation, to make 10 additional operating income and expense adjustments to arrive at a reduced requested base rate increase of \$7,364,073.²⁵ The Commission finds that the 10 adjustments, as proposed in the Joint Stipulation, are reasonable for ratemaking purposes and should be accepted, but notes the following comments and modifications.

Employee Retirement Plans

²³ Application, Schedule C-2.

²⁴ Id.

²⁵ Joint Stipulation, Attachment A.

Duke Kentucky included \$493,813 in retirement plan expense related to its employees, or its affiliates' employees, who were covered by both a defined dollar benefit (DDB) plan and a defined contribution (DC) plan.²⁶

The Attorney General, through the testimony of expert witness Lane Kollen, recommended reducing Duke Kentucky's retirement plan expense by \$296,111 before a gross-up factor. Mr. Kollen based his recommendation upon recent Commission decisions in which the Commission denied recovery of retirement expenses when a utility made contributions to both a DDB pension plan and a DC plan for certain employees.²⁷ In the Joint Stipulation, Duke Kentucky agreed to reduce its pro forma employee retirement plan expenses by \$296,111, as originally proposed by the Attorney General.

The Commission will accept the adjustment to employee retirement plan expenses made in the Joint Stipulation. While the Commission appreciates that Duke Kentucky is willing to reduce these costs in the Joint Stipulation, it finds that Duke Kentucky should further address the issue of employee retirement plan expenses in future contract negotiations with its union members. The Commission further finds that it will evaluate the appropriateness of duplicative pension contributions for both union and non-union employees as part of Duke Kentucky's next base rate case.

Other Employee Benefits

Duke Kentucky included, as part of the forecasted test period, \$2,381,447 in expenses related to employee benefits.²⁸ The Attorney General proposed to reduce this

²⁶ Duke Kentucky's response to Staff's Second Request, Item 5(e).

²⁷ Direct Testimony of Lane Kollen (Kollen Testimony) beginning at 26.

²⁸ Application, Schedule G-1.

amount by \$187,675 based upon his understanding of recent Commission decisions in which recovery of medical insurance premiums were adjusted to reflect an employee contribution rate of 21 percent for single coverage, 33 percent of the total cost for other types of coverage, and an employee contribution rate of 60 percent for dental premiums.²⁹ The Joint Stipulation includes the Attorney General's proposed reduction of costs,³⁰ and the Commission approves the same.

The Commission appreciates Duke Kentucky's willingness to reduce its employee benefit packages to the national average in the Joint Stipulation, but through responses to discovery, Duke Kentucky demonstrated that it had already implemented a cost-sharing mechanism to its employee benefits.³¹ The Commission would note that when a utility has properly demonstrated that its employee compensation package is at, or moving towards, the national average of cost sharing, and 100 percent of the insurance premiums are not being borne by the utility, no adjustment has been made.

<u>Deferred Integrity Management Expenses from Case No. 2016-00159</u>

Duke Kentucky was authorized to defer certain integrity management expenses associated with gas main pressure testing in Case No. 2016-00159, and amortize and recover these expenses through rates determined in Duke Kentucky's next natural gas rate case.³² Duke Kentucky incurred expenses that were greater than was estimated in

²⁹ Kollen Testimony at 29-30.

³⁰ Joint Stipulation at 6.

³¹ Staff's Second Request, Item 5(a) and 5(b).

³² Case No. 2016-00159 Application of Duke Energy Kentucky, Inc. for Approval to Establish a Regulatory Asset (Ky. PSC Jul. 22, 2016).

Case No. 2016-00159, and in its application seeks to recover all costs, including cost overruns, over five years. Duke Kentucky contends that these higher expenses were primarily due to more-than-anticipated usage of compressed natural gas (CNG) to maintain service to a large commercial customer, as well as the expense associated with additional security associated with CNG equipment and installation.³³

The Attorney General recommends denying recovery of the cost overruns and increasing the amortization period to ten years due to the magnitude and nonrecurring nature of the expense.³⁴ The Joint Stipulation agrees to allow Duke Kentucky to recover the full costs of the integrity management deferral, including the cost overruns,³⁵ but extends the amortization period to ten years and includes a carrying charge based on the long-term debt rate of 4.36 percent.³⁶ The Commission accepts this portion of the Joint Stipulation as it demonstrates a compromise between the parties, but if not for the settlement agreement, the Commission would have reviewed the reasonableness of the cost overruns more in-depth.

WNA Rider

In its application, Duke Kentucky proposes a WNA mechanism and Rider WNA, which adjusts the volumetric component of base delivery charges on customer bills to reflect normal weather conditions, thus removing some of the fluctuations that occur when

³³ Duke Kentucky's response to the Attorney General's First Request for Information, Item 48.

³⁴ Kollen Testimony at 34.

³⁵ Duke Kentucky's response to Commission Staff's First Post-Hearing Request for Information (Staff's First Post-Hearing Request), Item 28.

³⁶ Joint Stipulation at 5.

the weather varies.³⁷ With a WNA, if temperatures are colder than normal and a customer's usage is more than average, a customer's bill will include a credit. Conversely, if temperatures are warmer than normal and a customer's usage is lower than average, a customer's bill will include a surcharge. The WNA also removes fluctuation in a utility company's revenues and allows for a better match between current and forecasted revenues.

Duke Kentucky's proposed adjustment is based on the difference between actual and normal degree-days (DD) associated with a customer's billing period.³⁸ Two class level parameters called the Base Load (BL) and Heat Sensitivity Factor (HSF) are calculated utilizing a linear model based on 41 monthly observations from January 2015 through May 2018.³⁹ The BL factor is the estimated intercept, which is the base sales with negligible weather impacts, while the HSF represents the degree to which a change in a heating DD predicts a change in the volume of sales.⁴⁰ For the residential rate class, or Rate RS, Duke Kentucky proposed initial values of 1.10633 Mcf and 0.015283 Mcf/DD for the BL and HSF, respectively.⁴¹ The proposed estimates for the General Service Rate Class, or Rate GS, are 9.745755 Mcf for the BL and 0.090515 Mcf/DD for the HSF.⁴²

³⁷ Application at 5.

³⁸ Normal DD are based on 30 years of past weather data. *See*: Direct Testimony of Bruce L. Sailers (Sailers Testimony) at 14.

³⁹ Direct Testimony of Benjamin Passty Ph.D. (Passty Testimony) at 13.

⁴⁰ ld. 14.

⁴¹ Sailers Testimony at 14-15.

⁴² Id.

Given the timing of the instant case and the seasonal nature of the WNA, Duke Kentucky recommends that the proposed WNA Rider be effective with the first billing cycle of November 2019.⁴³ The WNA will apply to all Rate RS and Rate GS bills during the November through April billing periods each year. Duke Kentucky proposed annual reports of the Rider WAN impacts and annual updates to the Rider WNA class parameters but was open to the Commission's direction if it preferred that these parameters be updated only during natural gas base rate case fillings.⁴⁴ The tariff filed with the proposed Joint Stipulation states that the rate class sensitivity factors will be determined by rate class and adopted from the most recent Commission Order. The Joint Stipulation also recommends that the proposed WNA and Rider WNA be approved as filed.⁴⁵ The Commission accepts the proposed Joint Stipulation regarding the implementation of the WNA and Rider WNA, including Duke Kentucky providing updates to the sensitivity factors during base rate cases. Additionally, Duke Kentucky will file a report summarizing the impacts of the WNA with its next base rate case.

Subsidization of Rate GS

Duke Kentucky used the average and excess method, also known as the average and peak demand method) for the filed cost of service study (COSS) in the pending case.⁴⁶ This is the same COSS method that Duke Kentucky used in its 2009 natural gas

⁴³ Id. at 15.

⁴⁴ Id.

⁴⁵ Joint Stipulation at 4.

⁴⁶ Direct Testimony of James E. Ziolkowski (Ziolkowski Testimony) at 9.

rate case.⁴⁷ The results from the COSS illustrated that Rate GS is the only rate class being subsidized, and the other rate classes over-subsidize at various levels.⁴⁸ As a basis for the rate design, Duke Kentucky proposed to eliminate 15 percent of the subsidy/excess revenues between customer classes, based on present revenues.⁴⁹ Next, the overall revenue increase was allocated to each customer class based on each customer class' percent of rate base.⁵⁰ The sum of the 85 percent of present revenues and the allocated portion of the rate increase totals for each rate class revenue allocation.

The proposed Joint Stipulation maintained Duke Kentucky's proposed revenue allocation; however, the subsidization of Rate GS is still present.⁵¹ The Commission supports the proposed 15 percent subsidy removal but concludes that the residential class should not be subsidizing another rate class. The Commission is cognizant of the fact that if the entire existing subsidy were removed then it would result in an increase of 19.70 percent to Rate GS. Therefore, only the contributing subsidy from Rate RS will be removed and placed onto Rate GS.⁵² This results in an increase of 12.025 percent for Rate GS, and lowers the rate increase for Rate RS from 7.591 percent to 6.562 percent.⁵³

⁴⁷ Case No. 2009-00202, Application of Duke Energy Kentucky, Inc. for an Adjustment of Rates (Ky. PSC Dec. 29, 2009).

⁴⁸ Ziołkowski Testimony at 16–18.

⁴⁹ Id.

⁵⁰ Id.

⁵¹ Joint Stipulation, Attachment D.

⁵² Staff's First Post-Hearing Request, Item 4.

⁵³ See Appendix B.

The above-mentioned modifications will be reflected in the corresponding volumetric charges, and all other rate schedules will remain the same.

Miscellaneous Tariff Issues

Use of Service

Duke Kentucky has proposed to amend its service regulations governing the use of natural gas supplied to its customers. Currently, Third Revised Tariff Sheet No. 21, Section II – Supplying and Taking Service, paragraph 6, titled "Use of Service," prohibits a gas customer or someone acting on behalf of the customer from "install[ing] meters for the purpose of reselling or otherwise disposing of service supplied Customer." In its testimony, Duke Kentucky stated that the amendment being proposed "is to allow the installation of sub metering" so a master meter customer could allocate the natural gas bill among the users in a condominium or an apartment complex.

However, the text of Duke Kentucky's proposed amendment does not require the customer to install any sub-metering equipment to accurately determine the quantity of natural gas consumed in each condominium or apartment. Rather, the proposed tariff retains the current prohibition against installing meters to resell natural gas but would allow a customer to allocate the Duke Kentucky gas bill to others "provided the sum of such allocation does not exceed the Company's billing." When Duke Kentucky was asked whether it intended to monitor the allocations of its gas billings to others to ensure that the allocations do not exceed the utility's billings, Duke Kentucky stated "no." 56

⁵⁴ Sailers Testimony at 22.

⁵⁵ Application, Schedule L1, page 10 of 69.

⁵⁶ Hearing Transcript at 11:09:40.

The Commission finds that Duke Kentucky's proposed amendment to its "Use of Service" Tariff would expressly authorize the allocation of natural gas bills by master-metered customers to others without any monitoring of the allocation process by Duke Kentucky. Absent monitoring of the allocation process by Duke Kentucky, those residing in condominiums and apartments with master meters would have no assurance that their allocated share of the gas bill is accurate and does not represent a resale of service at a profit. Based on the record, Duke Kentucky has neither adequately justified the need to revise the terms of its "Use of Service" Tariff nor demonstrated that the proposed revision to that tariff is fair, just, and reasonable.

Reconnection Fee for Combination Electric and Natural Gas Customers

Duke Kentucky proposes a language change to its natural gas reconnection fee as it relates to combination natural gas and electric customers.⁵⁷ Duke Kentucky requests to remove the reconnection fee amount for combination electric and natural gas customers from the gas tariff, and instead direct those customers to the electric service "Charge for Reconnection of Service," Electric Sheet. No. 91, for the fee.⁵⁸ Duke Kentucky contends that having the reconnection fee in both the natural gas and electric tariffs can lead to a mismatch in the reconnection charges when one service has a base rate case separate from the other service.⁵⁹ Duke Kentucky also states that having the reconnection fee amount for combination customers in the natural gas tariff can lead to

⁵⁷ Sailers Testimony at 18.

⁵⁸ Id.

⁵⁹ Id.

confusion for combination customers who have the capability to have electric service reconnected remotely; for safety purposes, natural gas service is not reconnected remotely.⁶⁰

KRS 278.160(2) provides that "[n]o utility shall charge, demand, collect, or receive from any person a greater or less compensation for any service rendered or to be rendered than that prescribed in its filed schedules, and no person shall receive any service from any utility for a compensation greater or less than that prescribed in such schedules." Furthermore, 807 KAR 5:011, Section 2(3), provides that "[a] utility furnishing more than one (1) type of service (water and electricity for example) shall file a separate tariff for each type of service." The Commission finds that in order for Duke Kentucky to comply with both KRS 278.160(2) and 807 KAR 5:011, Section 2(3), the reconnection fee for combination electric and natural gas customers should be listed in both the natural gas and electric tariffs. Duke Kentucky's proposal to remove the reconnection fee amount for combination electric and natural gas customers from the natural gas tariff and instead direct those customers to the electric tariff for the fee amount is denied.

Updated Tariff Sheets

In response to Commission Staff's Second Post-Hearing Request for Information, Item 9, Duke Kentucky provided a list of tariff revisions that have been accepted by the Commission since the filing of the pending rate case. With the exception of Rider ASRP and Rider TCJA, which will be discontinued upon the issuance of this Order, when Duke Kentucky files its compliance tariff resulting from this case, it should update the tariff to

reflect the changes accepted by the Commission that became effective between the date of the filing of the pending rate case and the date of the issuance of this Order.

Adjusted Due Date Program

The Adjusted Due Date program is available to Duke Kentucky natural gas customers and electric customers who have an analog meter and allows customers to adjust their due date five to ten days forward from the original due date. In response to discovery, Duke Kentucky agreed to include the provisions of its Adjusted Due Date Program in its proposed natural gas tariff. However, in response to Staff's First Post-Hearing Request, Item 21, Duke Kentucky indicated that it did not prefer to add the Adjusted Due Date Program provisions to its electric tariff because "[t]here is no need for the Adjusted Due Date when Pick Your Due Date is available for these electric customers." The Commission notes that electric customers who have an analog meter are not eligible for the Pick Your Own Due Date program. Consequently, the Commission finds that the provisions of the Adjusted Due Date program should be added to Duke Kentucky's electric tariff, and the language added to the electric tariff regarding this program may specify that it is only available to customers with analog meters.

Meter Testing Waiver

Duke Kentucky requests a waiver pursuant to KRS 278.210 and 807 KAR 5:022

⁶¹ Duke Kentucky's response to Staff's Third Request for Information, Item 6(a).

⁶² Id. at Item 6(b).

Section 3(4)(a),⁶³ to amend its natural gas meter testing schedule for positive-displacement meters rated capacity, up to and including 500 cubic feet per hour, from a 10-year testing parameter to a 15-year schedule in order to align the testing timeline with the useful/depreciable life of the natural gas advanced metering infrastructure (AMI)/automated meter reading modules (AMR) as approved in Case No. 2016-00152.⁶⁴ Duke Kentucky initially requested this waiver in Case No. 2016-00152, in which the Commission approved Duke Kentucky's certificate of public convenience and necessity for replacement and upgrading of its electric and gas metering infrastructure to an AMI for electric and combination customers and an AMR infrastructure for its gas-only modules.⁶⁵ The Commission assigned a 15-year depreciable life for the gas modules, but found that Duke Kentucky did not provide sufficient information in compliance with KRS 278.210(4) to demonstrate through sample testing that no statistically significant number of its residential gas meters over-register.⁶⁶ Thus, the Commission denied the requested meter testing deviation.

⁶³ Duke Kentucky initially requested a waiver of 807 KAR 5:022 Section 8(5) in both its Application and in Barbare's Testimony. However, in Staff's Second Request for Information, Item 20, Duke Kentucky was asked to provide the correct regulation that it was seeking waiver from because 807 KAR 5:022, Section 8(5) was no longer in existence. Duke Kentucky confirmed that it was seeking waiver of 807 KAR 5:022, Section 3(4)(a).

⁶⁴ Application at 14; See: Barbare Testimony at 3; See also: Case No. 2016-00152, Application of Duke Energy Kentucky, Inc. for (1) A Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatment; and (3) All Other Necessary Waivers, Approvals, and Relief (Ky. PSC May 25, 2017).

⁶⁵ Case No. 2016-00152, Application of Duke Energy Kentucky, Inc. for (1) A Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatment; and (3) All Other Necessary Waivers, Approvals, and Relief (Ky. PSC May 25, 2017).

⁶⁶ Id. at 12.

In the pending case, Duke Kentucky submits the Barbare Testimony that provides an overview of Duke Kentucky's meter testing process in order to support the requested waiver. Mr. Barbare asserts that, in accordance with Commission regulations, Duke Kentucky removes the meter from the customer and brings it to Duke Kentucky's testing facility to conduct the accuracy test in a temperature-controlled environment.⁶⁷ When Duke Kentucky removes a meter for testing, a new meter must be set in its place to continue natural gas service.⁶⁸ Thus, a typical residential customer receives a new natural gas meter approximately every ten years.⁶⁹

Once the meter is brought to the testing facility, the meter is tested in accordance with industry standards, in compliance with Commission regulations.⁷⁰ Under Kentucky's regulations, any meter that is found to have a meter error of 2 percent or less, fast or slow, is considered accurate.⁷¹ Duke Kentucky disposes of the residential meters after testing because the cost to refurbish, repair, store, and redeploy this type of meter exceeds the costs of purchasing a new meter.⁷² The estimated, fully loaded labor costs per meter for the refurbishment of a typical meter is approximately \$115.80, but this does not include any additional costs for the replacement parts, materials, or storage.⁷³ In

⁶⁷ Barbare Testimony at 5.

⁶⁸ Id.

⁶⁹ Id.

⁷⁰ ld.

⁷¹ Id.

⁷² Id. at 6.

⁷³ Id. at 7.

contrast, purchasing a new Itron Category 1 Meter with an AMI or AMR module installed costs approximately \$105 or \$102, respectively.⁷⁴ Mr. Barbare argues that because the AMI/AMR modules have an estimated battery life of 13 to 20 years, it is not reasonable or economical to pull the meters at ten years to test them and then dispose of those meters.⁷⁵

In support of the requested waiver, Mr. Barbare submitted a study on behalf of Duke Kentucky, in which a sample size of Category 1 natural gas meters from Ohio and Kentucky service territories that were more than ten years between accuracy tests were examined. Mr. Barbare noted that Ohio does not have a meter change-out testing program as Duke Kentucky does. The study determined that 96 percent of the meters remained within the accuracy tolerances. Duke Kentucky argues that the results of this study strongly support the request to extend the meter testing cycle from 10 to 15 years, and verify that it will not create an accuracy issue with customers' bills. Mr. Barbare also states that extending the meter testing cycle will not affect safety, as Duke Kentucky will continue to perform all other inspections as required by Federal and Kentucky Regulations.

The Attorney General agreed with this proposal but requested that the annual savings of \$340,000 associated with extending the meter testing from 10 to 15 years be included in the revenue requirement calculation.⁷⁸ In the Joint Stipulation, the parties

⁷⁴ Id.

⁷⁵ Id. at 8.

⁷⁶ Barbare Testimony at 9-11 and Attachment TB-1.

⁷⁷ Id.

⁷⁸ Kollen Testimony at 21-22.

agreed to extend the natural gas meter testing cycle from 10 to 15 years as requested in the application and agreed to include a \$340,000 O&M savings adjustment to reduce the revenue requirement. Pursuant to the Joint Stipulation, if the meter testing cycle extension is not approved by the Commission, then the parties agree to increase Duke Kentucky's test year revenue requirement by \$340,000 before gross-up.

In the final Order of Case No. 2016-00152, the Commission asserted that information from the manufacturer included in the application specifically stated that the expected battery life of the gas module is 18 to 20 years with one transmission per day, and 15 to 17 years with two transmissions per day. The Commission also stated that it "believes it is likely that the gas modules will last through two replacement/testing cycles." Based upon the above-referenced testimony and study that were submitted, the Commission grants Duke Kentucky's requested waiver pursuant to KRS 278.210 and 807 KAR 5:022 Section 3(4)(a) to amend its natural gas meter testing schedule for positive-displacement meters rated capacity up to and including 500 cubic feet per hour from a ten-year testing parameter to a fifteen-year schedule. If any unforeseen issues arise from Duke Kentucky's testing of these specific meters at fifteen-year intervals instead of ten-year intervals, the Commission reserves the right to readdress this issue in the future.

The Excusal of Witnesses at Hearing

On January 30, 2019, Duke Kentucky filed the proposed Joint Stipulation and a Motion to Relieve Certain Witnesses from the Duty to Appear for Hearing (Duke Kentucky's Motion to Relieve Witnesses) and stated that in light of the Joint Stipulation resolving all issues certain witnesses should be excused from appearing at the February

5, 2019 hearing.⁷⁹ Duke Kentucky further asserted that it intended to have Ms. Spiller, Mr. Wathen, Mr. Hebbeler, Ms. Lawler, Mr. Ziolkowski, and Mr. Sailers to be present at the hearing as these witnesses are based out of its local offices.⁸⁰ The Attorney General also filed a Motion to Excuse Witness from Attendance at Formal Hearing (Attorney General's Motion to Excuse Witnesses) on January 30, 2019.

In an effort to reduce rate case expense, the Commission granted both Duke Kentucky's Motion to Relieve Witnesses and the Attorney General's Motion to Excuse Witnesses. However, at the February 5, 2019 hearing, a multitude of cross-examination questions from the Commission and the Commission Staff could not be answered by the Duke Kentucky witnesses that were present. As a result, a large number of post-hearing requests for information were issued. Due to the inefficiencies that arose from the hearing, the Commission would advise parties not to file settlement agreements or motions to relieve witnesses close to the hearing as it does not provide the Commission with adequate time to appropriately review the terms of the settlement agreement or determine whether specific witnesses need to attend the hearing. In future proceedings, the Commission is likely to deny motions to excuse witnesses if the parties file a settlement agreement or such motions shortly before the scheduled hearing, as was done in this case.

Gas Cost Adjustment Clause

⁷⁹ Duke Kentucky's Motion to Relieve Witnesses at 2.

⁸⁰ Id. at 3.

Currently, Duke Kentucky files monthly Gas Cost Adjustment (GCA) reports with at least twenty (20) days' notice, in accordance with the final Order in Case No. 2006-00144.81 Due to high volatility in natural gas markets at the time of that case, the Commission found Duke Kentucky's request for a monthly rate adjustment to be reasonable. Because the natural gas market has stabilized in the intervening years, the Commission concludes that monthly GCA filings are no longer reasonable or necessary.

The Commission finds that Duke Kentucky shall file a modified GCA Clause Tariff to include language that allows Duke Kentucky to file an updated GCA rate quarterly, filed at least thirty (30) days prior to the beginning of each billing period. The expected gas cost component calculation should be changed to reflect a quarterly average. The Commission is aware that due to the natural gas market being unregulated it is prone to periods of volatility. Therefore, Duke Kentucky should include language in its GCA Tariff that permits a GCA report for an Interim Gas Cost Adjustment should any significant change in supplier natural gas rates occur. Due to the three-month billing cycle periods pursuant to the revised tariff, the Commission finds that the monthly GCA filings should continue for the months of April and May 2019 and Duke Kentucky should begin to file its quarterly GCA reports beginning with the June, July, and August 2019 billing cycle.

IT IS THEREFORE ORDERED that:

- 1. The rates and charges proposed by Duke Kentucky are denied.
- 2. The Joint Stipulation, attached hereto as Appendix A (without exhibits), is approved with the modifications discussed herein.

⁸¹ Case No. 2006-00144, The Application of Union Light, Heat and Power D/B/A Duke Energy Kentucky for Authority to Continue Making Monthly Adjustments to the Expected Gas Cost Component of its Gas Cost Adjustment Rate (Ky. PSC May 22, 2006).

- 3. The rates and charges, as set forth in Appendix C to this Order, are approved as fair, just, and reasonable rates for Duke Kentucky, and these rates and charges are approved for service rendered on and after March 29, 2019.
- 4. Duke Kentucky shall begin to file its quarterly GCA reports beginning with the June, July, and August 2019 billing cycle.
- 5. Within 20 days of the date of this Order, Duke Kentucky shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.
 - 6. This case is closed and removed from the Commission's docket.

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By the Commission

ENTERED

MAR 2 7 2019

KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00261 DATED MAR 2 7 2019

ELEVEN PAGES TO FOLLOW

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke)	
Energy Kentucky, Inc., for: 1) An)	
Adjustment of the Natural Gas Rates; 2))	Case No. 2018-00261
Approval of a Decoupling Mechanism; 3))	
Approval of New Tariffs; and 4) All)	
Other Required Approvals, Waivers, and)	
Relief.)	

JOINT STIPULATION AND RECOMMENDATION

On August 31, 2018, Duke Energy Kentucky, Inc. ("Duke Energy Kentucky" or the "Company") filed its application with the Kentucky Public Service Commission ("Commission"), pursuant to KRS 278.180, KRS 278.190, and other applicable law for an increase in retail natural gas rates and to implement new tariffs and revised charges in the above-captioned proceeding ("Application"). On September 25, 2018, the Attorney General of the Commonwealth of Kentucky ("Attorney General"), the only other party in the case, filed his motion to intervene, which was granted by the Commission.

Duke Energy Kentucky and the Attorney General (collectively as the "Parties") have filed testimony supporting their respective positions relating to Duke Energy Kentucky's Application. The Parties and the Commission Staff have engaged in substantial discovery of the Parties' respective positions by issuing numerous information requests to which the Parties have responded.

The Parties, representing diverse interests and viewpoints, have reached a complete settlement of all the issues raised in this proceeding and have executed this Joint Stipulation and Recommendation ("Stipulation") for purposes of documenting and submitting their agreement to the Commission for consideration and approval. It is the intent and purpose of the Parties to express their agreement on a mutually satisfactory resolution of all issues in the instant proceeding.

The Parties understand that this Stipulation is not binding upon the Commission, but believe it is entitled to careful consideration by the Commission. The Parties agree that this Stipulation, viewed in its entirety, constitutes a reasonable resolution of all issues in this proceeding.

The Parties request that the Commission issue an Order approving this Stipulation in its entirety pursuant to KRS 278.190, including the rate increase, rate structure, and tariffs as described herein. The request is based upon the belief that the Parties' participation in settlement negotiations and the materials on file with the Commission adequately support this Stipulation. Adoption of this Stipulation will eliminate the need for the Commission and the Parties to expend significant resources in litigation of this proceeding and will eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final Order herein.

NOW, THEREFORE, for and in consideration of the mutual premises set forth above and the terms and conditions set forth herein, the Parties agree that the Company's Application should be approved as filed, except as modified or specified below:

- 1. Revenue Increase. The Parties agree that Duke Energy Kentucky's revenue requirement for natural gas distribution service for the forecasted test year of April 1, 2019, through March 31, 2020, is \$103,393,785. This represents an increase of \$7,364,074 over the test year revenue that would be collected at current rates. The total revenue requirement is comprised of \$66,336,212 in base revenues, \$36,334,174 in gas cost revenues and \$723,399 of miscellaneous revenues. The increase in the Company's base revenue includes recovery of costs associated with the Company's Accelerated Service Line Replacement Program (ASRP), approved by the Commission in 2017, currently being collected via a separate charge on customers' bills. This separate rider charge will terminate upon implementation of the new base rates. Stipulation Attachment A provides a summary of the adjustments to the Company's proposed overall revenue requirement agreed to in this Stipulation.
- 2. Rate Base. The Parties agree that the return component of the Company's overall revenue requirement shall be computed based upon rate base. The Parties further agree that the thirteen-month average rate base for the forecasted test period is \$313,423,577.
- 3. <u>Cash Working Capital</u>. The Parties agree that the Company's cash working capital balance shall be the amount calculated using the 1/8th Operation and Maintenance (O&M) method.
 - 4. Cost of Capital. The Parties agree that:
 - a. Duke Energy Kentucky's authorized Return on Equity (ROE) shall
 be 9.7 percent;

- Duke Energy Kentucky's long-term debt rate included in the cost of capital shall be 4.36 percent, reflecting the actual long-term debt issuances made through December 31, 2018; and
- c. The capital structure is approved as filed in the Company's Application.
- 5. Weather Normalization, Tariffs and New Rate Design. The Parties recommend that the Company's proposal to implement a Weather Normalization Adjustment (WNA) Mechanism, and Rider WNA be approved as filed. The Parties agree that the Residential Customer Charge shall be increased to \$16.50 per bill, representing a \$0.50 increase per bill. The Parties further agree that the Customer Charge for other tariffs should be approved as filed. The balance of the natural gas base revenue increase allocable to customers will be recovered through volumetric rates.

The Parties further agree that the Company's proposed ministerial changes to its Natural Gas Tariffs as were included in its Application and as modified in response to Staff Data Requests during Discovery should be approved.

The pro forms tariff sheets for all rate classes, attached hereto as Attachment B, are recommended as reflecting the new rates to be effective for service rendered on and after Commission approval. These pro forms tariff sheets further reflect rates that are designed to allow Duke Energy Kentucky to recover the increased natural gas base revenue from its various classes of customers, in the manner agreed to by the Parties to this Stipulation.

- 6. <u>Depreciation Rates.</u> The Company's depreciation rates shall be approved as filed using the Average Life Group methodology as proposed in the Company's Application.
- 7. Previously Approved Deferrals for Integrity Management Expense.

 The Parties agree that Duke Energy Kentucky shall recover the actual costs of the pressure testing integrity management deferral authorized in Case No. 2016-00159. The Parties agree that the amortization of this deferral should be extended over ten years, provided, however, that in order to recognize the time value of money associated with amortizing this expense over a much longer period of time, the Company should be permitted to include monthly carrying costs on the balance calculated at the Company's long-term debt rate of 4.36 percent. The annual net impact of the extended amortization with carrying costs is a decrease of \$220,697 before gross-up in the Company's test year amortization expense and is reflected in the revenue requirement provided in Paragraph Number 1.
- 8. Revenue from No Notice Transportation Service. The Parties agree that the Company's proposed test year revenue requirement should reflect the benefit of revenue from "No Notice" Transportation service that was inadvertently excluded from the Company's Application. Incorporating the revenue from this source reduces the magnitude of the increase in base rates by \$603,445 before gross-up. This reduction is reflected in the revenue requirement provided in Paragraph Number 1.
- 9. <u>Payroll Adjustments</u>. The Parties agree to the following adjustments to test year expenses related to Payroll, Payroll Taxes, and Benefits. The reduction in these expenses are reflected in the revenue requirement provided in Paragraph Number 1:

- Test year payroll and payroll tax expense should be reduced
 \$151,546 and \$12,735, respectively before gross-up.
- b. Expenses for 401(k) matching for Union employees also in the Company's Defined Pension Plan should be excluded. The reduction in test year expense is \$296,111 before gross-up.
- c. Company contributions to certain benefits programs above a certain threshold should be excluded from the test year revenue requirement.

 The reduction to the Company's proposed test year expense is \$187,675 before gross-up.
- d. Expenses related to employee compensation paid in the form of restricted stock units should be excluded. The reduction to the Company's proposed test year expense is \$284,472 before gross-up.
- 10. Test Year Expense for Integrity Management. The Parties agree that the Company's proposed adjustment to test year expenses for ongoing Integrity Management programs should be reduced from \$1,065,488 to \$532,744 before gross-up. The change is reflected in the overall revenue requirement indicated in Paragraph Number 1.
- 11. Meter Testing Cycle. The Parties agree that the Company's current natural gas meter testing cycle shall be extended from ten years to fifteen years as requested in the Company's Application. The agreed upon revenue requirement reflected in Paragraph 1 includes an Operations and Maintenance (O&M) savings adjustment to reduce the revenue requirement associated with the meter testing period extension. If this meter testing cycle extension is ultimately not approved by the Commission, then the

Parties agree that the Company's test year revenue requirement, reflected in Paragraph Number 1, should be increased by \$340,000 before gross-up.

- 12. Rate Case Expense. For financial accounting purposes, Duke Energy Kentucky will amortize rate case expense associated with this proceeding for recovery over a five-year period, without carrying charges, beginning with the effective date of the revised tariffs.
- 13. <u>Reconnection Revenue</u>. The Parties agree that the existing charge for reconnection of service should be increased to \$75. If the Commission issues an order disallowing or modifying the proposed increase, then the revenue requirement indicated in Paragraph Number 1 will increase by \$44,136 (or in an amount proportionately equivalent to any modification) before gross-up.
- 14. <u>Proof of Revenue</u>. Attached to this Stipulation as Attachment C are proofof-revenue sheets, showing that the rates set forth in Attachment B, plus projected
 Miscellaneous Revenue, will generate the revenue needed to recover the Company's test
 year revenue requirement to which the Parties have agreed in Paragraph Number 1
 hereof.
- 15. Allocation of Rate Increase. The Parties agree to the allocation set forth in Attachment D, which is guided by the Company's cost of service study as amended, and follows the general guidance provided by the Company in testimony. The allocation seeks to mitigate rate shock by eliminating only 15 % of the subsidy excess based on the Company's proposed cost of study, as amended.
- 16. <u>Filing of Stipulation</u>. Following the execution of this Stipulation, the Parties shall cause the Stipulation to be filed with the Commission with a request to the

Commission for consideration and approval of this Stipulation so that Duke Energy Kentucky may begin billing under the approved adjusted rates for service rendered on and after Approval.

- faith and use their best efforts to recommend to the Commission that this Stipulation be accepted and approved. Each Party hereto waives all cross-examination of the witnesses of the other Party hereto except in support of the Stipulation or unless the Commission fails to adopt this Stipulation in its entirety. Each Party further stipulates and recommends that the Notice of Intent, Notice, Application, direct testimony, rebuttal testimony, pleadings and responses to data requests filed in this proceeding be admitted into the record. The Parties further agree and intend to support the reasonableness of this Stipulation before the Commission, and to cause their counsel to do the same in this proceeding and in any appeal from the Commission's adoption and/or enforcement of this Stipulation. If the Commission issues an order adopting this Stipulation in its entirety, each of the Parties hereto agrees that it shall file neither an application for rehearing with the Commission, nor an appeal to the Franklin County Circuit Court with respect to such order.
- 18. Effect of Non-Approval. If the Commission does not accept and approve this Stipulation in its entirety or imposes any additional conditions or requirements upon the signatory Parties, then: (a) either Party may elect, in writing docketed in this proceeding, within ten days of such Commission Order, that this Stipulation shall be void and withdrawn by the Parties hereto from further consideration by the Commission and neither Party shall be bound by any of the provisions herein; and (b) each Party shall

have the right, within 20 days of the Commission's order, to file an petition for rehearing, including a notice of termination of and withdrawal from the Stipulation; and, (c) in the event of such termination and withdrawal of the Stipulation, neither the terms of this Stipulation nor any matters raised during the settlement negotiations shall be binding on either of the signatory Parties to this Stipulation or be construed against either of the signatory Parties. Should the Stipulation be voided or vacated for any reason after the Commission has approved the Stipulation and thereafter any implementation of the terms of the Stipulation has been made, then the Parties shall be returned to the *status quo* existing at the time immediately prior to the execution of this Stipulation.

- 19. <u>Commission Jurisdiction</u>. This Stipulation shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.
- 20. <u>Successors and Assigns</u>. This Stipulation shall inure to the benefit of and be binding upon the Parties hereto, their successors and assigns.
- 21. <u>Complete Agreement</u>. This Stipulation constitutes the complete agreement and understanding among the Parties hereto, and any and all oral statements, representations or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Stipulation.
- 22. <u>Implementation of Stipulation</u>. For the purpose of this Stipulation only, the terms are based upon the independent analysis of the Parties to reflect a just and reasonable resolution of the issues herein and are the product of compromise and

negotiation. Notwithstanding anything contained in the Stipulation, the Parties recognize and agree that the effects, if any, of any future events upon the operating income of Duke Energy Kentucky are unknown and this Stipulation shall be implemented as written.

- 23. Admissibility and Non-Precedential Effect. Neither the Stipulation nor any of the terms set forth herein shall be admissible in any court or Commission except insofar as such court or Commission is addressing litigation arising out of the implementation of the terms herein or the approval of this Stipulation or a Party's compliance with this Stipulation. This Stipulation shall not have any precedential value in this or any other jurisdiction.
- 24. <u>No Admissions</u>. Making and entering into this Stipulation shall not be deemed in any respect to constitute an admission by either Party that any computation, formula, allegation, assertion or contention made by any Party in these proceedings is true or valid. Nothing in this Stipulation shall be used or construed for any purpose to imply, suggest or otherwise indicate that the results produced through the compromise reflected herein represent fully the objectives of a Party.
- 25. <u>Authorizations</u>. The signatories hereto warrant that they have informed, advised, and consulted with the respective Parties hereto in regard to the contents of this Stipulation, and based upon the foregoing, are authorized to execute this Stipulation on behalf of the Parties hereto.
- 26. <u>Commission Approval</u>. This Stipulation is subject to the acceptance of and approval by the Commission.

- 27. <u>Interpretation of Stipulation</u>. This Stipulation is a product of negotiation among all Parties hereto, and no provision of this Stipulation shall be strictly construed in favor of or against any Party.
 - 28. Counterparts. This Stipulation may be executed in multiple counterparts.
- 29. <u>Future Proceedings</u>. Nothing in this Stipulation shall preclude, prevent or prejudice any Party hereto from raising any argument/issue or challenging any adjustment in any future rate case proceeding of Duke Energy Kentucky.

IN WITNESS WHEREOF, this Stipulation has been agreed to effective this and day of January 2019. By affixing their signatures below, the undersigned Parties respectfully request the Commission to issue its Order approving and adopting this Stipulation the Parties hereto have hereunto affixed their signatures.

DUKE ENERGY KENTUCKY, INC

Amy B. Spiller

Title: President

ATTORNEY GENERAL OF THE COMMONWEALTH OF KENTUCKY

Hart

itile: Asst. Attorney Chan

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00261 DATED MAR 2 7 2019

Line No.	Rate Class	Rate Base (A)	Present Revenues (B) (1)	Net Operating Income (C)	Present ROR (D)	Present Revenues At Average ROR (E)	Inter Class Subsidization Overcollected (Undercollected) (F)	Balance of Rate RS Subsidezation (G1)	Subsidization times 15.00%	Rate Increase (allocated to class based on Rate Base) (H)	Proposed Revenues	Proposed Percent Increase (J)	RCR At Proposed Rates (K)	At Proposed	Proposed Increase Less (Subsidy) Excess (L)
		FR-16(7)(4)-8	FR-16(7)(v)-8	WP - Pres NOI) + (((D) Line 5 ° (C))/(1-FIT))	(B) - (E)		(F) * 15.00%	(H) Line 5 ° ((A) / (A) Line 5)	(B) - (G) + (H) - (G1)	((H) - (G) - (G1)) / (B)	(((()-f) - (G))*(1- FIT)- (C))/(A)	((((H) - (G))*(1- FIT)+ (C)) / (A)	(H) - (G) - (G1)
1	Rate RS	\$ 216,755,621	\$ 65,522,695	\$ 12,112,556°	5.5881% \$	64,729,581	\$ 793,114	\$ 674,147	\$ 118,967	\$ 5,092,850	\$ 69,822,431	6.562%	7.155%	7.400926%	\$ 4,299,736
2	Rate GS	71,593,514	23,198,247	1,512,368	2.1124%	26,085,108	\$ (2,887,861)	\$ (874,147)	\$ (433,179	5 1,682,148	\$ 25,987,721	12.025%	5.190%	4 445597%	\$ 2,789,474
3	Rate FT-L	19,240,277	5,042,683	2,302,888	11.9691%	3,418,208	\$ 1,524,475		\$ 243,671	\$ 452,066	\$ 5,251,078	4.133%	12.825%	12.824750%	\$ 208.395
4	Page IT	5,834,165	1,524,248	680,670	11.6670%	1,053,976	\$ 470,272		\$ 70,541	\$ 137,078	\$ 1,590,785	4.365%	12.568%	12.567913%	\$ 66,537
-	Total	\$ 313,423,577	\$ 95,287,873	\$ 15,608,482	5.2991% \$	95,287,873	s .		\$ -	\$ 7,364,142	\$ 102,652,015	7.728%	7.155%	7.155222%	\$ 7,364,142

s for Rate RS and Rate GS include Gas Cost Adjustment revenues.

	MISCELLANEOUS REVENUES			
6	Interdepartmental	27,765		27,765
7	Bad Check Charges	28,032		28,032
8	Reconnection Charges	22,068		66.204
9	Rents	14,495		14,496
10	No Notice Transp	603,445		603,445
11	Other Misc	1,896		1,896
12	Revenue Transp of Gas - Interco	0		0
13	Total Misc	697,702		741,838
14	Total Company	95.985,575		103,393,846

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00261 DATED MAR 2 7 2019

The following rates and charges are prescribed for the customers in the area served by Duke Energy Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

	Base Rate +	Gas Cost Adjustment Rate =	Tota	l Rate
Rate RS Residential Service Monthly Customer Charge All Ccf	\$ 0.46920	\$ 0.40570	\$16 \$ 0	.50 .87490
Rate GS General Service Monthly Customer Charge All Ccf	\$ 0.29243	\$ 0.40570	\$50 \$ 0	.00 .69813
Rate FT-L Firm Transportation Service Monthly Administrative Charge All Ccf	\$ 0.18210		\$430 \$ 0	.00 .18210
Rate IT Interruptible Transportation Service Monthly Administrative Charge All Ccf	se \$ 0.09982		\$430 \$ 0	.00 .09982
Rate IMBS Interruptible Monthly Balancing All pools (per Mcf)	g Service		\$ 0	.10970
Rate MPS Meter Pulse Service Installation of Meter Pulse Equipme Replacement of Meter Index	ent		\$860 \$635	
Reconnection Charges Reconnection (Gas Only) Reconnection Non-Remote (Electric Reconnection at pole (Electric and		not to excee	\$ 75 d \$ 88 \$150	.00

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KENTUCKY PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY

OF

JOHN J. SPANOS

ON BEHALF OF

KENTUCKY AMERICAN WATER COMPANY

CASE NO. 2015-00418

January 29, 2016

FRANKFORT, KENTUCKY

TABLE OF CONTENTS

		<u>PAGE</u>
A.	WITNESS INTRODUCTION	1
B.	OVERVIEW	2
C.	ESTIMATION OF SERVICE LIFE AND NET SALVAGE	3
D.	CALCULATION OF DEPRECIATION	7
E.	DESCRIPTION OF REPORT	8
F.	RECOMMENDATION	10

DIRECT TESTIMONY JOHN J. SPANOS

1			INTRODUCTION
2	1.	Q.	Please state your name and address.
3		A.	John J. Spanos. My business address is 207 Senate Avenue, Camp Hill,
4			Pennsylvania.
5	2.	Q.	With what firm are you associated?
6		A.	I am associated with the firm of Gannett Fleming Valuation and Rate
7			Consultants, LLC. ("Gannett Fleming")
8	3.	Q.	How long have you been associated with Gannett Fleming?
9		A.	I have been associated with the firm since college graduation in June 1986.
10	4.	Q.	What is your position in the firm?
11		Α.	I am Senior Vice President.
12	5.	Q.	On whose behalf are you testifying in this proceeding?
13		Α.	I am testifying on behalf of Kentucky American Water Company ("KAWC" or
14			the "Company").
15	6.	Q.	Please state your qualifications.
16		A.	I have 29 years of depreciation experience, which includes giving expert
17			testimony in over 200 cases before 40 regulatory commissions including this
18			Commission. Please refer to Appendix A for my qualifications.
19	7.	Q.	What is the purpose of your testimony?
20		A.	My testimony is in support of the depreciation study conducted under my
21			direction and supervision for KAWC. Based upon that study, I am
22			recommending that new depreciation accrual rates be adopted by the
23			Company.

OVERVIEW

8.	Q.	Please describe what	you mean b	y the term	"depreciation"	٠.
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Α.

"Depreciation" refers to 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 can be reasonably anticipated or contemplated, against which the Company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities. Depreciation accrual rates are used to allocate, for accounting purposes, the cost of assets over their service lives.

In the study that I performed and that is the basis for my testimony, I used the straight line whole life method of depreciation, with the average service life procedure to develop recommended depreciation accrual rates. In addition, I calculated the amount required to amortize the variance between the book depreciation reserve and the calculated accrued depreciation. The total annual depreciation is based on a system of depreciation accounting which aims to distribute the cost of fixed capital assets over the estimated useful life of the unit, or group of assets, in a systematic and rational manner.

For General Plant Accounts 340.1, 340.15, 340.21, 340.22, 340.23, 340.3, 340.32, 340.5, 342, 343, 344, 346.1, 346.19, 346.2, 347 and 348; I used the straight line method of amortization. The annual amortization is based on amortization accounting which distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each

account and vinta	age	vinta	and	account
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Α.

2	9.	Q.	Have yo	u prepared	d an exhibit	presenting	the res	sults of	your study	v?
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- A. Yes. The report titled, "2014 Depreciation Study Calculated Annual Depreciation Accruals Related to Utility Plant as of December 31, 2014" which has been marked Exhibit No. JJS-1 sets forth the results of my study.
- 6 10. Q. How did you determine the recommended annual depreciation accrual rates?
 - A. The determination of annual depreciation accrual rates consists of two phases. In the first phase, service life and net salvage characteristics are estimated for each depreciable group, that is, each plant account or subaccount identified as having similar characteristics. In the second phase, the annual depreciation accrual rates are calculated based on the service life and net salvage estimates determined in the first phase.

ESTIMATION OF SERVICE LIFE AND NET SALVAGE

- 11. Q. Please describe the first phase of the study, that is, the manner in which
 you estimated the service life and net salvage characteristics for each
 depreciable group.
 - The service life and net salvage study consisted of compiling historical data from records related to the Company's plant; analyzing these data to obtain historical trends of survivor and salvage characteristics; obtaining supplementary information from management and operating personnel concerning the Company's practices and plans as they relate to plant operations; and interpreting the above data to form judgments of average service life and net salvage characteristics.

- 12. Q. What historical data did you analyze for the purpose of estimating the service life characteristics of the Company's plant?
- The data consisted of the entries made by the Company to record plant 3 A. transactions from 1995 through 2014. The transactions included additions, 4 The Company, in retirements, transfers and the related balances. 5 accordance with my instructions, classified the data by depreciable group, 6 type of transaction, the year in which the transaction took place, and the year 7 in which the plant was installed. The data included surviving plant balances 8 as of December 31, 1994. 9

10 13. Q. What method did you use to analyze this service life data?

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- A. I used the retirement rate method. That method is the most appropriate when aged retirement data are available, because it develops the average rates of retirement actually experienced during the period of study. Other methods of life analysis infer the rates of retirement based on a selected type survivor curve.
- 16 14. Q. Please describe the results of your use of the retirement rate method.
 - A. Each retirement rate analysis resulted in a life table which, when plotted, formed an original survivor curve. Each original survivor curve as plotted from the life table represents the average survivor pattern experienced by the several vintage groups during the experience band studied. Inasmuch as this survivor pattern does not necessarily describe the life characteristics of the property group, interpretation of the original curves is required in order to use them as valid considerations in service life estimation. Iowa type survivor curves were used in these interpretations.

15. Q. Please explain briefly what an "lowa-type survivor curve" is and how you use it in estimating service life characteristics for each depreciable group.

A. The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the lowa type curves. The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired.

lowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The lowa curves and truncated lowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable group indicate the average service life, the family within the lowa system and the relative height of the mode. For example, the lowa 52-R3 indicates an average service life of fifty-two years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 3, for the mode (possible modes for R type curves range from 1 to 5).

- 16. Q. Did you physically observe the Company's plants and equipment as part of your depreciation study?
- A. Yes. I made a field review of the Company's property on June 1 and 2, 2015 to observe representative portions of plant for this study. I have also taken

two previous site visits over the last 10 years. Field reviews are conducted to become familiar with Company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge, as well as information from other discussions with management, was incorporated in the interpretation and extrapolation of the statistical analyses.

7 17. Q. How did your experience in development of other depreciation studies affect your work in this case?

A.

A. Because I customarily conduct field reviews for my depreciation studies, I have had the opportunity to visit scores of similar plants and meet with operation's personnel at other companies. The knowledge accumulated from those visits and meetings provide me useful information that I can draw on to confirm or challenge my numerical analyses concerning plant condition and remaining life estimates.

18. Q. What historical data did you analyze for the purpose of estimating net salvage characteristics?

17 A. The data consisted of the entries made by the Company to record 18 retirements, cost of removal and gross salvage during the period 1980 19 through 2014.

19. Q. What method did you use to analyze this net salvage data?

The net salvage data were analyzed by expressing the net salvage and its two components, cost of removal and gross salvage, as percents of the original cost retired on annual, three-year moving average and most recent five-year average bases. The use of averages smooth the annual fluctuations and assists in identifying underlying trends.

- 2 20. Q. Please describe the manner in which you used the analyses of net salvage to estimate net salvage percents.
- A. The results of the net salvage analyses provided indications of historical net salvage levels. The judgments of net salvage incorporated these historical indications and consideration of estimates made for other water companies.

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CALCULATION OF DEPRECIATION

- 21. Q. Please describe the second phase of the process that you used, that is,
 the calculation of annual depreciation accrual rates.
- A. After I estimated the service life and net salvage characteristics for each depreciable group, I calculated annual depreciation accrual rates for each group in accordance with the straight line remaining life method, using the average service life procedure.
- 22. Q. What group procedure is being used in this proceeding for depreciableaccounts?
- A. The average service life procedure is used in the current proceeding for all depreciable accounts and installation years. The average service procedure also was used in the Company's last depreciation study.
- 19 23. Q. Please describe briefly the amortization of certain General Plant accounts.
- A. General Plant Accounts 340.1, 340.15, 340.21, 340.22, 340.23, 340.3, 340.32, 340.5, 342, 343, 344, 346.1, 346.19, 346.2, 347 and 348 include a very large number of units, but represent approximately four percent of depreciable utility plant. Depreciation accounting is difficult for these assets,

inasmuch as periodic inventories are required to properly reflect plant in service. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period.

DESCRIPTION OF REPORT

24. Q. Please outline the contents of your report.

Α.

My report is presented in nine parts. Part I, Introduction includes statement related to the scope and basis of the depreciation study. Part II, Estimation of Survivor Curves includes descriptions of the methodology of estimating survivor curves. Parts III and IV set forth the analysis of determining life and net salvage estimation. Part V, Calculation of Annual and Accrued Depreciation includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study presents a description of the results, and a summary of the depreciation calculations. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations.

The table on pages VI-5 through VI-7 presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2014, the calculated annual depreciation accrual amount and rate, book depreciation reserve, future accruals and the composite remaining life for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life

estimates. The section beginning on page VIII-2 presents the results of the analyses of historical net salvage data. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2014.

25. Q. Please use an example to illustrate the manner in which the study is presented in the report.

A.

I will use Account 331, Mains and Accessories, as my example, inasmuch as it is a large depreciable group and is representative of the presentation.

The retirement rate method was used to analyze the survivor characteristics of this group. The life table for the 1995-2014 experience band is presented on pages VII-54 through VII-56 of the report. The life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 85-R3 on page VII-53. The net salvage analysis for the period 1980 through 2014 is presented on pages VIII-22 and VIII-23.

The calculation of the annual depreciation accrual rate related to the original cost at December 31, 2014 of utility plant is presented on pages IX-32 through IX-34. The calculation is based on the 85-R3 survivor curve, negative 25 percent net salvage and the attained age. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual amount. The totals are brought forward to the table on page VI-6.

RECOMMENDATION

2	26. Q.	What is your recommendation regarding annual depreciation accrua
3		rates for the Company?

- A. I recommend that the Company use a composite annual depreciation accrual rate for each account or subaccount. My recommended depreciation accrual rates, based on the depreciation study, are set forth for each account in column 8 of Table 1 on pages VI-5 through VI-7 of Exhibit JJS-1. In my opinion, these are reasonable and appropriate depreciation accrual rates for the Company.
- 27. Q. Are your recommended depreciation accrual rates reasonable for plant
 added subsequent to December 31, 2014?
- 12 A. Yes. The annual depreciation accrual rates calculated as of December 31,
 13 2014, can reasonably be applied to the total balance including new plant
 14 additions during the next several years.
- 15 28. Q. Does this complete your direct testimony?
- 16 A. Yes, it does.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In tl	he Matter of:		
	APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS RATES)	CASE NO. 2018-00294
In tl	he Matter of:		
	APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES)	CASE NO. 2018-00295

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

LOUISVILLE GAS AND ELECTRIC COMPANY

AND KENTUCKY UTILITIES COMPANY

Filed: September 28, 2018

TABLE OF CONTENTS

		<u>PAGE</u>
I.	INTRODUCTION AND PURPOSE	- 1 -
II.	DEPRECIATION STUDY	- 3 -
III.	CONCLUSION	- 15 -

I. <u>INTRODUCTION AND PURPOSE</u>

- 1 Q. PLEASE STATE YOUR NAME AND ADDRESS.
- 2 A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill,
- 3 Pennsylvania.
- 4 Q. ARE YOU ASSOCIATED WITH ANY FIRM?
- 5 A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants,
- 6 LLC ("Gannett Fleming").
- 7 Q. CAN YOU BRIEFLY DESCRIBE GANNETT FLEMING?
- 8 A. Yes. Gannett Fleming, Inc. is an international engineering consulting firm with expertise 9 in numerous disciplines. Founded in 1915, Gannett Fleming Inc. has a long history of The firm's headquarters is located in suburban Harrisburg, 10 consulting services. 11 Pennsylvania. Regional offices are maintained in 23 states, one Canadian province, and an 12 office in Qatar and the United Arab Emirates. With approximately 2,200 highly qualified 13 individuals across a global network of 60 offices, we help shape infrastructure and improve 14 communities in more than 65 countries. Gannett Fleming Valuation and Rate Consultants, 15 LLC and its predecessor, the Valuation and Rate Division of Gannett Fleming, Inc., have 16 provided service to utility companies since the late 1930s and, in the last five years, have 17 prepared over 100 depreciation and valuation studies. Gannett Fleming staff has an 18 unparalleled depth and breadth of experience in the field of depreciation. This expertise 19 has been gained not only by conducting depreciation studies but also by actively 20 participating within the depreciation field as educators and members of organizations that 21 form depreciation standards.
- 22 Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT FLEMING?

- A. I have been associated with the firm since college graduation in June, 1986.
 Q. WHAT IS YOUR POSITION WITH THE FIRM?
 A. I am Senior Vice President.
- 4 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?
- 5 A. I have Bachelor of Science degrees in Industrial Management and Mathematics from
 6 Carnegie-Mellon University and a Master of Business Administration from York College
 7 of Pennsylvania.
- 8 Q. DO YOU BELONG TO ANY PROFESSIONAL SOCIETIES?
- 9 A. Yes. I am a member and past President of the Society of Depreciation Professionals. I am
 10 also a member of the American Gas Association/Edison Electric Institute Industry
 11 Accounting Committee.
- 12 Q. DO YOU HOLD ANY SPECIAL CERTIFICATION AS A DEPRECIATION
- 13 EXPERT?
- 14 A. Yes. The Society of Depreciation Professionals has established national standards for
 15 depreciation professionals. The Society administers an examination to become certified in
 16 this field. I passed the certification exam in September 1997 and was recertified in August
 17 2003, February 2008, January 2013 and February 2018.
- 18 Q. HAVE YOU HAD ANY ADDITIONAL EDUCATION RELATING TO UTILITY
- 19 **PLANT DEPRECIATION?**
- 20 A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:
 21 "Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis,"
 22 "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and
 23 "Managing a Depreciation Study." I have also completed the "Introduction to Public

- 1 Utility Accounting" program conducted by the American Gas Association.
- 2 Q. PLEASE OUTLINE YOUR EXPERIENCE IN THE FIELD OF DEPRECIATION.
- 3 A. Yes. I have 32 years of depreciation experience which includes giving expert testimony in
- 4 over 290 cases before 40 regulatory commissions, including this Commission. Please refer
- 5 to Exhibit JJS-1 for my qualifications. In addition to the cases that I have submitted
- 6 testimony, I have supervised over 600 other depreciation or valuation projects.
- 7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
- 8 A. I am sponsoring the depreciation studies that Gannett Fleming performed for Louisville
- 9 Gas and Electric Company and Kentucky Utilities Company attached hereto as Exhibit JJS-
- 10 LG&E-1 and Exhibit-JJS-KU-1.

II. DEPRECIATION STUDY

- 11 Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.
- 12 A. Depreciation refers to 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, against
- which the company is not protected by insurance. Among the causes to be given
- 16 consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence,
- changes in the art, changes in demand and the requirements of public authorities.
- 18 Q. DID YOU PREPARE THE DEPRECIATION STUDIES FILED BY LOUISVILLE
- 19 GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY IN
- 20 THIS PROCEEDING?
- 21 A. Yes. I prepared the depreciation studies submitted by Louisville Gas and Electric
- Company and Kentucky Utilities Company ("Companies") with their filings in this

1		proceeding. These studies are attached as Exhibits JJS-LG&E-1 and JJS-KU-1. My
2		reports are entitled: "2017 Depreciation Study - Calculated Annual Depreciation Accruals
3		Related to Steam Generation Plant as of December 31, 2017." These reports set forth the
4		results of my depreciation studies for each Company.
5	Q.	IN PREPARING THE DEPRECIATION STUDIES, DID YOU FOLLOW
6		GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION
7		VALUATION?
8	A.	Yes.
9	Q.	ARE THE METHODS AND PROCEDURES OF THESE DEPRECIATION
10		STUDIES CONSISTENT WITH PAST PRACTICES?
11	A.	The methods and procedures of these studies are the same as those utilized in past studies
12		of each Company as well as others before this Commission. The depreciation rates
13		recommended in my studies are determined based on the average service life procedure and
14		the remaining life method.
15	Q.	ARE THE UNDERLYING LIFE AND NET SALVAGE PARAMETERS AND
16		RESULTING DEPRECIATION ISSUES IN THIS STUDY CONSISTENT WITH
17		INDUSTRY TRENDS?
18	A.	Yes. The life and net salvage parameters for LG&E and KU have changed consistently
19		with others in the industry as well as the major changes to steam production asset mix.
20	Q.	PLEASE DESCRIBE THE CONTENTS OF YOUR REPORTS.
21	A.	Each Depreciation Study is presented in nine parts. Part I, Introduction, presents the scope
22		and basis for the depreciation study. Part II, Estimation of Survivor Curves, includes
23		descriptions of the methodology of estimating survivor curves. Parts III and IV set forth

the analysis for determining life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account.

A.

Q.

Table 1 on pages VI-4 and VI-5 of Exhibit JJS-LG&E-1 and on pages VI-4 and VI-5 of Exhibit JJS-KU-1 present the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2017, the book depreciation reserve, and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VIII-2 presents the results of the salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2017.

PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

A. I used the straight line remaining life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

20 Q. HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL 21 DEPRECIATION ACCRUAL RATES?

I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group, that is, each plant account or subaccount

1		identified as having similar characteristics. In the second phase, I calculated the composite
2		remaining lives and annual depreciation accrual rates based on the service life and net
3		salvage estimates determined in the first phase.
4	Q.	WILL YOU PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION
5		STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET
6		SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP?
7	A.	The service life and net salvage studies consisted of compiling historical data from records
8		related to Louisville Gas and Electric Company's and Kentucky Utilities Company's plant;
9		analyzing these data to obtain historical trends of survivor characteristics; obtaining
10		supplementary information from management and operating personnel concerning
11		practices and plans related to plant operations; and interpreting the data and the estimates
12		used by other electric utilities to form judgments of average service life and net salvage
13		characteristics.
14	Q.	WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF
15		ESTIMATING SERVICE LIFE CHARACTERISTICS?
16	A.	I analyzed the Companies' accounting entries that record plant transactions during the
17		period 1954 through 2017 for LG&E and during the period 1926 through 2017 for KU.
18		The transactions included additions, retirements, transfers, sales and the related balances.
19	Q.	WHAT METHOD DID YOU USE TO ANALYZE THESE SERVICE LIFE DATA?
20	A.	I used the retirement rate method. This is the most appropriate method when retirement
21		data covering a long period of time is available because this method determines the average
22		rates of retirement actually experienced by the Companies' during the period of time
23		covered by the depreciation study.

1	Q.	PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD TO
2		ANALYZE BOTH COMPANIES' SERVICE LIFE DATA.
3	A.	I applied the retirement rate analysis to each different group of property in each study. For

each property group, I used the retirement rate data to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa type survivor curves were used to perform these interpretations.

The lowa type survivor curves were used to perform these interpretations.

WHAT IS AN "IOWA-TYPE SURVIVOR CURVE" AND HOW DID YOU USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR

EACH PROPERTY GROUP?

O.

A.

lowa type curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. A survivor curve is a graphical depiction of the amount of property existing at each age throughout the life of an asset class. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves

were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

O.

A.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa curve system to which the property group belongs, and the relative height of the mode. For example, the Iowa 70-R1.5 indicates an average service life of seventy years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a low height, 1.5, for the mode (possible modes for R type curves range from 1 to 5).

WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF SIGNIFICANT FACILITIES STRUCTURES SUCH AS PRODUCTION PLANTS? I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates.

The interim survivor curves describe the rate of retirement related to the replacement of elements of the facility, such as, for a building, the retirements of plumbing, heating, doors, windows, roofs, etc., that occurs during the life of the facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

1	Q.	HAS	GANNETT	FLEMING	USED	THIS	APPROACH	IN	OTHER

2 **PROCEEDINGS?**

- 3 A. Yes, we have used the life span technique in performing depreciation studies presented to
- 4 and accepted by many public utility commissions across the United States and Canada,
- 5 including Kentucky. This technique is currently being utilized by Louisville Gas and
- 6 Electric Company and Kentucky Utilities Company in the same manner recommended in
- 7 this case.

8 Q. WHAT ARE THE BASES FOR THE PROBABLE RETIREMENT YEARS THAT

9 YOU HAVE ESTIMATED FOR EACH FACILITY?

- 10 The bases for the probable retirement years are life spans for each facility that are based on A. 11 informed judgment, and incorporate consideration of the age, use, size, nature of 12 construction, management outlook and typical life spans experienced and used by other 13 electric utilities for similar facilities. Most of the life spans result in probable retirement 14 years that are many years in the future. As a result, the retirements of these facilities are 15 not yet subject to specific management plans. Such plans would be premature. At the 16 appropriate time, studies of the economics of rehabilitation and continued use or retirement 17 of the structure will be performed and the results incorporated into the estimation of the 18 facility's life span.
- 19 Q. HAVE YOU PHYSICALLY OBSERVED LG&E'S AND KU'S PLANT AND
 20 EQUIPMENT AS PART OF YOUR DEPRECIATION STUDIES?
- 21 A. Yes. I have made field reviews of LG&E and KU's property as part of past studies during
 22 April and May 2007, October 2011 and October 2015 to observe representative portions of
 23 plant. Field reviews are commonly taken every 4 to 5 years in order to identify change in

1		asset condition. Field reviews are conducted to become familiar with a company's
2		operations and 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 of retirements.
4		This knowledge as well as information from other discussions with management was
5		incorporated in the interpretation and extrapolation of the statistical analyses.
6	Q.	PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE PERCENTAGES.
7	A.	I estimated the net salvage percentages by incorporating the historical data for the period
8		1972 through 2017 for LG&E and 1988 through 2017 for KU and considered estimates for
9		other electric companies.
10	Q.	HAVE YOU INCLUDED A DISMANTLEMENT COMPONENT INTO THE
11		OVERALL RECOVERY OF GENERATING FACILITIES?
12	A.	Yes. A dismantlement component has been included to the net salvage percentage for all
13		steam production facilities.
14	Q.	CAN YOU EXPLAIN WHY AND HOW THE DISMANTLEMENT COMPONENT
15		IS INCLUDED IN THE DEPRECIATION STUDY?
16	A.	Yes. The dismantlement component is part of the overall net salvage for each location
17		within the production assets. Based on studies for other utilities and the cost estimates of
18		some LG&E and KU facilities, it was determined that the dismantlement or
19		decommissioning costs for steam production facilities are best calculated at \$40/KW of the
20		assets subject to final retirement. The cost estimate of dismantlement of the Cane Run
21		facility was a primary resource for the \$40/KW component as Cane Run is most similar to
22	,	the remaining facilities to be dismantled. These amounts at a location basis are added to
23		the interim net salvage percentage of the assets anticipated to be retired on an interim basis

1		to produce the weighted net salvage percentage for each location. The detailed calculation
2		for each location is set forth on page VIII-2 Exhibit JJS-LG&E-1 and page VIII-2 of
3		Exhibit JJS-KU-1.
4	Q.	IS THIS METHODOLOGY A CHANGE FROM CURRENT PRACTICES?
5	A.	No. The current practice for LG&E and KU includes a low level of terminal net salvage
6		combined with the interim net salvage percentage. In this study, the methodology
7		continues to advance to a more precise practice and is utilized by most utilities. The
8		weighting of the interim and final net salvage by location establishes a more precise
9		recovery pattern for each location.
10	Q.	PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU
11		USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED THE
12		COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL
12 13		COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL RATES.
	A.	
13	A.	RATES.
13 14	Α.	RATES. After I estimated the service life and net salvage characteristics for each depreciable
13 14 15	Α.	RATES. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the
13 14 15	A. Q.	RATES. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using the remaining lives weighted consistent with
13 14 15 16		RATES. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using the remaining lives weighted consistent with the average service life procedure.
113 114 115 116 117		RATES. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using the remaining lives weighted consistent with the average service life procedure. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF
113 114 115 116 117 118	Q.	RATES. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using the remaining lives weighted consistent with the average service life procedure. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF DEPRECIATION.

1	Q.	PLEASE USE AN EXAMPLE TO ILLUSTRATE HOW THE ANNUAL
2		DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF
3		PROPERTY IS PRESENTED IN YOUR DEPRECIATION STUDIES.

A.

I will use KU Plant Account 312, Boiler Plant Equipment, as an example because it is the largest depreciable account and represents approximately 79% of depreciable steam production plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1926 through 2017 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1926-2017 and 1978-2017 experience bands are presented on pages VII-8 through VII-11 of the report. The life tables display the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-__ shows \$2,670,287 retired at age 1.5 with \$3,983,390,994 exposed to retirement. Consequently, the retirement ratio is 0.0007; and the surviving ratio is 0.9993. These life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, as shown on the 70-R1.5 on page VII-7.

The interim net salvage analyses for Account 312, Boiler Plant Equipment, is presented on pages VIII-5 and VIII-6 of the Depreciation Study. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1988 through 2017. This 30-year period experienced \$43,002,073 (\$3,929,933-\$46,932,006) in negative net salvage for \$155,030,596 plant retired. The result is negative net salvage of 28 percent (\$43,002,073/\$155,030,596). Based on the overall negative 28 percent net salvage and the

most recent five years of negative 31 percent, it was determined that negative 30 percent is the most appropriate interim estimate. The percentage is combined with the terminal net salvage component by location to create a weighted net salvage percent by unit. My calculation of the annual depreciation related to the original cost at December

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31, 2017, of utility plant is presented on pages IX-15 through IX-25. The calculation is based on the 70-R1.5 survivor curve, weighted negative net salvage by unit of 6 to 13 percent, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to the table on page VI-4.

11 Q. ARE REQUIREMENTS AND DEPRECIATION RATES FOR STEAM ASSETS 12 CHANGING MORE FREQUENTLY THAN OTHER ELECTRIC ASSETS?

- Α. Yes. Many utilities assets have long physical lives, however, service lives are driven by more than physical characteristics. In the case of steam assets, and particularly coal assets, 15 review of depreciation rates need to be updated more frequently due to regulations.
- 16 Q. WERE THERE SPECIFIC **GENERATING** UNITS WHICH 17 CONSIDERABLE CHANGE IN LIFE EXPECTATION?
- 18 A. Yes. The E.W. Brown Units 1 and 2 have much shorter remaining lives that are driven by 19 more than physical characteristics. E. W. Brown Units 1 and 2 are to be retired by 20 February 2019.
- 21 Q. HAS THE SHORTER REMAINING LIFE FOR BROWN UNITS 1 AND 2 BEEN 22 REFLECTED IN HIGHER DEPRECIATION RATES?

1	A.	No. The accumulated depreciation of the Brown Units 1 and 2 have been adjusted to
2		reflect the more appropriate theoretical reserve. The amount of the adjustment is offset by
3		Brown Unit 3, which has a longer remaining life.
4		
5		III. <u>CONCLUSION</u>
6	Q.	IN YOUR OPINION, ARE THE DEPRECIATION RATES SET FORTH IN
7		EXHIBIT JJS-LG&E-1 AND EXHIBIT JJS-KU-1 THE RECOMMENDED RATES
8		FOR THE KENTUCKY PUBLIC SERVICE COMMISSION TO ADOPT IN THIS
9		PROCEEDING FOR LG&E AND KU?
10	A.	Yes, these rates appropriately reflect the rates at which the value of LG&E's and KU's
11		steam generation assets are being consumed over their useful lives. These rates are an
12		appropriate basis for setting electric rates in this matter and for the Companies' to use for
13		booking depreciation expense going forward.
14	Q.	DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
15	Α.	Yes.

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)	
)	SS:
COUNTY OF CUMBERLAND)	

The undersigned, John J. Spanos, being duly sworn, deposes and says that he is Senior Vice President for Gannett Fleming Valuation and Rate Consultants, LLC, that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John J. Spanos

Subscribed and sworn to before me, a Notary Public in and before said County and Commonwealth, this 44 day of 2018.

(SEAL)

Notary Public

My Commission Expires:

February 20, 2019

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL

Cheryl Ann Rutter, Notary Public East Pennsboro Twp., Cumberland County My Commission Expires Feb. 20, 2019

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS	
AND ELECTRIC COMPANY FOR AN	CASE NO. 2016-00371
ADJUSTMENT OF ITS ELECTRIC AND	
GAS RATES AND CERTIFICATES OF	
PUBLIC CONVENIENCE AND NECESSITY	

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: November 23, 2016

TABLE OF CONTENTS

		PAGE
I.	INTRODUCTION AND PURPOSE	- 1 -
II.	DEPRECIATION STUDY	- 3 -
III.	CONCLUSION	- 15 -

I. <u>INTRODUCTION AND PURPOSE</u>

- 1 Q. PLEASE STATE YOUR NAME AND ADDRESS.
- 2 A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill,
- 3 Pennsylvania.
- 4 Q. ARE YOU ASSOCIATED WITH ANY FIRM?
- 5 A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants,
- 6 LLC ("Gannett Fleming").
- 7 Q. CAN YOU BRIEFLY DESCRIBE GANNETT FLEMING?
- 8 A. Yes. Gannett Fleming, Inc. is an international engineering consulting firm with expertise 9 in numerous disciplines. Founded in 1915, Gannett Fleming Inc. has a long history of 10 The firm's headquarters is located in suburban Harrisburg, consulting services. 11 Pennsylvania. Regional offices are maintained in 22 states, two Canadian provinces, and 12 an office in Abu Dhabi, United Arab Emirates. With 2,000 highly qualified individuals 13 across a global network of 60 offices, we help shape infrastructure and improve 14 communities in more than 65 countries. Gannett Fleming Valuation and Rate Consultants, 15 LLC and its predecessor, the Valuation and Rate Division of Gannett Fleming, Inc., have 16 provided service to utility companies since the late 1930s and, in the last five years alone, 17 have prepared over 100 depreciation and valuation studies. The Gannett Fleming 18 Valuation and Rate Consultants, LLC (Gannett Fleming) staff has an unparalleled depth 19 and breadth of experience in the field of depreciation. This expertise has been gained not 20 only by conducting depreciation studies but also by actively participating within the 21 depreciation field as educators and members of organizations that form depreciation 22 standards.

- 1 Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT FLEMING? 2 I have been associated with the firm since college graduation in June, 1986. A. 3 Q. WHAT IS YOUR POSITION WITH THE FIRM? 4 A. I am Senior Vice President. 5 O. WHAT IS YOUR EDUCATIONAL BACKGROUND? 6 A. I have Bachelor of Science degrees in Industrial Management and Mathematics from 7 Carnegie-Mellon University and a Master of Business Administration from York College 8 of Pennsylvania. 9 Q. DO YOU BELONG TO ANY PROFESSIONAL SOCIETIES? 10 Yes. I am a member and past President of the Society of Depreciation Professionals. I am A. 11 also a member of the American Gas Association/Edison Electric Institute Industry 12 Accounting Committee. 13 DO YOU HOLD ANY SPECIAL CERTIFICATION AS A DEPRECIATION Q. 14 EXPERT? 15 Yes. The Society of Depreciation Professionals has established national standards for A. 16 depreciation professionals. The Society administers an examination to become certified in 17 this field. I passed the certification exam in September 1997 and was recertified in August 18 2003, February 2008, and January 2013. 19 Q. HAVE YOU HAD ANY ADDITIONAL EDUCATION RELATING TO UTILITY 20 PLANT DEPRECIATION? 21 A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:
 - JOHN J. SPANOS DIRECT

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"Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis,"

"Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and

1 "Managing a Depreciation Study." I have also completed the "Introduction to Public 2 Utility Accounting" program conducted by the American Gas Association. 3 PLEASE OUTLINE YOUR EXPERIENCE IN THE FIELD OF DEPRECIATION. Q. 4 A. Yes. I have 30 years of depreciation experience which includes giving expert testimony in 5 over 230 cases before 40 regulatory commissions, including this Commission. Please refer to Exhibit JJS-1 for my qualifications. In addition to the cases that I have submitted 7 testimony, I have supervised in over 400 other depreciation or valuation projects. 8 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING? 9 A. I sponsor the depreciation study that Gannett Fleming performed for Louisville Gas and 10 Electric Company attached hereto as Exhibit JJS-LG&E-1. II. **DEPRECIATION STUDY** 11 Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION. 12 Depreciation refers to the loss in service value not restored by current maintenance, A. 13 incurred in connection with the consumption or prospective retirement of utility plant in 14 the course of service from causes which can be reasonably anticipated or contemplated, 15 against which the company is not protected by insurance. Among the causes to be given 16 consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, 17 changes in the art, changes in demand and the requirements of public authorities. 18 Q. DID YOU PREPARE THE DEPRECIATION STUDY FILED BY LOUISVILLE 19 GAS AND ELECTRIC COMPANY IN THIS PROCEEDING? 20 Yes. I prepared the depreciation study submitted by Louisville Gas and Electric Company A. 21 with its filing in this proceeding. This study is attached as Exhibit JJS-LG&E-1. My

report is entitled: "2015 Depreciation Study - Calculated Annual Depreciation Accruals

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(1)		Related to Electric, Gas and Common Plant as of December 31, 2015." This report sets
2		forth the results of my depreciation study for Louisville Gas and Electric Company.
3	Q.	IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW
4		GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION
5		VALUATION?
6	A.	Yes.
7	Q.	ARE THE METHODS AND PROCEDURES OF THIS DEPRECIATION STUDY
8		CONSISTENT WITH PAST PRACTICES?
9	A.	The methods and procedures of this study are the same as those utilized in past studies of
10		this Company as well as others before this Commission. The depreciation rates
11		recommended in my study are determined based on the average service life procedure and
12		the remaining life method.
13	Q.	ARE THE UNDERLYING LIFE AND SALVAGE PARAMETERS AND
14		RESULTING DEPRECIATION ISSUES IN THIS STUDY CONSISTENT WITH
15		INDUSTRY TRENDS?
16	A.	Yes. The life and salvage parameters for LG&E has changed consistently with others in
17		the industry as well as the major changes to steam production asset mix.
18	Q.	PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.
19	A.	The Depreciation Study is presented in nine parts; Part I, Introduction, presents the scope
20		and basis for the depreciation study. Part II, Estimation of Survivor Curves, includes
21		descriptions of the methodology of estimating survivor curves. Parts III and IV set forth
22		the analysis for determining life and net salvage estimates. Part V, Calculation of Annual

and Accrued Depreciation, includes the concepts of depreciation and amortization using

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the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account.

Q.

A.

Tables 1, 2, and 3 on pages VI-4 through VI-13 present the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2015, the book depreciation reserve and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VIII-2 presents the results of the salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2015.

PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

I used the straight line remaining life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and reasonable manner.

For General Plant Accounts 394 and 397.2 in electric plant; Account 394 in gas plant; and Accounts 391.1, 391.2, 391.3, 391.31, 391.4, 393, 394 and 397.1 in common plant, I used the straight line remaining life method of amortization. The account numbers identified throughout my testimony represent those in effect as of December 31, 2015. The annual amortization is based on amortization accounting that distributes the unrecovered

1		cost of fixed capital assets over the remaining amortization period selected for each
2		account and vintage.
3	Q.	HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL
4		DEPRECIATION ACCRUAL RATES?
5	A.	I did this in two phases. In the first phase, I estimated the service life and net salvage
6		characteristics for each depreciable group, that is, each plant account or subaccount
7		identified as having similar characteristics. In the second phase, I calculated the composite
8		remaining lives and annual depreciation accrual rates based on the service life and net
9	. 1	salvage estimates determined in the first phase.
10	Q.	WILL YOU PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION
11		STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET
12		SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP?
13	A.	The service life and net salvage study consisted of compiling historical data from records
14		related to Louisville Gas and Electric Company's plant; analyzing these data to obtain
15		historical trends of survivor characteristics; obtaining supplementary information from
16		management and operating personnel concerning practices and plans related to plant
17		operations; and interpreting the data and the estimates used by other electric and gas
18		utilities to form judgments of average service life and net salvage characteristics.
19	Q.	WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF
20		ESTIMATING SERVICE LIFE CHARACTERISTICS?
21	A.	I analyzed the Company's accounting entries that record plant transactions during the
22		period 1900 through 2015. The transactions included additions, retirements, transfers,
23		sales and the related balances.

1	Q.	WHAT METHOD DID YOU USE TO ANALYZE THESE SERVICE LIFE DATA?
2	A.	I used the retirement rate method. This is the most appropriate method when retirement
3		data covering a long period of time is available because this method determines the average
4		rates of retirement actually experienced by the Company during the period of time covered
5		by the depreciation study.
6	Q.	PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD TO
7		ANALYZE LOUISVILLE GAS AND ELECTRIC'S SERVICE LIFE DATA.
8	A.	I applied the retirement rate analysis to each different group of property in the study. For
9		each property group, I used the retirement rate data to form a life table which, when
0		plotted, shows an original survivor curve for that property group. Each original survivor
1		curve represents the average survivor pattern experienced by the several vintage groups
12		during the experience band studied. The survivor patterns do not necessarily describe the
13		life characteristics of the property group; therefore, interpretation of the original survivor
14		curves is required in order to use them as valid considerations in estimating service life.
15		The Iowa type survivor curves were used to perform these interpretations.
16	Q.	WHAT IS AN "IOWA-TYPE SURVIVOR CURVE" AND HOW DID YOU USE
17		SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR
8	*	EACH PROPERTY GROUP?
19	A.	Iowa type curves are a widely-used group of survivor curves that contain the range of
20		survivor characteristics usually experienced by utilities and other industrial companies. A
21		survivor curve is a graphical depiction of the amount of property existing at each age
22		throughout the life of an asset class. The Iowa curves were developed at the Iowa State
23		College Engineering Experiment Station through an extensive process of observing and

classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Q.

A.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa curve system to which the property group belongs, and the relative height of the mode. For example, the Iowa 63-R2.5 indicates an average service life of sixty-three years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 2.5, for the mode (possible modes for R type curves range from 1 to 5).

WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF SIGNIFICANT FACILITIES STRUCTURES SUCH AS PRODUCTION PLANTS?

I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates.

The interim survivor curves describe the rate of retirement related to the replacement of elements of the facility, such as, for a building, the retirements of plumbing, heating, doors, windows, roofs, etc., that occur during the life of the facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age

1	at the date of probable retirement. The use of interim survivor curves truncated at the date
2	of probable retirement provides a consistent method for estimating the lives of the several
3	years of installation for a particular facility inasmuch as a single concurrent retirement for
4	all years of installation will occur when it is retired.

5 Q. HAS GANNETT FLEMING USED THIS APPROACH IN OTHER 6 PROCEEDINGS?

Yes, we have used the life span technique in performing depreciation studies presented to and accepted by many public utility commissions across the United States and Canada, including Kentucky. This technique is currently being utilized by Louisville Gas and Electric Company in the same manner recommended in this case.

Q. WHAT ARE THE BASES FOR THE PROBABLE RETIREMENT YEARS THAT YOU HAVE ESTIMATED FOR EACH FACILITY?

A.

The bases for the probable retirement years are life spans for each facility that are based on informed judgment, and incorporate consideration of the age, use, size, nature of construction, management outlook and typical life spans experienced and used by other electric utilities for similar facilities. Most of the life spans result in probable retirement years that are many years in the future. As a result, the retirements of these facilities are not yet subject to specific management plans. Such plans would be premature. At the appropriate time, studies of the economics of rehabilitation and continued use or retirement of the structure will be performed and the results incorporated in the estimation of the facility's life span.

1 Q. DID YOU PHYSICALLY OBSERVE LOUISVILLE GAS AND ELECTRIC 2 COMPANY'S PLANT AND EQUIPMENT AS PART OF YOUR DEPRECIATION 3 STUDY? 4 A. Yes. I made a field review of Louisville Gas and Electric Company's property as part of 5 this study during October 2015 and previously reviewed assets in April and May 2007 and 6 October 2011 to observe representative portions of plant. Field reviews are conducted to 7 become familiar with Company operations and obtain an understanding of the function of 8 the plant and information with respect to the reasons for past retirements and the expected 9 future causes of retirements. This knowledge as well as information from other discussions 10 with management was incorporated in the interpretation and extrapolation of the statistical 11 analyses. 12 Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE PERCENTAGES. 13 A. I estimated the net salvage percentages by incorporating the historical data for the period 14 1972 through 2015 and considered estimates for other electric and gas companies. 15 HAVE YOU INCLUDED A DISMANTLEMENT COMPONENT INTO THE O. 16 OVERALL RECOVERY OF GENERATING FACILITIES? 17 A. Yes. A dismantlement component has been included to the net salvage percentage for 18 steam, hydro and other production facilities. 19 O. CAN YOU EXPLAIN HOW THE DISMANTLEMENT COMPONENT IS 20 INCLUDED IN THE DEPRECIATION STUDY? 21 A. Yes. The dismantlement component is part of the overall net salvage for each location 22 within the production assets. Based on studies for other utilities and the cost estimates of 23 LG&E, it was determined that the dismantlement or decommissioning costs for steam

production facilities is best calculated at \$40/KW of the assets subject to final retirement. The percentage for dismantlement of hydro and other production facilities is \$10/KW of the assets surviving at final retirement with the exception of the combined cycle facility 4 which is \$20/KW. These amounts at a location basis are added to the interim net salvage 5 percentage of the assets anticipated to be retired on an interim basis to produce the 6 weighted net salvage percentage for each location. The detailed calculation for each 7 location is set forth on pages VIII-2 and VIII-3 of Exhibit JJS-LG&E-1. 8 Q. IS THIS METHODOLOGY A CHANGE FROM CURRENT PRACTICES? No. The current practice for LG&E includes a low level of terminal net salvage combined A. 10 with the interim net salvage percentage. In this study, the methodology continues to advance to a more precise practice and is utilized by most utilities. The weighting of the interim and final net salvage by location establishes a more precise recovery pattern for each location. 14 O. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU 15 USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL 16 RATES. 18 A. After I estimated the service life and net salvage characteristics for each depreciable 19 property group, I calculated the annual depreciation accrual rates for each group, using the straight line remaining life method, and using remaining lives weighted consistent with the average service life procedure.

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Q.

DEPRECIATION.

PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF

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

Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.

In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. Amortization accounting is used for accounts with a large number of units, but small asset values. Therefore, depreciation accounting is difficult for these assets because periodic inventories are required to properly reflect plant in service. Consequently, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period which represents an anticipated life during which the asset will render full benefit. For example, in amortization accounting, assets that have a 10-year amortization period will be fully recovered after 10 years of service and taken off the Company's books, but not necessarily removed from service. In contrast, assets that are taken out of service before 10 years remain on the books until the amortization period for that vintage has expired.

18 Q. AMORTIZATION ACCOUNTING IS BEING UTILIZED FOR WHICH PLANT

ACCOUNTS?

A.

A.

Amortization accounting is only appropriate for certain General Plant accounts. These accounts are 394 and 397.2 for electric plant; 394 for gas plant; and 391.1, 391.2, 391.3, 391.31, 391.4, 393, 394 and 397.1 for common plant which represents slightly more than one percent of depreciable plant.

Q.	PLEASE	USE	AN	EXAMPL	Е ТО	ILLU	STR	ATE	HOW	TH	E ANNU	J AL
	DEPREC	IATIO	N A	CCRUAL	RATE	FOR	A	PAR	FICULA	AR (GROUP	OF
	PROPER'	TY IS	PRES	SENTED IN	N YOUF	R DEPR	ŒC	IATIO	ON STU	DY.		

A.

I will use Gas Plant Account 376, Mains, as an example because it is one of the largest depreciable mass accounts and represents approximately 38% of depreciable gas plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1900 through 2015 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1900-2015, 1936-2015 and 1966-2015 experience bands are presented on pages VII-251 through VII-259 of the report. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-251 shows \$83,528 retired at age 0.5 with \$390,873,635 exposed to retirement. Consequently, the retirement ratio is 0.0002 and the surviving ratio is 0.9998. These life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, the 63-R2.5 on page VII-250.

The net salvage analyses for Account 376, Mains, is presented on pages VIII-152 through VIII-154 of the Depreciation Study. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1972 through 2015. This 44-year period experienced \$7,075,111 (\$649,509 - \$7,724,620) in negative net salvage for \$23,656,275 plant retired. The result is negative net salvage of 30 percent (\$7,075,111/\$23,656,275). Based on the overall negative 30 percent net salvage and the most recent five years of negative 29

percent, as well as industry ranges and Company expectations, it was determined that negative 30 percent is the most appropriate estimate.

Q.

A.

My calculation of the annual depreciation related to the original cost at December 31, 2015, of utility plant is presented on pages IX-164 and IX-165. The calculation is based on the 63-R2.5 survivor curve, 30% negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to the table on page VI-11.

WERE THERE ANY SPECIFIC ACCOUNT CHANGES TO DEPRECIATION METHODS PROPOSED IN THE DEPRECIATION STUDY?

Yes. The depreciation calculations for Account 370.0, Meters, and Account 370.1, Metering Equipment, including the anticipated Advanced Metering System (AMS) program of new technology meters. First, the life characteristics of these two subaccounts include historical data through 2015 and projected data through 2021. This combined life analyses properly estimates the full life cycle of the current meters and metering equipment. Second, the application of the full life characteristics of the two accounts are used to determine the annual depreciation accrual rate in the study. This calculation is performed with the segregated book reserve in order to avoid unnecessarily high depreciation expense in the future due to the accelerated replacement or conversion of the meters. According to Mr. Garrett's testimony, the regulatory asset which represents the remaining reserve amount will be established at the end of the program and recovered in a future period. The segregation does not change the past recovery or the total amount to be

1		recovered, however, it does create a more systematic and rational recovery that will not
2		affect future meter assets.
3	Q.	WAS THERE ALSO A NEW ASSET CLASS ADDED TO METERS SINCE THE
4		LAST DEPRECIATION STUDY?
5	A.	Yes. Electric Account 370.20, Meters – AMS, represent the new technology meters which
6		were first placed into service in 2015. These meters are expected to have a shorter average
7		life and maximum life than the standard meters they are replacing. The most consistent
8		average life within the industry for new technology electric meters is 15 years, with a
9		maximum life potential of 25 years. The 15-S2.5 survivor curve best fits this life
10		characteristic.
11	Q.	WHAT IS THE EFFECT OF THESE CHANGES ON DEPRECIATION?
12	A.	The annual depreciation rates and annual depreciation expense for electric meters has
13		increased as of December 31, 2015.
14	Q.	DOES THE INCREASED DEPRECIATION EXPENSE AFFECT ELECTRIC
15		PLANT?
16	A.	Yes, the distribution plant function in Electric Plant was increased slightly, in part, due to
17		the changes in depreciation practices for Accounts 370.0 and 370.1 and the addition of
18		Account 370.20.
19		
20		III. <u>CONCLUSION</u>
21	Q.	IN YOUR OPINION, ARE THE DEPRECIATION RATES SET FORTH IN
22		EXHIBIT LIS-LG&E-1 THE RECOMMENDED RATES FOR THE KENTUCKY

1 PUBLIC SERVICE COMMISSION TO ADOPT IN THIS PROCEEDING FOR

- 2 LG&E?
- 3 A. Yes, these rates appropriately reflect the rates at which the value of LG&E's assets are
- 4 being consumed over their useful lives. These rates are an appropriate basis for setting
- 5 electric and gas rates in this matter and for the Company to use for booking depreciation
- 6 and amortization expense going forward.
- 7 Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?
- 8 A. Yes.

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)	
)	SS:
COUNTY OF CUMBERLAND)	

The undersigned, **John J. Spanos**, being duly sworn, deposes and says he is Senior Vice President, for Gannett Fleming Valuation and Rate Consultants, LLC, that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John J. Spanos

Subscribed and sworn to before me, a Notary Public in and before said County and Commonwealth, this <u>Stl.</u> day of <u>November</u> 2016.

Little (SEAL)

My Commission Expires:

February 20, 2019

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Cheryl Ann Rutter, Notary Public
ast Pennaboro Twp., Cumberland Count
My Commission Expires Feb. 20, 2019

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

		•			· Comment	
I۳	1	no.	N/	21	tor	of:
и	ı	110	IV	a	LOI	VI.

APPLICATION OF COLUMBIA GAS OF)	CASE NO.
KENTUCKY, INC. FOR AN INCREASE IN)	2016-00162
BASE RATES)	

ORDER

Columbia Gas of Kentucky, Inc. ("Columbia") is a wholly owned subsidiary of the Columbia Energy Group.¹ Headquartered in Lexington, Kentucky, it distributes natural gas to about 134,000 customers in 30 counties in central and eastern Kentucky. The most recent adjustment of Columbia's base rates was in December 2013 in Case No. 2013-00167.²

BACKGROUND

On April 27, 2016, Columbia filed a notice of intent to file an application for approval of an increase in its base rates based on a forecasted test period. On May 27, 2016, Columbia filed its application seeking an increase in revenues of \$25,408,373, with a proposed effective date of June 27, 2016.³

By Order dated June 10, 2016, the Commission found that an investigation would be necessary to determine the reasonableness of Columbia's proposed rates and suspended them for six months, from June 27, 2016, up to and including December 26,

¹ Columbia Energy Group is a wholly owned subsidiary of NiSource, Inc., an energy holding company whose subsidiaries provide natural gas, electricity, and other products and services.

² Case No. 2013-00167, Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates for Gas Service (Ky. PSC Dec. 13, 2013).

³ In its response to Commission Staff's Third Request for Information, Item 3, Attachment A, page 25 of 78, Line 39, Columbia reduced the amount of its stated revenue deficiency from \$25.4 million to \$25.24 million.

2016, pursuant to KRS 278.190(2). That Order included a procedural schedule for processing this case which provided for discovery on Columbia's application, intervenor testimony, discovery on intervenor testimony, rebuttal testimony by Columbia, a public hearing, and an opportunity for the parties to file post-hearing briefs.

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG"), Kentucky Industrial Utility Customers, Inc. Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties, Inc. and Lexington-Fayette Urban County Government ("LFUCG"), requested and were granted intervention. Interstate Gas Supply, Inc., Stand Energy Corporation and Direct Energy Business Marketing, LLC, marketers who supply gas to various Columbia customers, requested but were denied intervention in the case. Discovery was conducted on Columbia's application by all of the intervenors and Commission Staff. All intervenors, with the exception of LFUCG, filed testimony stating their positions on the requested increase in rates or on various programs and tariffs proposed by Columbia in conjunction with its proposed rate increase. The Commission conducted a public information and comment meeting in the case on September 14, 2016, in Lexington.

An informal conference requested by Columbia was held on October 18, 2016, to review and discuss the provisions of a unanimous Stipulation and Recommendation ("Stipulation") that had been negotiated among the parties. On October 20, 2016, Columbia filed the Stipulation, described as a mutually satisfactory resolution of all issues in this proceeding, with the Commission. The Stipulation consists of an eight-

⁴ The Stipulation was in draft form at the time of the conference. A memorandum documenting the conference was entered in the record of this proceeding by Commission Staff on October 26, 2016.

page document with two attachments: Attachment A, Columbia's revised tariffs and Attachment B, its proof of revenues. When it was submitted, all parties had executed the Stipulation; however, the signature on behalf of LFUCG was contingent upon ratification by the urban county council.⁵ In support of the Stipulation, Columbia filed the written testimony of its president, Herbert A. Miller, Jr.

A public hearing was held on November 1, 2016. During the hearing, Columbia presented testimony in support of the Stipulation and responded to cross-examination by Commission Staff and questions from the Commission. The parties were afforded the opportunity to cross-examine each other's witnesses, but waived the right to do so. None of the parties proposed filing post-hearing briefs. Columbia responded to post-hearing data requests on November 11, 2016, and December 2, 2016. The matter is now before the Commission for a decision on Columbia's rate application and the proposed Stipulation.

STIPULATION

The Stipulation, attached as Appendix A to this Order, reflects a unanimous resolution of all issues raised in this case. Prior to entering into the Stipulation, Columbia proposed a revenue increase of approximately \$25.241 million, while the AG proposed a \$7.577 million increase.⁶ The Stipulation contains the parties' unanimous recommendation that Columbia's revenues be increased by \$13.408 million. The major provisions of the Stipulation include the following:

⁵ At the formal hearing held on November 1, 2016, LFUCG provided a document representing the ratification.

⁶ Only Columbia and the AG filed proposals addressing Columbia's proposed revenue increase.

- Columbia's base rates will be increased to recover \$13,408,000 more in annual revenues, with the new rates effective for service rendered on and after December 27, 2016.
- The increase will be accomplished with increases to the customer charges for Columbia's various rates schedules and changes to its various volumetric rates. Its residential customer charge will be increased from \$15.00 to \$16.00 per month and the commercial customer charge will be increased from \$37.50 to \$44.69 per month.
- Columbia will withdraw its proposed revisions to the Rider Accelerated
 Main Replacement Program ("AMRP") except for Columbia's AMRP
 rates which will be set to \$0.00. For purposes of its AMRP and
 calculation of Allowance for Funds Used During Construction
 ("AFUDC"), the specified return on equity ("ROE") is 9.8 percent.
- All other tariff changes proposed in Columbia's application shall be adopted.
- Columbia will withdraw the proposed Equal Life Group method of calculating depreciation it submitted as part of its Application and will implement new depreciation rates effective January 1, 2017, calculated using the Average Service Life method at the rates contained in the response to the AG's Initial Request for Information, Item 9.
- Columbia's actual rate case expenses will be deferred, amortized and recovered over 28 months.

- Columbia agrees that for 28 months subsequent to December 15,
 2016, it will not file any Notice of Intent to submit an application for a general adjustment of rates pursuant to 807 KAR 5:001 Section 16
 (2), subject to certain conditions.
- Columbia agrees to withdraw Case No. 2016-00334, Electronic
 Application of Columbia Gas of Kentucky for a Certificate of Public
 Convenience and Necessity ("CPCN"). Columbia further agrees that
 it will not file a CPCN for the purpose of building a training facility
 before 28 months from December 15, 2016.
- Columbia agrees to perform a lead/lag cash working capital study in conjunction with its next application of a general base rate adjustment which shall include any and all non-cash items. The reasonable cost associated with performing the lead/lag study shall be an allowable rate case expense for recovery in its next base rate case.
- Columbia will guarantee an annual Wintercare contribution of \$45,000 from company funds in addition to voluntary customer contributions to Wintercare.
- Columbia agrees to contribute an additional \$25,000 annually of shareholder dollars to its Energy Assistance Program ("EAP") and otherwise continue its existing program to eligible customers at the annual budget of \$675,000, except that in its next annual tariff adjustment, the calculation of the EAP surcharge applicable to Rate

- Schedule GSR will be calculated to produce \$475,000 annually instead of \$500,000 annually.
- The Stipulation provides that, if it receives Commission approval in its entirety, no requests for rehearing and no appeals will be filed.

ANALYSIS AND FINDINGS

Based on a review of the Stipulation, the attachments thereto, and the case record including intervenor testimony, the Commission finds that, with the modifications discussed below, the Stipulation is reasonable and in the public interest. The Stipulation was the product of arm's-length negotiations among knowledgeable, capable parties and, as modified herein, should be approved. Such approval is based solely on the reasonableness of the modified Stipulation in total and does not constitute a precedent on any individual issue.

The Commission finds that the increase proposed in the Stipulation should be reduced from \$13.408 million to \$13.086 million, based upon the issues discussed below. Individual amounts of adjustments are not shown due to the nature of the Stipulation, which contains only the total proposed increase in revenue and no details of how the revenue increase was determined.

Employee Level

Columbia proposed a significant increase in staffing levels in this case, from 118 in January 2013 to 158 for the test year ending December 31, 2017. The AG opposed this adjustment, deeming the 34 percent increase in positions in five years to be excessive and extraordinary, especially since the number of customers that Columbia

serves has declined.⁷ The AG also pointed out that in Case No 2013-00167, the Company projected that the number of positions would grow from 119 to 131 during 2013, but would remain constant at 131 from year-end 2013 through 2016.⁸

The Commission recognizes that Columbia has had additional compliance responsibilities in recent years for the provision of safe, reliable service to its customers and for the protection of its employees and the public. However, given the changes that have been made to specific proposals in the Stipulation, the Commission has determined that the staffing level proposed by Columbia is excessive, and that a staffing level of 144 employees is more reasonable. Therefore, the Commission finds that the revenue requirement approved herein should be reduced for salaries and wages reflecting a reduction in the staffing level of 14 employees.

<u>Capital Structure – Reduction in Equity for Deemed Dividends</u>

Columbia reflected no common dividend in the test year, despite the fact that for the five-year period from 2011 through 2015, it paid \$29 million in dividends, an average \$5.8 million per year. The AG recommended that the Commission assume Columbia will pay a common dividend of \$4.0 million in the test year, the same dividend it assumed in the base period. The AG further recommended that common equity be decreased and that short-term debt be increased by the same amount. The Commission finds that Columbia should have assumed some level of dividend payment

⁷ Direct Testimony of Lane Kollen ("Kollen") Testimony at 11.

⁸ Id.

Response to the AG's Second Request for Information, Item 17 and Staff's Post-Hearing Request, Item 4.

¹⁰ Kollen Testimony at 42.

in the test year. Accordingly, the Commission made an adjustment to reflect a payment of dividends in the test year.

ROE for AMRP and AFUDC

Section 2 of the Settlement Agreement provides that, for the purposes of Columbia's AMRP and its calculation of its AFUDC, the specified ROE is 9.8 percent. For the reasons discussed below, the Commission finds this aspect of the settlement to be unreasonable and that it should be modified.

Testimony regarding ROE was provided by both Columbia and the AG, and was subject to discovery by the Commission Staff and all parties. Columbia proposed an ROE of 11 percent, based on Discounted Cash Flow ("DCF"), Risk Premium, Capital Asset Pricing Model ("CAPM"), and Comparable Earnings analyses. The AG proposed an ROE of 9 percent, using DCF and CAPM analyses. In light of the record developed in this case, as well as the sustained downward trend in gas utility ROE awards as exhibited by the Regulatory Research Associates report introduced at the public hearing in this matter, ¹¹ the Commission finds a 9.8 percent ROE to be an unnecessarily high level to compensate investors for the risk in investing in Columbia's AMRP on an ongoing basis.

While the Commission does not rely on individual returns awarded in other states in determining the appropriate ROE for Kentucky jurisdictional utilities, the Commission finds it reasonable to expect that other state commissions, each with its own attributes, evaluate expert witness testimony which uses the same or similar cost-of-equity models as those presented by the parties participating in this rate proceeding, and that they reach conclusions based on the data provided in the records of individual cases.

¹¹ PSC - Hearing Exhibit 2.

Therefore, the Commission finds it appropriate to consider the RRA reports that were included in the record, along with the parties' testimony, in determining the ROE to now be authorized as reasonable. The RRA reports summarize the conclusions reached by other commissions, as well as this Commission, as to reasonable ROEs. They also contain explanatory reference points as to individual utility and commission circumstances, all of which are available to investors. To the extent that investors' expectations are influenced by such publications, and we believe that they are, we also find it appropriate to use that information to put their expectations in context.

While not relying on the specific ROE awards summarized by the RRA report, the Commission takes notice of the simple fact that the quarterly average ROE awards for gas utilities did not rise above 9.5 percent in the first three quarters of 2016. 12 Therefore, irrespective of the agreement by the parties that a 9.8 percent ROE is appropriate for Columbia's AMRP, the Commission finds no basis for use of that ROE for cost recovery. The controlling statute for the AMRP, KRS 278.509, provides that "... the commission may allow recovery of costs for investment in natural gas pipeline programs which are not recovered in the existing rates of a regulated utility. No recovery shall be allowed unless the costs shall have been deemed by the commission to be fair, just and reasonable." Similarly, base rates that are established to recover the cost of AFUDC must be "fair, just and reasonable" under KRS 278.030(1). The Commission finds the fair, just and reasonable ROE for Columbia's AMRP and its calculation of AFUDC, which reflect current economic conditions and investor expectations, to be 9.5 percent.

¹² 2016 quarterly average ROE awards were 9.48, 9.42, and 9.47 percent in the first, second, and third quarters respectively, with a year-to-date average as of September 30, 2016 of 9.45. *Id.*, page 10.

Rate Adjustment

In setting the rates shown in Appendix B, the Commission maintained the customer charges for each class that were included in the Stipulation. The reduction in Columbia's settlement revenue increase was then allocated to the volumetric rates of those customer classes where revenue increases were proposed in the Stipulation. The reduction to each class's proposed revenue increase was in proportion to the settlement revenue responsibility for that class.

<u>OTHER</u>

NiSource Corporate Services Company ("NCSC") Expenses

Columbia proposed \$17.442 million for the NCSC management fee in its revenue requirement. The AG pointed out that the growth in NCSC charges has been significant and relentless, as on the total charges to Columbia have increased from \$13.449 million in 2012 to \$20.060 million in 2017, a total increase of \$6.557 million, or 49 percent. He further pointed out that the proposed NCSC expense increase represents a compound annual growth rate of 8.3 percent. Because of the Commission's concern regarding the level of these charges, Columbia was questioned at length at the hearing regarding the NCSC charges, and these charges were the subject of a number of post-hearing data requests. The lack of clear responses to the post-hearing data requests necessitated a second set of post-hearing data requests seeking further clarification. The Commission found no further clarity in Columbia's responses to the second post-hearing requests, which were not sufficiently responsive as to the actual basis of the NCSC charges. Given the increasing level of the NCSC charges, the Commission

¹³ Kollen Testimony at 19.

¹⁴ Id.

expects those charges to be reasonable and adequately supported. The Commission reminds Columbia to closely monitor the expenses being charged to it by NCSC, and to ensure that only valid and reasonable costs are approved for payment. In its next rate case, the Commission expects Columbia to clearly identify the support for both the direct and allocated NCSC charges so that the Commission can determine the reasonableness of those charges.

Modified Stipulation

As discussed above, the Commission finds the Stipulation to be reasonable only by reducing the proposed revenue increase from \$13.408 million to \$13.086 million, and by lowering the AMRP and AFUDC ROE to 9.5 percent. Since the modifications affect only Columbia, we will allow seven days from the date of this Order for Columbia to file in writing a statement either accepting or rejecting the Stipulation as modified to reflect a revenue increase of \$13.086 million and the rates set forth in Appendix B, as well as the 9.5 percent ROE for the AMRP and AFUDC. In the event that Columbia rejects the Stipulation as modified to reflect a revenue increase of \$13.086 million and 9.5 percent AMRP and AFUDC ROE, the Commission will then proceed expeditiously to issue an Order addressing the merits of Columbia's rate application without reference to the Stipulation.

IT IS THEREFORE ORDERED that:

- 1. The rates and charges proposed by Columbia are denied.
- 2. The Stipulation, attached hereto as Appendix A, is approved with the modifications previously discussed.

3. The rates and charges in Appendix B, attached hereto, are fair, just and reasonable for Columbia to charge for service rendered on and after December 27, 2016.

4. Within 7 days of the date of this Order, the president of Columbia shall file a written statement with the Commission accepting or rejecting the Stipulation as modified herein.

5. In the event that Columbia accepts the Stipulation as modified herein, within 20 days of the date of this Order, Columbia shall file with the Commission, using the Commission's electronic Tariff Filing System, its revised tariffs as set forth in this Order, reflecting that they were approved pursuant to this Order.

By the Commission

ENTERED

DEC 22 2016

KENTUCKY PUBLIC

ATTEST:

Jalina R. Matheus

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2016-00162 DATED DEC 2 2 2016

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF AN)	
ADJUSTMENT OF GAS RATES OF)	CASE NO. 2016-00162
COLUMBIA GAS OF KENTUCKY,)	
INC.		
	,	

STIPULATION AND RECOMMENDATION

It is the intent and purpose of the parties to this proceeding, namely Columbia Gas of Kentucky, Inc. ("Columbia"); the Attorney General of the Commonwealth of Kentucky; the Lexington-Fayette Urban County Government; the Kentucky Industrial Utility Customers; and the Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties, Inc. to express their agreement on a mutually satisfactory resolution of all of the issues in the instant proceeding.

It is understood by all parties hereto that this Stipulation and Recommendation is not binding upon the Public Service Commission ("Commission"), nor does it represent agreement on any specific theory supporting the appropriateness of any recommended adjustments to Columbia's rates. The parties have expended considerable efforts to reach the agreements that form the basis of this Stipulation and Recommendation. All of the parties, representing

diverse interests and divergent viewpoints, agree that this Stipulation and Recommendation, viewed in its entirety, constitutes a reasonable resolution of all issues in this proceeding.

Additionally, the adoption of this Stipulation and Recommendation will eliminate the need for the Commission and the parties to expend significant resources in litigation of this proceeding, and eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final order herein. It is the position of the parties hereto that this Stipulation and Recommendation is supported by sufficient and adequate data and information, and is entitled to serious consideration by the Commission. Based upon the parties' participation in settlement conferences and the materials on file with the Commission, and upon the belief that these materials adequately support this Stipulation and Recommendation, the parties hereby stipulate and recommend the following:

1. Columbia should be authorized to implement an incremental revenue increase of \$13,408,000 effective with service rendered on and after December 27, 2016. The increased revenue requirement shall be reflected in increases to the customer charges associated with Columbia's various rate schedules as well as in increases to Columbia's volumetric rates. For residential customers Columbia's customer charge will be \$16 per month, and the volumetric rate will be \$3.5927 per Mcf. For commercial customers Columbia's customer

charge will be \$44.69 per month and the volumetric rate will be \$3.0332 per Mcf for the first block, \$2.3446 per Mcf for the second block, \$2.2294 per Mcf for the third block and \$2.0294 per Mcf for the fourth block. For DS customers, Columbia will modify the usage for the second rate block and add a third block. The first rate block will remain the first 30,000 Mcf, the second rate block will be the next 70,000 Mcf and the final block will be over 100,000 Mcf per month. The customer charge will be \$2,007.00 and the volumetric rates will be \$0.6321 per Mcf for the first block, \$0.3773 per Mcf for the second block and \$0.3283 per Mcf for the third block. The pro-forma tariff sheets attached hereto as Attachment A are recommended as reflecting the new rates to be effective as of the aforementioned date. These pro-forma tariff sheets reflect rates that are designed to allow Columbia to recover the increased revenue from its various classes of customers, in the manner agreed to by the parties to this Stipulation and Recommendation.

- Columbia will withdraw its proposed revisions to Rider AMRP except for Columbia's Accelerated Main Replacement Program ("AMRP") rates which will be set to \$0.00. For purposes of Columbia's AMRP and calculation of AFUDC, the specified ROE is 9.8%.
- 3. All other tariff changes proposed in Columbia's Application shall be adopted.

- 4. The aforementioned changes are reflected in the proposed tariff sheets attached to this Stipulation and Recommendation as Attachment A.
- Columbia withdraws the proposed Equal Life Group method of calculating depreciation it submitted as part of its Application in this proceeding. Columbia will implement new depreciation rates effective January 1, 2017 calculated using the Average Service Life method at the rates contained in its response to the Attorney General's Initial Request for Information to Columbia Gas, Item 9.
- Columbia's actual rate case expenses will be deferred, amortized and recovered over 28 months.
- 7. Columbia agrees that for 28 months subsequent to December 15, 2016, it will not file any Notice of Intent to submit an application for a general adjustment of rates as required by 807 KAR 5:001 Section 16 (2). This agreement is understood to mean that Columbia will not file an application for a general base rate adjustment prior to May 15, 2019 except to seek approval from the Commission for emergency rate relief to avoid material impairment or damage to Columbia's credit or operations; or, to seek rate relief for costs or programs required of Columbia due to changes in state, federal or local law, order or regulation which may occur during the 28 months subsequent to December 15, 2016.

- 8. Columbia agrees to withdraw Case No. 2016-00334, Electronic Application of Columbia Gas of Kentucky, Inc. for a Certificate of Public Convenience and Necessity. Columbia further agrees that it will not file a Certificate of Public Convenience and Necessity as required by Commission's Order of September 9, 2016 in Case No. 2016-00181 for the purpose of building a training facility, before 28 months from December 15, 2016; that is, not prior to April 15, 2019.
- 9. Columbia agrees to perform a lead/lag cash working capital study in conjunction with its next application for a general base rate adjustment which shall exclude any and all non-cash items. The reasonable cost associated with performing the lead/lag study shall be an allowable rate case expense for recovery in its next base rate case.
- Columbia will guarantee an annual Wintercare contribution of \$45,000 from company funds in addition to voluntary customer contributions to Wintercare.
- 11. Columbia agrees to contribute an additional \$25,000 annually of shareholder dollars to its Energy Assistance Program and otherwise continue its existing program to eligible customers at the annual budget of \$675,000 except that in its next annual tariff adjustment, the calculation of

- the EAP surcharge applicable to Rate Schedule GSR will be calculated to produce \$475,000 annually instead of \$500,000 annually.
- 12. Attached to this Stipulation and Recommendation as Attachment B are proofof-revenue sheets, showing that the rates set forth in Attachment A will
 generate the proposed revenue increase to which the parties have agreed in
 Paragraph number 1 hereof.
- 13. Unless otherwise specifically stated in this Stipulation, entering into this Stipulation shall not be deemed in any respect to constitute an admission by any of the Parties that any computation, formula, allegation, assertion or contention made by any other party in these proceedings is true or valid.
- 14. The Stipulation shall inure to the benefit of and be binding upon the Parties and their successors and assigns.
- 15. This Stipulation and Recommendation is submitted for purposes of this case only and is not deemed binding upon the parties hereto in any other proceeding unless otherwise specified herein, nor is it to be offered or relied upon in any other proceeding involving Columbia or any other utility.
- 16. Each party hereto waives all cross-examination of the witnesses of the other parties hereto except in support of the Stipulation and Recommendation, or unless the Commission disapproves this Stipulation and Recommendation, and each party further stipulates and recommends that the Notice of Intent,

Notice, Application, testimony, pleadings and responses to data requests filed in this proceeding be admitted into the record. The parties also agree that if the Commission issues an order adopting this Stipulation and Recommendation in its entirety no party shall file a post-hearing brief.

- 17. If the Commission issues an order adopting this Stipulation and Recommendation in its entirety, each of the parties hereto agrees that it shall file neither an application for rehearing with the Commission, nor an appeal to the Franklin County Circuit Court with respect to such order.
- 18. In the event the Commission should reject or modify all or any portion of this Stipulation and Recommendation, or impose additional conditions or requirements upon the signatory parties, each signatory party shall have the right, within twenty (20) days of the Commission's order, to either file an application for rehearing or terminate and withdraw from the Stipulation and Recommendation by filing a notice with the Commission. Upon rehearing, any signatory party shall have the right within fifteen (15) days of the Commission's order on rehearing to file a notice of termination or withdrawal from this Stipulation and Recommendation. In such event the terms of this Stipulation and Recommendation shall not be deemed binding upon the parties hereto, nor shall such Stipulation and

- Recommendation be admitted into evidence, referred to, or relied upon in any manner by any party hereto.
- 19. This Stipulation and Recommendation and its attachments constitute the complete agreement and understanding among the Parties and any and all oral statements, representations or agreements made prior hereto or contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Stipulation and Recommendation.
- 20. The Parties agree for the purpose of settlement that the terms herein are a fair, just and reasonable resolution of the issues and are a product of compromise and negotiation amongst the Parties.

AGREED, this 20th day of October, 2016

Hon. Brooke E. Wancheck

On behalf of Columbia Gas of Kentucky, Inc.

A CC

Hon. Kent Chandler

On behalf of the Attorney General of the Commonwealth of Kentucky

Hon. David J. Barberie

On behalf of the Lexington-Fayette Urban County Government

Subject to ratification by
the Whan Country Council

about & Boehn

Hon. David F. Boehm

On behalf of the Kentucky Industrial Utility Customer

Hon. Iris Skidmore

On behalf of the Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties, Inc.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:		
APPLICATION OF DELTA NATURAL)	
GAS COMPANY, INC. FOR AN)	CASE NO. 2010-00116
ADJUSTMENT OF RATES)	

DIRECT TESTIMONY OF WILLIAM STEVEN SEELYE

PRINCIPAL & SENIOR CONSULTANT THE PRIME GROUP, LLC

AFFIDAVIT

The affiant, William Steven Seelye, being duly sworn, deposes and states that the prepared testimony attached hereto and made a part hereof, constitutes the prepared direct testimony of this affiant in Case No. 2010-00116 in the Matter of: Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates and that if asked the questions propounded therein, this affiant would make the answers set forth in the attached prepared direct testimony.

Affiant further states that he will be present and available for cross-examination and for such additional examination as may be appropriate at the hearing in Case No. 2010-00116 scheduled by the Commission, at which time affiant-will further reaffirm the attached prepared testimony as his direct testimony in such case.

WILLIAM STEVEN SEELYE

STATE OF KENTUCKY

COUNTY OF CLARK oldham)

Subscribed and sworn to before me by William Steven Seelye, this the 21St day of April , 2010.

My Commission Expires: 4-25-2013

Notary Public, State at Large, Kentucky

- 1 Q. Please state your name and business address.
- 2 A. My name is William Steven Seelye and my business address is The Prime Group, LLC, 6001
- 3 Claymont Village Drive, Suite 8, Crestwood, Kentucky, 40014.
- 4 Q. By whom are you employed?
- 5 A. I am a senior consultant and principal for The Prime Group, LLC, a firm located in
- 6 Crestwood, Kentucky, providing consulting and educational services in the areas of utility
- 7 regulatory analysis, revenue requirement support, cost of service, rate design and economic
- 8 analysis.
- 9 Q. What is the purpose of your testimony in this proceeding?
- 10 A. The purpose of my testimony is to sponsor Delta Natural Gas Company Inc.'s ("Delta's")
- proposed rates for natural gas service; to describe the proposed allocation of the revenue
- increase; to sponsor the fully allocated class cost of service study based on Delta's embedded
- costs for the 12 months ended December 31, 2009; to sponsor the temperature normalization
- adjustment; and to sponsor Delta's depreciation study supporting the proposed depreciation
- rates and the pro-forma adjustment to depreciation expenses.
- 16 Q. Please summarize your testimony.
- 17 A. Delta is proposing to increase base rate revenues by \$5,315,428. The Company has a large
- residential customer base, and, as a result, Delta is proposing to allocate \$3,541,111 or 67%
- of the increase to the residential class. The Company is proposing to collect these revenues
- 20 in large part by increasing the residential customer charge. By recovering the residential
- 21 increase largely through the customer charge, Delta is proposing to continue the movement
- 22 undertaken in previous rate cases in the direction of a "Straight Fixed Variable" rate design,
- which is a methodology that has been adopted in other regulatory jurisdictions. More

specifically, Delta is proposing to recover through the monthly customer charge most of the customer-related costs identified in the cost of service study. The Prime Group prepared a fully allocated, embedded cost of service study for Delta's test-year operations using a cost of service methodology that has been accepted by the Commission in previous rate cases. The purpose of the cost of service study is to determine the contribution that each customer class is making towards Delta's overall rate of return. Rates of return are computed for each rate class. Delta was guided by the embedded cost of service study in allocating the proposed revenue increase to the classes of service. Delta is also proposing to make a temperature normalization adjustment to sales and transportation volumes not covered by the Company's Weather Normalization Adjustment ("WNA") clause. In addition, Delta is proposing to change a number of its depreciation rates based on the depreciation study included as an exhibit to my testimony.

Q. How is your testimony organized?

A. My testimony is divided into the following sections: (I) Qualifications, (II) Rate Design and
the Allocation of the Increase, (III) Gas Cost of Service Study, (IV) Temperature
Normalization Adjustment, (V) Revenue Adjustment to Reflect Year-End Customers, and
(VI) Depreciation Study and Depreciation Expense Adjustment.

18 Q. Are you sponsoring any Exhibits to your testimony?

19 A. Yes. The exhibits that accompany my testimony in this proceeding are listed below.

20	Seelye Exhibit 1	Summary of Qualifications
21	Seelye Exhibit 2	Reconstruction of Billing Determinants
22	Seelye Exhibit 3	Summary of Proposed Increase
23	Seelve Exhibit 4	Calculated Billings at Proposed Rates

1	Seelye Exhibit 5	Cost of Service Study: Functional Assignment & Classification
2	Seelye Exhibit 6	Class Cost of Service Study: Allocation of Costs by Rate Class
3	Seelye Exhibit 7	Class Cost of Service Study: Storage Allocation Factor
4	Seelye Exhibit 8	Class Cost of Service Study: Zero Intercept Analysis
5	Seelye Exhibit 9	Temperature Normalization Adjustment
6	Seelye Exhibit 10	Year-End Customer Adjustment - Not Proposed
7	Seelye Exhibit 11	Depreciation Study

I.

A.

QUALIFICATIONS

10 Q. Please describe your educational background and prior work experience.

I received a Bachelor of Science degree in Mathematics from the University of Louisville in 1979. I have also completed 54 hours of graduate level course work in Industrial Engineering and Physics. From May 1979 until July 1996, I was employed by Louisville Gas and Electric Company ("LG&E"). From May 1979 until December, 1990, I held various positions within the Rate Department of LG&E. In December 1990, I became Manager of Rates and Regulatory Analysis. In May 1994, I was given additional responsibilities in the marketing area and was promoted to Manager of Market Management and Rates. I left LG&E in July 1996 to form The Prime Group, LLC, with two other former employees of LG&E.

Since leaving LG&E, I have performed cost of service and rate studies for over 150 investor-owned utilities, rural electric cooperatives, and municipal utilities. I have also developed or modified fuel and purchased power adjustment mechanisms for numerous electric and gas utilities, including integrated investor-owned utilities, integrated municipal

- utilities and distribution cooperatives. A more detailed description of my qualifications is included in Seelye Exhibit 1.
- 3 Q. Have you ever testified before any state or federal regulatory commissions?
- 4 A. Yes, on many occasions. I have testified in over 50 regulatory proceedings in 11 different jurisdictions. A listing of my testimony is included in Seelye Exhibit 1.

A.

II. RATE DESIGN AND THE ALLOCATION OF THE INCREASE

- Q. Is Delta proposing to change the relationship between the customer charge and
 volumetric charge for the residential rate class?
 - Yes. The Company is proposing a significant increase in its customer charge. Delta has a traditional residential base rate design consisting of a customer charge and a volumetric charge. This type of rate design is referred to as a "two-part" rate. Under this design, a portion of Delta's non-gas costs are collected through a monthly fixed customer charge, which does not vary with usage, and a portion of the costs are collected via a volumetric charge applied to each unit of natural gas used. Delta's residential customer charge is currently \$15.30 per month (not including the \$0.20 per month collected under Delta's Energy Assistance Program Tariff Rider) and the non-gas volumetric charge is \$0.41580 per Ccf (or \$4.1580 per Mcf). Gas costs are recovered through the Gas Cost Recovery Rate (GCR), which is a volumetric charge.

Some regulatory jurisdictions have shifted from a traditional two-part rate design to a design in which *all* non-gas costs are recovered through a fixed monthly customer charge. This type of rate structure is referred to as a "Straight Fixed Variable" rate design. This rate design evolved from pipeline rate designs that recovered all fixed costs through a fixed

charge and all variable costs through a volumetric charge. Because non-gas costs are *fixed* for a gas distributor, and do not vary with the amount of gas purchased by its customers, all non-gas costs are recovered through a *fixed* monthly customer charge under a Straight Fixed Variable rate structure.

Q. Please describe the Straight Fixed Variable rate design further.

A.

Under a Straight Fixed Variable rate design, a gas utility eliminates in its entirety the distribution cost component of the volumetric rate, and increases the fixed monthly customer charge accordingly. By recovering its fixed distribution costs fully through a fixed monthly charge, a utility severs the relationship between its natural gas delivery revenue (revenue less the cost of gas) and its sales of natural gas. This insulates a utility's income from changes in sales per customer.

Utilities implement a Straight Fixed Variable rate design for several reasons. Some of the more prevalent reasons to adopt Straight Fixed Variable rates are:

- A Straight Fixed Variable rate design is a simple form of decoupling, which many environmental and conservation advocates consider to be a cornerstone to the implementation of comprehensive energy conservation programs.
- A Straight Fixed Variable rate design removes all incentives for the Company to encourage customers to use more natural gas.
- A Straight Fixed Variable rate design reflects the cost of providing natural gas delivery service and sends the appropriate price signal to customers.
- Because low-income customers typically use more gas than the average customer, a
 Straight Fixed Variable rate design will remove the subsidy that low-income customers
 are providing to other residential customers.

1		Through the implementation of a Straight Fixed Variable rate design, the volatility of
2		customers' bills will be reduced.
3		A Straight Fixed Variable rate design is easy for customers to understand.
4		Adopting a Straight Fixed Variable rate design typically enhance the viability of gas
5		distribution operations as a business.
6		Straight Fixed Variable rate designs have been implemented in a number of progressive
7		regulatory jurisdictions and are being considered in many others.
8		A Straight Fixed Variable rate design is consistent with emerging national energy
9		policy.
10	Q.	Has a Straight Fixed Variable rate design been adopted in other jurisdictions?
11	A.	Yes. The Missouri Public Service Commission ("Missouri Commission") adopted a Straight
12		Fixed Variable rate design for Atmos Energy Corporation (Case No. GR-2006-0387, Order
13		dated February 22, 2007) and Missouri Gas Energy, a division of Southern Union Company
14		(Case No. GR-2006-0422, Order dated March 22, 2007). The Straight Fixed Variable rate
15		design was proposed by the Missouri Commission Staff in the Atmos proceeding. A Straight
16		Fixed Variable rate design is also used by the Atlanta Gas Light Company in Georgia
17		In the Atmos Proceeding, the Missouri Commission accepted the Staff's
18		recommendation to eliminate the traditional two-part rate structure and to adopt instead a
19		Straight Fixed Variable design because collecting fixed costs through a volumetric charge:
20		a) Creates unnecessary volatility in customer bills by
21		collecting too much cost in the winter months;
22		b) Sends incorrect price signals to residential customers:

1	c) Forces residential customers whose usage is greater than
2	the average to pay more than the cost of service, while
3	allowing smaller customers to pay less than the cost of
4	service;
5	d) Provides no incentive for the utilities to promote
6	conservation.
7	(Atmos Energy Corporation, Case No. GR-2006-0387, Order dated February 22, 2007, pp.
8	19-20.)
9	More recently, the Public Utilities Commission of Ohio ("Ohio Commission")
10	authorized Vectren Energy Delivery of Ohio to transition to a Straight Fixed Variable rate
11	design over a 12-month period. (Vectren Energy Delivery of Ohio, Case No. 07-1080-GA-AIR;
12	Case No. 07-1081-GA-ALT; Case No. 08-632-GA-AAM, Order dated January 7, 2009.) In that
13	proceeding the Ohio Commission Staff argued that Straight Fixed Variable rates are
14	"reasonable, understandable, and send the proper price signals to customers." (Id., at 22.) The
15	Ohio Commission found that a Straight Fixed Variable rate design "promotes the regulatory
16	principles of providing a more equitable allocation among customers, regardless of usage. It
17	fairly apportions the fixed costs of service among all customers so that everyone pays their fair
18	share." (Id., at 30.) The Ohio Commission also concluded that a Straight Fixed Variable rate
19	design sends a better price signal, stating as follows:
20 21 22	[T]he Commission believes that a levelized rate design sends better price signals to consumers. The possible response of consumers to an increase in the customer charge, i.e., dropping gas service entirely and switching to a

different fuel, is much less likely to occur than consumers changing their level of gas usage in response to a change in the volumetric rates. When a

utility is entitled to recover costs in excess of its costs for providing the

next increment of gas service, a more economically efficient rate design is

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one that recovers these additional costs largely through a change that has little impact on consumer behavior.

Customers will not be misled into believing that reductions in consumption will allow them to avoid the fixed costs of the distribution system, as feared by Staff. However, the commodity costs comprise 75 to 80 percent of the total bill. (TR. III at 68). Therefore, we believe that the gas usage will still have the biggest influence on the price signals received by customers when making gas consumption decisions and that customers will still receive the appropriate benefits of any conservation efforts. (*Id.*, at 25-26.)

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In Kentucky, Straight Fixed Variable rates have also been proposed by Duke Energy Kentucky, Inc. (Case No. 2009-00202) and by Columbia Gas of Kentucky, Inc. (Case No. 2009-00141). While both of those cases settled without Straight Fixed Variable rate designs, the parties agreed to, and the Commission approved, significant increases in their residential customer charges. Additionally, LG&E recently proposed Straight Fixed Variable rates in Case No. 2009-00549, a proceeding that is open before the Commission at this time.

- Q. Are there any reasons for gas utilities not to adopt Straight Fixed Variable rate design?
- 20 A. Yes. While the reasons listed above for adopting Straight Fixed Variable rates are sound,
 21 utilities may elect not to adopt Straight Fixed Variable rates in order to avoid rate shock.
 22 Instead, they may adopt an incremental approach over several rate cases with movement
 23 in the direction of increasing fixed charges to appropriately reflect fixed costs. This is
 24 consistent with accepted ratemaking practices and with the principle of gradualism.
 - Q. Is Delta proposing a Straight Fixed Variable rate design?
- A. No. Although Delta is not recommending a Straight Fixed Variable rate design, the
 Company is proposing to continue the significant movement in that direction undertaken in
 its last rate case. Specifically, Delta is proposing to set the volumetric charge close to the

current level and recover nearly all of the residential revenue increase in the customer charge.

Under a Straight Fixed Variable design the non-gas volumetric charge would be eliminated and all of Delta's non-gas costs would be recovered through the monthly customer charge.

Although Delta's proposed residential rate will fall far short of recovering all fixed costs in the customer charge, it will come reasonably close to recovering the customer-related costs identified in the fully allocated class cost of service study submitted in this proceeding. In the cost of service study, Delta's non-gas fixed costs are classified as either customer-related or demand-related. With a Straight Fixed Variable rate design adopted in Missouri, Georgia, and Ohio, all of these costs – both customer-related and demand-related fixed costs – would be recovered through the monthly customer charge. In this proceeding Delta is proposing to recover most – but not all – of its customer-related costs through the monthly customer charge. Delta's customer-related cost for residential customers is currently \$27.72 per month. However, the Company is only charging \$15.30 per month, or 55% of the customer-related costs that were identified in the cost of service study. In this proceeding, Delta is proposing to increase the monthly customer charge to \$24.00, which represents 87% of the customer-related costs identified in the cost of service study. Although this increase in the customer charge is less than it would be with Straight Fixed Variable rate design, Delta's proposal is a significant shift in that direction.

- Q. What would the proposed customer charge be if a Straight Fixed Variable rate design were adopted?
- 21 A. Under a Straight Fixed Variable rate design, the fixed monthly customer charge for the residential class would be \$43.77.

Q. What are the benefits of recovering most of the customer-related costs through the customer charge?

A.

Recovering more of Delta's customer-related costs through the fixed monthly customer charge will better reflect the actual cost of service through rates and will thus send a more accurate price signal to customers. In addition, Delta's proposed customer charge will reduce the volatility in customer bills by lowering the amount charged during the winter.

The Company's proposal will also eliminate rate subsidies within the residential customer class. Currently, customers with lower than average usage are being subsidized by customers with higher than average usage. Based on data that I have seen from other gas utilities, including a gas utility in the region, low income customers – contrary to a common misconception – tend to purchase more gas than the average customer. One likely reason for this is that low income customers often have poorly insulated homes, which causes their gas usage to be higher than the average even though their homes may have less square footage than the average. When customer-related costs are recovered through the volumetric charge, low income customers who use more than the average will subsidize customers who use less natural gas than the average.

Yet another advantage of Delta's proposal – and one which should be an important consideration for the Company – is that a higher customer charge should help mitigate the erosion in margins that Delta has been experiencing for a number of years. Delta's average Mcf per customer has been trending down for many years now. Since 2000, the average residential usage has gone from 75 Mcf per customer in 2002 to 55 Mcf in 2009. This decline in average consumption will continue to exacerbate the earnings erosion as long as customer-related costs are included in the volumetric charge.

Because a large percentage of Delta's fixed costs have been recovered through a volumetric charge, the decline in customer usage has the effect of reducing the recovery of fixed costs and eroding the Company's earnings. Delta has not had an opportunity to earn the rate of return on equity authorized by the Commission in Delta's last three rate cases, and decreasing sales volumes have contributed heavily to this trend. This is discussed in detail in the testimony of Dr. Blake. Recovering more fixed costs through the customer charge should help mitigate this erosion in earnings.

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Q. Will the proposed rate design better position the Company to encourage conservation on the part of customers?

Yes. Recovering a significant portion of fixed costs through a volumetric charge works to penalize the Company when customers conserve. Essentially all of Delta's non-gas costs are fixed and do not vary as customer volumes go up or down. With a significant portion of fixed costs recovered through volumetric charges, the Company's financial results are adversely affected from consumer conservation. Because Delta is not proposing to eliminate the volumetric charge for non-gas costs through the adoption a Straight Fixed Variable rate design, the Company's non-gas related revenues will continue to decline as a result of conservation, but not nearly as much as they would if Delta had proposed an increase in the volumetric charge. Thus increasing the customer charge will help maintain Delta's financial integrity while encouraging customers to use less natural gas.

Q. Have you prepared an exhibit reconstructing Delta's test-year billing units?

21 A. Yes. In order to develop Delta's proposed rates it was necessary to reconstruct test-year billing
22 units. The reconstruction of Delta's billing determinants is shown on Seelye Exhibit 2.

- Q. After considering all of the required adjustments, what is the proposed increase in revenues and how is the increase apportioned to the individual customer classes?
- A. Delta is proposing to increase its annual revenues by \$5,315,428. As shown on Seelye Exhibit

 3, this amount would result in an increase of 11.54% in total operating revenue.

Delta is not proposing to increase the collection charge, reconnection charge, or bad check charge, so there is no proposed increase in miscellaneous revenue.

The proposed rates apportion the revenue increase among the customer classes as follows:

TABLE 1 Proposed Gas Increase			
Customer Class	Proposed Increase	Percentage Increase	
Residential	\$ 3,538,987	15.85%	
Small Non-Residential	593,145	9.17%	
Large Non-Residential	668,559	7.27%	
Unmetered Gas Lights	448	4.31%	
On-System Transportation	261,259	6.31%	
Off-System Transportation	253,030	7.41%	
Total Sales and Transportation	\$ 5,315,428	11.54%	

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As shown on Seelye Exhibit 4, the effects on individual class revenues were determined by applying both the current and proposed charges to the adjusted billing determinants for each customer class.

Q. What was the basic underlying information that supported the proposed allocation among rate classes?

The cost of service study provided information measuring the extent to which the revenues generated by each customer class contribute to the overall return earned by the Company. The cost of service study indicates that the individual class rates of return ranged between 3.44%

and 15.08% as compared to an overall adjusted actual return on rate base of 4.79%, with residential being the lowest (excluding special contracts). This indicates a need to increase the revenues collected from the residential class more than the other classes. The rates of return for all of the rate classes except the special contracts were measurably higher than for residential. The cost of service study also showed that the earned return for the interruptible rates were extremely high when compared to the other classes of service. This is also true, albeit to a lesser degree, for the off-system transportation rate.

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Because the rate of return for the residential class is significantly below Delta's proposed overall rate of return of 8.66%, Delta is proposing to increase the residential rate by a larger percentage than the other classes in order to bring the residential rate of return more in line with the overall rate of return. The proposed rate of return for the residential rate is 8.19%.

The special contracts are served under fixed-price arrangements; therefore, none of the revenue increase will be allocated to these customers.

Delta does not propose to increase the rates for the interruptible rate class because of the high rates of return for this rate class. With a rate of return of 15.08% for interruptible service, a rate increase for this rate class cannot be justified.

Delta is proposing increases for the small and large non-residential rate classes that will result in rates of return of 9.21% and 10.64%, respectively, based on the results of the cost of service study. The Company is also proposing an increase in the off-system transportation rate that will produce a rate of return of approximately 7.26%.

Is it important to consider competitive issues when designing rates?

Yes. It is extremely important to take into consideration the competitive pressures facing the utility when designing rates. Utility customers have many more options than they did in the

past, and they are also becoming more sophisticated in how to utilize the various competitive products that are now available to them. However, the natural gas industry has always experienced keen competition from alternative fuels. When customers have alternatives (and the ability to substitute fuel oil for natural gas is only one example), gas distribution companies must be able to ensure that the revenues contributed by these customers are retained as long as they make some contribution to the utility's fixed costs. Industrial and commercial customers generally have more options than residential customers. Therefore, it is important not to charge rates to commercial and industrial customers that are not competitive and/or exceed the cost of providing service. Otherwise, large commercial and industrial customers will leave the system, forcing residential and small commercial customers, who have fewer options, to pay for fixed costs that are left stranded by the departing customers. Unlike volumetric costs, such as the cost of the gas commodity that a distribution company buys for its customers, a utility's fixed costs generally do not disappear if it sells less gas, but instead are spread over a lower volume of gas, thus causing the utility's rates to increase. Therefore, if a utility loses several large highload factor industrial customers, then the utility's fixed costs do not suddenly disappear but are shifted to the remaining customers in future rate proceedings. On the other hand, if the utility can attract high-load factor customers or, even better, customers with off-peak usage, then the utility's fixed costs can be spread over a larger volume of gas, thus causing gas rates to go down, benefiting all customers.

Q. Are the competitive issues outlined above especially relevant to Delta?

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Yes, for two reasons. First, Delta serves a customer base that is both rural and residential. This means that overall consumption and customer count are both lower than they would otherwise be if the utility served a more urban or industrial service territory -- which means costs are

spread across comparatively fewer users with less consumption. Second, the electric provider in Delta's service territory is Kentucky Utilities Company, which has electric rates that are among the lowest in the region. This affords customers a viable, attractive, economic option for meeting their energy needs with electricity rather than natural gas. These specific circumstances for Delta only serve to augment the reasons why it is important for Delta to keep the rates as competitive as possible while considering the cost of serving these customers.

7 Q. What were the ratemaking objectives in developing the proposed gas rates?

A.

A. As explained earlier, the broad aim in rate design is to develop rates that more closely reflect the cost of providing service. Therefore, one of the key objectives was to bring the unit charges more in line with the unit costs derived from the cost of service study. Thus, the proposed rates move the charges toward the unit costs indicated by the cost of service study.

Q. Have you analyzed the customer-related costs for Delta's rate classes?

Yes. Page 20 of Seelye Exhibit 6 shows the unit customer-related costs for each rate class based on the results of the cost of service study. The customer-related cost for each rate class was derived by calculating the customer-related cost of service, or "revenue requirement," and dividing this amount by the number of customers. Delta's cost of service includes (1) return on investment, (2) income taxes, (3) operation and maintenance expenses, (4) depreciation expenses, and (5) other taxes. The proposed overall rate of return of 8.66% was used to calculate the unit cost.

Q. What are the proposed unit charges for the residential rate class?

A. Delta is proposing a customer charge of \$24.00 per customer per month and a flat commodity charge of \$0.43344 for all Ccf. The current rate consists of a customer charge of \$15.30 and commodity charge of \$0.41580 per Ccf.

- 1 Q. What are the proposed unit charges for the small non-residential rate class?
- 2 A. Delta is proposing a customer charge of \$35.00 per customer per month and a flat commodity
- 3 charge of \$0.43344 for all Ccf. The current rate consists of a customer charge of \$25.00 and
- 4 commodity charge of \$0.41580 per Ccf.
- 5 Q. What are the proposed unit charges for the large non-residential rate class?
- 6 A. Delta is proposing a customer charge of \$150.00 per customer per month and a commodity
- 7 charge of \$0.43344 for the first 2,000 Ccf, \$0.26855 for the next 8,000 Ccf, \$0.18894 for the
- 8 next 40,000 Ccf, \$0.14894 for the next 50,000 Ccf, and \$0.12984 for all usage over 100,000
- 9 Ccf. The first block was set at the same level as the first block in the small non-residential rate,
- and the current charge differentials between the blocks were maintained.
- 11 Q. Is Delta proposing to modify the interruptible schedules?
- 12 A. No. As indicated earlier, rate increases for these services cannot be justified in light of the high
- 13 class rates of return.
- 14 Q. Is Delta proposing to modify the unmetered gas lights schedules?
- 15 A. Yes. Relatively small increases are proposed for the residential, commercial, and small
- 16 commercial unmetered lights schedules, which collectively amount to a 4.3% increase over
- 17 current rates.
- 18 Q. Is Delta proposing to modify the on-system transportation rates?
- 19 A. Yes. Delta's on-system transportation rates are net margin rates, wherein the on-system
- transportation rates have the same distribution delivery charges as the corresponding sales rates;
- 21 therefore, the Company is proposing the same increase in net margins for its on-system
- transportation rates as for the underlying sales rates. Collectively, this amounts to a 6.3%
- 23 increase over current rates.

- 1 Q. Is Delta proposing to increase the off-system transportation rate?
- 2 A. Yes. Delta is proposing to increase the off-system transportation rate from \$0.27 to \$0.29 per
- 3 Mcf of gas transported, or in the case of measurement based on heating value, \$0.29 per
- 4 dekatherm.

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6 III. GAS COST OF SERVICE STUDY

- 7 Q. Did you prepare a cost of service study for Delta's natural gas operations based on
- 8 financial and operating results for the 12 months ended December 31, 2009?
- 9 Yes. I supervised and participated in the preparation of a fully allocated, embedded cost of A. 10 service study for natural gas service based on Delta's accounting costs per books, adjusted 11 for known and measurable changes to test year operating results, for the 12 months ended 12 December 31, 2009. The Commission has accepted in other rate case proceedings the 13 methodology used in Delta's cost of service study. The objective in performing the cost of 14 service study is to determine the rate of return on rate base that Delta is earning from each 15 customer class, which provides an indication as to whether Delta's service rates reflect the 16 cost of providing service to each customer class.
- 17 Q. Have you ever prepared an embedded cost of service study?
- Yes, on many occasions. While employed at LG&E, I prepared numerous gas and electric cost of service studies, many of which were filed in rate cases before the Commission.

 Since leaving LG&E, I have prepared or supervised the preparation of well over 150 embedded cost of service studies for electric, gas and water utilities. In Kentucky, I supervised and participated in the preparation of gas cost of service studies for Delta (Case

- Nos. 99-176, 2004-00067, and 2007-00089) and LG&E (Case Nos. 2000-080, 2003-00433,
- 2 2008-00252 and 2009-00549).
- 3 Q. Was the same methodology used in the cost of service study submitted in this
- 4 proceeding that was used in the cost of service study filed by Delta in Case No. 2007-
- 5 00089?
- 6 A. Yes. This is also the same methodology utilized by Delta in Case No. 2004-00067 and
- 7 accepted by the Commission in that same proceeding in its Order dated November 10,
- 8 2004.
- 9 Q. Did you develop the model used to perform Delta's cost of service study?
- 10 A. Yes. I developed the spreadsheet model used to perform the cost of service study being
- submitted in this proceeding.
- 12 Q. What procedure was used in performing the cost of service study?
- 13 A. The cost of service study was prepared using the following basic procedure: (1) costs were
- functionally assigned (functionalized) to the major functional groups, (2) costs were then
- 15 classified as commodity-related, demand-related, or customer-related; and then (3) costs
- were allocated to Delta's rate classes. This is a standard approach utilized in the preparation
- of embedded cost of service studies for gas utilities.
- 18 Q. What is the purpose of functionally assigning costs?
- 19 A. Functional assignment serves the following purposes: (1) it groups associated costs together
- 20 to facilitate allocation on the basis of cost responsibility; (2) it provides a rational mechanism
- 21 for grouping costs that do not appear to be related to major service functions; and (3) it
- 22 provides a mechanism for separating assignable costs from joint costs, which must be
- 23 allocated.

- O. What functional groups were used in the natural gas cost of service study?
- 2 A. The following standard functional groups were identified in the cost of service study: (1)
- 3 Storage, (2) Transmission, (3) Distribution Commodity, (4) Distribution Structures and
- 4 Equipment, (5) Distribution Mains, (6) Services, (7) Meters, (8) Customer Accounts, and (9)
- 5 Customer Service Expense.

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- 6 Q. How were costs classified as commodity related, demand related or customer related?
- 7 A. Classification provides a method of arranging costs so that the service characteristics which
- give rise to the costs can serve as a basis for allocation. Costs classified as commodity related
- 9 tend to vary with the quantity of gas delivered, such as gas supply and the operation of
- compressors. Since gas supply costs were removed from the cost of service study, it was not
- necessary to classify gas supply costs. Costs classified as demand related are costs related to
- facilities installed to meet design-day usage requirements. Costs classified as customer
- 13 related include costs incurred to serve customers regardless of the quantity of gas purchased
- or the peak requirements of the customers. All transmission plant costs were classified as
- demand related. Distribution Structures and Equipment costs were classified as demand-
- related. Costs related to Distribution Mains were classified as demand-related and customer-
- 17 related using the zero-intercept methodology. Services, Meters, Customer Accounts, and
- 18 Customer Service Expenses were all classified as customer-related.
- 19 Q. Have you prepared an exhibit showing the results of the functional assignment and
- classification steps of the cost of service study?
- 21 A. Yes. Seelye Exhibit 5 shows the results of the first two steps of the cost of service study:
- 22 functional assignment and classification.

Q. In your cost of service model, once costs are functionally assigned and classified, how are these costs allocated to the customer classes?

A.

In the cost of service model used in this study, Delta's accounting costs are functionally assigned and classified using what are referred to in the model as "functional vectors." These vectors are multiplied (using *scalar multiplication*) by the various accounts in order to simultaneously assign costs to the functional groups and classify costs. Therefore, in the portion of the model included in Seelye Exhibit 5, Delta's accounting costs are functionally assigned and classified using the explicitly determined functional vectors of the analysis and using internally generated functional vectors. The explicitly determined functional vectors, which are primarily used to direct where costs are functionally assigned and classified, are shown on pages 27 and 28 of Seelye Exhibit 5. Internally generated functional vectors are utilized throughout the study to functionally assign costs on the basis of similar costs or on the basis of internal cost drivers. The internally generated functional vectors are shown on pages 29 and 30 of Seelye Exhibit 5. The functional vector used to allocate a specific cost is identified by the column in the model labeled "Vector" and refers to a vector identified elsewhere in the analysis by the column labeled "Name."

Once costs for all of the major accounts are functionally assigned and classified, the resultant cost matrix for the major cost groupings (e.g., Plant in Service, Rate Base, Operation and Maintenance Expenses) is then transposed and allocated to the customer classes using "allocation vectors" or "allocation factors." The results of the class allocation step of the cost of service study are included in Seelye Exhibit 6. The costs shown in the column labeled "Total System" in Seelye Exhibit 6 were carried forward from the

- functionally assigned and classified costs shown in Seelye Exhibit 5. The column labeled

 "Ref" in Seelye Exhibit 6 provides a reference to the results included in Seelye Exhibit 5.
- 3 Q. Please describe the allocation factors used in the gas cost of service study.

- 4 A. The following allocation factors were used in the gas cost of service study herein:
 - **DEM02** is used to allocate Storage demand-related costs and represents a composite allocation based on expected winter season requirements and design day demands. The class allocation factor is the sum of (a) the volumes (commodity) withdrawn from storage during the expected winter season, and (b) the volumes needed in storage to meet the design-day demands. The calculation of this allocation factor is shown on Seelye Exhibit 7.
 - DEM03 is used to allocate Transmission demand-related costs and is allocated on the basis of design-day demands determined at Delta's -3 degree F design-day mean temperature.
 - DEM04 is used to allocate Distribution Structures and Equipment
 demand-related costs and represents maximum class demands
 determined at Delta's -3 degree F design day mean temperature.

 These demands were calculated using base loads and temperature
 sensitive loads developed for the temperature normalization
 adjustment. The temperature normalization adjustment will be
 discussed later in my testimony.
 - DEM05 is used to allocate the demand-related portion of the cost of distribution mains and represents maximum class demands

determined at the design day mean temperature. 1 2 COM02 is used to allocate Storage commodity-related costs and represents actual customer class deliveries during the winter 3 withdrawal season (defined as the months of December through 5 March.) COM03 is used to allocate Transmission commodity-related costs 6 and represents annual throughput volumes (including both sales and 7 8 transportation). 9 COM04 is used to allocate Distribution commodity-related costs and represents annual throughput volumes (including both sales and 10 11 transportation) of customers served on the distribution system. 12 CUST01 is used to allocate the customer-related portion of Delta's distribution mains and represents the year-end number of customers. 13 CUST02 is used to allocate Services and is based on the total 14 estimated cost of installing a service line per customer in each 15 16 customer class weighted by the year-end number of customers in each 17 class. 18 CUST03 is used to allocate Meters and is based on the estimated cost of meters and meter installation costs per customer in each customer 19 20 class weighted by the year-end number of customers in each class.

CUST04 is used to allocate customer accounts expenses (Accounts

901 through 905) and is determined on the basis of the average

number of customers.

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• CUST05 is used to allocate customer service expenses using the same allocation factor used to allocate Accounts 901, 902, 903, and 905 in CUST04.

Q. How are mains typically classified between demand and customer costs?

A.

Two commonly used methodologies for determining demand/customer splits of distribution plant are the "minimum system" methodology and the "zero-intercept" methodology. In the minimum system approach, a "minimum" standard pipe size is selected and the minimum system is obtained by pricing all of the distribution mains at the unit cost of this minimum size pipe. The minimum system determined in this manner is then classified as customer-related and allocated on the basis of the number of customers in each rate class. All costs in excess of the minimum system are classified as demand-related. The theory supporting this approach maintains that in order for a utility to serve even the smallest customer, it would have to install a minimum size system. Therefore, the costs associated with the minimum system are related to the number of customers that are served, instead of the demand imposed by the customers on the system.

In preparing this study, the zero-intercept methodology, rather than the minimum system methodology, was used to determine the customer component of mains. Because the zero-intercept methodology is less subjective than the minimum system approach, the zero-intercept methodology is strongly preferred over the minimum system methodology when the necessary data is available. With the zero-intercept methodology, we are not forced to choose a minimum size main to determine the customer component. In the zero-intercept methodology, a zero-diameter pipe is the absolute minimum system.

Q. What is the theory behind the zero-intercept methodology?

A. The theory behind the zero-intercept methodology is that there is a linear relationship between the unit cost (\$/ft) of mains and the gas flow capability of the pipe, which is proportionate to its diameter. After establishing a linear relation, which is given by the equation:

$$y = a + bx$$

7 where:

y is the unit cost of the pipe,

x is the size of the pipe, and

a, b are the coefficients representing the intercept and slope, respectively it can be determined that, theoretically, the unit cost of a pipe with zero diameter (or pipe with zero load carrying capability) is a, the zero intercept. The zero intercept is essentially the cost component of mains that is invariant to the size (and load carrying capability) of the pipe.

Like most gas distribution systems, the number of feet of mains on Delta's system is not uniformly distributed over all sizes of pipe. For example, Delta has over 4.6 million feet of 2-inch plastic mains, but only 89 thousand feet of 3-inch plastic mains. For this reason, it was necessary to use a weighted regression analysis, instead of a standard least-squares analysis, in the determination of the zero intercept. Using a weighted regression analysis, the cost and diameter of each size pipe is, in effect, weighted by the number of feet of installed pipe. In a weighted regression analysis, the following weighted sum of squared differences

$$\sum_{i} w_i (y_i - \hat{y}_i)^2$$

is minimized, where w is the weighting factor (in this case the feet of pipe) for each size of pipe, and y is the observed value and \hat{y} is the predicted value of the dependent variable (in this case the unit cost of the pipe).

Attached as Seelye Exhibit 8 is the zero-intercept analysis used in this study. The
zero-intercept unit cost of \$5.65 per foot pipe is applied to the total feet of mains in the
analysis to determine the customer cost component. The listing on page 1 of the analysis
indicates that the coefficient of determination R-squared for mains is 0.9475. The coefficient
of determination is a relative measure of the closeness of fit, where a coefficient of 0.0
indicates no linear correlation between the independent variable and dependent variable and a
coefficient of 1.0 indicates perfect linear correlation.

Q.

A.

cases?

Yes, on many occasions. The Commission accepted the methodology utilized by Delta in Case No. 2004-00067. LG&E utilized the zero-intercept methodology in the cost of service studies submitted in several rate cases (Case Nos. 2000-080 and 90-158) in which the Commission has issued orders and the Commission found them to be reasonable. LG&E utilized the same methodology in Case Nos. 2003-00433, 2008-00252 and 2009-00549. The Commission also found the embedded cost of service study submitted by The Union Light Heat and Power in its gas base rate case (Case No. 2001-00092), which utilized a zero-

Has the Commission accepted the use of the zero-intercept methodology in previous

intercept methodology, to be reasonable. In my experience, the zero-intercept methodology

is the predominant method used in Kentucky and is used widely in other jurisdictions.

3 Q. Please summarize the results of the gas cost of service study.

A. The following table (Table 2) summarizes the rates of return on net cost rate base for each customer class before and after reflecting the rate adjustments proposed by Delta. The Actual Adjusted Rate of Return was calculated by dividing the adjusted net operating income by the adjusted net cost rate base for each customer class. The Proposed Rate of Return was calculated by dividing the net operating income adjusted for the proposed rate increase by the adjusted net cost rate base.

TABLE 2 Class Rates of Return										
Customer Class	Actual Adjusted Rate of Return	Proposed Rate of Return								
Residential	3.44%	8.19%								
Small Non-Residential	5.51%	9.21%								
Large Non-Residential	7.00%	10.64%								
Interruptible	15.08%	15.08%								
Special Contracts	0.79%	0.79%								
Off-System Transportation	5.59%	7.26%								
Total System	4.79%	8.66%								

A.

12 Q. Is the current actual rate of return for the residential class adequate?

No. As shown in Table 1, the actual adjusted rate of return for the residential class is below the rates of return for the other customer classes. Delta's overall adjusted rate of return is 4.79%, while the rate of return for the residential class is only 3.44%. In my opinion, Delta should be allowed to charge rates that bring the residential rate of return more in line with the overall rate of return.

Q. Would Delta's proposed rates move the company toward bringing the class rates of return closer together?

A. Yes. As Table 1 shows, the residential rates proposed by Delta result in a pro-forma rate of return of 8.19%, which brings the residential class within 47 basis points of the proposed overall rate of return of 8.66%. This is an improvement over the 1.35 percentage point difference between the current overall and residential rates of return of 4.79% and 3.44%, respectively.

IV. TEMPERATURE NORMALIZATION ADJUSTMENT

- Q. Please explain the calculations and methodology used to determine the temperature normalization adjustment to test period revenue.
- A. Delta has a Weather Normalization Adjustment ("WNA") clause that automatically adjusts the commodity charge to reflect normal temperatures. The WNA clause is applicable to residential and small non-residential customers and is currently applied during the months of December through April. Because the WNA automatically normalizes customer billings for these two rate classes during the months of December through April it is not necessary to perform a temperature normalization adjustment for these two classes during these months. However, it is necessary to perform a temperature normalization adjustment for the residential and small non-residential customer classes to reflect the heating months not covered by the WNA. Additionally, it is necessary to perform a temperature normalization adjustment for rate classes not billed under the WNA, namely, large non-residential and interruptible rate classes.

Q. How was the gas temperature normalization adjustment performed for the rate classes not billed under the WNA?

A.

A standard temperature normalization adjustment covering the entire heating season was performed for the large non-residential and interruptible rate classes. Heating degree days related to cycle billed customer deliveries were 11 below the 30-year average Weather Bureau heating-degree days of 4,603 where the 30-year average was determined using the period ended December 31,2009. Thus, Delta's actual revenues for these rate classes were mildly understated due to slightly warmer than normal temperatures experienced during the test period. The degree-day data used for purposes of calculating the temperature normalization adjustment was obtained from the Lexington, Kentucky weather station.

The first step in computing the temperature-related variance in deliveries was to determine the annual non-temperature sensitive and temperature sensitive volumes for each rate class. The determination of the non-temperature sensitive volumes was based on the gas deliveries that occurred in July and August since those months had no heating degree days. The volumes in those two months were then multiplied by six to calculate an annual non-temperature sensitive load that was deducted from total deliveries to arrive at the annual temperature sensitive volumes.

The next step was to determine the volumetric adjustment required to normalize deliveries to reflect normal temperatures. The annual temperature sensitive volumes were divided by the actual heating degree days (4,592 for billing cycle customers) in the test period and the resulting Mcf per degree day was then multiplied by the degree-day departure from normal (11 HDDs) to arrive at the volumetric adjustment for each rate class. In the

final step, the volumetric adjustment for each rate class was applied to the applicable 1 2 distribution component (rate per Mcf) for each rate schedule not billed under the WNA. How was the gas temperature normalization adjustment performed for the residential 3 Q. and small non-residential rate classes, which are billed under the WNA? 4 5 A. The same methodology was used for the residential and small non-residential rate classes except that the difference in degree days was determined only for the months outside of the 6 period when the WNA is applied. In other words the temperature normalization was only 7 8 applied to the 7 non-WNA months of May through November. Since the WNA adjusts 9 customer volumes during the months of December through April, it was not necessary to make a temperature normalization adjustment during these months. During the months of May 10 11 through November, actual heating degree days related to cycle billed customer deliveries were 12 68 above the 30-year average Weather Bureau heating-degree days of 795 for those months. 13 This difference was then used in the calculation of the temperature normalization adjustment 14 for the residential and small non-residential rate classes. 15 Q. Please summarize the total impact of the gas temperature normalization adjustment. 16 A. The temperature normalization adjustment results in a net decrease of \$63,111 to Delta's gas 17 operating revenue. The calculation of this amount is summarized on Seelye Exhibit 9. The

amount is also reflected by rate class and in total in Column 5 of Seelye Exhibit 3.

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V. REVENUE ADJUSTMENT TO REFLECT YEAR-END CUSTOMERS

A.

Q. Is Delta proposing to make a pro-forma adjustment to reflect the number of customers
 served at the end of the year?

No. Delta respectfully requests that a year-end customer adjustment not be made in this proceeding. The purpose of such an adjustment is to normalize annual revenues to reflect a going forward level of customers. The rationale for a year-end adjustment is to compare the number of customers at the end of the test year to the average number of customers during the test year. If the year-end level is higher than the average then it is assumed that the Company is adding customers and that the year-end level of customers and associated revenues is more appropriate than the average test-year level on a going-forward basis for purposes of setting rates. Delta does not believe that the year-end level of customers reflects an appropriate going forward level of customers. In fact, it is likely that the revenues associated with the year-end level will overstate Delta's going forward revenue because the year-end level of customers will almost certainly be higher than the average number of customers during the first full year that the rates go into effect.

In this proceeding, the year-end level of customers is higher than the average, but not because of customer growth; instead, it is because of the selection of the 12 months ended December as the test year. A significant number of customers disconnect service during the summer months and return to the system during the winter months. Because the test year in this proceeding ends in December – which is a winter month – using the year-end level of customers overstates the customer level that should be used for purposes of normalization. On the whole, Delta is not adding customers. In fact, Delta has been consistently losing customers over the past several years. In 2002, Delta's total average customer count was 40,185. By

2006, that number had declined to 38,117 and in the 2009 test year that number is 35,895. Based on this trend, one could expect that the number of customers served by Delta will continue to decrease, thus suggesting that a downward adjustment could be made to normalize revenues to reflect the number of customers served on a going forward basis. Delta is not proposing to make a downward revenue adjustment to reflect this trend, and requests that the Commission not make a year-end adjustment in this proceeding. The standard year-end adjustment is included in Seelye Exhibit 10 in the event that the Commission rejects the recommendation not to make a year-end adjustment.

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VI. DEPRECIATION STUDY AND DEPRECIATION EXPENSE ADJUSTMENT

- 11 Q. Did you supervise the preparation of a depreciation study for Delta?
- 12 A. Yes.
- 13 Q. Was a standard methodology used to determine the depreciation accrual rates?
- 14 A. Yes. Where suitable information was available, the Simulated Plant Record (SPR) 15 methodology was used to determine the survivor curve that best fit the plant retirement data for 16 Delta's plant accounts. The SPR methodology is described in Public Utility Depreciation 17 Practices published by the National Association of Regulatory Utility Commissioners and in 18 other publications. Where sufficient data were not available, or the resulting statistics were not 19 satisfactory, we relied heavily on comparisons to the survivor curves and depreciation rates 20 utilized by neighboring gas utilities. The methodology used to develop the depreciation accrual 21 rates is described in more detail in the report included in Seelye Exhibit 11.

- 1 Q. Was the same methodology used in this depreciation study as in study filed by Delta in
- 2 its last two rate cases (Case Nos. 2004-00067 and 2007-00089)?
- 3 A. Yes.
- 4 Q. Does this conclude your testimony?
- 5 A. Yes, it does.



Seelye Exhibit 1

Summary of Qualifications
William Steven Seelye

QUALIFICATIONS OF WILLIAM STEVEN SEELYE

Summary of Qualifications

Provides consulting services to numerous investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service and wholesale and retail rate designs; and develops revenue requirements for utilities in general rate cases, including the preparation of analyses supporting pro-forma adjustments and the development of rate base.

Employment

Senior Consultant and Principal The Prime Group, LLC (July 1996 to Present)

Provides consulting services in the areas of tariff development, regulatory analysis revenue requirements, cost of service, rate design, fuel and power procurement, depreciation studies, lead-lag studies, and mathematical modeling.

Assists utilities with developing strategic marketing plans and implementation of those plans. Provides utility clients assistance regarding regulatory policy and strategy; project management support for utilities involved in complex regulatory proceedings; process audits; state and federal regulatory filing development; cost of service development and support; the development of innovative rates to achieve strategic objectives; unbundling of rates and the development of menus of rate alternatives for use with customers; performance-based rate development.

Prepared retail and wholesale rate schedules and filings submitted to the Federal Energy Regulatory Commission (FERC) and state regulatory commissions for numerous of electric and gas utilities. Performed cost of service or rate studies for over 150 utilities throughout North America. Prepared market power analyses in support of market-based rate filings submitted to the FERC for utilities and their marketing affiliates. Performed business practice audits for electric utilities, gas utilities, and independent transmission organizations (ISOs), including audits of production cost modeling, retail utility tariffs, retail utility

billing practices, and ISO billing processes and procedures.

Manager of Rates and Other Positions Louisville Gas & Electric Co. (May 1979 to July 1996) Held various positions in the Rate
Department of LG&E. In December 1990,
promoted to Manager of Rates and
Regulatory Analysis. In May 1994,
given additional responsibilities in the marketing
area and promoted to Manager of Market
Management and Rates.

Education

Bachelor of Science Degree in Mathematics, University of Louisville, 1979 54 Hours of Graduate Level Course Work in Industrial Engineering and Physics.

Associations

Member of the Society for Industrial and Applied Mathematics

Expert Witness Testimony

Alabama:

Testified in Docket 28101 on behalf of Mobile Gas Service Corporation

concerning rate design and pro-forma revenue adjustments.

Colorado:

Testified in Consolidated Docket Nos. 01F-530E and 01A-531E on behalf of

Intermountain Rural Electric Association in a territory dispute case.

FERC:

Submitted direct and rebuttal testimony in Docket No. EL02-25-000 et al.

concerning Public Service of Colorado's fuel cost adjustment.

Submitted direct and responsive testimony in Docket No. ER05-522-001 concerning a rate filing by Bluegrass Generation Company, LLC to charge reactive power service to LG&E Energy, LLC.

Submitted testimony in Docket Nos. ER07-1383-000 and ER08-05-000 concerning Duke Energy Shared Services, Inc.'s charges for reactive power service.

Submitted testimony in Docket No. ER08-1468-000 concerning changes to Vectren Energy's transmission formula rate.

Submitted testimony in Docket No. ER08-1588-000 concerning a generation formula rate for Kentucky Utilities Company.

Submitted testimony in Docket No. ER09-180-000 concerning changes to Vectren Energy's transmission formula rate.

Florida:

Testified in Docket No. 981827 on behalf of Lee County Electric Cooperative, Inc. concerning Seminole Electric Cooperative Inc.'s wholesale rates and cost of service.

Illinois:

Submitted direct, rebuttal, and surrebuttal testimony in Docket No. 01-0637 on behalf of Central Illinois Light Company ("CILCO") concerning the modification of interim supply service and the implementation of black start service in connection with providing unbundled electric service.

Indiana:

Submitted direct testimony and testimony in support of a settlement agreement in Cause No. 42713 on behalf of Richmond Power & Light regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

Submitted direct and rebuttal testimony in Cause No. 43111 on behalf of Vectren Energy in support of a transmission cost recovery adjustment.

Submitted direct testimony in Cause No. 43773 on behalf of Crawfordsville Electric Light & Power regarding revenue requirements, class cost of service studies, fuel adjustment clause and rate design.

Kansas:

Submitted direct and rebuttal testimony in Docket No. 05-WSEE-981-RTS on behalf of Westar Energy, Inc. and Kansas Gas and Electric Company regarding transmission delivery revenue requirements, energy cost adjustment clauses, fuel normalization, and class cost of service studies.

Kentucky:

Testified in Administrative Case No. 244 regarding rates for cogenerators and small power producers, Case No. 8924 regarding marginal cost of service, and in numerous 6-month and 2-year fuel adjustment clause proceedings.

Submitted direct and rebuttal testimony in Case No. 96-161 and Case No. 96-362 regarding Prestonsburg Utilities' rates.

Submitted direct and rebuttal testimony in Case No. 99-046 on behalf of Delta Natural Gas Company, Inc. concerning its rate stabilization plan.

Submitted direct and rebuttal testimony in Case No. 99-176 on behalf of Delta Natural Gas Company, Inc. concerning cost of service, rate design and expense adjustments in connection with Delta's rate case.

Submitted direct and rebuttal testimony in Case No. 2000-080, testified on behalf of Louisville Gas and Electric Company concerning cost of service, rate design, and pro-forma adjustments to revenues and expenses.

Submitted rebuttal testimony in Case No. 2000-548 on behalf of Louisville Gas and Electric Company regarding the company's prepaid metering program.

Testified on behalf of Louisville Gas and Electric Company in Case No. 2002-00430 and on behalf of Kentucky Utilities Company in Case No. 2002-00429 regarding the calculation of merger savings.

Submitted direct and rebuttal testimony in Case No. 2003-00433 on behalf of Louisville Gas and Electric Company and in Case No. 2003-00434 on behalf of Kentucky Utilities Company regarding pro-forma revenue, expense and plant adjustments, class cost of service studies, and rate design.

Submitted direct and rebuttal testimony in Case No. 2004-00067 on behalf of Delta Natural Gas Company regarding pro-forma adjustments, depreciation rates, class cost of service studies, and rate design.

Testified on behalf of Kentucky Utilities Company in Case No. 2006-00129 and on behalf of Louisville Gas and electric Company in Case No. 2006-00130 concerning methodologies for recovering environmental costs through base electric rates.

Testified on behalf of Delta Natural Gas Company in Case No. 2007-00089 concerning cost of service, temperature normalization, year-end normalization, depreciation expenses, allocation of the rate increase, and rate design.

Submitted testimony on behalf of Big Rivers Electric Corporation and E.ON U.S. LLC in Case No 2007-00455 and Case No. 2007-00460 regarding the design and implementation of a Fuel Adjustment Clause, Environmental Surcharge, Unwind Surcredit, Rebate Adjustment, and Member Rate Stability Mechanism for Big Rivers Electric Corporation in connection with the unwind of a lease and purchase power transaction with E.ON U.S. LLC.

Submitted testimony in Case No. 2008-00251 on behalf of Kentucky Utilities Company and in Case No. 2008-00252 on behalf of Louisville Gas and Electric Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Submitted testimony in Case No. 2008-00409 on behalf of East Kentucky Power Cooperative, Inc., concerning revenue requirements, pro-forma adjustments, cost of service, and rate design.

Submitted testimony in Case No. 2009-00040 on behalf of Big Rivers Electric Corporation regarding revenue requirements and rate design.

Submitted testimony on behalf of Columbia Gas Company of Kentucky in Case No. 2009-00141 regarding the demand side management program costs and cost recovery mechanism.

Submitted testimony in Case No. 2009-00548 on behalf of Kentucky Utilities Company and in Case No. 2009-00549 on behalf of Louisville Gas and Electric Company regarding pro-forma revenue and expense adjustments, electric and gas temperature normalization, jurisdictional separation, class cost of service studies, and rate design.

Nevada:

Submitted direct and rebuttal testimony in Case No. 03-10001 on behalf of Nevada Power Company regarding cash working capital and rate base adjustments.

Submitted direct and rebuttal testimony in Case No. 03-12002 on behalf of Sierra Pacific Power Company regarding cash working capital.

Submitted direct and rebuttal testimony in Case No. 05-10003 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

Submitted direct and rebuttal testimony in Case No. 05-10005 on behalf of Sierra Pacific Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case Nos. 06-11022 and 06-11023 on behalf of Nevada Power Company regarding cash working capital for a gas general rate case.

Submitted direct and rebuttal testimony in Case No. 07-12001 on behalf of Sierra Pacific Power Company regarding cash working capital for an electric general rate case.

Submitted direct testimony in Case No. Docket No. 08-12002 on behalf of Nevada Power Company regarding cash working capital for an electric general rate case.

Nova Scotia: Testified on behalf of Nova Scotia Power Company in NSUARB - NSPI - P-887 regarding the development and implementation of a fuel adjustment mechanism.

Submitted testimony in NSUARB – NSPI – P-884 regarding Nova Scotia Power Company's application to approve a demand-side management plan and cost recovery mechanism.

Submitted testimony in NSUARB – NSPI – P-888 regarding a general rate application filed by Nova Scotia Power Company.

Submitted testimony on behalf of Nova Scotia Power Company in the matter of the approval of backup, top-up and spill service for use in the Wholesale Open Access Market in Nova Scotia.

Submitted testimony in NSUARB – NSPI – P-884 (2) on behalf of Nova Scotia Power Company's regarding a demand-side management cost recovery mechanism.

Virginia:

Submitted testimony in Case No. PUE-2008-00076 on behalf of Northern Neck Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.

Submitted testimony in Case No. PUE-2009-00029 on behalf of Old Dominion Power Company regarding class cost of service, jurisdictional separation, allocation of the revenue increase, general rate design, time of use rates, and excess facilities charge rider.

Submitted testimony in Case No. PUE-2009-00065 on behalf of Craig-Botetourt Electric Cooperative regarding revenue requirements, class cost of service, jurisdictional separation and an excess facilities charge rider.

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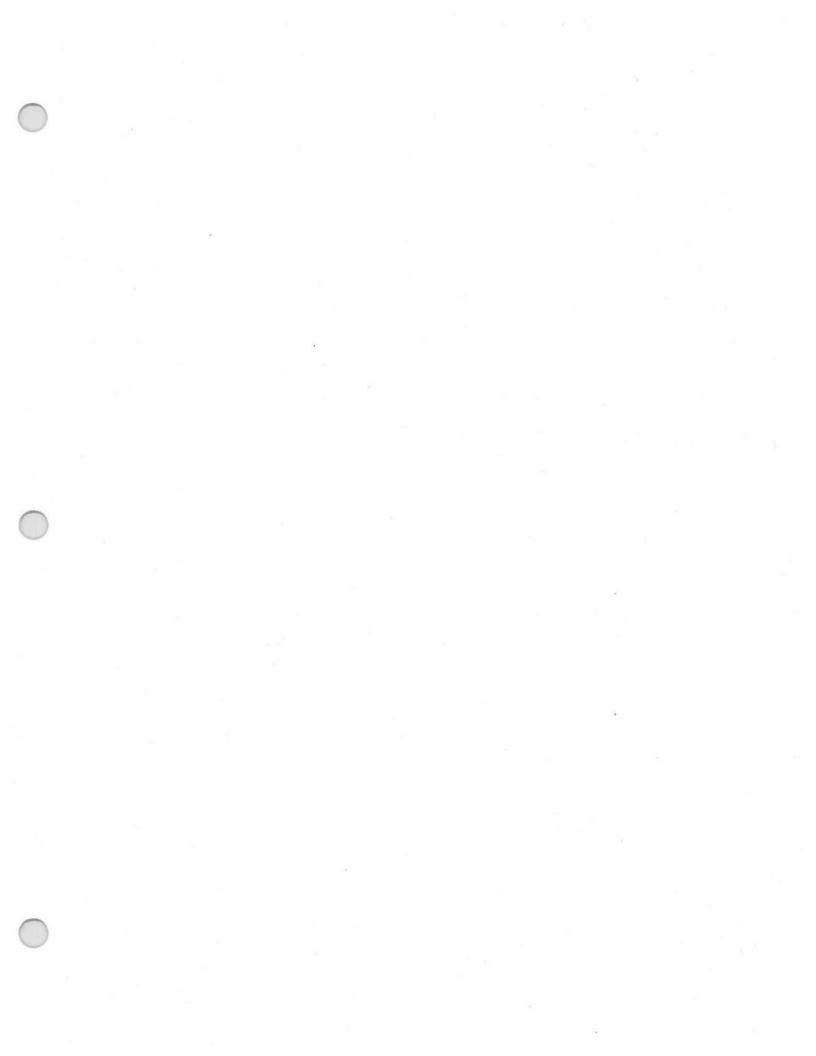
Seelye Exhibit 2

Reconstruction of Billing Determinants

Delta Natural Gas Company, Inc. Calculations to Verify Test Period Billing Determinants For the 12 months Ended December 31, 2009

	(1)		(2)	(3)	Re	(4) venue Excluding	Ell	(5) imination of Weather		(5)		(7)	(8)
	Actual Billed Revenue		mination of Gas ost Adjustment	Billing Correction		Gas Cost Adjustment		Normalization Adjustment		Net Revenue		Calculated Net Revenue See Verification of Rates	Correction Factor
REVENUE		(Se	e Gas Cost Exhibit)			(Column (1) + (2))		(See WNA Exhibit)	(1	Catumn (3) + (4))	(*	Exhibit)	(Column (6) / Column (7)
Residential : Small Non-Residential GS Large Non-Residential GS	\$ 30,606,864.00 9,073,688.00		(17,994,255.40) (5,663,368.35)		\$	12,612,608.60 3,410,319,65	\$	71,470.00 15,561.00	\$	12,684,078,60 3,425,880,65	s	12,487,172.45 3,384,458,10	0.98448 0.98791
Large Non-Residential GS - Commercial	11,908,202,00		(8,082,382.97)			3,825,819,03				3,825,819,03		3,821,227 48	0.99880
Large Non-Rasidential GS - Industrial	1,203,947.00		(895,797.11)			308,149.89				308,149,89		308,031.29	0.99962
Total Large Non-Residential GS Interruptible	13,112,149.00		(8,978,180.07)			4,133,968,93		· · ·		4,133,968,93		4,129,258,77	
Interruptible -Commercial	29,572.00		(24,285.70)			5,286,30				5,286,30		5,285.52	0.99985
Interruptible - Industrial	327,000.00		(275,248.31)			51,751.69				51,751.69		51,744.48	0.99986
Total interruptible	358,572.00		(299,534.01)			57,037.99				57,037.99		57,030,00	
Unmetered Gas Lights													
Residential	5,249.00		(3,703.04)			1,545.96				1,545,96		1,546.78	1.00053
Commercial	3,766.00		(2,643.46)			1,122,54				1,122,54		1,024.65	0.91280
Small Commercial	5,274.00		(3,700.85)			1,573.15				1,573.15		1,434.51	0.91187
Unmetered Gas Lights_	14,289.00		(10,047.35)			4,241.65				4,241.65		4,005.94	
Total Retail _	\$ 53,163,562.00	\$	(32,945,385.18)	\$ -	\$	20,218,176.82	\$	87,031.00	\$	20,305,207.82	5	20,081,925,26	0,98802
											_		
Special Contracts	309,427.56					309,427.58				309,427.56	\$	309,427,56	1,00000
Small Non-Residential GS	186,481.17					186,481,17				186,481,17		186,481.08	1.00000
Large Non-Residential GS	2,203,535.47					2,203,535,47				2,203,535.47		2,203,556,59	1.00001
Residential	8,471,17					8,471,17				8,471.17		8,471.12	0.99999
Interuptible	1,427,028.92					1,427,028,92				1.427,028.92		1,420,339.32	0.99531
On System Transportation	4,134,944.29					4,134,944.29				4,134,944.29		4,128,275,67	4.47.40
Off System Transportation	3,415,904.00				_	3,415,904.00			_	3,415,904.00		3,328,385,31	0.97438
Total Transportation	\$ 7,550,848.29	\$			\$	7,550,848.29	\$		\$	7,550,848.29	*	7,456,660.98	0.98753
Miscellaneous Revenue	\$ 302,580.00					302,580.00			s	302,580.00		302,580,00	
Total Operating Revenue			(32,945,385,18)		s	28,071,605.11	_	87,031.00	_	28,158,636.11		27,821,166,24	0.98802
rotal Operating Revenue	. 01,010,350.28		(32,945,385,10)	<u> </u>	-	20,071,003.17	•	87,031.00	•	28,156,636.71	•	21,021,100,24	0,96802
MCF									_				
Residential	1,650,148			9,040.00						1,650,148			
Small Non-Residential GS	515,460			3.040.00						515,480			
Large Non-Residential GS - Commercial	754,173									754.173			
Large Non-Residential GS - Industrial	81,222		y .							81,222			
Interruptible - Commercial	2.210									2.210			
Interruptible - Industrial	25,265									25,265			
Unmetered Gas Lights - Total	1,020									1,020			
Total Retail	3,029,498									3,029,498	-		
									_		-		
On System Transportation Special	4,110,307									4,110,307			
Off System Transportation	10,642,929						_			10,642,929			
Total Transportation	14,753,236									14,753,236	_		
	47 700 70				_				_	47 700 700	-		
Total	17,782,734	_			-		-		-	17,782,734	*		
													Cashes Eublishing

Seelye Exhibit 2 Page 1 of 1



Seelye Exhibit 3

Summary of Proposed Increase

Delta Natural Gas Company, Inc.
Summary of Rate Increase by Rate Class
Based on Adjusted Sales and Transportation for the 12 months Ended December 31, 2009

	(1) (2)		(3)	Ne	(4) et Revenue Before	(5)	(6)	(7)	(8)	
	Actual Billed Revenue	Elimination of Gas Cost Adjustment	Correction		Temperature Adjustment	Temperature Adjustment	GCR at Current Rates	Adjusted Billings at Current Rates	Increase in Revenue	
REVENUE		(See Gas Cost Edvibit)			(Column (1) + (2))	(See Temperature Normalization Exhibit)	6,0350	(Column (3) + (4) + (5))		
Residential \$ Small Non-Residential GS Large Non-Residential GS	30,806,864 9,073,688	\$ (17,994,255) (5,663,368)		s	12,612,609 3,410,320	\$ (57.963) (13,572)	s 9,772,403 3,069,026	\$ 22,327,049 6,465,774	\$ 3,538,987 593,145	
Large Non-Residential GS - Commercial Large Non-Residential GS - Industrial Total Large Non-Residential GS	11,908,202 1,203,947 13,112,149	(8,082,383) (895,797) (8,978,180)			3,825,819 308,150 4,133,969	4,894 640 5,534	4,559,291 491,187 5,050,478	8,390,004 799,977 9,189,981	628,392 40,167 668,559	
Interruptible Interruptible - Commercial Interruptible - Industrial Total Interruptible	29,572 327,000 356,572	(24,286) (275,248) (299,534)			5,286 51,752 57,038	53 53	13,338 152,699 166,036	18,624 204,503 223,127	:	
Unmetered Gas Lights Residential Commercial Small Commercial	5,249 3,766 5,274	(3,703) (2,643) (3,701)			1,546 1,123 1,573		2,245 1,630 2,282	3,791 2,752 3,855	223	
Unmetered Gas Lights	14,289 53,163,582	(10,047) \$ (32,945,385) \$	·	\$	4,242 20,218,177	\$ (65,947)	6,157 \$ 18,064,101	10,398 \$ 38,216,330	\$ 4,801,139	
Special Contracts \$ Small Non-Residential GS Large Non-Residential GS Residential Interrupble On System Transportation	309,428 186,481 2,203,535 8,471 1,427,029 4,134,944	s .	54	\$	309,428 186,481 2,203,535 8,471 1,427,029 4,134,944	\$ - 368 2,470 - - 2,836	\$ - - -	\$ 309,428 186,847 2,206,005 8,471 1,427,029 4,137,780	18,165 241,036 2,058	
Off System Transportation Total Transportation	3,415,904	<u>:</u> s -		s	3,415,904 7,550,848		<u>:</u>	3,415,904 \$ 7,553,684	253,030	
Miscellaneous Revenue			2 1	s	302,580	la .		\$ 302,580		
Total Operating Revenue _\$	61,016,990	\$ (32,945,385) \$	· ·	\$	28,071,605	\$ (63,111)	\$ 18,064,101	\$ 46,072,595	\$ 5,315,428	

Seelye Exhibit 4

Calculated Billings at Proposed Rates

Delta Natural Gas Company, Inc.
Calculated Increase in Revenue under Revision of Rates
Based on the adjusted sales for the 12 months Ended December 31, 2009

Residential

	Customers	Pre	sent Rate	Calculated Net Revenue@ Present Rates	P	roposed Rate	oposed e Per Ccf	,	Calculated Net Revenue@ Proposed Rates
Customer Charge	367,703	\$	15.30	\$ 5,625,855.90	\$	24.00	\$ 24.00	\$	8,824,872.00
Commodity Charge	Mcf								
All Mcf	1,650,148	\$	4.1580	6,861,316.55	\$	4.3344	\$ 0.4334		7,151,742.65
Calculated Billings at Base Rates				\$ 12,487,172.45				\$	15,976,614.65
Correction Factor -(Calculated / Actual)			0.98448			0.98448			
Total After Application of Correction Factor				\$ 12,684,078.60				\$	16,228,544.68
Temperature Normalization									
All Mcf	(31,129)	\$	4.1580	(129,432.52)	\$	4.3344	\$ 0.4334		(134,911.15)
	Mcf								
Adjusted Billings at Base Rates	1,619,020			\$ 12,554,646.08				\$	16,093,633.53
GCR at Current Rates	1,619,020		6.0360	9,772,403.08		6.0360	\$ 0.6036		9,772,403.08
Total Adjusted Billings at Base Rates				\$ 22,327,049.16				\$	25,866,036.61
Increase in Revenue								\$	3,538,987.45 15.9%

Delta Natural Gas Company, Inc.
Calculated Increase in Revenue under Revision of Rates
Based on the adjusted sales for the 12 months Ended December 31, 2009

Small Non-Residential General Service

	Customers	Pre			Calculated Net Revenue@ Present Rates	oposed Rate	Rate	oposed e Per Ccf	Calculated Net Revenue@ Proposed Rates
Customer Charge	49,647	\$	25.00	\$	1,241,175.00	\$ 35.00	\$	35.00	\$ 1,737,645.00
Commodity Charge	Mcf								
All Mcf	515,460	\$	4.1580		2,143,283.10	\$ 4.3344	\$	0.4334	2,234,004.07
Calculated Billings at Base Rates	515,460			\$	3,384,458.10	4			\$ 3,971,649.07
Correction Factor -(Calculated / Actual)			0.98791			0.9879			
Total After Application of Correction Factor				\$	3,425,880.65				\$ 4,020,258.28
Temperature Normalization									
First 200 Mcf	(7,006)	\$	4.1580		(29,132.71)	\$ 4.3344	\$	0.4334	(30,365.84)
	Mcf								
Adjusted Billings at Base Rates	508,454			\$	3,396,747.94				\$ 3,989,892.44
GCR at Current Rates	508,454		6.0360	ĺ	3,069,026.39	6.0360	\$	0.6036	3,069,026.39
Total Adjusted Billings at Base Rates				\$	6,465,774.33	_			\$ 7,058,918.83
Increase in Revenue									\$ 593,144.50 9.2%

Delta Natural Gas Company, Inc.
Calculated Increase in Revenue under Revision of Rates
Based on the adjusted sales for the 12 months Ended December 31, 2009

Large Non-Residential General Service - Commercial

	Customers	Pre	sent Rate	Calculated Net Revenue@ Present Rates	P	roposed Rate	oposed e Per Ccf	Calculated Net Revenue@ Proposed Rates
Customer Charge	9,891		100.00	\$ 989,100.00	\$	150.00	\$ 150.00	\$ 1,483,650.00
Commodity Charge	Mcf	Pre	sent Rate					
First 200 Mcf	577,069	\$	4.1580	2,399,450.82	\$	4.3344	\$ 0.4334	2,501,014.88
Next 800 Mcf	162,413	\$	2.5091	407,510.46	\$	2.6855	\$ 0.2686	436,241.32
Next 4,000 Mcf	14,691	\$	1.7130	25,166.20	\$	1.8894	\$ 0.1889	27,751.87
Next 5,000 Mcf	-	\$	1.3130	-	\$	1.4894	\$ 0.1489	-
Over 10,000 Mcf	_	\$	1.1130		\$	1.2894	\$ 0.1289	_
Calculated Billings at Base Rates	754,173			\$ 3,821,227.48	-			\$ 4,448,658.07
Correction Factor -(Calculated / Actual)			0.9988			0.9988		
Total After Application of Correction Factor				\$ 3,825,819.03				\$ 4,454,003.54
Temperature Normalization								
First 200 Mcf	1,177	\$	4.1580	4,893.97	\$	4.3344	\$ 0.4334	5;101.12
	Mcf							
Adjusted Billings at Base Rates	755,350			\$ 3.830.713.00				\$ 4,459,104.66
GCR at Current Rates	755,350		6.0360	4,559,291.39		6.0360	0.6036	4,559,291.39
				\$ 8,390,004.39				\$ 9,018,396.05
Increase in Revenue								\$ 628,391.66 7.5%

Large Non-Residential General Service - Industrial

Customer Charge	Customers 516		sent Rate 100.00		Calculated Net Revenue@ Present Rates 51,600.00	<i>P</i> :	roposed Rate 150.00		roposed e Per Ccf 150.00	P	Calculated Net Revenue@ roposed Rates 77,400.00
Customer Charge	310	Φ	100.00	Φ	31,000.00	Ψ	130.00	Φ	130.00	Φ	77,400.00
Commodity Charge	Mcf	Pre.	sent Rate								•
First 200 Mcf	37,318	\$	4.1580		155,167.83	\$	4.3344	\$	0.4334		161,735.78
Next 800 Mcf	32,729	\$	2.5091		82,119.83	\$	2.6855	\$	0.2686		87,909.56
Next 4,000 Mcf	11,176	\$	1.7130		19,143.63	\$	1.8894	\$	0.1889		21,110.52
Next 5,000 Mcf		\$	1.3130			\$	1.4894	\$	0.1489		-
Over 10,000 Mcf		\$	1.1130		-	\$	1.2894	\$	0.1289		-
Calculated Billings at Base Rates	81,222		· ·	\$	308,031.29				-	\$	348,155.86
Correction Factor -(Calculated / Actual)			0.99962				0.99962				
Total After Application of Correction Factor				\$	308,149.89					\$	348,289.91
Temperature Normalization											
First 200 Mcf	154	\$	4,1580		640.33	\$	4.3344	\$	0.4334		667.44
	Mcf										
Adjusted Billings at Base Rates	81,376			\$	308,790.22					\$	348,957.35
GCR at Current Rates	81,376		6.0360		491,186.74		6.0360		0.6036		491,186.74
				\$	799,976.96					\$	840,144.09
Increase in Revenue										\$	40,167.13 5.0%

Interruptible Service - Commercial

Customer Charge	Customers 7	Pre \$	sent Rate 250.00	\$ Calculated Net Revenue@ Present Rates 1,750.00	<i>Pi</i> \$	oposed Rate 250.00	Rat	oposed e Per Ccf 250.00	P	Calculated Net Revenue@ roposed Rates 1,750.00
Commodity Charge	Mcf	Pre	sent Rate					,		
First 1,000 Mcf	2,210	\$	1.6000	3,535.52	\$	1.6000	\$	0.1600		3,535.52
Next 4,000 Mcf	-	\$	1.2000		\$	1.2000	\$	0.1200		-
Next 5,000 Mcf		\$	0.8000	-	\$	0.8000	\$	0.0800		-
Over 10,000 Mcf	-	\$	0.6000	III :=	\$	0.6000	\$	0.0600		-
Calculated Billings at Base Rates	2,210		***************************************	\$ 5,285.52					\$	5,285.52
Correction Factor -(Calculated / Actual)			0.99985			0.99985				
Total After Application of Correction Factor				\$ 5,286.30					\$	5,286.30
Temperature Normalization										
First 1,000 Mcf	. 0	\$	1.6000		\$	1.6000	\$	0.1600		-
	Mcf									
Adjusted Billings at Base Rates	2,210			\$ 5.286.30					\$	5,286,30
GCR at Current Rates	2,210		6.0360	13,337.75		6.0360	1	0.6036		13,337.75
_				\$ 18,624.05	-				\$	18,624.05
Increase in Revenue									\$	-
										0.0%

Seelye Exhibit 4 Page 5 of 15

Interruptible Service - Industrial

				Calculated Net Revenue@	Pi	oposed	PI	roposed		Calculated Net Revenue@
	Customers	Pre	sent Rate	Present Rates		Rate	Rat	e Per Ccf	F	Proposed Rates
Customer Charge	55	\$	250.00	\$ 13,750.00	\$	250.00	\$	250.00	\$	13,750.00
Commodity Charge	Mcf	Pre	sent Rate							
First 1,000 Mcf	19,191	\$	1.6000	30,705.92	\$	1.6000	\$	0.1600		30,705.92
Next 4,000 Mcf	6,074	\$	1.2000	7,288.56	\$	1.2000	\$	0.1200		7,288.56
Next 5,000 Mcf		\$	0.8000		\$	0.8000	\$	0.0800		
Over 10,000 Mcf	-	\$	0.6000	-	\$	0.6000	\$	0.0600		-
Calculated Billings at Base Rates	25,265			\$ 51,744.48					\$	51,744.48
Correction Factor -(Calculated / Actual)			0.99986	:-::::::::::::::::::::::::::::::::::::		0.99986				(Fig. 6) 12 25 102
Total After Application of Correction Factor				\$ 51,751.69					\$	51,751.69
Temperature Normalization										
First 1,000 Mcf	33	\$	1.6000	52.80	\$	1.6000	\$	0.1600		52.80
	Mcf									
Adjusted Billings at Base Rates	25,298			\$ 51,804,49					\$	51,804.49
GCR at Current Rates	25,298		6.0360	 152,698,73		6.0360)	0.6036		152,698.73
				\$ 204,503.22	-				\$	204,503.22
Increase in Revenue									\$	
										0.0%

Seelye Exhibit 4 Page 6 of 15

Unmetered Gas Lights - Residential

		Lights Present Rate		Calculated Net Revenue@ Present Rates		oposed Rate	oposed e Per Ccf		Calculated Net Revenue@ roposed Rates
Customer Charge	248	3 -	Ф	-	\$	-		Ф	-
Commodity Charge	Mcf	Present Rate							
All Mcf	372	\$ 4.1580		1,546.78	\$	4.3344	\$ 0.4334		1,612.25
Calculated Billings at Base Rates Correction Factor -(Calculated / Actual)	11	1.00053	\$	1,546.78		1.00053		\$	1,612.25
Total After Application of Correction Factor			\$	1,545.96				\$	1,611.40
Temperature Normalization									
	-			-8	\$	¥			-
	Mcf								
Adjusted Billings at Base Rates	372		\$	1,545.96				\$	1,611.40
GCR at Current Rates	372	6.0360)	2,245.39		6.0360	0.6036		2,245.39
			\$	3,791.35	-			\$	3,856.79
Increase in Revenue								\$	65.44 1.7%

Unmetered Gas Lights - Commercial

		sent Rate	Calculated Net Revenue@ Present Rates	P	roposed Rate	roposed te Per Ccf	Calculated Net Revenue@ oposed Rates	
Customer Charge	24	\$	-	\$ *	\$	=		\$ •
Commodity Charge	Mcf	Pre	sent Rate					
All Mcf	270	\$	3.7950	1,024.65	\$	4.3344	\$ 0.4334	1,170.18
Calculated Billings at Base Rates				\$ 1,024.65		¥1)	 	\$ 1,170.18
Correction Factor -(Calculated / Actual)			0.91280	No. 9 (0.0) - (0.0) - (0.0) - (0.0)		0.91280		and in describers
Total After Application of Correction Factor				\$ 1,122.54				\$ 1,281.97
Temperature Normalization								
*	=			-	\$	-		
	Mef							
Adjusted Billings at Base Rates	270			\$ 1,122.54				\$ 1,281.97
GCR at Current Rates	270		6.0360	1,629.72		6.0360	0.6036	1,629.72
-			EI .	\$ 2,752.26			 	\$ 2,911.69
Increase in Revenue								\$ 159.43 5.8%

Unmetered Gas Lights - Small Commercial

	-		sent Rate	Calculated Net Revenue@ Present Rates		Proposed Rate		roposed te Per Ccf	PI	Calculated Net Revenue@ roposed Rates
Customer Charge	36	\$	1. -	\$ -	\$	-			\$	•
Commodity Charge	Mcf	Pre	sent Rate							
All Mcf	378	\$	3.7950	1,434.51	\$	4.3344	\$	0.4334		1,638.25
Calculated Billings at Base Rates				\$ 1,434.51	-	-			\$	1,638.25
Correction Factor -(Calculated / Actual)			0.91187			0.91187				
Total After Application of Correction Factor				\$ 1,573.15					\$	1,796.58
Temperature Normalization					100					
•	(4)			100	\$	2				2
	Mcf									
Adjusted Billings at Base Rates	378			\$ 1,573.15					\$	1,796.58
GCR at Current Rates	378		6.0360	2,281.61		6.0360)	0.6036		2,281.61
_				\$ 3,854.76					\$	4,078.19
Increase in Revenue									\$	223.43 5.8%

On System Transportation

SI	pecial Contracts (4)	Customers 48	<i>Mcf</i> 1,955,008		į	Net Margin@ Present Rates		Pr	Net Margin@ oposed Rates
	Calculated Billings at Base Rate			4.00000	\$	309,427.56	4.0000	\$	309,427.56
	Correction Factor -(Calcul Total After Application of Corre			1.00000	\$	309.427.56	1.00000	\$	309.427.56

On System Transportation Small Non Residential General Service -Transportation

Customer Charge		Present Rate Pre		Calculated Net Revenue@ Present Rates 28,675.00		oposed Rate 35.00		oposed e Per Ccf 35.00	P	Calculated Net Revenue@ roposed Rates 40,145.00	
oustomer onlygo	1,130	Ψ.	20.00	•	20,010.00	•	00.00	•	00.00	•	10,110.00
Commodity Charge	Mcf	Pre	sent Rate								
First 200 Mcf	37,952	\$	4.1580		157,806.08	\$	4.3344	\$	0.4334		164,485.70
Next 800 Mcf	_	\$	2.5091		-	\$	2.6855	\$	0.2686		-
Next 4,000 Mcf		\$	1.7130		-	\$	1.8894	\$	0.1889		-
Next 5,000 Mcf	-	\$	1.3130		-	\$	1.4894	\$	0.1489		-
Over 10,000 Mcf		\$	1.1130		-	\$	1.2894	\$	0.1289		-
Calculated Billings at Base Rates	37,952			\$	186,481.08					\$	204,630.70
Correction Factor -(Calculated / Actual)			1.00000				1.00000				
Total After Application of Correction Factor				\$	186,481.17					\$	204,630.80
Temperature Normalization											
First 200 Mcf	88.00	\$	4.1580		365.90	\$	4.3344	\$	0.4334		381.39
	Mcf										
Adjusted Billings at Base Rates	37,952			\$	186,847.07					\$	205,012.19
25											
Increase in Revenue										\$	18,165.12
											9.7%

Seelye Exhibit 4 Page 11 of 15

On System Transportation Large Non Residential General Service -Transportation

Customer Charge		stomers Present Rate		Present Rate Rate Rate Rate Rate Rate Rate Rat			Calculated Net Revenue@ Present Rates 105,300.00		oposed Rate 150.00	oposed e Per Ccf 150.00	P	Calculated Net Revenue@ roposed Rates 157,950.00
Commodity Charge	Mcf	Pre	sent Rate		*							
First 200 Mcf	100.565	\$	4.1580		418,150.52	\$	4.3344	\$ 0.4334		435,850.01		
Next 800 Mcf	212,444	\$	2.5091		533,042.74	\$	2.6855	\$ 0.2686		570.624.05		
Next 4,000 Mcf	453,128	\$	1.7130		776,207.41	\$	1.8894	\$ 0.1889		855,957.85		
Next 5,000 Mcf	170,468	\$	1.3130		223,823.83	\$	1.4894	\$ 0.1489		253,826.11		
Over 10,000 Mcf	132,104	\$	1.1130		147,032.09	\$	1.2894	\$ 0.1289		170,282.44		
Calculated Billings at Base Rates	1,068,708			\$	2,203,556.59				\$	2,444,490.46		
Correction Factor -(Calculated / Actual)			1.00001				1.00001					
Total After Application of Correction Factor				\$	2,203,535.47	4			\$	2,444,467.03		
Temperature Normalization												
First 200 Mcf	594	\$	4.1580		2,469.85	\$	4.3344	\$ 0.4334		2,574.40		
	Mcf											
Adjusted Billings at Base Rates	1,068,708			\$	2,206,005.32				\$	2,447,041.43		
Increase in Revenue									\$	241,036.11		
										10.9%		

Seelye Exhibit 4 Page 12 of 15

On System Transportation Residential

		Present Rate \$ 15.30		Calculated Net Revenue@ Present Rates	oposed Rate	Rat	oposed e Per Ccf	P	Calculated Net Revenue@ roposed Rates
Customer Charge	211	\$	15,30	\$ 3,228.30	\$ 24.00	\$	24.00	\$	5,064.00
Commodity Charge	Mcf	Pre	sent Rate						
All Mcf	1,261	\$	4.1580	5,242.82	\$ 4.3344	\$	0.4334		5,464.74
Calculated Billings at Base Rates				\$ 8,471,12				\$	10,528.74
Correction Factor -(Calculated / Actual)			0.99999	5,	0.99999			•	10,020.11
Total After Application of Correction Factor				\$ 8,471.17				\$	10,528.80
Temperature Normalization									
All Mcf		\$	4.1580	-	\$ 4.3344	\$	0.4334		
	Mcf								
Adjusted Billings at Base Rates	1,261			\$ 8,471.17				\$	10,528.80
Increase in Revenue								\$	2,057.63
									24 3%

Seelye Exhibit 4 Page 13 of 15

On System Transportation Interruptible Service - Transportation

Customer Charge	Customers 424	Pre \$	sent Rate 250.00				Calculated Net Revenue@ Proposed Rates 106,000.00			
Commodity Charge	Mcf	Pre	sent Rate							
First 1,000 Mcf	301,642	\$	1.6000		482,627.68	\$	1.6000	\$	0.1600	482,627.68
Next 4,000 Mcf	593,018	\$	1.2000		711,621.72	\$	1.2000	\$	0.1200	711,621.72
Next 5,000 Mcf	142,299	\$	0.8000		113,839.12	\$	0.8000	\$	0.0800	113,839.12
Over 10,000 Mcf	10,418	\$	0.6000		6,250.80	\$	0.6000	\$	0.0600	6,250.80
Calculated Billings at Base Rates	1,047,377			\$	1,420,339.32	38			7.	\$ 1,420,339.32
Correction Factor -(Calculated / Actual)			0.99531				0.99531			
Total After Application of Correction Factor				\$	1,427,028.92					\$ 1,427,028.92
Temperature Normalization										
First 1,000 Mcf		\$	1.6000		-	\$	1,6000	\$	0.1600	 -
	Mcf									
Adjusted Billings at Base Rates	1,047,377			\$	1,427,028.92					\$ 1,427,028.92
Increase in Revenue										\$ -

Seelye Exhibit 4 Page 14 of 15



Seelye Exhibit 5

Class Cost of Service Study

Cost of Service Study 12 Months Ended December 31, 2009

															Distribution Structures &
Descriptio	20	Name	Vector		Total Company	Storage Demand		Storage	Transmissle		Transmissio Commodit		Distribution		Equipment Demand
								,							
Gas Plant	at Onginal Cost														
	und Storage Plant														
350-358	Underground Storage Plant	PT350	F003	S	14,934,082	14,934,082					•		-		3
Total Store	sge Plant	PTST		\$	14,934,082 \$	14,934,082	s	5		\$		\$	6.5	\$	
Transmis	sion Plant				1										
325-371	Transmission	PT365	F005	\$	57,620,977	•		10	57,620,97	77	- 00				-
Distributi	on Plant														
374 & 304	Land and Land Rights	PT374	F008	S	327,685						-		-		327,685
375	Structures & Improvements	PT375	F008		112,359								40		112,359
376	Mains	PT376	FD09		66,875,339			400							24.75
378	Mess, & Reg. Sta. Equip General	PT378	F008		1,435,143			2					2		1,435,143
379	Meas, & Reg. Sta. Equip City Gate	PT379	F008		500,033	¥5.									500,033
-	Services	PT380	F010		13,709,009										-
	Metors	PT381	F011		9,302,928	***		*0.0							
1	Meter Installations	PT382	F011		3,186,037								-		-
100	House Regulators	PT383	F011		3,478,550	-									
384	House Regulator Installations	PT384	F011						-						
385	Industrial Meas, & Reg. Equip.	PT385	F011		1,597,032								45		
387	Other Equipment	PT387	F011		80,914										
	Mt. Olivet	MTOVT			•	•		-					-		
Sub-Total	Distribution Plant	PTDSUB		s	100,605,029			•							2,375,221
Transmiss	sion & Distribution Subtotal	TOSUB		\$	158,226,007 \$		s	;	5 57,620,93	77 \$	-	s		5	2,375,221
U-T-D Sul	blotal	PTSUB		s	173,160,089	14,934,082			57,620,97	77					2,375,221
117	Gas Stored Underground/Non-Current	PT117	F003	s	4,208,069	4,208,089			-						
301-303	Intengible Plant	PT301	PTSUB		53,151	4,584			17,68	86					729
389-399	General Plant	PT389	PTSUB		21,242,491	1,832,045			7,068,67						291,381
200-000	Common Utility Plant	PTCP	PTSUB			.,,070			,,500,0	-					291,301
			505										•		
Total Plan	it in Service	PTIS		\$	198,663,799	20,978,780		*	64,707,34	43			-		2,667,331

Cost of Service Study 12 Months Ended December 31, 2009

-				Distribution Mains	Distribution Mains		rvices	Motera	Custor	ner Accounts	С	ustomer Service Expense
Description	on	Name	Vector	Demand	Customer	Cus	stomer	Customer		Customer		Customer
Gas Plant	at Original Cost											
Undergro	und Storage Plant											
350-358	Underground Storage Plant	PT350	F003									
Total Ston	age Plant	PTST			s -	\$	- \$		S		\$	•
Transmis	sion Plant											
325-371	Transmission	PT365	F005				-	•	1.0			
Distributi	on Plant											
374 & 304		PT374	F008		_							2
375	Structures & Improvements	PT375	F008									2
376	Mans	PT376	F009	22,209,300	44,666,039							2
378	Mess. & Reg. Sta. Equip General	PT378	F008							2		
379	Meas, & Reg. Sta. Equip City Gate	PT379	F008	-	-					120		
and the same	Services	PT380	F010	-		13.70	9,009					
	Meters	PT381	F011					9,302,928				
	Meter Installations	PT382	F011					3,186,037		-		
-	House Regulators	PT383	F011					3,478,550				
384	House Regulator Installations	PT384	F011									
385	Industrial Meas, & Reg. Equip.	PT385	F011					1,597,032		-		
387	Other Equipment	PT387	F011					80,914				
	Mt. Olivet	MTOVT		•	•							•
Sub-Total	Distribution Plant	PTDSUB		22,209,300	44,666,039	13,70	9,009	17,645,461				
Transmiss	son & Distribution Subtotal	TOSUB		22,209,300	\$ 44,666,039	\$ 13,70	09,009 \$	17,645,461	\$		\$	*
U-T-D Sul	blotal	PTSUB		22,209,300	44,666,039	13,7	09,009	17,645,461				
117	Ges Stored Underground/Non-Current	PT117	F003									
301-303	Intangible Plant	PT301	PTSUB	6,817	13,710		4,208	5,416				
389-399	General Plant	PT389	PTSUB	2,724,538	5,479,428	1,6	81,759	2,164,665				
	Common Utility Plant	PTCP	PTSUB				•			•		-
Total Plan	t in Service	PTIS		24,940,653	50,159,175	15,3	94,975	19,815,542				

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Gas Plant at Original Cost (Continued)										
Construction Work In Progress										
Underground Storage	CWIPUS	F003	S			*				
Transmission	CWIPTR	F005	\$	71,157		€	71,157			
Distribution Mains	CWIPOM	F009	S	(38,587)						
Other Distribution	CWIPOD	PTDSUB	\$	27,411				-		647
General	CWIPCO	PT389	\$	441,990	38,119		147,077			6,063
Total CWIP	CWIP		\$	501,971	38,119	-	218,234		10	6,710
Total Gas Plant at Ongmel Cost	PTT		\$	199,165,770	21,016,899		64,925,577	1.		2,674,041

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Distribution Mains Demand	Distribution Mains Customer	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Gas Plant at Original Cost (Continued)								
Construction Work In Progress								
Underground Storage	CWIPUS	F003						
Transmission	CWIPTR	F005						
Distribution Mains	CWIPDM	F009	(12,815)	(25,772)				
Other Distribution	CWIPOD	PTDSUB	6,051	12,170	3,735	4,808		
General	CWIPCO	PT389	56.689	114,010	34,992	45,040		
Total CWIP	CWIP		49,926	100,407	38,727	49,848		
Total Gas Plant at Ongmai Cost	PTT		24,890,578	50,259,582	15,433,703	19,865,390	20	1

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Not Cost Rate Base										
Total Gas Utility Plant at Original Cost			\$	199.165,770 \$	21,018,899 \$. 5	64,925,577 \$	- 5	- s	2,674,041
Less:										
Reserve for Depreciation										
Underground Storage	DEPRUS	PIST	\$	5,126,945	5,126,945	**			•	•
Transmission	DEPTR	F005		20,483,644	•		20,483,644			
Distribution	DEPROI	PTDSUB		33,817,598		*		1.0		798,412
General	DEPRGE	PT389		10,824,054	933,514	*	3,801,826			148,473
Common	DEPRCO	PTCP			-		•		•	
Total Depreciation Reserve	DEPR		\$	70.252,241 \$	6,060,459 \$. s	24,085,470 S	- \$	- \$	946,884
Depreciation Adjustment		DEPR	s	1,112,824	95,000		381,524			14,999
tomer Advances For Construction	CAD	CADAL	S	54,605						-
a. Deferred Income Taxes	DIT	PTSUB		29,427,209	2,537,931		9,792,237			403,650
ment Tax Credit	ITC	PTSUB				41	-	-		
arred Income Taxes-FAS 109	FAS109	PTSUB		-			•	-		
PLUS:										
Materials and Supplies	MSP	PTSUB	s	596,121	51,412		198,366			8,177
Prepayments	PPY	PTSUB	•	1.631.711	140,726		542,970			22,382
Gas Stored Underground	GSU	F003		3,777,901	3,777,901	-	5-2,010	:		22,302
Cash Working Capital	cwc	OMT		1,658,306	58,576	170,895	403,413	56,991	13,064	18,221
Adjustments:										
Unamortized Debt		PTSUB	s	4.542.382	391,755		1,511,529	-		62,307
Utility ARO Assets		PTT	Š	(138,345)	(14,599)		(45,099)			(1,857)
A/O on ARO Assets		DEPR	s	134,408	11,595	*1	46,081			1,812
Net Cost Rate Base	NCRB		s	110,521,375 \$	16.737.875 \$	170,895 S	33,323,606 \$	56,991 \$	13,064 \$	1,419,548

Cost of Service Study 12 Months Ended December 31, 2009

											Custor	ner Servico
Description	Name	Vector	Distribution Mains Demand		Distribution Mains Customer		Services Customer	Meters Customer	Cu	stomer Accounts Customer		Expense Customer
Net Cost Rate Base												
Total Gas Utility Plant at Original Cost		s	24,990,578	\$	50,259,582	5	15,433,703 \$	19,865,390	5	- 5		
Leas:												
Reserve for Depreciation												
Underground Storage	DEPRUS	PTST					-					
Transmission	DEPTR	F005										
Distribution	DEPROI	PTDSU8	7,465,483		15.014.141		4,608,177	5,931,385				
General	DEPRGE	PT389	1,388,280		2,792,027		856,936	1,102,999				
Common	DEPRCO	PTCP	1,000,200		2,702,027		030,330	1,102,333				
Common	DEFREU	PICE	1.5							•		151
Total Depreciation Reserve	DEPR	\$	8,853,763	\$	17,806,168	\$	5,485,112 \$	7,034,384	\$	- s		
Depreciation Adjustment		DEPR	140,247		282,057		86,570	111,427				
mer Advances For Construction	CAD	CADAL	15,049		30,266		9,289	-				-
1. Deferred income Taxes	DIT	PTSUB	3,774,298		7,590,646		2.329,739	2,998,709				
ment Tax Credit	ITC	PTSUB			.,,,,,,,,,			4,000,00				_
erred Income Taxes-FAS 109	FAS109	PTSUB			-							
PLUS:												
Materials and Supplies	MSP	PTSUB	76,458		153,767		47,195	60,746		0.0		
Prepayments	PPY	PTSUB	209,281		420,894		129,182	166,278				-
Gas Stored Underground	GSU	F003	200,201		-120,001		125,102	100,270		0.75		
Cash Working Capital	CWC	OMT	178,981		359,956		103,170	144,343		152,473		224
Adjustments:												
Unamortized Debt		PTSUB	582,600		1,171,692		359,618	462,880				-
Utildy ARO Assets		PTT	(17,359)		(34,911)		(10,721)	(13,799)				
A/D on ARO Assets		DEPR	16,939		34,067		10,456	13,458				
Net Cost Rate Base	NCRB	s	13,254,121	s	26,655,910		8,181,893 \$	10.554.775		152,473 \$		224

Cost of Service Study 12 Months Ended December 31, 2009

Description		Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Duscinput					- Company					- COMMITTEE OF	
Labor Ex	penses										
Productic	on Expenses										
	& Maintenance										
753	Wells and Gathering	LB 753	F006		21,827				21,827		
754	Compressor Station	LB754	F006		102,954				102,954		
764	Maintenance of Wells and Gathering	LB764	F006		168				168		
765	Maintenance of Compressor Station	LB765	F008		3,525		-		3,525		
Total Proc	fuction Operation & Maintenance Expenses				128,472	_	ě		128,472		-
807-813	Procurement Expenses	LB807	DMCM	s	-			- 1			
007-013	Proceedings Capetises	LDOOT	DIVICINI	•	-					•	-
Storage E											
814	Operations Supervision and Engineer	LB814	OSE				140			-	- 2
-	Maps and Records	LB815	F003					-			
1	Well Expenses	L8818	F003		97,523	97,523			1.0		-
)	Unes Expenses	LB817	F003		,	. ,	19				-
, d	Compressor Station Exp - Payroll	LB818	F004		20,175		20,175		_		
819	Compressor Station Fuel and Power	LB819	F004								
820	Measurement and Regulator Station	L8820	F003			-				_	
821	Purification of Natural Gas	LB821	F004						- 2	27	
823	Gas losses	LB823	F004		100			- 1			
824	Other Expenses	LB824	F004		767		100				
825	Storage Well Royalities	LB825	F003								-
826	Rents	L8826	F003			-		1.5		0.7	
Total Stor	age Operation Labor	LBSO		\$	117,696 \$	97,523 S	20,175 \$. s	· = \$	
Storage I Maintena											
830	Maintenance Super and Eng.	LB830	MSE	\$							
831	Maintenance of Structures	LB831	F003						-		
832	Maintenance of Resevoirs	1,8832	F003		613	613					
833	Maintenance of Lines	LB833	F003								
834	Main of Compressor Station Equipment	LB834	F004		1,494		1,494				
835	Main of Meas and Reg Sta. Equip	LB835	F003		427	427	•			-	
836	Main of Purification Equip	LB836	F004		-						
837	Main of Other Equipment	LB837	F003			•			1		2
Total Mas	ntenance Labor	LBSM		s	2,534 \$	1,040 \$	1,494 \$	- 5	i- s	- s	
			*1	20			20.00				
Total Stor	rage Labor	LBS		S	120,232	98,563	21,669			•	

Cost of Service Study 12 Months Ended December 31, 2009

Descripti	on	Name	Vector	Distribution Mains Demand	Distribution	Mains	Services Customer		Metera stomer	Customer Account	
Labor Ex	penses										
Production	on Expenses										
	n & Maintenance										
753	Wells and Gatharing	LB 753	F006							_	_
754	Compressor Station	LB754	F006			-				1	
784	Maintenance of Wolls and Gathering	LB764	F008								
765	Maintenance of Compressor Station	LB765	F006				-			4	
Total Prod	duction Operation & Maintenance Expenses					•				5 .	
807-813	Procurement Expenses	LB807	DMCM			*					
Storage 8	Expenses										
814	Operations Supervision and Engineer	LB814	OSE	2						20	
	Maps and Records	LB815	F003			3				20	•
	Well Expenses	LB816	F003			- 5			-		
	Lines Expenses	LB817	F003			3			-		
	Compressor Station Exp - Payroll	LB818	F004	20		3					-
819	Compressor Station Fuel and Power	LB819	F004						-		-
820	Measurement and Regulator Station	L8820	F003			-					
821	Purification of Natural Gas	LB821	F004						•	•	-
823	Gas losses	LB823	F004	12.5					•		
824	Other Expenses	LB824	F004			•			•	•	
825	Storage Well Royalities	LB825	F003			- 5	-		•	-	-
828	Rents	LB826	F003	•		•					
020	Kanis	LB820	F003				•		*		
Total Stor	rage Operation Labor	LBSO	1 1		\$	- s	•	\$	٠	s .	s .
Storage I											
Maintena											
B30	Maintenance Super and Eng.	LB830	MSE			-					
831	Maintenance of Structures	LB831	F003	(*)		•			•		-
832	Maintenance of Resevoirs	LB832	F003	•		•			-	•	1.
833	Maintenance of Lines	LB833	F003			•	•		-		
834	Main of Compressor Station Equipment	LB834	F004			*			-		
835	Main of Meas and Reg Sta. Equip	LB835	F003			-					
836	Main of Purification Equip	L8836	F004			*	-		•		-
837	Main of Other Equipment	LB837	F003						-	-	-
Total Ma	ntenance Labor	LBSM	:	*	\$	- \$		s		s -	s -
Total Slo	rage Labor	LBS		14.							

Cost of Service Study 12 Months Ended December 31, 2009

Description	on	Name	Vector		Total Company		Storage Demand		Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Labor Ext	penses (Continued)												
Transmis	alon												
850-867	Transmission Expenses	LB850	F005	S	(*)					*	*		
Distribution	on Expenses												
Operation													
870	Operation Supr and Engr	LB870	DOES	S					*1	*			
871	Dist Load Dispatching	LB871	F007	200									-
872	Comor, Station Labor and Exp.	LB872	F007						•		-		
873	Compr. Station Fuel and Power	LB673	F007		4.				•		-		
874.01	Other Mains/Serv. Expenses	LB874,01	CADAL						/ *		-		
874,02	Leak Survey-Mains	LB874.02	F009										
874.03	Leak Survey - Service	LB874.03	F010										•
874.04	Locate Main per Request	LB874.04	CADAL		-								
75	Check Stop Box Access	LB874.05	F010				-						
	Patrolling Mains	LB874.06	F009						-		-		
1	Check/Grease Valves	LB874.07	F009								2		
. 08	Opr. Odor Equipment	LB874.08	F007										
874.09	Locate and Inspect Valve Boxes	LB874.09	F009		-								
874.1	Cut Grass - Right of Way	LB874,10	F009		-								
875	Meas and Reg Station Exp General	LB875	F008										-
876	Meas and Reg Station Exp Industrial	LB876	F011								-		
877	Meas and Reg Station Exp City Gate	LB877	F008				•				-		-
878	Meter and House Reg. Expense	LB878	F011				-			-			•
879	Customer Installation Expense	LB879	F011								-	*	
880	Other Expenses	LB880	PTDSUB								-		
881	Rents	L8881	PTDSUB						•	*			
Total Ope	rations Distribution Labor	LBDO		\$	-	s		\$				- \$	
Total Ope	rations Transmission and Distribution Labor	LBTDO		\$	124,781	\$	-	s	- s		s 124,781 S	. \$	

Cost of Service Study 12 Months Ended December 31, 2009

Description	on	Name	Vector	Digtribution N	lains nand	Distribution Mains Customer		Services		Metora stomer	Custo	mer Accounts Customer	Customer Service Expense Customer
Labor Ex	penses (Continued)												
Transmis	sion												
850-867	Transmission Expenses	LB850	F005		*			-				-	
Distributi	on Expenses												
870	Operation Supr and Engr	LB870	DOES										
671	Dist Load Dispetching	LB871	F007			-							
872	Compr. Station Labor and Exp.	LB872	F007										
873	Compr. Station Fuel and Power	LB873	F007			4.1							
874.01	Other Mains/Serv. Expenses	LB874.01	CADAL							-			
874.02	Leak Survey-Mains	LB874.02	F009					-					
874.03	Leak Survey - Service	LB874.03	F010							-		-	
874.04	Locate Main per Request	LB874.04	CADAL							-			
05	Check Stop Box Access	LB874.05	F010										
36	Patrolling Mains	L8874.06	F009										
37	Check/Grease Valves	LB874.07	F009		2			- 2					
80,-	Opr. Odor Equipment	LB874.08	F007		2								
874.09	Locate and Inspect Valve Boxes	LB874.09	F009					-					
874.1	Cut Grass - Right of Way	LB874.10	F009					-					
875	Meas and Reg Station Exp General	LB875	F008										
876	Mees and Reg Station Exp Industrial	LB876	F011					-		-		-	
877	Meas and Reg Station Exp City Gate	L8877	FOOR		-			(*)				196	
878	Meter and House Reg. Expense	LB878	F011		•	-							
879	Customer Installation Expense	LB879	F011			,		-				-	
880	Other Expenses	LB880	PTDSUB		•					-		-	
881	Rents	LB881	PTDSUB		*							•	
Total Ope	rations Distribution Labor	FBDO	1	•	- 5		s	-	s		s		
Total Ope	rations Transmission and Distribution Labor	LBTDO	5		- 5		s		s		s		

Cost of Service Study 12 Months Ended December 31, 2009

					Total		Storage		Storage	Transmission		Transmission		Distribution		Distribution Structures & Equipment
Descri	ption	Name	Vector		Company		Demand		Commodity	Demand		Commodity		Commodity		Demand
Labor	Expenses (Continued)															
Mainte	nance Expense Transmission and Distributio	n														
885	Maintenance Supr and Engr	L8885	DMES	\$						-		-				
886	Maintenance Structures	LB886	F008						- 2					*		*
887	Maintenance Mains	LB887	F009		81,259											
888	Maintenance Comp. Station Equip.	LB888	F007													
889	Maintenance Meas and Reg. General	LB889	F008						2							
890	Maintenance Meas and Reg - Industrial	LB890	F011		-				¥1							
891	Maintenance Meas and RegCity Gate	LB891	F008						•							
892	Maintenance Services	LB892	F010				-									
893	Maintenance Meters and House Reg.	LB893	F011		18,717		-									-
894	Maintenance Other Equipment	LB894	PTDSUB		5,703		-									135
898	Maintenance Transportaion Equip	L8898	PTDSUB		-					•				•		
	Trans & Distribution Expenses	LB900	TOSUB		2,692,246				-	950,432						40,415
1	laintenance Labor	LBDM		\$	2,797,925	S		\$		\$ 980,432	\$		\$		5	40,549
Total 1	ransmission & Distribution Labor	LBTD		\$	2,926,397	\$	*	\$		\$ 980,432	S	128,472	\$		\$	40,549
	mer Accounts Expense															
901	Supervision	LB901	F012	S			-		-					Two I		
902	Meter Reading	LB902	F012													*
903	Customer Records and Collections	LB903	F012	\$	439,440	0						-		-		
904	Uncollectible Accounts	LB904	F012		-							-		100		*
905	Misc. Cust Account Expenses	LB905	F012				-		~							7
Total 0	Customer Accounts Labor	LBCA		\$	439,440	\$		S	-	\$ -	\$		S		\$	
Custo	mer Service Expenses															
907-91	O Customer Service	LB907	F013	\$			•			-						•
Sales	Expenses															
911-91	6 Sales Expenses	LB911	F013	\$	-					-						

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Distribution Distribution	Mains emand	Distribution Mains Customer		Services Customer	15	Meters Customer	Cus	stomer Accounts Customer	Cust	emer Service Expense Custome
abor Expenses (Continued)													
Maintenance Expense – Transmission and Distribution	n												
885 Maintenance Supr and Engr	LB885	DMES											
386 Maintenance Structures	LB886	F008		-									
387 Maintenance Mains	LB887	F009		26,986	54,273						-		
Maintenance Comp. Station Equip.	LB888	F007											
389 Maintenance Meas and Reg. General	LB889	F008											
90 Maintenance Meas and Reg - Industrial	LB890	F011											
91 Maintenance Meas and RegCity Gate	LB891	F008					100						
92 Maintenance Services	LB892	F010											1.0
93 Maintenance Meters and House Reg.	LB893	F011							18,717				
94 Maintenance Other Equipment	LB894	PTDSUB		1.259	2,532		777		1,000		-		
98 Maintenance Transportaion Equip	LB898	PTDSUB			•								
Trans & Distribution Expenses	LB900	TOSUB	37	77,896	760,001		233,261		300,241				
Maintenance Labor	LBOM		\$ 40	06,141	\$ 816,806	s	234,039	s	319,958	\$		s	
Total Transmission & Distribution Labor	LBTD		S 40	06,141	\$ 816,806	\$	234,039	s	319,958	s	~	s	
Customer Accounts Expense													
901 Supervision	LB901	F012		-									
902 Meter Reading	LB902	F012			4				-		-		
103 Customer Records and Collections	LB903	F012		4							439,440		
904 Uncollectible Accounts	LB904	F012					-						
905 Misc. Cust Account Expenses	LB905	F012		*							•		
Total Customer Accounts Labor	LBCA		s	•	s .	\$		\$	•	5	439,440	s	*:
Customer Service Expenses													
907-910 Customer Service	LB907	F013		•									20
Sales Expenses													
911-916 Sales Expenses	LB911	F013		*			-						

Cost of Service Study 12 Months Ended December 31, 2009

Descript	ion	Name	Vector	71	Total Company	Storage Demand		orage nodity	Transmission Demand	Transmissio Commodit		Distribution	St	Distribution tructures & Equipment Demand
Later E	menses (Continued)													
	trative & General			-	20020									
920	Admin and General Salaries	LB920	LBSUB	S	2,543,913	71,925	7	5,813	715,457	93,751				29,590
921	Office Supplies and Expense	LB921	LBSUB		-	-						•		-
922	Admin. Expenses Transferred	L8922	LBSUB		•			-				*		-
923	Outside Services Employed	LB923	OMSUB		•					-		•		
924	Property Insurance	LB924	PTT					*	7.					-
925	Injunes and Damages	LB925	PTT											
926	Employee Pensions and Benefits	LB926	LBSUB		989,789	27,985		6,152	278,371	36,477		4(4)		11,513
927	Franxhise Requirement	LB927	PTT						-					
928	Regulatory Commission Fee	LB928	PTT		=									
929	Duplicate Charges - Dredit	LB929	PTT		*							-		-
930.1	General Advertising Expense	L8930.1	PTT											
930.2	Misc. General Expense	LB930.2	OMSUB			-				-				
-	Rents	LB931	PTT											_
	Maintenance of General Plant	LB935	PT389					1.0	-	-				•
Jal Adı	ministrative and General Labor	LBAG		\$	3,533,702 \$	99,910	s :	1,985 \$	993,829	\$ 130,227	\$		\$	41,104
Total Lal	oor Expense	LBTOT		s	7,019,771 \$	198,473	\$	3,634 \$	1,974,261	\$ 258,899	S		\$	81,653

Cost of Service Study 12 Months Ended December 31, 2009

Descripti	on	Name	Vector	Distribution Mains Demand	Distribution Mains Customer		Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Lapor Ex	nemes (Confinued)									
Administ	rative & General									
920	Admin and General Salanes	LB920	LBSUB	298,378	596,054		170.787	233,485	320,675	
921	Office Supplies and Expense	LB921	LBSUB	150.002.0016				•	•	
922	Admin. Expenses Transferred	LB922	LBSUB							-
923	Outside Services Employed	LB923	OMSUB							
924	Property Insurance	LB924	PTT							
925	Injunes and Damages	LB925	PTT					4		
926	Employee Pensions and Benefits	LB926	LBSUB	115,314	231,913		66,450	90,845	124,769	100
927	Franxhise Requirement	LB927	PTT					-	•	
928	Regulatory Commission Fee	LB928	PIT							10.0
929	Duplicate Charges - Dredit	LB929	PTT						8	
930.1	General Advertising Expense	LB930.1	PTT		-					
930.2	Misc. General Expense	LB930.2	OMSUB						-	
	Rents	LB931	PTT					-	-	-
	Maintenance of General Plant	LB935	PT389	*			•	1.5		
Ada	ninistrative and General Labor	LBAG	\$	411,690	\$ 827,967	s	237.236	\$ 324,330	\$ 445,444 \$	
Total Lab	or Expense	LBTOT	\$	817,831	\$ 1,644,773	\$	471,275	\$ 644,288	\$ 884,884 \$	-

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Operation & Maintenance Expenses										
Production Expenses										
Operation & Maintenance										
753 Wells and Gathering	OM 753	F006		21,969				21,969		
754 Compressor Station	OM754	F006		196,198	***			196,198		
784 Maintenance of Wells and Gathering	OM764	F006		168				166	•	
765 Maintenance of Compressor Station	OM785	F006		34,929			•	34,929		-
Total Production Operation & Maintenance Expenses				253,262	80			253,262	•	-
807-813 Procurement Expenses	OM807	DMCM	\$		(6)					
Storage Expenses										
Operation										
814 Operations Supervision and Engineer	OM814	OSE					1.0		-	
Maps and Records	OM815	F003							-	-
Well Expenses	OM816	F003		109,451	109,451					
Lines Expenses	OM817	F003				-			_	
Compressor Station Exp - Payroll	OMB18	F004		52.201		52,201				
819 Compressor Station Fuel and Power	OM819	F004								
820 Measurement and Regulator Station	OM820	F003								199
821 Purification of Natural Gas	OM821	F004		120,817		120,817		100		2
823 Gas losses	OMB23	F004		867,900		867,900			-	
824 Other Expenses	OMB24	F004		27,005		27,005		-		
825 Storage Well Royalities	OM825	F003		56,681	56,681					
826 Rents	OM826	F003		•	•	-	-	•		
Total Operation Expenses	OMOE		s	1,234,055 \$	166,132 S	1,067,923 \$	- s	- s	. \$	
Storage Expense										
Maintenance										
830 Maintenance Super and Eng.	OM830	MSE	\$			*				
831 Maintenance of Structures	OM831	F003		5,844	5,844			-	•	
832 Maintenance of Resevoirs	OM832	F003		613	613	-			•	
833 Maintenance of Lines	OM833	F003		•						
834 Main of Compressor Station Equipment	OMB34	F004		12,355		12,355				
835 Main of Meas and Reg Sta. Equip	OM835	F003	5.0	2,066	2,066	•				
836 Main of Purification Equip	OM836	F004	3	•	•		-			-
837 Main of Other Equipment	OM837	F003		1,154	1,154	•				
Total Maintenance Expense	OMME		\$	22,033 \$	9,678 \$	12,355 \$	- S	. 5	·	
Total Storage Expense	OMS		s	1,256,088	175,810	1,080,278				

Cost of Service Study 12 Months Ended December 31, 2009

Description	on .	Name	Vector	Distribution Mains Demand		n Mains ustomer	Service Custome		Meter		er Accounts Customer		er Service Expense Customer
Operation	& Maintenance Expenses												
	n Expenses												
	& Maintenance												
753	Wells and Gathering	OM 753	F006	15									
754	Compressor Station	OM754	F006	•									
764	Maintenance of Wells and Gathering	OM764	F006										
765	Maintenance of Compressor Station	OM785	F006										-
Total Prod	luction Operation & Maintenance Expenses												٠
807-813	Procurement Expenses	OM807	DMCM								3.47		
Storage E	xpenses												
Operation													
814	Operations Supervision and Engineer	OMB14	OSE	12		12					_		
	Maps and Records	OM815	F003				18		- 5		1.50		- 5
-	Well Expenses	OM816	F003										
3	Lines Expenses	OM817	F003										
	Compressor Station Exp - Payroll	OM818	F004	•		•	of.		•				
819		OM819	F004	-		5	-		*		•		-
	Compressor Station Fuel and Power					•	•						. *
B20	Measurement and Regulator Station	OM820	F003	-		•			-				
821	Purification of Natural Ges	OM821	F004			•					-		*
823	Gas losses	OM823	F004	*		•			-				-
824	Other Expenses	OM824	F004										-
825	Storage Well Royalities	OM825	F003										
826	Rents	OM826	F003			*							-
Total Ope	ration Expenses	OMOE	3	•	S	- S		s	-	s		5	•4
Storage E Maintena													
830	Maintenance Super and Eng.	OM830	MSE	9		20	(2)						
831	Maintenance of Structures	OM831	F003				120						2
832	Maintenance of Resevoirs	OM832	F003	172		13							-
833	Maintenance of Lines	OM833	F003										
834	Main of Compressor Station Equipment	OM834	F004	1									
835	Main of Meas and Reg Sta. Equip	OM835	F003	•			-		•				100
836	Main of Purification Equip	OM836	F003	2 7					-				
837	Main of Other Equipment	OM837	F004										7
			P003								•		35
Total Mass	ntenance Expense	OMME	5		5	- \$		\$		s		5	-
Total Stor	age Expense	OMS											

Cost of Service Study 12 Months Ended December 31, 2009

Description	on	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Operation	& Maintenance Expenses (Continued)										
Transmiss	-1										
850-867	Transmission Expenses	OM850	F005	s	121,438	(*)		121,438	×1		
Distribution	on Expenses	100									
Operation	500,000,000,000										
870	Operation Supr and Engr	OM870	DOES	S							
871	Dist Load Dispatching	OM871	F007		84,043					84,043	
872	Compr. Station Labor and Exp.	QM872	F007							•	
873	Compr. Station Fuel and Power	OM873	F007		-	*					
874.01	Other Mains/Serv. Expenses	OM874,01	CADAL								
874.02	Leak Survey-Mains	OM874 02	F009		*						
874.03	Leak Survey - Service	OM874.03	F010								
874.04	Locate Mam per Request	OM874.04	CADAL								
5	Check Stop Box Access	OM874.05	F010								
	Patrolling Mams	OM874.06	F009						-		
	Check/Grease Valves	OM874.07	F009						-		
·· 08	Opr. Odor Equipment	OM874.08	F007						•		
874.09	Locate and Inspect Valve Boxes	QM874.09	F009		-						
874.1	Cut Grass - Right of Way	OM874,10	F009				•				
875	Meas and Reg Station Exp General	OM875	F008								
876	Meas and Reg Station Exp Industrial	OM876	F011			-					
877	Meas and Reg Station Exp City Gate	OM877	F008						-		
878	Meter and House Reg. Expense	OM878	F011		-	1.00					
879	Customer Installation Expense	OM879	F011						•	-	
088	Other Expenses	OM880	PTDSUB		359,498						8,488
881	Rents	OM881	PTDSUB		15,104	•	(*)		•	-	357
Total Ope	rations Distribution Expense	OMDO		s	458,645		1.0			84,043	8,844
Total Tran	smission and Distribution Oper Exp	OMTDO		\$	798,249 \$	· \$	- \$	121,438 \$	218,167 \$	84,043 \$	8,844

Cost of Service Study 12 Months Ended December 31, 2009

Descriptio	n	Name	Vector	Distribution Mains Demand	Distribution Mains Customer	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Operation	& Maintenance Expenses (Continued)			*	-				
Transmiss	lon								
850-867	Transmission Expenses	OM850	F005	*					
Distributio	n Expenses								
Operation	·•								
870	Operation Supr and Engr	OM870	DOES			-			
871	Dist Load Dispatching	OM871	F007					-	
872	Compr. Station Labor and Exp.	OM872	F007						
873	Compr. Station Fuel and Power	OM873	F007					4	-
874.01	Other Mains/Serv. Expenses	OM874.01	CADAL	*	2				
874.02	Leak Survey-Mains	OM874.02	F009			-			
674.03	Leak Survey - Service	OM874.03	F010						
874.04	Locate Main per Request	OM874.04	CADAL	0.00					
05	Check Stop Box Access	OM874.05	F010	-			1.0		
3	Patrolling Mains	OM874.06	F009					2	
17	Check/Grease Valves	OM874.07	F009						,
08	Opr. Odor Equipment	OM874.08	F007	-					
874.09	Locate and Inspect Valve Boxes	OM874.09	F009						
874.1	Cut Grass - Right of Way	OM874.10	F009			-			
875	Meas and Reg Station Exp General	OM875	F008	-	-	-1		-	
876	Meas and Reg Station Exp Industrial	OM876	F011			•		-	
877	Meas and Reg Station Exp City Gate	OM877	F008						
878	Meter and House Reg. Expense	OM878	F011	(m)		4		-	
879	Customer Installation Expense	OM879	F011			2			
880	Other Expenses	OM880	PTDSUB	79,362	159,608	48,987	63,054	•	
881	Rents	OM881	PTDSUB	3,334	6,706	2,058	2,649	* ,	
Total Oper	ations Distribution Expense	OMDO		82,696	166,314	51,045	65,703		
Total Trans	imission and Distribution Oper Exp	ОМТОО	s	82,696 \$	168,314 \$	51,045 S	65,703	s . s	

Cost of Service Study 12 Months Ended December 31, 2009

Descripti	оп	Name	Vector		Total Company		Storage Demand	Storage Commodity		Transmission Demand		Transmission Commodity		Distribution Commodity		Distribution Structures & Equipmen Demand	t
Operation	n & Maintenance Expenses (Continued)																
Maintena	nco Expense — Transmission and Distribution	οn															
885	Maintenance Supr and Engr	OM885	DMES	\$						-		-		-			
886	Maintenance Structures	OM886	F008					-									
887	Maintenance Mains	OM887	F009		157,799												
888	Maintenance Comp. Station Equip.	OM888	F007														
889	Maintenance Meas and Reg. General	OM889	F008		2,221											2,221	
890	Maintenance Meas and Reg - Industrial	OM890	F011					*									
891	Maintenance Meas and RegCity Gate	OM891	F008														
892	Maintenance Services	OM892	F010				-										
893	Maintenance Meters and House Reg.	OM893	F011		57,773		*			1.5						-	
894	Maintenance Other Equipment	OM894	PTDSUB		130,203			*		-						3,074	
898	Maintenance Transportation Equip	OM898	BUSGTS		42,119			*		•						994	
	Trans & Distribution Expenses	OM900	TDSU8		3,530,029			•		1,285,526		•				52,991	
Mai	ntenance Expenses	OMME		s	3,920,144	S		\$ •	s	1,285,526	S		\$		\$	59,281	
Total Tra	nsmission & Distribution Expenses	OMDE		S	4,753,488	S	•	\$	s	1,406,965	\$	253,262	S	84,043	5	68,125	
Custome	r Accounts Expense																
901	Supervision	OM901	F012	\$	-							-					
902	Meter Reading	OM902	F012														
903	Customer Records and Collections	OM903	F012	5	778,501												
904	Uncollectible Accounts	OM904	F012		(185,412)	i.						-					
905	Misc. Cust Account Expenses	OM905	F012		-									*			
Total Cus	stomer Accounts Expense	OMCA		\$	593,089	s		\$	\$	4	\$		\$	-	s	0.18	
	r Service Expenses																
907-910	Customer Service	OM907	F013	\$			•							-			
Sales Ex																	
911-916	Sales Expenses	OM911	F013	\$	1,438							-					

Cost of Service Study 12 Months Ended December 31, 2009

Description		Name	Vector	Distribution Main		Distribution Mains Customer		Services Customer	Meters Customer	С	ustomer Accounts Customer	Cı	stomer Service Expense Customer
Operation & Ma	Intenance Expenses (Continued)												
Maintenance Ex	spense Transmission and Distribution												
885 Ma	intenance Supr and Engr	OM885	DMES										
886 Ma	intenance Structures	OM886	F008										304
887 Ma	intenance Mains	OM887	F009	52,40	15	105,394							
888 Ma	intenance Comp. Station Equip.	OM888	F007			-							
889 Ma	intenance Meas and Reg. General	OMB89	F008										-
890 Ma	intenance Meas and Reg - Industrial	OM890	F011										
	intenance Meas and RegCity Gate	OM891	F008						-				
	intenance Services	OM892	F010	•		-							-
	intenance Meters and House Reg.	OM893	F011			•		•	57,773				
	intenance Other Equipment	OM894	PTDSUB	28,74		57,807		17,742	22.837				-
	intenance Transportzion Equip	OM898	PTDSU8	9,29		18,700		5,739	7,387				
Tra	ns & Distribution Expenses	OM900	TOSUB	495,49	ю	996,501		305,849	393,671				
Aaıntenan	ce Expenses	OMME	s	585,93	37 \$	1,178,402	s	329,330	\$ 481,668	5		\$	
Total Transmiss	on & Distribution Expenses	OMDE	s	668,63	3 \$	1,344,715	s	380,376	\$ 547,371	\$	•	s	•
Customer Acco	ounts Expense												
	pervision	OM901	F012										0.2
	ter Reading	OM902	F012			2							
	stomer Records and Collections	OM903	F012	-							778,501		
904 Un	collectible Accounts	OM904	F012					-			(185,412)		
905 Mis	sc. Cust Account Expenses	OM905	F012										
Total Customer	Accounts Expense	OMCA	s		\$	-	\$		\$	\$	593,089	\$	
Customer Serv													
907-910 Cu	storner Service	OM907	F013			•			•		-		-
Sales Expense:		011011	5042										
911-916 Sa	les Expenses	OM911	F013	-		•		-	-		-		1,438

Cost of Service Study 12 Months Ended December 31, 2009

Descript	ion	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand		Transmission Commodity	*	Distribution Commodity		Distribution Structures & Equipment Demand
Operation	n & Maintenance Expenses (Continued)			15										
Adminis	trative & General													
920	Admin and General Salaries	OM920	LBSUB	S	2,628,513	74,317	16,339	739,251		96,869				30,575
921	Office Supplies and Expense	OM921	LBSUB		549,130	15,526	3,413	154,439		20,237				6,387
922	Admin. Expenses Transferred	OM922	LBSUB		(3,314,076)	(93,700)	(20,600)	(932,060)		(122,134)				(38,549)
923	Outside Services Employed	OM923	OMSUB		1,085,160	28,888	177,507	231,187	1	41,615		13,810		11,194
924	Property Insurance	OM924	PTT		846,315	89,307	-	275,888						11,363
925	Injunes and Damages	OM925	PTT				-							
926	Employee Pensions and Benefits	OM926	LBSUB		3,978,940	112,498	24,733	1,119,049		146,636				46,282
927	Franchise Requirement	OM927	PTT							-		4		
928	Regulatory Commission Fee	OM928	PTT		189,509	19,998	-	61,778						2,544
929	Duplicate Charges - Dredit	OM929	PTT					-						
930.1	General Advertising Expense	QM930.1	PTT				-							-
930.2	Misc. General Expense	OM930.2	OMSUB		559,375	14,891	91,501	119,172	•	21,452		7,119		5,770
	Rents	OM931	PTT		-		-			-				
	Maintenance of General Plant	OM932	PT389		197,811	17,060		65,824		-		•		2,713
Ad la.	ministrative and General Expense	OMAGT		\$	6,720,678	\$ 278,786	\$ 292,892	\$ 1,834,526	\$	204,674	\$	20,928	\$	78,280
Total Op	eration & Maintenance Expense	OMT		\$	13,324,781	\$ 454,596	\$ 1,373,171	\$ 3,241,491	s	457,936	s	104,971	S	146,405

Cost of Service Study 12 Months Ended December 31, 2009

Descripti	ion	Name	Vector	Distribution Mains Demand	Distribution Mains Customer	Services Customer		Customer Accounts Customer	Customer Service Expense Customer
Operation	n & Maintenance Expenses (Continued)								
Administ	trative & General								
920	Admin and General Salanes	OM920	LBSUB	306,232	615,876	176,468	241,250	331,340	
921	Office Supplies and Expense	OM921	LBSUB	63,976	128,664	36,886	50,400	69,221	
922	Admin. Expenses Transferred	OM922	LBSUB	(386,103)	(776,507)	(222,492)		(417,759)	•
923	Outside Services Employed	OM923	OMSUB	109,867	220,958	62,502	89,942	97,454	236
924	Property Insurance	OM924	PTT	106,193	213,568	65,582	84,414		
925	Injunes and Damages	OM925	PTT	-	-		•		
926	Employee Pensions and Benefits	OM926	LBSUB	463,562	932,289	267,128	365,195	501,569	
927	Franchise Requirement	QM927	PIT	-					
928	Regulatory Commission Fee	OM928	PTT	23,779	47,823	14,685	18,902	-	ė
929	Duplicate Charges - Dredit	OM929	PTT		-		-	-	
930.1	General Advertising Expense	OM930.1	PTT		-	w		-	
930.2	Misc. General Expense	OM930.2	OMSUB	56,634	113,899	32,218	46,363	50,235	122
	Rents	OM931	PIT	-			-		-
	Maintenance of General Plant	OM932	PT389	25,371	51,025	15,661	20,157		-
Adr الهاس	ninistrative and General Expense	OMAGT		769,511 \$	1,547,594	S 448,617	\$ 612,451	\$ 632,060	\$ 358
Total Ope	eration & Maintenance Expense	OMT	s	1,438,144 \$	2,892,310	s 828,992	\$ 1,159,822	\$ 1,225,149	\$ 1,796

Cost of Service Study 12 Months Ended December 31, 2009

Descriptio	in.	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
		145,110	7 0000				-		- Commonly	- Continued	Demano
Depreciati	on Expenses										
Undersen	and Storage										
350-357	Underground Storage Plant	DP350	F003	s	293,733	293,733				4	
Transmiss											
365-371	Transmission Plant	DP365	F005	S	1,232,318		•	1,232,318		•	150
Distributio	on								*		
374	Land & Land Rights	DP374	F008	S					-		
375	Structures & Improvements	DP375	F008		3,000			-			3,000
376	Mains	DP376	F009		926,374	9					
378	Meas & Reg Station EqGen	DP378	F008		45,914	+			4		45,914
379	Meas & Reg Station EqCity Gate	DP379	F008		14,674						14,674
380	Services	DP380	F010		191,190		-				•
	Meters	DP381	F011		211,954	-					
	Meter Installations	DP382	F011		74,194	*					
	House Regulators	DP383	F011		130,944	-					
	House Regulator Installations	DP384	F011								
385	Industrial Meas & Reg Equipment	DP385	F011		36,370						1000
387	Other Equipment	DP387	F011								-
	Other		PTSUB		*						
										120	
Total Distri	button			s	1,634,615 \$. 5	¥ \$. s	- \$	- S	63,588
117	Gas Stored Underground	DP117	F003	- 5		20				-	*
301-303	Intangible Plant	OP301	PTSUB	(2)							
389-399	General Plant	DP389	PTSUB		651,391	56,179		216,758			8,935
Common t	Julity Plant	DPCP	PTSUB					-			
											17 to server
Amortizatio	on of Gas Plant	AMORT	PTSUB		(19,800)	(1,708)		(6,589)			(272)
Accretion i	Expense	ACCRTN	PTSUB				2		2		1-
Total Depr	ecuation Expense	DEPREX		s	3,792,258 \$	348,204 \$. s	1,442,487 S	. s	- s	72,251

Cost of Service Study 12 Months Ended December 31, 2009

Description	on .	Name	Vector	Distribution Mains Demand	Distribution Mains Customer	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Depreciat	on Expenses								
Hoderom	und Storage								
350-357	Underground Storage Plant	DP350	F003	-	1 2		-		
Transmis	tion .								
365-371	Transmission Plant	DP365	F005			-			
Distributi									
374	Land & Land Rights	DP374	F008	-	-	.5			
375	Structures & Improvements	DP375	F008				*		
376	Mains	DP376	F009	307,649	618,725				3.5
378	Meas & Reg Station EqGen	DP378	F008	•			•	-	
379	Meas & Reg Station EqCity Gate	DP379	F008		*				*
380	Services	DP380	F010	•	•	191,190		•	•
1	Moters	DP381	F011			•	211,954	-	
	Meter Installations	DP382	F011	-			74,194		
	House Regulators	DP383	F011	•			130,944	-	
-04	House Regulator Installations	DP384	F011					-	
385	Industrial Meas & Reg Equipment	DP385	F011			•	36,370		\$ S
387	Other Equipment	DP387	F011	(*)					
	Other		PTSUB	1.5		•		-	
Total Oist	ibution		s	307,649 \$	618,725 \$	191,190 \$	453,463		
117	Gas Stored Underground	DP117	F003					-	
301-303	Intangible Plant	DP301	PTSUB					-	
389-399	General Plant	DP389	PTSUB	83,547	168,024	51,570	66,378	-	21
	Utility Plant	DPCP	PTSUB	-		•			•
Amortizati	on of Gas Plant	AMORT	PTSUB	(2,540)	(5.107)	(1,568)	(2,018)		-
Accretion	Expense	ACCRTN	PTSUB						
Total Dep	reciation Expense	DEPREX	5	368,656 \$	781,642 \$	241,193 \$	517,824	s :	

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector		Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Taxes Other Than Income Taxes										
Liscense & Privilege Fee Property Taxes Payroli Taxes	OTRE OTPP OTUN	PTT PTT LBTOT	s	7,382 1,320,467 577,030	779 139,342 16,315	3,587	2,407 430,456 162,286	21,265	:	99 17,729 6,712
Total Taxes Other Than Income Taxes	οπ		s	1,904,879 \$	156,435 \$	3,587 \$	595,148 \$	21,265 \$	- s	24,540
Interest on Long Term Debt	INT	PTT	\$	4,075,601	430,076		1,328,596	2.0		54,720

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Distribution Mains Demand	Distribution Mains Customer	Services Customer	Meters Customer	Customer Accounts Customer	Customer Service Expense Customer
Taxes Other Than Income Taxes								
Liscense & Privilege Fee Property Taxes Payroll Taxes	OTRE OTPP OTUN	PTT PTT LBTOT	926 165,687 67,226	1,863 333,221 135,202	572 102,325 38,739	736 131,707 52,961	72,738	:
Total Taxes Other Than Income Taxes	опт	s	233,840 \$	470,285 \$	141,636	\$ 185,405	72,738 \$	
Interest on Long Term Debt	INT	PTT	511,391	1,028,480	315,825	406,513		

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Total Company	Storage Demand	Storage Commodity	Transmission Demand	Transmission Commodity	Distribution Commodity	Distribution Structures & Equipment Demand
Functional Assignment Vectors									
Gas Supply Demand	F001		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Gas Supply Commodity	F002		1.000000	0.000000	0.000000	0.000000	0.00000	0.000000	0.000000
Storage Demand	F003		1,000000	1.000000	0.000000	0.000000	0.00000	0.000000	0.000000
Storage Commodity	F004		1,000000	0.000000	1,000000	0.00000	0.00000	0.000000	0.000000
Transmission Demand	F005		1.000000	0.000000	0.000000	1.000000	0.00000	0.000000	0.000000
Transmission Commodity	F006		1.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
Distribution Expense Commodity	F007		1.000000	0.000000	0.000000	0.000000	0.00000	1.000000	0.000000
Distribution Structures & Equipment	F008		1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Distribution Mains	F009		1.000000	0.000000	0.000000	0.000000	0.00000	0.000000	0.000000
Services	F010		1.000000	0.000000	0.000000	0.000000	0.00000	0.000000	0.000000
Meters	F011		1,000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Customer Accounts	F012		1.000000	0.000000	0.000000	0.00000	0.000000	0.000000	0.000000
Customer Service Expense	F013		1.000000	0.000000	0.00000	0.00000	0.00000	0.000000	0.000000
mission & Distribution Mains	TOMSUB	•	124 496 316 \$			57 620 977 \$			

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Distribution Mains Demand	Distribution Mains Customer		Services ustomer	Moters Customer	Customer Accounts Customer	Customer Service Expense Customer
Functional Assignment Vectors									
Gas Supply Demand	F001		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000
Gas Supply Commodity	F002		0.00000	0.00000		0.000000	0.000000	0.000000	0.00000
Storage Demand	F003		0.000000	0.000000	1	0.000000	0.000000	0.000000	0.000000
Storage Commodity	F004		0.000000	0.000000		0.000000	0.000000	0.000000	0.000000
Transmission Demand	F005		0.00000	0.00000		0.000000	0.000000	0.00000	0.000000
Transmission Commodity	F006		0.000000	0.00000		0.000000	0.000000	0.000000	0.000000
Distribution Expense Commodity	F007		0.000000	0.000000	1	0.000000	0.000000	0.00000	0.000000
Distribution Structures & Equipment	F008		0.000000	0.000000		0.000000	0.000000	0.00000	0.000000
Distribution Mains	F009		0.332100	0.667900		0.000000	0.000000	0.000000	0.000000
Services	F010		0.000000	0.000000	19	1.000000	0.000000	0.000000	0.000000
Meters	F011		0.00000	0,00000		0.000000	1.000000	0.000000	0.000000
Customer Accounts	F012		0.000000	0.000000		0.000000	0.000000	1.000000	0.00000
Customer Service Expense	F013		0.000000	0.000000	100	0.000000	0.000000	0.000000	1.000000
vnission & Distribution Mains	TDMSUB	s	22,209,300 S	44,666,039		0		s . 1	

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector		Total Company		egen bnem	Storage Commodity	Transmission Demand		Transmission Commodity	Distribution Commodity	Olstribution Structures & Equipment Demand
Internally Generated Functional Vectors												
Sub-Total Distribution Plant		PTDSUB		1.000000						1.		0.023609
Storage-Transmission-Distribution Subtotal		PTSUB		1,000000	0.08	5244		0.332761				0.013717
Total Storage Plant		PTST		1,000000	1.00	0000		-				
Transmission Plant		PT365		1.000000				1.000000				
General Plant		PT389		1,000000	0.08	6244		0 332761				0.013717
Total Distribution Plant		PTDSUB		1,000000			-					0.023809
Sub-Total CWIP		CWIP		1.000000	0.07	5939		0.434755			-	0.013367
Total Depreciation Reserve		DEPR		1.000000	0.08	8267		0.342843				0.013478
Storage-Transmission -Distribution Plant Subtotal		PTSUB		1.000000	80.0	5244		0.332761				0.013717
Transmission and Distribution Payroll		LBTD		1.000000		*		0.335030		0.043901		0.013858
Transmission and Distribution Mains		TDMSUB		1.000000		-		0.462833				
Storage Operation Expenses Subtotal	OSE			117,698	9	,523	20,175	-				
Storage Maintenance Expenses Sublotal	MSE			2,534		,040	1,494					
Mains & Services	CADAL			80,584,347		-	•				*	
and/Commodity Percent of Purchased Gas Cost	DMCM			1.00000								
button Operation Expenses Subtotal	DOES			•		•				-		
bution Maintenance Expenses Subtolal	DMES			105,679								135
utotal Labor Expenses	LBSUB		\$	3,486,089	\$ 9	3,563	\$ 21,669	\$ 980,432	S	128,472	\$	\$ 40,549
Subtotal O&M Expenses	OMSUB		5	8,604,104	\$ 17	.810	\$ 1,080,278	\$ 1,406,965	\$	253,262	\$ 84,043	\$ 68,125

Cost of Service Study 12 Months Ended December 31, 2009

Description	Name	Vector	Distribution Mains Demand		bution Mains Customer		Service Custom		Meters Custome	Customer Accounts		 ner Service Expense Customer	
Internally Generated Functional Vectors			3										
Sub-Total Oistribution Plant		PTDSUB	0.220757		0.443974		0.13626	6	0.175393				
Storage-Transmission-Distribution Subtotal		PTSUB	0,128259		0.257946		0.07917		0.101903				
Total Storage Plant		PTST			-				4.14.666				
Transmission Plant		PT365			-								
General Plant		PT389	0.128259		0.257946		0.07917	0	0.101903				
Total Distribution Plant		PTDSUB	0.220757		0.443974		0.13626		0.175393			-	
Sub-Total CWIP		CWIP	0.099459		0.200026		0.07715		0.099304				
Total Depreciation Reserve		DEPR	0.126028		0.253461		0.07779		0.100130			-	
Storage-Transmission -Distribution Plant Subtotal		PTSUB	0.128259		0.257948		0.07917		0.101903	-			
		LBTD	0.128239		0.279117		0.07997		0.109335				
Transmission and Distribution Payroll							0.07897	5	0,109335			-	
Transmission and Distribution Mains		TDMSU8	0,178393		0.358774		-			5			
Storage Operation Expenses Subtotal	OSE		•		-								
Storage Maintenance Expenses Subtotal	MSE		•							-			
Mains & Services	CADAL		22,209,300		44,666,039		13,709,00	9		-			
and/Commodity Percent of Purchased Gas Cost	DMCM												
ution Operation Expenses Subtotal	DOES									2		-	
oution Maintenance Expenses Subtotal	DMES		28,245		56,805		77	7	19,717	2			
Lotal Labor Expenses	LBSUB	5	406,141	2	816,806	S	234.03		319,958	439,440	s		
Subtotal O&M Expenses	OMSUB	3	668,633		1,344,715		380,37		547,371	593,089		1,438	

Seelye Exhibit 6

Class Cost of Service Study

Allocation of Costs by Rate Class

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Nan	Allocati ne Vec		Total System		Residential		Small Non-Res		Large Non-Res		Interruptible		Special		Off Sys Trans
Plant in Service (Continued)																	
Distribution Mains Demand Customer Total Distribution Mains	PTIS PTIS	PTISOMO PTISOMC	DEMOS CUST01	s	24,940,653 50,159,175 75,099,828	5	11,308,407 42,800,385 54,108,792	2	3,718,577 5,963,396 9,681,973	5	8,103,281 1,337,078 9,440,359	5	1,722,368 \$6,926 1,779,295	5	88,020 1,388 89,409	5	:
Services Customer	PTIS	PTISSC	CUST02	s	15,394,975	s	12,679,380	s	1,646,099	s	1,022,766	s	43,545	s	3,186	s	
Meters Customer	PTIS	PTISMC	CUSTO3	s	19,815,542	s	13,355,472	s	2,990,345	s	3,046,528	s	378,581	s	44,616	s	
Customer Accounts Customer	PTIS	PTISCAC	CUST04	s		s		s		s	*	\$		s		s	•
stomer Service	PTIS	PTISCSC	CUST05	s		s	•	s		\$		s	-	\$		s	7.
iotal		PLT		s	198,663,799	S	108,094,752	\$	23,520,966	\$	34,112,662	5	4,940,043	5	4,498,739	5	23,496,637

Cost of Service Study 12 Months Ended December 31, 2009

			Alloca	tion													
Description	Ref	N		ctor	Total System		Residentia		Small Non-Res		Large Non-Res		Interruptibl		Special		Off Sys Tran
Rate Base																	
Gas Supply Casts																	
Demand	NCRB	RBGSD	DEM01	S		\$		5		5		S		S		\$	
Commodity	NCRB	RBGSC	COM01			5		5	-	5		5		S		S	
Total Procurement Expenses				\$	-	S		\$	-	5	: - :	\$		\$		S	
Storage																	
Demand	NCRB	RBSD	DEM02	5	16,737,875	5	7,954,835	5	2,624,831	5	6,158,209	S	141	\$	*	5	
Commodity	NCRB	RBSC	COM02		170,895	5	77,028	5	26,273	5	67,594	2		S		5	
Total Storage				S	16,908,770	5	8,031,863	5	2,651,104	\$	6,225,803	\$	-	S		5	
Transmission																	
Demand	NCRB	RBTD	TDEM	5	33,323,606	S	8,637,065	S	2,840,151	2	6,189,074	\$	1,315,500	S	2,241,294	5	12,100,523
Commodity	NCRB	RBTC	COM03		56,991	\$	5,294	5	1,775	5	6,103	5	3,445	S	6,266		34,109
Total Transmission				S	33,380,598	S	8,642,359	S	2,841,926	5	6,195,177	\$	1,318,945	5	2,247,559	S	12,134,632
itribution Expenses																	
Commodity	NCRB	RBDEC	COM04	\$	13,064	\$	4,115	S	1,380	\$	4,744	\$	2,678	5	147	\$	
Distribution Structures & Equipment																	
Demand	NCRB	RBDSD	DEM04	S	1,419,548	S	643,641	2	211,650	2	461,215	2	98,032	S	5,010	2	

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	N	Allocati		Total System	Residential		Small Non-Res		Large Non-Res		Interruptible	1	Special		Off Sys Trans
Rate Base (Continued)																
Distribution Mains Demand Customer Total Distribution Mains	NCRB NCRB	RBDMD RBDMC	DEM05 CUST01	s	13,254,121 \$ 26,655,910 \$ 39,910,031 \$	6,009,586 22,745,255 28,754,841	5	1,976,150 3,169,106 5,145,256	5	4,306,297 710,559 5,016,856	5	915,312 30,252 945,564	5	46,776 738 47,514	5	÷
Services Customer	NCRB	RBSC	CUST02	s	8,181,893 S	6,738,649	s	874,844	s	543,564	s	. 23,142	s	1,693	s	9
Meters Customer	NCRB	RBMC	CUST03	s	10,554,775 \$	7,113,810	s	1,592,811	s	1,622,737	5	201,652	s	23,765	s	
Customer Accounts Customer	NCRB	RBCAC	CUST04	s	152,473 S	119,847	s	16,547	5	14,954	s	594	5	63	s	469
tomer Service stomer	NCRB	RBCSC	CUST05	s	224 S	191	s	26	s	6	s	0	s	0	s	
fotal		RST		5	110,521,375 \$	60,049,315	\$	13,335,545	s	20,085,056	\$	2,590,607	5	2,325,751	s	12,135,101

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Na	Alloca me Ve	tion ctor	Total System		Residential		Small Non-Res		Large Non-Res			Interruptible		Special		Off Sys Trans
Operation and Maintenance Expenses	e .										12							
Gas Supply Costs																		
Demand	OMT	OMGSD	DEMO1	S		•	-	•				•			•		S	
Commodity	OMT	OMGSC	COMO1	•				Š		Š		:			3		:	
	OWIT		COMO			5		ż		,		3			3		,	
Total Procurement Expenses		OMGST		S		2		3		2		2		•	2		2	•
Storage																		
Demand	OMT	OMSD	DEM02	s	454,596	\$	216,051	5	71,290	\$	167,255	2	+	12	\$		S	
Commodity	OMT	OMSC	COM02		1,373,171		618,932		211,108		543, (3)			11	5		s	
Total Storage	•	OMST		5	1,827,766		834,983		282,397		710,386				s		S	
Transmission																		
Demand	OMT	OMTD	TDEM	5	3,241,491	•	840,154		276,270	<	602,030	•		127,963		218,018	•	1,177,055
Commodity	OMT	OMTC	COM03	•	457,936		42,536		14,261	s	49.041			27,679				274,074
Total Transmission	CIMIT	OMTRT	COMOS		3,699,427		882,690		290,531		651,071			155,642		268,362		1,451,129
Dail Herbitission		OMINI		3	3,039,421	3	982,030	3	290,331	3	431,071	3		133,042	•	208,302	3	1,431,129
tribution Expenses																		
omnodity	OMT	OMDEC	COM04	\$	104,971		33,064		11,085		38,121			73.636		1,184		
Solisioony	CIMI	OMDEC	COMO	•	104,971	3	13,004	3	11,083	•	38,121	•		21,516	,	1,104	2	
Distribution Structures & Equipment																		
Demand	OMT	OMDSD	DEM04	•	146,405	•	66,382	•	21,829		47,567	•		10,111		517	•	
D OTT LOS TO	Q11111	OHIDOD	O CHILD	-	1-0,402		20,00		41,027	-	47,307	-		10,111	-	211	•	

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Nan	Affocati ie Veet		Total System		Residential		Small Non-Res		Large Non-Res		Interruptible		Special		Off Sys Trans
Operation and Maintenance Expen	ses (Continued)																
Distribution Mains Demand Customer Total Distribution Mains	OMT OMT	OMDMD	DEMOS CUSTO1	s	1,438,144 2,892,310 4,330,453	S	652,072 2,467,983 3,120,055	\$	214,423 343,865 558,288	S	467,256 77,099 544,356	S	99,316 3,283 102,599	5	5,075 80 5,156	5	:
Services Customer	OMT	OMSC	CUST02	s	828,992	s	682,762	s	88,640	s	55,074	s	2,345	s	172	s	
Meters Customer	OMT	OMMC	CUST03	s	1,159,822	s	781,708	\$	175,028	s	178,316	s	22,159	s	2,611	5	
Customer Accounts Customer	OMT	OMCAC	CUST04	s	1,225,149	s	962,994	\$	132,961	s	120,155	s	4,771	s	502	s	3,767
tomer Service stomer	OMT	OMCSC	CUST05	s	1,796	\$	1,534	s	212	s	48	s	2	s	0	s	•
Fotal		OMTT		\$	13,324,781	5	7,366,173	5	1,560,971	5	2,345,094	5	319,144	S	278,504	S	1,454,896

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref		Name Vec	ion	Total System		Residential		Small Non-Res		Large Non-Res		Interruptible	:	Special		Off Sys Trans
Payroll Expenses																	
Distribution Mains Demend Customer Total Distribution Mains	LBT LBT			s	817,831 1,644,773 2,462,604	S	370,815 1,403,470 1,774,285	5	121,936 195,546 317,482	5	265,715 43,844 309,559	\$	\$6,478 1,867 58,345	5	2,886 46 2,932	S	
Services Customer	LBT	OT LBSC	CUST02	s	471,275	s	388,144	5	50,391	s	31,309	5	1,333	s	98	s	
Meters Customer	LBT	OT LBMC	CUSTOS	3	644,288	s	434,244	s	97,229	S	99,056	s	12,309	s	1,451	s	*
Customer Accounts Customer	LBT	OT LBCAG	CUST04	5	884,884	s	695,538	s	96,033	s	86,784	s	3,446	s	363	s	2,720
stomer Service	LBT	OT LBCS	C CUSTOS	s		s	- *	s		s		s		s	-	s	· ·
Total		LBTT		S	7,019,771	S	3,978,961	S	787,464	2	1,037,895	S	174,646	5	166,358	\$	874,448

Cost of Service Study 12 Months Ended December 31, 2009

				cation					19								
Description	Ref		Name	Vector	Total System		Residentia		Small Non-Res	1	Large Non-Res	-	Interrupt	ble	Special	<u> </u>	Off Sys Trans
Depreciation Expenses																	
Gas Supply Costs																	
Demand	DEPREX	DEGSD	DEM01	S		S	-	5		S		5				5	
Commodity	DEPREX	DEGSC	COM01		-	\$		5		5		5				5	
Total Procurement Expenses		DEGST		2		2	*	\$		\$	*	5		5		\$	
Storage																	
Demand	DEPREX	DESD	DEM02	5	348,204	2	165,487	\$	54,605	5	128,111	5	10	S		5	
Commodity	DEPREX	DESC	COM02			S	-	5		2		5		S		S	
Total Storage		DEST		2	348,204	\$	165,487	5	54,605	5	128,111	\$		5		5	•
Transmission																	
Demand	DEPREX	DETD	TDEM	S	1,442,487	5	373,875	S	122,942	5	267,908	5	56,9	44 5	97,019	5	523,798
Commodity	DEPREX	DETC	COM03			5		\$		5	1.	2	-	-		5	•
Total Transmission		DETT		S	1,442,487	2	173,875	\$	122,942	5	267,908	5	\$6,9	44 S	97,019	\$	523,798
tribution Expenses																	
Commodity	DEPREX	DEDEC	COM04	\$	•	S		5	•	S		S		5		S	•
Distribution Structures & Equipment	CO. (1994 1994 177.000-	Later Company and															
Demand	DEPREX	DEDSD	DEM04	s	72,251	8	32,760	S	10,772	S	23,475	S	4,9	90 \$	255	\$	

Cost of Service Study 12 Months Ended December 31, 2009

			Allocation	2														
Description	Ref	!	Name Vector		Total System		Residential	_	Small Non-Res	_	Large Non-Res	_	Interrup	tible		Specia	1	Off Sys Trans
Denreciation Expenses (Continued)																		
Distribution Mains Demand Customer Total Distribution Mains	DEPREX DEPREX	DEDMD	DEM05 CUST01	s	388,656 781,642 1,170,298	\$	176,221 666,968 843,190	5	57,947 92,929 150,876	5	126,275 20,836 147,111	5		840 887 727	5 5 5	1,372 22 1,393	3	
Services Customer	DEPREX	DESC	CUSTOZ	s	241,193	s	198,648	s	25,789	s	16,024	s		682	s	50	s	
Meters Customer	DEPREX	DEMC	CUSTO3	s	517,824	s	349,008	s	78,144	s	79,612	s	9.	893	s	1,166	s	١,
Customer Accounts Customer	DEPREX	DECAC	CUST04	s		s		s	*	\$	**	5			s	-	s	
stomer Service	DEPREX	DECSC	CUST05	s		s		s	2	s	2.	s			s		s	
Total		DET		s	3,792,258	s	1,962,967	\$	443,130	\$	662,242	s	100	236	s	99,884	s	523,798

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Na	Allocat me Ve	tion	Total System		Residential		Small Non-Res	_	Large Non-Res		later	roptibl		Special		Off Sys Trans
Other Taxes																		
Gas Supply Costs																		
Demand	OTT	OTTGSD	DEM01	S	*	S		2		\$		5			5		\$	
Commodity	OTT	OTTGSC	COM01			5		5	*	2		5		:	5		S	
Total Procurement Expenses		OTTGST		\$	•	\$		\$		\$	-	\$			\$		S	
Storage																		
Demand	OTT	OTTSD	DEM02	2	156,435	S	74,347	\$	24,532	S	57,556	2	24		S		\$	
Commodity	OTT	OTTSC	COM02		3,587	S	1,617	\$	551	S	1,419	5		-	5		5	
Total Storage		OTTST		5	160,022	S	75,964	\$	25,084	5	58,974	5		-	S		\$	
Transmission																		
Demand	OTT	OTTE	TDEM	S	595,148	\$	154,255	5	50,724	5	110,535	\$		23,494	5	40,029	5	216,111
Commodity	OTT	OTTTC	COM03		21,265	5	1,975	5	662	5	2,277	S		1,285		2,338		12,727
Joial Transmission		оттт		\$	616,413	S	156,230	S	51,386	\$	112,812	5		24,780	S	42,367	s	228,838
hibution Expenses	отт	OTTDEC	COM04	s	*	s		s		\$	*	s			s		s	
Distribution Structures & Equipment																		
Demand	OTT	OTTOSO	DEM04	5	24,540	\$	11,127	5	3,659	S	7,973	2		1,695	5	87	S	-

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Naz	Allocati		Total System		Residential		Small Non-Res		Large Non-Res		Interruptible	:	Special		Off Sys Trans
Other Taxes (Continued)																	
Distribution Mains Demand Customer Total Distribution Mains	οπ οπ	OTTDMD	DEMOS CUSTO1	5	233,840 470,285 704,125	S	106,026 401,290 507,316	5	34,865 55,912 90,777	5	75,975 12,536 88,511	5	16,149 534 16,682	5	825 13 838	5	:
Services Customer	οπ	оттяс	CUST02		141,636	s	116,653	s	15,144	s	9,410	\$	401	s	29	s	
Meters Customer	οπ	ОТТМС	CUSTOS	s	185,405	s	124,961	s	27,979	s	28,505	5	3,542	s	417	s	
Customer Accounts Customer	отт	OTTCAC	CUST04	s	72,738	s	57,174	s	7,894	s	7,134	s	283	s	30	s	224
stomer Service	оπ	оттсѕс	CUST05	s		s	*	s		s	*	s	.*	s		s	
Total		отт		s	1,904,879	s	1,049,424	\$	221,923	S	313,319	s	47,383	s	43,768	s	229,062

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	N:	Alloca me Ve	tton	Total System		Residential		Small Non-Res		Large Non-Res		Interruptible	,	Special		Off Sys Trans
Interest Expense																	
Gas Supply Costs																	
Damand	INT	INTGSD	DEM01	5		\$		2		5		5		•		2	
Commedity	INT	INTGSC	COM01	-		S		\$		5		5		5		5	2
Total Procurement Expanses		INTEST	001407	5	-	S		s		s	:	s	17.	s		s	
Storage																	
Demand	INT	INTSD	DEM02	5	430,076	2	204,398	2	67,445	5	158,234	2		•		•	
Commodity	INT	INTSC	COM02			5		3		•	.50,50		- 2			ě	- 1
Total Storage		INTST	5011102	\$	430,076	s	204,398	\$	67,445	5	158,234	s	/5	2		s	
Transmission																	
Demand	INT	INTTO	TDEM	5	1,328,596	S	344,355	S	113,235	5	246,755	•	52,448	•	89,359	•	482,442
Commodity	INT	INTTC	COM03	•	1,220,270	Š	344,333	Š	113,233	Š	240,733	š	JA,448	3	97,337	3	482,442
Total Transmission		INTTT		s	1,328,596	s	344,355	s	113,235	2	246,755	s	52,448	Š	89,359	s	482,442
itribution Expenses commodity	INT	INTDEC	COM04	\$		s	•	s		S		\$		5	7. •	5	
Distribution Structures & Equipment	55-400000	No															
Domand	INT	INTOSO	DEM04	S	54,720	S	24,811	3	8,159	5	17,779	\$	3,779	S	193	\$	

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Na	Allocate		Total System		Residential		Small Non-Res		Large Non-Res		Interruptible		Special		Off Sys Trans
Interest Expense (Continued)	Ti .																
Distribution Mains Demand Customer Total Distribution Mains	INT	INTOMO	DEMOS CUSTO1	s	511,391 1,028,480 1,539,871	S	231,871 877,593 1,109,464	2	76,247 122,275 198,522	S	166,152 27,416 193,568	\$	35,316 1,167 36,483	\$	t,805 28 1,833	\$:
Services Customer	INT	INTSC	CUST02	s	315,825	s	260,115	s	33,769	s	20,982	s	893	s	65	s	÷
Meters Customer	INT	INTMC	CUST03	2	406,513	s	273,985	2	61,346	s	62,499	s	7,767	s	915	s	7 8
Customer Accounts Customer	INT	INTCAC	CUST04	s		s	-	s	•	s		s	19	s		s	
tomer Service	INT	INTCSC	CUST05	s		s		s		s	-	s	-	s	2	s	
Cotal		INTT		s	4,075,601	s	2,217,129	s	482,477	s	699,817	s	101,370	s	92,366	s	482,442

Cost of Service Study 12 Months Ended December 31, 2009

			Alloca	tion											
Description	Ref	Na:	me Ve	ctor	Total System	Residential	S	mail Non-Res	Large Non-R	es	Interruptible		Special		Off Sys Trans
Net Operating Income - Adjusted Test Period															
Operating Revenues Sales and Transportation		REVUC	R01		27,769,025	12,622,626		3,598,374	6,338,62	,	1,484,067		309,428		3,415,904
Collection Fees		COLFEE	COLL	2	177,360 S	157,980	5	1,641			1,101,007	5	307,120	2	5,415,504
Reconnect Revenue		RCTREV	RCNCT	-	111,420 S	92,100		1,680				s		s	
Bad Chack Revenue		BDCH	BDCK		13,800 S	11,895	2	225	1,68	2 0		\$		\$	
Total Operating Revenues - Per Books		TOR		s	28,071,605 \$	12,884,600	s	3,601,920	s 6,375,68	7 S	1,484,067	\$	309,428	\$	3,415,904
Pro-Forma Adjustments to Revenues															
Temperature normalization		REVADJ1		\$	(63,111) \$	(57,963)	\$	(13,206)	\$ 8,00	4 \$	53	5	*	\$	
Total Revenue Adjustments				\$	(63,111) \$	(57,963)	S	(13,206)	s 8,00	4 \$	53	\$	•	\$	
Total Adjusted Revenue				\$	28,008,494 \$	12,826,638	\$	3,588,714	s 6,383,69	1 \$	1,484,120	s	309,428	\$	3,415,904
October															
peration and Maintenance Expenses				\$	13,324,781 \$	7,386,173	\$	1,560,971	\$ 2,345,09	4 \$	319,144	\$	278,504	\$	1,454,896
Jepreciation and Amortization Expenses				S	3,792,258	1,962,967		443,130	662,24	2	100,236		99,884		523,798
Other Taxes				S	1,904,879	1,049,424		221,923	313,31	9	47,383		43,768		229,062
Total Operating Expenses		TOE		\$	19,021,918 \$	10,378,564	\$	2,226,024	\$ 3,320,65	5 \$	466,763	\$	422,156	5	2,207,756

Cost of Service Study 12 Months Ended December 31, 2009

			Alloca	tion							
Description	Ref	Nan	ie Ve	ctor	Total System	Residential	Small Non-Res	Large Non-Res	Interruptible	Special	Off Sys Trans
Net Operating Income - Adjusted Test Period (Co	nt,)										
Pro-Forma Adjustments to Expenses											
Labor Adjustment		EXADJ1	LBTT	S	(41,046) S	(23,266) \$	(4,604) \$	(6,069) \$	(1,021) \$	(973) \$	(5,113)
Eliminate Advedrtising Expenses		EXADJ2	OTTT		(1,438) \$	(792) 5	(168) 5	(237) S	(36) \$	(33) \$	(173
Lobbying Expense		EXADJ3	OTTT		(19,194) \$	(10,574) \$	(2,236) \$	(3,157) \$	(477) \$	(441) 5	(2,308)
Community Relations		EXADJ4	OTT		(26,450) S	(14,572) \$	(3,081) \$	(4,351) \$	(658) \$	(608) \$	(3,181)
Marketing		EXADJ5	OMTT		(1,944) \$	(1,075) \$	(228) S	(342) \$	(47) \$	(41) \$	(212
Rate Case Expenses		EXADJ6	OMTT		(10,948) S	(6,052) \$	(1,283) S	(1,927) \$	(262) S	(229) S	(1,195)
Depreciation Expenses		EXADJ7	DET		1,311,714 \$	678,976 \$	153,275 S	229,064 \$	34,671 \$	34,549 \$	181,178
Bad Debt Expenses		EXADJ7	BDCK		330,993 \$	285,303 \$	5,395 S	40,295 \$	- s	. 5	¥
Conservation		EXADJ8	REVUC		(600) S	(273) \$	(78) S	(137) S	(32) \$	(7) \$	(74)
Property Tax		EXADJ9	OTIT		67,835 \$	37,371 S	7,903 \$	11,158 \$	1,687 \$	1,559 \$	8,157
		EXADJ10	INTT		- 5	. 5	- 5	- 5	- 3	- 5	
Total Expense Adjustments		ADJTOT		\$	1,608,922 \$	945,046 \$	154,896 \$	264,298 \$	33,825 \$	33,777 \$	177,079
~	. 7										
t Income Before Income Taxes				\$	7,377,653 \$	1,503,027 \$	1,207,794 \$	2,798,738 \$	983,531 \$	(146,505) \$	1,031,069
come Taxes			TXINC	\$	2,081,177 \$	(565,631) \$	472,454 S	1,393,200 \$	592,741 S	(164,901) S	353,314
Net Operating Income (Adjusted)		TOM		\$	5,296,476 \$	2,068,658 \$	735,340 \$	1,405,538 \$	390,791 \$	18,395 \$	677,755
Net Cost Rate Base				\$	110,521,375 \$	60,049,315 \$	13,335,545 \$	20,085,056 S	2,590,607 \$	2,325,751 \$	12,135,101
Rate of Return - Actual		V 10000 - 10000-			4.79%	3.44%	5.51%	7.00%	15.08%	0.79%	5,59%

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Name	Allocation Vector	Total System	Residentia	i	Small Non-Res		Large Non-Res		Interruptibl	e	Special		Off Sys Tra
Net Operating Income - Adjusted For Increase															
Test Year Operating Income			\$ -	5,296,476 \$	2,068,658	\$	735,340	\$	1,405,538	\$	390,791	\$	18,395	s	677,755
Proposed Increase			s	5,315,428 \$	3,541,111		611,533	5	909,754	s		s		\$	253,030
Increase To Misc Revenue		RC	NCT S	- 5		5		5		2		5		5	
Total Increase		CLSINC	\$	5,315,428	3,541,111	\$	611,533	\$	909,754	S	•	\$		\$	253,030
Incremental Income Taxes (@39.4445)		CL	SINC	1,036,917 \$	690,789	s	119,296	S	177,472	\$		s		s	49,360
Net Operating Income Adjusted for Increase				9,574,987	4,918,980		1,227,577		2,137,820		390,791		18,395		881,425
Net Cost Rate Base			\$	110,521,375	60,049,315	\$	13,335,545	\$	20,085,056	\$	2,590,607	\$	2,325,751	s	12,135,101
Rate of Return - Proposed				8.66%	8.19%		9.21%		10 64%		15.0B5	6	0,79%	-	7.26%

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Name	Allocation	Total System	Residential	Small Non-Res	Large Non-Res	Interruptible	Special	Off Sys Trans
Allecation Factors	-			3.118.094						
Zimostion Lactors			•	3079555 \$	38,539					
Commodity				40.3000	50,000					
Procurement Expenses	C	OM01		17,782,734	1,651,781	553,791	1,904,373	1,074,852	1,955,008	10,642,929
1 Total Ciliati Capanias		O.MO I		11,100,104	0.092887	0.031142	0.107091	1,014,002	1,000,000	10,012,020
Storage (Dec thru March)	c	OM02		2,511,065	1,131,817	386,045	993,203			
Transmission		OM03		17,782,734	1,651,781	553,791	1,904,373	1,074,852	1,955,008	10,642,929
Distribution		OM04		5,243,952	1,651,781	553,791	1,904,373	1,074,852	59,155	10,012,022
	,			-	.,	-	.,00 ,,0.0	-	-	
Demand									5,356.19	
Procurement Expenses	D	EM01		80,256	20,813	6,844	14,914	3,170	5,356	29,159
Storage		EM02		1.0000	0.4753	0.1568	0.3679			20,100
					0.4753	0.1568	0.3679			
Transmission	D	EM03		80,256	20,813	6,844	14,914	3,170	5,356	29,159
Distribution Structures		EM04		45,903	20,813 +	6,844	14,914	3,170	162	-
tribution Mains	D	EMOS		45,903	20,813	6,844	14,914	3,170	162	
stomer										
Distribution Mains (Year-end Customers)		UST01		36,126	30,826	4,295	963	41	1	
Services		UST02		28,599,210	23,554,455	3,057,954	1,899,989	80,893	5,919	1 4
Meters	С	UST03		18,253,935	12,302,965	2,754,684	2,806,440	348,746	41,100	
Customer Count (Average)				35,915	30,680	4,236	957	38	4	-
Customer Accounts		UST04		39,032	30,680	4,236	3,828	152	16	120
Customer Service	С	UST05		35,915	30,680	4,238	957	38	4	•
Forfeited Discounts	R	EVFD		2,641,717	2,168,773	432,108	9,080	2,703	18,740	9,961

Cost of Service Study 12 Months Ended December 31, 2009

Description	Ref	Name	Allocation Vector	Total System	Residential	Small Non-Res	Large Non-Res	Interruptible	Special	Off Sys Trans
Customer Related Unit Cost										
Rate Base Rate of Return Return			ş s	45,545,274 \$ 8.66% 3,945,802 \$	36,717,752 \$ 8,66% 3,181,032 \$	5,653,335 \$ 8.66% 489,775 \$	2,891,820 \$ 8.66% 250,532 \$	255,640 \$ 8.66% 22,147 \$	26,259 \$ 8,66% 2,275 \$	469 8.66% 41
Income Taxes Operation and Maintenance Expenses			5	858,186 \$ 6,108,069	(345,915) \$ 4,896,981	200,335 \$ 740,705	200,699 \$ 430,692	58,630 \$ 32,559	(1,867) \$ 3,365	14 3,767
Depreciation Expenses Other Taxes Expense Adjustment (Classified Pro-Rata on	the basis of Operati	ing Expenses)		1,540,659 870,064 721,347	1,214,624 700,077 620,373	196,863 106,930 72,702	116,472 57,584 48,166	11,462 4,760 3,545	1,237 490 410	224 322
Yolal Customer-Related Revenue Requireme	ant		s	14,044,127 \$ (48,506)	10,267,172 S (59,258)	1,807,309 \$ (758)	1,104,146 \$ (2,901)	133,103 \$	5,910 \$	4,366
Net Revenue Requirement			\$	13,995,621 \$	10,207,915 \$	1,806,551 \$	1,101,246 \$	133,103 \$	5,910 \$	4,366
nlomer-Months				35,915	30,680	4,236	957	38	4	-
atomer-Related Unit Cost (\$/Cust/Mo)				32.474	27.727	35,540	95.894	291,893	123,130	



Seelye Exhibit 7

Class Cost of Service Study
Storage Allocation Factor

On February 10th Desi	m Class Demands gn Day Assuming 68 Degree lemand Allocation Factors	Days Total	Residential	Small Non Residential GS	Large Non Residential GS
Non-Temp Sensitive Loa	ad (per Day)	4,151	821	316	3,014
Temp Sensitive Load (p	er Degree Day)	565	294	96	175
Calculated Daily Require	ements at -3 Degrees	42,571	20,813	6,844	14,914
Percentage of Total			48.89%	16.08%	35.03%
Allocation of Undergro	ound Storage			Small	Large
		Storage	Desidential	Non Residential	Non Residential
Total Allocated Withdra	wals Thru February 9th	Storage Withdrawals	Residential		
Total Allocated Withdra	wals Thru February 9th December January Feb. 1-9 Total		208,862 229,031 70,673 508,566	Residential	Residential
Total Allocated Withdran Balance of Working Gas Basis of -3 Degree Fe	December January Feb. 1-9 Total s Allocated on the	459,864 497,654 154,734	208,862 229,031 70,673	Residential GS 69,286 75,860 23,429	181,716 192,763 60,632
Balance of Working Gas	December January Feb. 1-9 Total s Allocated on the b. 10 Design Day	459,864 497,654 154,734 1,112,252	208,862 229,031 70,673 508,566	Residential GS 69,286 75,860 23,429 168,575	181,716 192,763 60,632 435,111

(November)

	Residential	Small Non Res GS	Large Non Res GS	Total
Non-Temperature Sensitive Load (per Day)	821	316	3,014	4,151
Temperature Sensitive Load (per Degree Day)	294	96	175	565

			Requiremen	ts			Storag	ge Allocation	
			Small	Large				Small	Large
			Non	Non		Storage		Non	Non
	Heating		Res	Res		Withdrawals		Res	Res
Date	Degree Days	Residential	GS	GS	Total	(Injections)	Res	GS	G\$
1	14	4,937	1,660	5,464	12,061	0	0	0	0
2	14	4,937	1,660	5,464	12,061	0	0	0	0
3	14	4,937	1,660	5,464	12,061	0	0	0	0
4	14	4,937	1,660	5,464	12,061	0	0	0	0
5	15	5,231	1,756	5,639	12,626	0	0	0	0
6	15	5,231	1,756	5,639	12,626	0	0	0	0
7	15	5,231	1,756	5,639	12,626	0	0	0	0
8	15	5,231	1,756	5,639	12,626	0	0	0	0
9	16	5,525	1,852	5,814	13,191	0	0	0	0
10	16	5,525	1,852	5,814	13,191	0	0	0	0
11	17	5,819	1,948	5,989	13,756	0	0	0	. 0
12	17	5,819	1,948	5,989	13,756	0	0	0	0
13	18	6,113	2,044	6,164	14,321	0	0	0	0
14	18	6,113	2,044	6,164	14,321	0	0	0	0
15	19	6,407	2,140	6,339	14,886	0	0	0	0
16	19	6,407	2,140	6,339	14,886	0	0	0	0
17	20	6,701	2,236	6,514	15,451	0	0	0	0
18	20	6,701	2,236	6,514	15,451	0	0	0	0
19	20	6,701	2,236	6,514	15,451	0	0	0	0
20	21	6,995	2,332	6,689	16,016	0	0	0	0
21	21	6,995	2,332	6,689	16,016	0	0	0	0
22	21	6,995	2,332	6,689	16,016	0	0	0	0
23	22,	7,289	2,428	6,864	16,581	0	0	0	0
24	22	7,289	2,428	6,864	16,581	0	0	0	0
25	22	7,289	2,428	6,864	16,581	0	0	0	0
26	22	7,289	2,428	6,864	16,581	0	0	0	0
27	23	7,583	2,524	7,039	17,146	0	0	0	0
28	23	7,583	2,524	7,039	17,146	0	0	0	٥
29	24	7,877	2,620	7,214	17,711	0	0	0	0
30	24	7,877	2,620	7,214	17,711	0	0	0	0
Total	561	189,564	63,336	188,595	441,495	0	0	0	0

Seelye Exhibit 7 Page 2 of 5

(December)

	Residential	Small Non Res GS	Large Non Res GS	Total
Non-Temperature Sensitive Load (per Day) Temperature Sensitive Load (per Degree Day)	821	316	3,014	4,151
	294	96	175	565

			Requirement	ts		_	Stora	ge Allocation	
			Small	Large				Small	Large
			Non	Non		Storage		Non	Non
	Heating		Res	Res		Withdrawals		Res	Res
Date	Degree Days	Residential	GS	GS	Total	(injections)	Residential	GS	GS
1	25	8,171	2,716	7,389	18,276	13,649	6,102	2,028	5,518
2	25	8,171	2,716	7,389	18,276	12,537	5,605	1,863	5,069
3	26	8,465	2,812	7,564	18,841	12,556	5,641	1,874	5,041
4	26	8,465	2,812	7,564	18,841	13,466	6,050	2,010	5,406
5	26	8,465	2,812	7,564	18,841	13,859	6,227	2,068	5,564
6	26	8,465	2,812	7,564	18,841	13,994	6,287	2,089	5,618
7	26	8,465	2,812	7,564	18,841	14,387	6,464	2,147	5,776
8	26	8,465	2,812	7,564	18,841	14,388	6,464	2.147	5,776
9	27	8,759	2,908	7,739	19,406	14,390	6,495	2,156	5,739
10	27	8,759	2,908	7,739	19,406	14,391	6,495	2,157	5,739
11	27	8,759	2,908	7,739	19,405	13,950	6,296	2,090	5,563
12	28	9,053	3,004	7,914	19,971	14,342	6,501	2,157	5,683
13	28	9,053	3,004	7,914	19,971	14,343	6,502	2,157	5,684
14	28	9,053	3,004	7,914	19,971	14,735	6,679	2,216	5,839
15	29	9,347	3,100	8,089	20,536	14,735	6,706	2,224	5,804
16	29	9,347	3,100	8,089	20,536	14,753	6,715	2,227	5,811
17	29	9,347	3,100	8,089	20,536	14,753	6,715	2,227	5,811
18	29	9,347	3,100	8,089	20,536	15,144	6,893	2,286	5,965
19	30	9,641	3,196	8,264	21,101	15 144	6,919	2,294	5,931
20	30	9,641	3,196	8.264	21,101	15,535	7.098	2,353	6,084
21	30	9,641	3,196	8,264	21,101	15,483	7,074	2,345	6,064
22	30	9,641	3,196	8.264	21,101	15,483	7,074	2,345	6,064
23	30	9,641	3,196	8,264	21,101	15,874	7,253	2,404	6,217
24	30	9.641	3,198	8.264	21,101	15,874	7,253	2,404	6,217
25	30	9,641	3,196	8,264	21,101	15,874	7,253	2,404	6,217
26	30	9,641	3,196	8,264	21,101	16,007	7,314	2,424	6,269
27	31	9,935	3,292	8,439	21,666	16,007	7,340	2,432	6,235
28	31	9,935	3,292	8,439	21,666	16,007	7,340	2,432	6,235
29	31	9,935	3,292	8,439	21,666	16,069	7,369	2,442	6,259
30	31	9,935	3,292	8,439	21,666	16,069	7,369	2,442	6,259
31	31	9,935	3,292	8,439	21,666	16,069	7,369	2,442	6,259
Total	882	284,759	94,468	247,784	627,011	459,867	208,862	69,286	181,716

(January)

		Small	Large	
		Non	Non	
		Res	Res	
	Residential	GS	GS	Total
Non-Temperature Sensitive Load (per Day)	821	316	3,014	4,151
Temperature Sensitive Load (per Degree Day)	294	96	175	565

	-		Requiremen	ts		100	Stora	ge Allocation	
			Small	Large		_		Small	Large
			Non	Non		Storage		Non	Non
	Heating		Res	Res		Withdrawals		Res	Res
Date	Degree Days	Residential	GS	GS	Total	(injections)	Residential	GS	GS
1	31	9,935	3,292	8,439	21,666	15,613	7,159	2,372	6,081
2	31	9,935	3,292	8,439	21,666	15,586	7,147	2,368	6,071
3	31	9,935	3,292	8,439	21,666	15,602	7,154	2,371	6,077
4	31	9,935	3,292	8,439	21,666	15,596	7,152	2,370	6,075
5	32	10,229	3,388	8,614	22,231	15,602	7,179	2,378	6,046
6	32	10,229	3,388	8,614	22,231	15,728	7,237	2,397	6,094
7	32	10,229	3,388	8,614	22,231	15,727	7,236	2,397	6,094
8	32	10,229	3,388	8,614	22,231	15,734	7,240	2,398	6,097
9	32	10,229	3,388	8,614	22,231	15,731	7,238	2,397	6,095
10	32	10,229	3,388	8,614	22,231	15,722	7,234	2,396	6,092
11	32	10,229	3,388	8,614	22,231	15,745	7,245	2,400	6,101
12	33	10,523	3,484	8.789	22,796	15,720	7,257	2,403	6.061
13	33	10,523	3,484	8,789	22,796	15,712	7,253	2,401	6,058
14	33	10,523	3,484	8,789	22,796	15,681	7,239	2,397	6,046
15	34	10,817	3,580	8,964	23,361	15,720	7,279	2,409	6,032
16	34	10,817	3,580	8,964	23,361	16,115	7,462	2,470	6,184
17	34	10,817	3,580	8,964	23,361	16,107	7,458	2,468	6,181
18	33	10,523	3,484	8,789	22,796	16,109	7,436	2,462	6,211
19	33	10,523	3,484	8,789	22,796	16,133	7,447	2,466	6,220
20	33	10,523	3,484	8,789	22,796	16,112	7,438	2,463	6,212
21	32	10,229	3,388	8,614	22,231	15,992	7,358	2,437	6,197
22	32	10,229	3,388	8,614	22,231	15,999	7,362	2,438	6,199
23	32	10,229	3,388	8,614	22,231	16,000	7,362	2,438	6,200
24	32	10,229	3,388	8,614	22,231	16,390	7,541	2,498	6,351
25	32	10,229	3,388	8,614	22,231	16,390	7,541	2,498	6,351
26	32	10,229	3,388	8,614	22,231	16,523	7,602	2,518	6,402
27	31	9,935	3,292	8,439	21,666	16,912	7,755	2,570	6,587
28	31.	9,935	3,292	8,439	21,666	16,912	7,755	2,570	6,587
29	31	9,935	3,292	8,439	21,666	16,912	7,755	2,570	6,587
30	31	9,935	3,292	8,439	21,666	16,912	7,755	2,570	6,587
31	31	9,935	3,292	8,439	21,666	16,912	7,755	2,570	6,587
Total	995	317,981	105,316	267,559	690,856	497,654	229,031	75,860	192,763

(February)

		Small	Large	
		Non	Non	
		Res	Res	
	Residential	GS	GS	Total
Non-Temperature Sensitive Load (per Day)	821	316	3,014	4,151
Temperature Sensitive Load (per Degree Day)	294	96	175	565

			Requirement	ts			Stora	ge Allocation	
Heating Date Degree Days	Residential	Small Non Res GS	Large Non Res GS	Total	Storage Withdrawals (Injections)	Residential	Small Non Res GS	Large Non Res GS	
	,-					(-,,)		0,500	
1	31	9,935	3,292	8,439	21,666	16,348	7,497	2,484	6,368
2	30	9,641	3,196	8,264	21,101	16,321	7,457	2,472	6,392
3	30	9,641	3,196	8,264	21,101	15,952	7,288	2,416	6,247
4	30	9,641	3,196	8,264	21,101	15,560	7,109	2,357	6,094
5	30	9,641	3,196	8,264	21,101	15,180	6,936	2,299	5,945
6	30	9,641	3,196	8,264	21,101	15,306	6,993	2,318	5,994
7	30	9,641	3,196	8,264	21,101	15,305	6,993	2,318	5,994
8	30	9,641	3,196	8,264	21,101	14,926	6,820	2,261	5,846
9	29	9,347	3,100	8,089	20,536	14,923	6,792	2,253	5,878
10	29	9,347	3,100	8,089	20,536	14,914	6,788	2,251	5,874
Total	299	96,116	31,864	82,465	210,445	154,734	70,673	23,429	60,632

Seelye Exhibit 8

Class Cost of Service Study

Zero Intercept Analysis

Delta Natural Gas Company, Inc.

Zero Intercept Analysis Account 376 -- Distribution Mains

December 31, 2009

Weighted Linear Regression Statistics

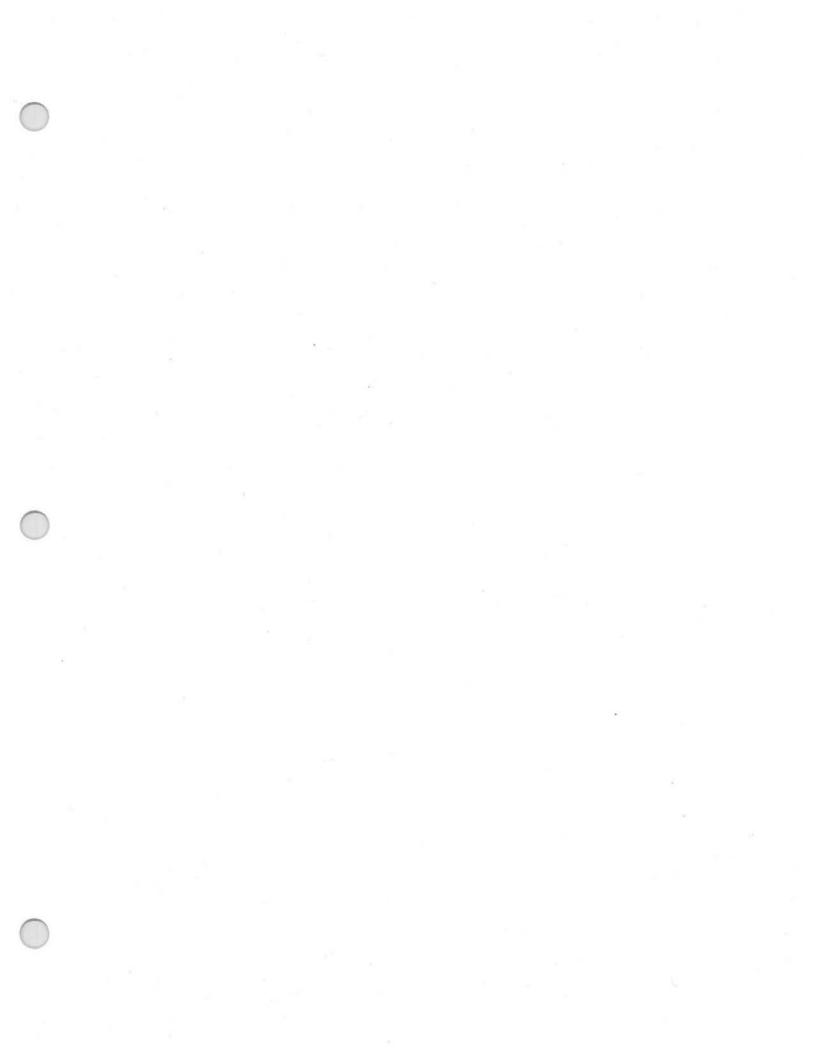
		Standard
	 Estimate	Error
Size Coefficient (\$ per Foot) Zero Intercept (\$ per Foot)	1.0559793 5.6479737	0.5323013 1.5668682
R-Square	0.9474806	
Plant Classification		
Total Number of Units	7,802,022	
Zero Intercept	5.6479737	
Zero Intercept Cost	\$ 44,065,615	
Total Cost of Sample	\$ 65,974,747	
Percentage of Total	0.667916396	
Percentage Classified as Customer-Related	66.79%	
Percentage Classified as Demand-Related	33.21%	

Delta Natural Gas Company, Inc.

Zero Intercept Analysis Account 376 -- Distribution Mains

December 31, 2009

Description	Pipe Size		Net Cost of Plant	Quantity (Feet)	Unit Cost (\$ per Foot)
Distribution Main Pipe, Under 2" Plastic	1.500	s	4,526,325	.511,979	8.84084
Distribution Main Pipe, 2" Plastic	2.000		35,810,174	4,656,267	7.69075
Distribution Main Pipe, 3" Plastic	3.000		233.177	89.043	2.61870
Distribution Main Pipe, 4" Plastic	4.000	\$	17,279,740	1,425,318	12.12343
Distribution Main Pipe, 6" Plastic	6.000	\$	925,501	59,768	15.48489
Distribution Main Pipe, Under 2" Steel	1.500	\$	212,739	78,268	2.71808
Distribution Main Pipe, 2" Steel	2.000	\$	685,650	287,587	2.38415
Distribution Main Pipe, 3" Steel	3.000	\$	110,787	52,022	2.12962
Distribution Main Pipe, 4" Steel	4.000	\$	3,093,182	274,404	11.27236
Distribution Main Pipe, 6" Steel	6.000	\$	2,194,153	272,503	8.05185
Distribution Main Pipe, 8" Steel	8.000	\$	903,319	94,863	9.52235
Total		\$	65.974.747.00	7.802.022	

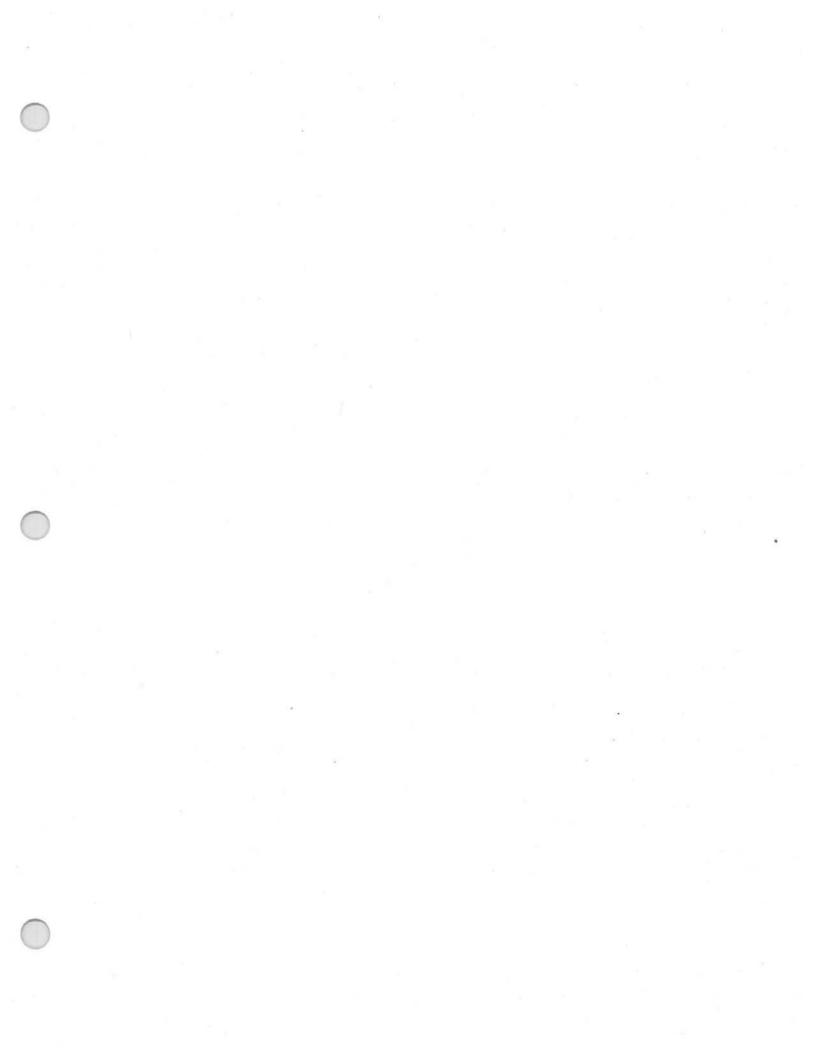


Seelye Exhibit 9

Temperature Normalization Adjustment Delta Natural Gas Company, Inc. Natural Gas Temperature Normalization Adjustment For the 12 months Ended December 31, 2009

Consumption Not Billed under the Weather No	No.	I Clause ormal Heating Degree Days Ictual Heating Degree Days Normal over (under) Actual	Cycle Edling Basis 4,603 4,592 11	Calendar Basis 4,623 4,636 (13)		Normal Heating D Actual Heating D	egree Days (7	Non-WNA Months) Non-WNA Months) /er (under) Actual	Cycle Billing Basis 795 863 (68)	Calendar Basis 998 997 1			
_	(1) Total Mcf	(2) Non-Temp Maf	(3) Non-Temp Mcf Full Year	(4) Temperature Sensitiva Mcf	(5) Actual Degree Days	(6) Mcl per Degree Days	(7) Normal Degree Days	(8) Departure From Normal	(9) Normal Temperature Adjustment	(10) Net Revenue Per Mcf Sold	Ac	(11) Revenue justment	
_ 100			(Column (1) x 6)	(Column (1) - (3))	1000	(Column (4) x (5))	200	(Column (7) - (5))	(Column (5) x (8))	o: 7.1295		nn (9) × (10) }	
Residential *	351,111	49,875	174,562	176,549	863	205	795	(68)	(13,940)	\$ 4.1580	\$	(57,962.52)	
Small Non-Residential General Service *	107,163	18,794	65,780	41,384	863	48	795	(68)	(3,264)	s 4,1580	\$	(13,571,71)	
Large Non-Residential GS - Commercial	754,173	43,619	261,715	492,458	4,592	107	4,603	11	1,177	\$ 4.1580	\$	4,893.97	
Large Non-Residential GS - Industrial	81,222	3,131	18,783	62,439	4,592	14	4,603	11	154	\$ 4.1580	\$	640.33	
Interruptible Service - Commercial	2,210	· ·		2,210	4,592	0	4,603	11	•	S 1,6000	\$		
Interruptible Service - Industrial	25,265	1,724	10,342	14,923	4,592	3	4,603	11	33	\$ 1.6000	5	52.80	
Small Non Residential General Service -Transportation	37,952	369	2,216	35,736	4,592	8	4,603	11	88	\$ 4,1580	\$	365.90	
Large Non Residential General Service -Transportation	1,068,708	136,561	819,365	249,343	4,592	54	4,603	11	594	\$ 4.1580	\$	2,469.85	
Residential - Transportation _	1,261		89	1,172	4,592	0	4,603	11	-	\$ 4.1580	s	-	
<u>-</u>	2,429,066	254,087	1,352,852	1,076,214					(15,158)		2	(63,111,38)	

^{*} For the seven months May to November only



Seelye Exhibit 10

Year-End Customer Adjustment

Not Proposed

Delta Natural C Adjustment of Gas Rev. Over Average Number of C ompany, Inc. .e reflect Year-end Customers stomers in Test Penod

UV	Et WAGI	ogo i	APITITION	01 00	Photograph	CIS III	4
17	Months	Fo	ded Dec	amba	-31	2009	

<u>.</u>	Average Number of Customers (1)	Customers Served at 12/31/09 (2)	Year-End Over (Under) Average (Col. 2 - 1) (3)	Customer Charge (4)	Additional Customer Charge Revenue (Col. 3 x 4) (5)	Weather Normalized Mcf (6)	Average Mcf per Customer (COL. 6 / 1)	Year -End Mcf Adjustment (COL. 7 x 3) (8)	Net Revenue per Mcf Commodity (9)	Additional Revenue Commodity (COL. 8 x 9) (10)	Year-End Revenue Adjustment (COL, 5 + 10)
Residential	30,660	30.826	166	s 15.30	\$ 2,539.80	1,857,139	60.6	10,055	s 4.1580	\$ 41,808.69	\$ 44,348,49
Small Non-Residential GS	4,233	4,295	62			605,173	143.0	8,864		\$ 36,856.51	\$ 38,406.51
Large Non-Residential GS - Retail First 200 Mcf Next 600 Mcf Next 4,000 Mcf Next 5,000 Mcf Over 10,000 Mcf	955	963	8	s 100.00	\$ 800.00	2,253,407 772,185 431,115 607,467 235,080 207,560	2,359.6	3,612 5,089 1,970	\$ 1.7130 \$ 1.3130	\$ 9,062.87 \$ 8,717.46 \$ 2,588.61	\$ 49,988.08
Interruptible	43	41	(2)	\$ 250,00	\$ (500,00)	1,254,621 326,478 657,056 214,604 56,483	29,177.2	(58,354) (15,185) (30,561) (9,982) (2,627)	s 1.2000 s 0.8000	\$ (35,673.20° \$ (7,985.60°	
On System Transportation Special	4	4	-		s .	2,801,367	700,341.8	*	s .	s .	s .
	35,895	36,129	234		\$ 4,389.80	8,771,707		(20,558)		\$ 57,322.28	\$ 61,712.08

Expenses at an Operating Ratio of -

0.3191

19,690

ADJUSTMENT TO NET OPERATING INCOME BEFORE TAXES

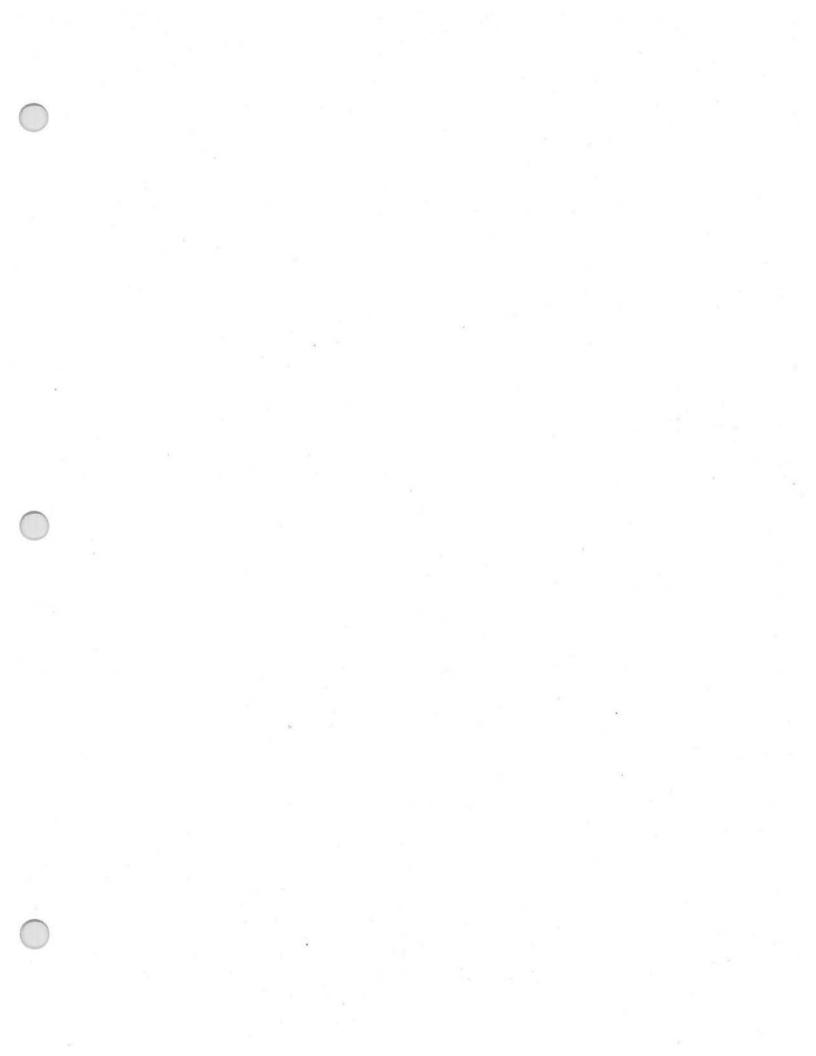
\$ 42,022

CALCULATION OF GAS OPERATING RATIO

TOTAL GAS OPERATING EXPENSES	51,967,303
LESS GAS SUPPLY EXPENSES	32,945,385
LESS WAGES AND SALARIES	6,907,866
LESS PENSIONS AND BENEFITS	2,989,151
LESS REGULATORY COMMISSION EXPENSE	189,509
NET EXPENSES	8 935 392

TOTAL GAS OPERATIONS REVENUES (AS BILLED)	60,950,552
LESS GSC REVENUE	32,945,718
NET REVENUE	28,004,834

OPERATING RATIO 0.3191



Seelye Exhibit 11

Depreciation Study

Delta Natural Gas Company, Inc. Depreciation Study December 31, 2009

Overview

The purpose of performing a depreciation study is to insure that the depreciation expenses recorded by the utility and included in the cost of service represent a reasonably accurate and systematic measurement of the annual accrual levels necessary to distribute plant costs, less salvage and removal, over the estimated useful life of the assets.

In performing this study, data was compiled showing plant additions, retirements and transfers going back as far as the 1940s. For certain plant accounts, such as distribution mains (Account 376), meters (Account 381), and house regulators (Account 383), data was available going back well into the 1940s. Many other accounts were not utilized until the 1950s, 1960s or later.

Where sufficient data was available, the average service lives ("ASLs") were determined by identifying the survivor curve and associated ASL that best fit the pattern of retirements from the historical data provided by Delta Natural Gas Company, Inc. ("Delta"). In general, the survivor curves and ASLs were identified that produced the lowest sum of square deviations between the actual balances and simulated balances. The simulated balances were determined by applying various survivor curves to the plant additions and transfers for each plant account for which data was available and then computing the resultant plant balances. The sum of square deviations were calculated based on the difference between the computed plant balances and actual plant balances. In selecting a survivor curve and ASL, several goodness-of-fit statistics were examined: (1) sum of squared deviations ("SSD"), (2) conformance index ("CI"), (3) index of variation ("IV"), and (4) retirement experience index ("REI").²

Where sufficient data was not available, the ASLs and depreciation accrual rates of neighboring utilities and judgment were used as a guide in developing the proposed depreciation rates.

The survivor curves utilized in this study correspond to the "Iowa" curves that were developed under the direction of Robley Winfrey at Iowa State University, as described in various bulletins and publications.³ These curves are still widely used within the industry.

¹ A detailed description of the simulated plant record ("SPR") method is included in *Public Utility Depreciation Practices*, August 1996, published by the National Association of Regulatory Commissioners ("NARUC").

² Ibid., at pp. 92-97.

³ See Winfrey, Robley, Depreciation of Group Properties, Bulletin 155 (Iowa State University, Engineering Research Institute, reprinted 1969); Winfrey, Robley, Statistical Analyses of Industrial Property Retirements, Bulletin 125 (Iowa State University, Engineering Research Institute, revised 1967); Winfrey, Robley, Condition – Percent Tables for Depreciation of Unit and Group Properties, Bulletin 156 (Iowa State University, Engineering Research Institute, reprinted 1970); Marston, Anson, Winfrey, Robley, and Hepstead, Jean C., Engineering Valuation and Depreciation (Iowa State University Press, 1963).

The depreciation accrual rates were calculated using the average service life depreciation procedure, the straight-line method, and the remaining life basis. Using this approach, the remaining life annual accrual for each category of plant was determined by dividing the original cost less book reserve by the average remaining life determined based on the selected survivor curve. The average remaining life is a weighted average derived from the estimated future survivor curve based on the age of the actual plant additions. The annual depreciation amount is determined by dividing the net plant balance to be recovered by the estimated remaining life. The depreciation accrual rate is then calculated by dividing the annual depreciation amount by the plant balance for the account.

A table showing the current and proposed depreciation accrual rates is included in Appendix A. The Summary of Results included in Appendix B shows the plant balances, the survivor curve, ASL, estimated salvage percentage, net salvage amount, depreciation reserve per books, balance to be recovered, estimated remaining life, annual depreciation amount and base accrual rate for those plant accounts for which sufficient data were available to estimate ASLs and survivor curves. For those accounts for which sufficient data was not available, only the base accrual rates are shown. Historical data and the average remaining life calculations based on the selected survivor curves are included in Appendix C. The results of the study are described below.

Distribution Plant

Account 375 - Distribution Structures and Improvements

Delta's records indicated plant additions dating back to 1951. The current depreciation accrual rate for this account is 2.67%. The survivor curve that best fit the data was the L3 curve with an ASL of 35 years. Using these parameters, the average remaining life is calculated to be 15.5 years. There has been no salvage experienced for this account and none is anticipated. Based on a plant balance of \$112,359, the recommended accrual rate is 2.67%, which is identical to the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 376 - Distribution Mains

This is the account with the largest amount of assets. Delta's records indicated plant additions dating back to 1940. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the R2 curve with an ASL of 34 years provided solid results for all four metrics. Using an R2 curve with an ASL of 34 years, the average remaining life is calculated to be 20.3 years. There has been no salvage experienced for this account and none is anticipated. Based on a plant balance of \$65,974,747, the calculated accrual rate is 3.11%, which is higher than the current rate of 1.41%. Although the higher rate could be supported from the data, it is recommended that Delta increase the rate only to 2.22%. This recommendation is based on judgment and is reasonable compared with other gas distribution utilities in the region.

Account 378 - Measuring and Regulator Station Equipment - Distribution

Delta's records indicated plant additions dating back to 1940. The current depreciation accrual rate for this account is 3.28%. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L0 curve with an ASL of 30 years provided solid results for all four metrics. Using an L0 curve with an ASL of 30 years, the average remaining life is calculated to be 22.2 years. The salvage rate is expected to be -10% for this account due to removal cost. Based on a plant balance of \$1,396,756, the recommended accrual rate is 3.98%, which is slightly higher than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 379 - Measuring and Regulator Station Equipment - City Gate

Delta's records indicated plant additions dating back to 1950. The current depreciation accrual rate for this account is 3.01%. An R1 curve was chosen for this plant account because it had good statistical results and is a common curve used for this account in the industry. Using an R1 curve with an ASL of 40 years, the average remaining life is calculated to be 26.7 years. The salvage rate is expected to be -10% for this account due to removal cost. Based on a plant balance of \$500,033, the recommended accrual rate is 2.80%, which is slightly lower than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 380 - Services - Distribution

Because distribution services were recorded as distribution mains (Account 376) for a number of years, there was not sufficient data to develop survivor curves based on Delta's plant additions and retirements for distribution services. Delta is currently using a depreciation accrual rate of 1.41% for Account 380. The plant balance is \$13,562,075. The recommended accrual rate for this account is 3.07%. This is reasonable compared with other gas distribution utilities in the region.

Account 381 - Meters

Delta's records indicated plant additions dating back to 1940. The current depreciation accrual rate for this account is 2.28%. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the S4 curve with an ASL of 36 years provided excellent results for all four metrics. Using an S4 curve with an ASL of 36 years, the average remaining life is calculated to be 21.4 years. No salvage is anticipated in the future for this account. Based on a plant balance of \$9,302,928 the recommended accrual rate is 3.14%, which is higher than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 382 - Meters & Regulator Installations

Delta's records indicated plant additions dating back to 1940. The current depreciation accrual rate for this account is 2.33%. An S1 curve was chosen for this plant account because it had sound statistical results. Using an S1 curve with an ASL of 32 years, the average remaining life is calculated to be 18.2 years. The salvage rate is expected to be -45% for this account due to removal cost. Based on a plant balance of \$3,186,037, the calculated accrual rate is 5.08%, which is higher than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 383 - House Regulators

Delta's records indicated plant additions dating back to 1940. The current depreciation accrual rate for this account is 3.80%. The S0 curve with an ASL of 30 years was chosen because it produced sound statistical results and maximized all four of the statistics examined (SSD, CI, IV and REI). Using an S0 curve with an ASL of 30 years, the average remaining life is calculated to be 20.0 years. Salvage is anticipated to be 5%. Based on a plant balance of \$3,478,550, the recommended accrual rate is 3.88%, which is slightly higher than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 385 - Industrial Measuring and Regulator Station Equipment - Distribution

Delta's records indicated plant additions dating back to 1956. The current depreciation accrual rate for this account is 2.31%. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L0 curve with an ASL of 40 years provided sound results for all four metrics. Using an L0 curve with an ASL of 40 years, the average remaining life is calculated to be 31.6 years. Salvage is anticipated to be -10% due to removal cost. Based on a plant balance of \$1,567,108, the recommended accrual rate is 2.57%, which is slightly higher than the current rate. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Gathering and Transmission Plant

Account 305 - Structures and Improvements - Manufactured Gas Plant

There is currently no plant balance for this account. The depreciation rate for this account was 2.20%. If additional investment were made in this account, we would recommend using Delta's existing rate of 2.20%.

Account 325 – Gathering Land & Rights

Delta's records indicated plant additions dating back to 1959. The plant balance is \$79,004. The current depreciation accrual rate for this account is 3.00%. The curve fitting statistics

were poor for all survivor curve types. Based on judgment, we are not proposing to modify the existing accrual rate of 3.00%.

Account 327 – Compressor Station Structures

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for this account. Delta is currently using a depreciation accrual rate of 3.00% for Account 327. We are recommending that Delta maintain its current accrual rate of 3.00%. The plant balance is \$45,721.

Account 331 - Producing Gas Wells - Well Equipment

Delta's records indicated plant additions dating back to 1969. The plant balance is \$7,795. However, the plant in this account is fully depreciated. If additional investment were made in this account, we would recommend using Delta's existing rate of 4.00%.

Account 332 - Gathering Lines

The retirement data for this account produce curves with poor statistical results. Delta is currently using a depreciation accrual rate of 2.25% for Account 332, which has a balance of \$1,915,975. We are recommending that Delta maintain its current accrual rate of 2.25%.

Account 333 - Gathering Compressor Stations

Delta's records indicated plant additions dating back only to 1986. The plant balance is \$749,211. The current depreciation accrual rate for this account is 4.00%. The curve fitting statistics were poor for all survivor curve types. We are recommending that Delta maintain its current accrual rate of 4.00%.

Account 334 – Gathering Lines

The retirement data for this account produce curves with poor statistical results. Delta is currently using a depreciation accrual rate of 4.00% for Account 334, which has a balance of \$147,297. We are recommending that Delta maintain its current accrual rate of 2.72%.

Account 365.3 - Land Rights

Delta's records indicated plant additions dating back to 1958. The current depreciation accrual rate for this account is 2.50%. Based on a plant balance of \$163,626, we recommend that Delta maintain the accrual rate of 2.50%.

Account 366 - Structures and Improvements - Transmission

Delta's records indicated plant additions dating back to 1951. The plant balance is \$244,453. The current depreciation accrual rate for this account is 2.00%. There has been no salvage experienced for this account and none is anticipated. While no single curve maximized all

four of the statistics examined (SSD, CI, IV and REI), the R1 curve with an ASL of 38 years provided excellent results for all four metrics. Using an R1 curve with an ASL of 38 years, the average remaining life is calculated to be 28.3 years. We recommend an accrual rate of 2.49%, which is higher than the existing rate.

Account 367 - Mains - Transmission

Delta's records indicated plant additions dating back to 1951. The current depreciation accrual rate for this account is 2.24%. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L0 curve with an ASL of 35 years provided excellent results for all four metrics. Using an L0 curve with an ASL of 35 years, the average remaining life is calculated to be 26.6 years. No salvage is anticipated for this account. Based on a plant balance of \$42,014,896, the recommended accrual rate is 2.52%, which is slightly higher than the current rate.

Account 368 - Compressor Station Equipment - Transmission

Delta's records indicated plant additions dating back to 1961. The plant balance is \$7,498,154. The current depreciation accrual rate for this account is 2.00%. Delta made significant additions to plant since 2006 -- more than tripling the balance of plant since that time. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L2 curve with an ASL of 32 years provided excellent results for all four metrics. Using an L2 curve with an ASL of 32 years, the average remaining life is calculated to be 25.1 years, we are recommending that Delta increase its accrual rate to 3.43%.

Account 369 – Measuring and Regulator Station Equipment - Transmission

Delta's records indicated plant additions dating back to 1951. The current depreciation accrual rate for this account is 2.22%. While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L0 curve with an ASL of 26 years provided excellent results for all four metrics. Using an L0 curve with an ASL of 26 years, the average remaining life is calculated to be 21.0 years. Salvage is expected to be –10% due to removal cost. Based on a plant balance of \$3,380,321, the recommended accrual rate is 4.30%, which is higher than the current rate.

Account 371 - Other Equipment - Transmission

Delta's records indicated plant additions dating back to 1959. The plant balance is \$445,043. The current depreciation accrual rate for this account is 2.00%. The curve fitting statistics were poor for all survivor curve types. Based on judgment and a comparison of depreciation accrual rates of other utilities in the region, we are proposing that Delta maintain its accrual rate of 2.00%.

Storage Plant

Account 351 -- Storage Structures and Improvements

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 2.20% for Account 351. Continuing the accrual rate of 2.20% is recommended based on an expected remaining life of 29.0 years. The plant balance is \$292,484. The recommended accrual rate is consistent with other utilities in the region.

Account 352 -- Storage Wells

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 2.19% for Account 352. Maintaining an accrual rate of 2.19% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$2,876,146. The recommended accrual rate is consistent with other utilities in the region.

Account 352.1 -- Storage Rights

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 1.85% for Account 352.1. Maintaining an accrual rate of 1.85% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$860,396. The recommended accrual rate is consistent with other utilities in the region.

Account 352.2 -- Storage Reservoirs

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 1.78% for Account 352.2. Maintaining an accrual rate of 1.78% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$1,881,731. The recommended accrual rate is consistent with other utilities in the region.

Account 352.3 -- Storage Nonrec Natural Gas

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 1.75% for Account 352.3. Maintaining an accrual rate of 1.75% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$294,307. The recommended accrual rate is consistent with other utilities in the region.

Account 353 -- Storage Lines

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 2.05% for Account 353. Maintaining an accrual rate of 2.05% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$5,102,436. The recommended accrual rate is consistent with other utilities in the region.

Account 354 -- Storage Compressor Lines

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 1.90% for Account 354. Maintaining an accrual rate of 1.90% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$2,526,069. The recommended accrual rate is consistent with other utilities in the region.

Account 355 -- Storage Measuring and Regulator Equipment

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 2.41% for Account 355. Maintaining an accrual rate of 2.69% is recommended based on an expected remaining life of approximately 29.0 years. The plant balance is \$379,709. The recommended accrual rate is consistent with other utilities in the region.

Account 356 - Purification Equipment

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 1.91% for Account 356. Maintaining an accrual rate of 1.91% is recommended based on an expected remaining life of approximately 23.0 years. The plant balance is \$409,570. The recommended accrual rate is consistent with other utilities in the region.

Account 357 - Storage Other Equipment

There was not sufficient historical data to develop survivor curves based on Delta's plant additions and retirements for its storage investment. Delta is currently using a depreciation accrual rate of 0.53% for Account 357. Maintaining an accrual rate of 0.53% is recommended based on an expected remaining life of approximately 23.0 years. The plant balance is \$47,209. The recommended accrual rate is consistent with other utilities in the region.

General Plant

Account 390 - Structures and Improvements

Delta's records indicated plant additions dating back to 1958. The current depreciation accrual rate for this account is 2.00% While no single curve maximized all four of the statistics examined (SSD, CI, IV and REI), the L0 curve with an ASL of 35 years provided solid results for all four metrics. Using an L0 curve with an ASL of 35 years, the average remaining life is calculated to be 27.0 years. The salvage rate is expected to be 40% for this account. Based on a plant balance of \$5,355,492, it is recommended that Delta maintain the current accrual rate of 2.00%. The recommended accrual rate is reasonable compared with other gas distribution utilities in the region.

Account 391 - Office Furniture

The retirement data did not produce a curve with sufficient statistical results. Delta is currently using a depreciation accrual rate of 1.00% for Account 391. The plant balance is \$146,777 and the salvage rate is expected to be 5% for this account. It is recommended that Delta maintain the accrual rate of 1.00%, which will remain in line with other utilities in the region.

Account 392 - Transportation Equipment

There was not a sufficient amount of retirements to develop survivor curves based on Delta's plant data. The curve fitting statistics were marginal for all survivor curve types. The existing accrual rate is 8.14% and the plant balance is \$4,201,697. Salvage rate is estimated at 30%. It is recommended that Delta maintain use of 8.14% for this account. This accrual rate is in line with other utilities in the region.

Account 393 – Stores Equipment

There was not a sufficient amount of retirements to develop survivor curves based on Delta's plant data. The curve fitting statistics were marginal for all survivor curve types. The plant balance is \$36,011. It is recommended that Delta maintain the current accrual rate of 2.00%, which is in line with other utilities in the region.

Account 394 - Tools and Equipment

There was not a sufficient amount of retirements to develop survivor curves based on Delta's plant data. The curve fitting statistics were poor for all survivor curve types. The plant balance is \$703,034. It is recommended that Delta maintain the existing accrual rate of 4.00%, which is in line with other utilities in the region.

Account 395 - Laboratory Equipment

Delta's records indicated plant additions dating back to 1957. The current depreciation accrual rate for this account is 5.00%. The plant balance is \$237,610. After reviewing the account we recommend that the depreciation rate be maintained at 5.00%, which is in line with other utilities in the region.

Account 396 - Power Operated Equipment

Delta's records indicated plant additions dating back to 1964. The current depreciation accrual rate for this account is 2.00%. The curve fitting statistics were poor for all survivor curve types. The plant balance is \$3,294,567. Based on judgment and a comparison of depreciation accrual rates of other utilities in the region, it is recommended that Delta maintain the existing accrual rate of 2.00%.

Account 397 - Communication Equipment

The retirement data did not produce a curve with sufficient statistical results. Delta is currently using a depreciation accrual rate of 5.00% for Account 397. The plant balance is \$386,003. It is recommended that Delta maintain the current accrual rate of 5.00%, which will remain in line with other utilities in the region.

Account 398 - Miscellaneous Equipment

There was not a sufficient amount of retirements to develop survivor curves based on Delta's plant data. The curve fitting statistics were poor for all survivor curve types. Delta is currently using a depreciation accrual rate of 2.00% for Account 398, which has a balance of \$44,382. It is recommended that Delta maintain the existing accrual rate of 2.00%, which will remain in line with other utilities in the region.

Account 399.1 - Other Tangible Property - Mapping Software

The current depreciation accrual rate for this account is 4.0%. It is recommended that Delta maintain this accrual rate. The plant balance is \$638,509.

Account 399.2 - Other Tangible Property - Computer Software

The current depreciation accrual rate for this account is 10.0%. Based on judgment concerning the expected rate of obsolescence for this type of property, it is recommended that Delta maintain the existing accrual rate, consistent with other utilities in the region.

Account 399.3 - Other Tangible Property - Computer Hardware

The current depreciation accrual rate for this account is 10.0%. Based on judgment concerning the expected rate of obsolescence for this type of property, it is recommended that Delta maintain the existing accrual rate, consistent with other utilities in the region.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

A General Adjustment Of Its Rates For Electric) Service; (2) An Order Approving Its 2014)
Service; (2) An Order Approving Its 2014
Environmental Compliance Plan; (3) An Order) Case No. 2014-003
Approving Its Tariffs And Riders; And (4) An)
Order Granting All Other Required Approvals)
And Relief)

DIRECT TESTIMONY OF

DAVID A. DAVIS

ON BEHALF OF KENTUCKY POWER COMPANY

VERIFICATION

The undersigned, David A.Davis, being duly sworn, deposes and says he is the Manager, Property Accounting Policy and Research that he has personal knowledge of the matters set forth in the forgoing testimony for which he is identified as the witness contained therein is true and correct to the best of his information, knowledge and belief.

	David a Davie	
	David A. Davis	
STATE OF OHIO)	
) Case No. 2014-00396	
County of FRANKLIN)	

Subscribed and sworn to before me, a Notary Public in and before said County and State, by David A. Davis, this the 10th day of December, 2014.

Notary Public

My Commission Expires: Quagnot 18, 2017

DIRECT TESTIMONY OF DAVID A. DAVIS ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

CASE NO. 2014-00396

TABLE OF CONTENTS

SUBJECT	PAGE
I. Introduction	1
II. Purpose Of Direct Testimony	3
III. Definition Of Depreciation.	5
IV. Depreciation Study Overview	5
V. Study Methods and Procedures	7
VI. Study Results	10

EXHIBITS

Exhibit DAD-1	David Davis Rate Case Experience
Exhibit DAD-2	Depreciation Study Report
Exhibit DAD-3	Sargent & Lundy Dismantling Estimate

DIRECT TESTIMONY OF DAVID A. DAVIS ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

I. <u>INTRODUCTION</u>

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is David A. Davis. My business address is 1 Riverside Plaza, Columbus,
3		Ohio 43215.
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
5	A.	I am an employee of American Electric Power Service Corporation ("AEPSC") a
6		wholly owned subsidiary of American Electric Power Company, Inc. ("AEP"). My
7		position is Manager - Property Accounting Policy and Research.
8	AT AT	My responsibilities include providing the AEP electric operating subsidiaries
9		with accounting support for regulatory filings, including the preparation of depreciation
10		studies and testimony. I also monitor regulatory proceedings and legislation for
11		accounting implications and assist in determining the appropriate regulatory accounting
12		treatment.
13	Q.	PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
14		BUSINESS EXPERIENCE.
15	Α.	I received a Masters Degree in Business Administration from the University of Dayton
16		in 1988. I also have a Bachelors degree in Business Administration with a major in
17		accounting from Ohio University that I received in 1976. I am a Certified Public
18		Accountant (Inactive) in the state of Ohio. In 1980, I was employed by Columbus

Southern Power Company ("CSP"), one of the AEP operating companies, as an 1 2 accountant. I have held various positions in the Accounting Department including 3 Special Studies, Reports and Lease Accounting. From 1984 to 1985, I was employed by 4 Columbia Gas System Service Corporation as a staff auditor, where my responsibilities 5 included financial and procedural audits of the Columbia Gas Distribution Companies 6 and other subsidiary companies. From 1986 to present, I have been employed by AEP 7 at the Service Corporation, CSP or Ohio Power. At AEP, I have held several positions 8 including Supervisor of Consolidation Accounting, Manager/Supervisor of Property 9 Accounting (for 16 years) and my current position of Property Accounting Policy and 10 Research Manager. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY Q.

- 11
- 12 **COMMISSIONS?**
- 13 A. Yes. See Exhibit DAD-1 which details my rate case experience.
- 14 Q. HAVE YOU HAD ANY **FORMAL** TRAINING RELATING TO
- 15 **DEPRECIATION AND UTILITY ACCOUNTING?**
- 16 A. Yes. I am a former President of the Society of Depreciation Professionals (SDP) and 17 have completed training offered by the SDP that included Depreciation Basics, Life 18 Analysis for Valuations, Life and Net Salvage Analysis, and Preparing and Defending a 19 Depreciation Study. These training classes included an introduction to Plant and 20 Depreciation Accounting, Data Requirements and Collection, Depreciation Models, 21 Life Cycle Analysis, Current Regulatory Issues, Actuarial Life Analysis, Net Salvage 22 Analysis and Simulation Life Analysis. I am a member of the American Institute of

Certified Public Accountants and have attended and participated in numerous Edison Electric Institute Property Accounting and Valuation meetings.

Q.

A.

In addition, I traveled to Tirana, Albania in 2010 with the USAID program to provide a presentation to Albanian utility personnel regarding "Depreciation for a Regulated Utility".

II. PURPOSE OF TESTIMONY

WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

My testimony recommends revised depreciation accrual rates for Kentucky Power Company's ("Kentucky Power" or "Company") electric plant in service based on a depreciation study for electric utility plant in service at December 31, 2013. Schedules I and II in the Depreciation Study Report detail the results of the study. The depreciation rates determined by the study are intended to provide recovery of invested capital, cost of removal, and credit for salvage over the expected life of the property.

The revised depreciation rates are primarily required due to changes in investment and changes in the expected life and net salvage of Kentucky Power's property that takes into account the December 2013 transfer of a 50% undivided interest in the Mitchell generating station from AEP affiliate Ohio Power Company to Kentucky Power as approved by the Kentucky Public Service Commission ("Commission") in Case No. 2012-00578. In the Stipulation and Settlement Agreement attached to that case, the Commission ordered that Kentucky Power would use current Ohio Power Company depreciation rates for Mitchell Units 1 and 2 until such rates are changed in the Base Rate Case. Consistent with the Stipulation and Settlement Agreement, the

Company is proposing a change in the Mitchell Plant's depreciation rates. The depreciation rate changes are based on my depreciation study which uses 2040 as the plant's estimated retirement year.

The Company is not recommending any revision to Big Sandy Plant's depreciation rates in this filing since Unit 2 is planned for retirement at the end of May 2015 and the coal related portions of Unit 1 are planned for retirement in April 2016.

The order from the Mitchell transfer Case No. 2012-00578 allows Kentucky Power to recover the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and other site related retirement costs that will no longer be used. The costs are further detailed in the testimony of Company Witness Yoder. New depreciation rates will be required for Big Sandy Unit 1 after it is repowered to use natural gas in 2016.

13 Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?

- 14 A. Yes. I am sponsoring EXHIBIT DAD-1 which details my rate case experience,
 15 EXHIBIT DAD-2 which includes my depreciation study report and EXHIBIT DAD-3
 16 which is a copy of the Sargent & Lundy dismantling study performed for Mitchell Plant
 17 to provide terminal removal costs for the Mitchell units.
- 18 Q. WERE THESE EXHIBITS PREPARED OR ASSEMBLED BY YOU OR
 19 UNDER YOUR DIRECT SUPERVISION?
- 20 A. Yes.

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III. <u>DEFINITION OF DEPRECIATION</u>

1	Q.	PLEASE EXPLAIN THE DEFINITION OF DEPRECIATION AS USED IN
2		PREPARING YOUR DEPRECIATION STUDY.
3	A.	The definition of depreciation that I used in preparing the study is the same that is used
4		by the FERC and the National Association of Regulatory Utility Commissioners. That
5		definition is:
6 7 8 9 10 11 12		Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric 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 the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities.
14 15 16		Service value means the difference between original cost and the net salvage value (net salvage value means the salvage value of the property retired less the cost of removal) of the electric plant.
		IV. <u>DEPRECIATION STUDY OVERVIEW</u>
17	Q.	HOW DO THE DEPRECIATION RATES AND ANNUAL ACCRUALS
18		CALCULATED IN YOUR 2013 DEPRECIATION STUDY COMPARE WITH
19		KENTUCKY POWER'S CURRENT RATES AND ACCRUALS?
20	A.	A comparison of Kentucky Power's current rates and accruals and the study rates and
21		accruals is shown below based on total Company depreciable plant balances at
22		December 31, 2013:

Table 1 - Depreciation Rates and Accruals

Based on Depreciable Plant In Service at December 31, 2013

	E	xisting		Study	
Functional Plant Group	Rates	Accruals	Rates	Accruals	Difference
Steam Production (1)	3.80%	54,851,796	3.36%	48,418,617	(6,433,179)
Transmission	1.71%	8,478,288	2.66%	13,169,805	4,691,517
Distribution	3.52%	24,312,736	4.48%	30,971,933	6,659,197
General	2.54%	858,462	4.42%	1,492,241	633,779
Total Depreciable Plant	3.32%	88,501,282	3.50%	94,052,596	5,551,314

Note: (1) Includes Big Sandy and Mitchell plants. The Company is not recommending a change in depreciation rates for Big Sandy Plant due to the planned retirement of Unit 2 in 2015 and the coal related portions of Unit 1 in 2016.

Based on results of the depreciation study which includes a 50% share of the Mitchell Generating Station I recommend an increase in annual depreciation expense due to a change in depreciation rates of \$5,551,314 using depreciable plant balances at December 31, 2013. The changes in depreciation rates are necessary because of changes in average service lives and the net salvage estimates used to calculate the Company's depreciation rates.

Kentucky Power's current depreciation rates (excluding Mitchell Plant) are based on a 1991 settlement agreement in Case No. 91-066 which were made effective on April 1, 1991. The Mitchell Plant's depreciation rates were set in Case No. 2012-00578 where the Commission ordered Kentucky Power to use Ohio Power Company depreciation rates for Mitchell Units 1 and 2 until such rates changed in a future Base Rate Case.

V. STUDY METHODS AND PROCEDURES

1	Q.	PLEASE BRIEFLY D	ESCRIBE THE	METHODS	AND	PROCEDURES	USED
2		IN THE STUDY.					

A.

Exhibit DAD-2. In summary, all of the property included in the depreciation report was considered on a group plan. Under the group plan, depreciation is accrued upon the basis of the original cost of all property included in each depreciable plant group instead of individual items of property. Upon retirement of any depreciable property, its full cost, less any net salvage realized, is charged to the accumulated provision for depreciation regardless of the age of the particular item retired. Also under this plan, the dollars in each primary plant account are considered as a separate group for depreciation accounting purposes and an annual depreciation rate for each account is determined. In this study, the plant groups consisted of the individual primary plant accounts for Production, Transmission, Distribution and General Plant property. The depreciation rates were calculated by using the Average Remaining Life Method, which is the same method that was used to calculate Kentucky Power's current depreciation rates. The Average Remaining Life Method recovers the original cost of the plant, adjusted for net salvage, less accumulated depreciation over the average remaining life of the plant.

Mitchell Plant original cost, accumulated depreciation and terminal net salvage was included at Kentucky's 50% share at December 31, 2013. The Big Sandy amounts listed on Schedules I and II in the Depreciation Study Report are also at December 31, 2013 but due to the planned retirement of Big Sandy Unit 2 in 2015 and the coal related

portions of Big Sandy Unit 1 in 2016, new depreciation rates are not recommended for Big Sandy Plant in this depreciation study.

A separate depreciation rate was calculated for Mitchell Plant's SCR catalyst since AEP Generation determined that the catalyst has a shorter life than other plant assets (8 years).

The average service lives for the Company's Transmission, Distribution and General Plant were determined using statistical procedures similar to those used in the insurance industry in studies of human mortality. The historical retirement experience of property groups was studied and retirement characteristics of the property were described using the Iowa-type retirement dispersion curves.

Net salvage for each property group was determined based on actual historical experience for Production, Transmission, Distribution and General Plant accounts. In addition the depreciation rate calculation for Mitchell Plant includes a terminal net salvage amount. To determine this amount, Kentucky Power commissioned the independent engineering firm, Sargent & Lundy ("S&L"), to prepare a conceptual dismantling cost estimate to be included in Kentucky Power's depreciation rates for Mitchell Plant.

- 18 Q. WHY DID KENTUCKY POWER RETAIN S&L TO PERFORM A

 19 DISMANTLING STUDY OF THE MITCHELL PLANT'S GENERATING
 20 UNITS?
- A. The S&L dismantling study provides estimated removal cost and salvage amounts specific to Mitchell Plant and is therefore a reasonable method to arrive at future

1		expected terminal net salvage amounts. A copy of the S&L dismantling study is
2		included with my testimony as EXHIBIT DAD-3.
3	Q.	WERE THERE ANY ADJUSTMENTS MADE TO THE RESULTS OF THE
4		MITCHELL PLANT'S DISMANTLING STUDY WHEN ADDING THE S&L
5		NET SALVAGE AMOUNTS TO THE DEPRECIATION STUDY?
6	A.	Yes. S&L provided terminal net salvage amounts, excluding any asbestos, ash pond or
7		landfill type removal costs, in 2012 dollars. I applied a 2.35% escalation rate factor to
8		the net salvage amounts provided by the S&L study to determine the terminal net
9		salvage amount at 2040 the estimated retirement date for the Mitchell Plant. The
10		terminal net salvage amount after escalation was used in the calculation of net salvage
11		percentages in the depreciation study.
12	Q.	WHAT IS THE SOURCE OF THE 2.35% ESCALATION RATE USED FOR
13		THIS PURPOSE?
14	A.	The 2.35% escalation rate was taken from a publication titled "The Livingston Survey"
15		dated December 12, 2013. The Livingston Survey is published by the research
16		department of the Federal Reserve Bank of Philadelphia and provides a long term
17		outlook projecting an escalation rate for a 10 year period.
18	Q.	WHY DID S&L'S MITCHELL PLANT DISMANTLING STUDY ESTIMATE
19		EXCLUDE THE COST TO REMOVE ASBESTOS AND TO COVER ASH
20		PONDS AND LANDFILLS?
21	A.	The cost to remove asbestos and to cover ash ponds and landfills are included in the
22		Company's accounting for asset retirement obligations (ARO) and the depreciation and

1		accretion on these ARO's are incorporated in the cost of service outside of the
2		depreciation study.
3	Q.	WOULD YOU PLEASE EXPLAIN WHY YOU CALCULATED A SEPARATE
4		DEPRECIATION RATE FOR MITCHELL PLANT'S SELECTIVE
5		CATALYTIC REDUCTION (SCR) CATALYST?
6	A.	Yes. AEP Engineering determined that the depreciable life of the Mitchell Plant SCR
7		catalyst was approximately 8 years. Since the life of the catalyst is much shorter than
8		the remaining life of the plant, it is more appropriate to depreciate it over a shorter life
9		than the remaining life of the plant.
10	Q.	DO YOU HAVE ANY RECOMMENDATIONS REGARDING THE
11		DEPRECIATION RATES CALCULATED BY THE DEPRECIATION STUDY?
12	A.	Yes. Kentucky Power currently applies depreciation rates and maintains accumulated
13		depreciation by functional plant classification (Production, Transmission, Distribution
14		and General). I recommend that the Commission authorize Kentucky Power to adopt
15		and apply the proposed depreciation accrual rates at the primary plant account level, and
16		that the accumulated depreciation by primary plant account be established as of the date
17		the revised depreciation rates become effective. Maintaining accumulated depreciation
18		at the primary account level will facilitate monitoring depreciation accruals and actual
19		salvage and removal activity for future depreciation study purposes.
		VI. <u>STUDY RESULTS</u>
20	Q.	WOULD YOU PLEASE EXPLAIN THE RESULTS OF YOUR STUDY FOR
21		STEAM PRODUCTION PLANT?

1	A.	Yes. The composite depreciation rate for Steam Production Plant decreased from
2		3.80% to 3.36% primarily due to the change in Mitchell Plant's estimated retirement
3		year to 2040 from 2031. The current Mitchell Plant depreciation rates (those used by
4		Ohio Power Company at the December 31, 2013 transfer date) are based on a 2031
5		retirement date.
6	Q.	WOULD YOU PLEASE EXPLAIN THE RESULTS OF YOUR STUDY FOR
7		TRANSMISSION PLANT?
8	A.	Yes. The depreciation rate for Transmission Plant increased from 1.71% to 2.66% due
9		to increases in the net salvage ratio for 5 accounts (accounts 352, 353, 354, 355, and
10		356) and decreases in the average service life for two accounts (354, and 355). These
11		changes were partially offset by an increase in average service life for account 352.
12	Q.	WOULD YOU PLEASE EXPLAIN THE RESULTS OF YOUR STUDY FOR
13		DISTRIBUTION PLANT?
14	A.	Yes. The depreciation rate for Distribution Plant increased from 3.52% to 4.48% due to
15		increases in the net salvage ratio for nine accounts (accounts 361, 362, 364, 365, 367,
16		368, 369, 371 and 373) and a decrease in the average service life for one account
17		(account 370). The increase was partially offset by an increase in average service life
18		for five accounts (accounts 361, 362, 366, 369, and 373) and a decrease in the net
19		salvage ratio for account 370.
20	Q.	WOULD YOU PLEASE EXPLAIN THE RESULTS OF YOUR STUDY FOR
21		GENERAL PLANT?

1 A. Yes. The depreciation rate for General Plant increased from 2.54% to 4.42% due to an increase in the net salvage ratio for three accounts (391, 394 and 398) and a reduction in the average service life for account 390. The increase was partially offset by a decrease in the net salvage ratio for account 397.

5 Q. DO YOU SPONSOR ANY ADJUSTMENTS IN THIS CASE?

Yes, I sponsor three adjustments in this case. Adjustment No. 37 annualizes depreciation expense at September 30, 2014 for Transmission, Distribution and General property using the depreciation rates recommended by the depreciation study and calculates an adjustment that reflects the difference between the actual twelve month ended September 30, 2014 book depreciation and the annualized amount. Adjustment No. 39 annualizes depreciation expense at September 30, 2014 for Mitchell Plant using depreciation rates recommended by the depreciation study and calculates an adjustment that reflects the difference between the actual twelve month ended September 30, 2014 book depreciation and the annualized September amount. Adjustment No. 40 annualizes depreciation expense at September 30, 2014 for Big Sandy Plant's remaining plant in service after the retirement of Big Sandy Unit 2 and the coal related portions of Unit 1 using current depreciation rates (which are the rates recommended by the depreciation study) and calculates an adjustment that reflects the difference between the actual twelve month ended September 30, 2014 book depreciation and the annualized amount. The support for these adjustments is provided in Section V, Exhibit 2.

21 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

22 A. Yes.

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3	RATE CASE EXPERIENCE OF DAVID A. DAVIS				
No.	Year	Company	Commission	Case, Cause or Docket No.	Items Provided/Filed
1.	2006	Public Service of Oklahoma	Oklahoma Corporation Commission	Cause No. PUD 200600285	Oral and written Testimony and Depreciation Study
2.	2007	Southwestern Electric Power Company	Louisiana Public Service Commission	Docket No. U- 23327, Subdocket A	Provided a Depreciation Study for Generation
3.	2008	Public Service of Oklahoma	Oklahoma Corporation Commission	Cause No. PUD 200800144	Oral and written Testimony and Depreciation Study
4.	2009	Southwestern Electric Power Company	Arkansas Public Service Commission	Docket No. 09- 008-U	Filed written Testimony and Depreciation Study
5.	2009	Southwestern Electric Power Company	Public Utility Commission of Texas	Docket No. 37364	Filed written Testimony and Depreciation Study
6.	2010	Public Service of Oklahoma	Oklahoma Corporation Commission	Cause No. PUD 201000050	Filed written Testimony and Depreciation Study
7.	2011	Columbus Southern Power Company and Ohio Power Company	Public Utility Commission of Ohio	Case Nos. 11- 351-EL-AIR and 11-352-EL-AIR	Filed written Testimony and Depreciation Study
8.	2011	Southwestern Electric Power Company	Louisiana Public Service Commission	Docket No. U- 23327, Subdocket F	Provided a Depreciation Study for Generation
9.	2011	Indiana Michigan Power Company	Michigan Public Service Commission	Case No. U- 16801	Oral and written Testimony and Depreciation Study

No.	Year	Company	Commission	Case, Cause or Docket No.	Items Provided/Filed
10.	2011	Indiana Michigan Power Co.	Indiana Utility Regulatory Commission	Cause No. 44075	Testified and filed Testimony and Depreciation Study
		Co.	Commission	la la	Depreciation Study
11	2012	Southwestern Electric Power Company	Public Utility Commission of Texas	Docket No. 40443	Oral and written Testimony and Depreciation Stud
12	2012	Transource Missouri, LLC	Federal Energy Regulatory Commission	Docket No. ER12-2554-000	Testimony and Depreciation Study
13	2012	Appalachian Power Company	Federal Energy Regulatory Commission	Docket No. ER13-0539-000	Testimony and Exhibits – to show how book depreciation is calculated in formula rates
14	2013	Appalachian Power Company	Virginia State Corporation Commission	Case No. PUE- 2012-00141	Oral and written rebuttal Testimony in asset transfer case for Mitchell Plant and OPCo's share of Amos U3
15	2013	Indiana Michigan Power Company	Michigan Public Service Commission	Case No. U- 17524	Filed a Depreciation Study for Steam Generation Plant
16	2014	Appalachian Power Company	Virginia State Corporation Commission	Case No. PUE- 2014-00026	Filed written Testimony and Depreciation Study
17	2014	Appalachian Power Company	Public Service Commission of West Virginia	Case No. 14- 0546-E-PC	Filed rebuttal Testimony in asse transfer case for

		RATE CASE	EXPERIENCE O	F DAVID A. DAV	IS
No.	Year	Company	Commission	Case, Cause or Docket No.	Items Provided/Filed
					Mitchell Plant
18	2014	Transource Wisconsin, LLC	Federal Energy Regulatory Commission	Docket No. ER15-13-000	Testimony and Depreciation Study
19	2014	Indiana Michigan Power Company	Indiana Utility Regulatory Commission	Cause No. 44555	Filed a Depreciation Study for Steam Generation Plant

KENTUCKY POWER COMPANY

OF
ELECTRIC PLANT IN SERVICE
AT

DECEMBER 31, 2013

DEPRECIATION STUDY REPORT

Table of Contents

SUBJECT		PAGE
I. Introduction		3
II. Discussion of Methods and Procedures Used In The Study		5
III. Net Salvage		13
IV. Calculation of Depreciation Requirement at December 31, 2013		16
V. Study Results		16
SCHEDULE I – Explanation of Columns		19
SCHEDULE I – Calculation of Depreciation Rates by the Remaining Life Method		20
SCHEDULE II – Compare Depreciation Rates Using Current and Study Rates		
		22
SCHEDULE III - Comparison of Mortality Characteristics	*	24

I. INTRODUCTION

This report presents the results of a depreciation study of Kentucky Power Company's (KPCo) depreciable electric utility plant in service at December 31, 2013. The study was prepared by David A. Davis, Manager – Property Accounting Policy and Research at American Electric Power Service Corporation (AEPSC). The purpose of the depreciation study was to develop appropriate annual depreciation accrual rates for each of the primary plant accounts that comprise the functional groups for which KPCo computes its annual depreciation expense.

The recommended depreciation rates are based on the Average Remaining Life Method of computing depreciation. Further explanation of this method is contained in Section II of this report.

The definition of depreciation used in my Study is the same as that used by the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners:

"Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric 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 the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities."

"Service value means the difference between original cost and the

net salvage value (net salvage value means the salvage value of the property retired less the cost of removal) of the electric plant." (FERC Accounting and Reporting Requirements for Public Utilities and Licensees, ¶15.001.)

Schedule I of this report shows the recommended depreciation accrual rates by primary plant accounts and composited to functional plant classifications. Schedule II compares depreciation expense using rates approved by the Commission and rates recommended by the depreciation study. Schedule III shows a comparison of the current mortality characteristics that were used to compute the recommended depreciation rates and the mortality characteristics used to determine the existing depreciation rates and accruals for Transmission, Distribution and General Plant Functions. A comparison of KPCo's current functional group composite depreciation rates and accruals to recommended functional group rates and accruals based on December 31, 2013 depreciable plant balances follows:

Table 1 - Depreciation Rates and Accruals

Based on Depreciable Plant In Service at December 31, 2013

	Existing Study		Study		
Functional Plant Group	Rates	Accruals	Rates	<u>Accruals</u>	Difference
Steam Production (1)	3.80%	54,851,796	3.36%	48,418,617	(6,433,179)
Transmission	1.71%	8,478,288	2.66%	13,169,805	4,691,517
Distribution	3.52%	24,312,736	4.48%	30,971,933	6,659,197
General	2.54%	858,462	4.42%	1,492,241	633,779
Total Depreciable Plant	3.32%	88,501,282	3.50%	94,052,596	5,551,314

Note: (1) Includes Big Sandy and Mitchell plants. The Company is not recommending a change in depreciation rates for Big Sandy Plant due to the planned retirement of Unit 2 in 2015 and the coal related portions of Unit 1 in 2016.

Based on Total Company Depreciable Plant In-Service as of December 31, 2013, I am recommending an increase in depreciation rates that result in an increase in annual depreciation expense of \$5,551,314. The depreciation rate changes are necessary because of changes in average service lives and net salvage estimates used to calculate KPCo's recommended depreciation rates that takes into account the December 31, 2013 transfer of a 50% undivided interest in the Mitchell generating station from AEP affiliate Ohio Power Company as approved by the Kentucky Public Service Commission (or Commission) in Case No. 2012-00578. KPCo's current approved depreciation rates with the exception of Mitchell Plant rates are based on a 1991 settlement agreement in Case No. 91-066 and were made effective on April 1, 1991. The Stipulation and Settlement Agreement in Case No. 2012-00578 ordered Kentucky Power to use the current Ohio Power Company depreciation rates for Mitchell Plant until such rates are changed in a base rate case.

II. DISCUSSION OF METHODS AND PROCEDURES USED IN THE STUDY

Group Method

All of the depreciable property included in this report was considered on a group plan. Under the group plan, depreciation expense is accrued upon the basis of the original cost of all property included in each depreciable plant account. Upon retirement of any depreciable property, its full cost, less any net salvage realized, is charged to the accrued depreciation reserve regardless of the age of the particular item retired. Also, under this plan, the dollars in each primary plant account are considered as a separate group for depreciation accounting purposes and an annual depreciation rate for each account is determined. The annual accruals by primary account were then summed, to arrive at the total accrual for each functional group. The total accrual divided by the original cost yields the functional group accrual rate.

2. Annual Depreciation Rates Using the Average Remaining Life Method

KPCo's current depreciation rates are based on the Average Remaining Life Method. The Average Remaining Life Method recovers the original cost of the plant, adjusted for net salvage, less accumulated depreciation, over the average remaining life of the plant. By this method, the annual depreciation rate for each account is determined on the following basis:

Annual Depreciation Expense =

(Orig. Cost) (Net Salvage Ratio) - Accumulated Depreciation
Average Remaining Life

Annual
Depreciation = Annual Depreciation Expense
Rate Original Cost

Methods of Life Analysis

Depending upon the type of property and the nature of the data available from the property accounting records, one of three life analyses was used to arrive at the historically realized mortality characteristics and service lives of the depreciable plant investments. These methods are identified and described as follows:

Life Span Analysis

The life span analysis was employed for Mitchell Plant. The lifespan method of analysis is particularly suited to specific location property, such as generating plants, where all of the surviving investments are likely to be retired in total at a future date. The key elements in the life span analysis are the age of the surviving investments, the projected retirement date of the facility and the expected interim retirements. Interim retirements are those retirements that are expected to occur between the date of the depreciation study and the expected final retirement date of the generating plant. Examples of interim retirements include fans, pumps, motors, a set of boiler tubes, a turbine rotor, etc. The interim retirement history for each primary production plant account was analyzed and the results of those analyses were used to project future interim retirements. The age of Mitchell Plant's surviving investments at December 31, 2013 was obtained from the accounting records of affiliate Ohio Power Company (OPCo). American Electric Power Service Corporation (AEPSC) provided the retirement date used in the life-span analysis for Mitchell Plant.

The Company is not recommending any revision to Big Sandy Plant's depreciation rates in this filing since Unit 2 is planned for retirement at the end of May 2015 and the coal related portions of Unit 1 are planned for retirement in April 2016. KPCo expects to repower Big Sandy Unit 1 to use natural gas in 2016.

The order in the Mitchell transfer Case No. 2012-00578 allows Kentucky Power to recover the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and other site related retirement costs that will not continue in use. New depreciation rates will be required for Big Sandy Unit 1 after it is repowered to use natural gas in 2016.

Steam Production Plant

At December 31st, 2013, KPCo's depreciable investment in Steam

Production Plant includes the Big Sandy Generating plant and a 50% undivided interest in Mitchell Generation Plant. The Big Sandy plant is located highway 23 near Louisa, Kentucky and includes two generating units. The Mitchell Plant is located on the Ohio River near Moundsville, West Virginia and also consists of two generating units. All generating units at the Big Sandy and Mitchell plants are currently coal fired.

The generating units and their capacities are as follows (also shown on Schedule IV – Estimated Generation Plant Retirement Dates):

<u>Plant</u>	<u>Unit</u>	Rating	Commercial Operating Date
Big Sandy	1	260 MW	1963
Big Sandy	2	800 MW	1969
Mitchell	1	770 MW	1971
Mitchell	2	790 MW	1971

AEPSC evaluated each of the generating units and determined the following retirement dates for the units:

<u>Plant</u>	<u>Unit</u>	Retirement Date
Big Sandy	2	2015
Big Sandy	1	2016 coal related portion
Big Sandy	1	2031 repowered to use natural gas
Mitchell Plant	1,2	2040

Since KPCo's last depreciation study (property investment dated December 31, 2008), AEP has reevaluated the expected retirement dates for its generation plant including Big Sandy Units 1-2. The reevaluation for these two Big Sandy units indicated that their current estimated retirement

dates should be 2015 for Big Sandy Unit 2, 2016 for the coal related portion of Big Sandy Unit 1 and 2031 for Big Sandy Unit 1 after it is repowered to use natural gas. AEP previously estimated individual unit retirement dates of 2023 for Unit 1 and 2029 for Unit 2. According to AEP, the earlier Big Sandy Unit 2 and the coal related portion of Unit 1 retirement dates are because it is not economically feasible to equip the units with necessary environmental controls, not because they have reached the end of their service lives.

Current plans are for the Mitchell Plant to operate for a total life of 69 years or until 2040.

Actuarial Analysis - Transmission, Distribution and General Plant

This method of analyzing past experience represents the application to industrial property of statistical procedures developed in the life insurance field for investigating human mortality. It is distinguished from other methods of life estimation by the requirement that it is necessary to know the age of the property at the time of its retirement and the age of survivors, or plant remaining in service; that is, the installation date must be known for each particular retirement and for each particular survivor.

The application of this method involves the statistical procedure known as the "annual rate method" of analysis. This procedure relates the retirements during each age interval to the exposures at the beginning of that interval, the ratio of these being the annual retirement ratio. Subtracting each retirement ratio from unity yields a sequence of annual survival ratios from which a survivor curve can be determined. This is

accomplished by the consecutive multiplication of the survivor ratios. The length of this curve depends primarily upon the age of the oldest property. Normally, if the period of years from the inception of the account to the time of the study is short in relation to the expected maximum life of the property, an incomplete or stub survivor curve results.

While there are a number of acceptable methods of smoothing and extending this stub survivor curve in order to compute the area under it from which the average life is determined, the well-known lowa Type Curve Method was used in this study.

By this procedure, instead of mathematically smoothing and projecting the stub survivor curve to determine the average life of the group, it was assumed that the stub curve would have the same mortality characteristics as the type curve selected. The selection of the appropriate type curve and average life is accomplished by plotting the stub curve, superimposing on it lowa curves of the various types and average lives drawn to the same scale, and then determining which lowa type curve and average life best matches the stub.

The Actuarial Method of Life Analysis was used for the following accounts:

- 352.0 Transmission Structures & Improvements
- 353.0 Transmission Station Equipment
- 361.0 Distribution Structures & Improvements
- 362.0 Distribution Station Equipment
- 390.0 General Structures & Improvements

The result of the actuarial analysis for the above accounts is detailed in the depreciation study work papers.

<u>Simulated Plant Record Analysis – Transmission and Distribution Plant</u>

The "Simulated Plant Record" (SPR) method designates a class of statistical techniques that provide an estimate of the age distribution, mortality dispersion and average service life of property accounts whose recorded history provides no indication of the age of the property units when retired from service. For each such account, the available property records usually reveal only the annual gross additions, annual retirements and balances with no indication of the age of either plant retirements or annual plant balances. For this study, the "Balances method" of analysis was used.

The SPR Balances Method is a trial and error procedure that attempts to duplicate the annual balance of a plant account by distributing the actual annual gross additions over time according to an assumed mortality distribution. Specifically, the dollars remaining in service at any date are estimated by multiplying each year's additions by the successive proportion surviving at each age as given by the assumed survivor characteristics. For a given year, the balance indicated is the accumulation of survivors from all vintages and this is compared with the actual book balance. This process is repeated for a different survivor curves and average life combinations until a pattern is discovered which produces a series of "simulated balances" most nearly equaling the actual balances shown in a company's books.

This determination is based on the distribution producing the minimum sum of squared differences between the simulated balance and the actual balances over a test period of years.

The iterative nature of the simulated methods makes them ideally suited for computerized analysis. For each analysis of a given property account, the computer program provides a single page summary containing the results of each analysis indicating the "best fit" based on criteria selected by the user.

The results of my analysis using the Balance Method is shown in the depreciation study work papers. The analysis also shows the value of the Index of Variation of the difference that is calculated according to the the Balances Method where a lower value for the Index of Variation indicates better agreement with the actual data.

The SPR Method of Life Analysis was utilized for the following accounts:

- 354.0 Transmission Towers & Fixtures
- 355.0 Transmission Poles & Fixtures
- 356.0 Transmission Overhead Conductor & Devices
- 364.0 Distribution Poles, Towers & Fixtures
- 365.0 Distribution OH Conductor & Devices
- 366.0 Distribution Underground Conduit
- 367.0 Distribution Underground Conductor & Devices
- 368.0 Distribution Line Transformers
- 369.0 Distribution Services
- 370.0 Distribution Meters

371.0 Installation on Customers Premises

373.0 Street Lighting & Signal Systems

Vintage Year Accounting - General Equipment

In 1998, the Company began using a vintage year accounting method for general plant accounts 391 to 398 in accordance with Federal Energy Regulatory Commission Accounting Release Number 15 (AR-15). This accounting method requires the amortization of vintage groups of property over their useful lives. AR-15 also requires that property be retired when it meets its average service life.

As a result, my recommendation for these accounts is that the current useful life approved by the Commission be retained and used to continue amortization of the account balances.

4. Final Selection of Average Life and Curve Type

The final selection of average life and curve type for each depreciable plant account analyzed by the Actuarial and SPR Methods was primarily based on the results of the mortality analyses of past retirement history.

III. NET SALVAGE

Net Salvage - Steam Production Plant

The net salvage analysis for steam production plant included a review of the plant's experienced functional interim retirement, salvage and removal history for the period 2001-2013. No interim retirements were estimated for Big Sandy Plant in this depreciation study since Unit 2 is estimated to retire in 2015, the coal

related portions of Unit 1 are estimated to retire in 2016 and the repowered Unit 1 (to use natural gas) is expected to retire in 2031.

While a standard type of analysis was used by the depreciation study to determine the net salvage characteristics applicable to interim retirements for the plants, the most significant net salvage amounts for generating plants occurs at the end of their life. Therefore, to assist in establishing total net salvage applicable to Big Sandy and Mitchell plants, the Company contracted with Sargent & Lundy (S&L) to prepare conceptual demolition cost estimates. The S&L cost estimates to demolish the plants are based on current (2013) price levels which were inflated to retirement dates in the depreciation study. These estimates were incorporated into the calculation of a net salvage ratio for Steam Production Plant. S&L's demolition costs do not include Asset Retirement Obligation (ARO) amounts associated with the removal of asbestos or any cost associated with the final disposition of Big Sandy or Mitchell Plant landfills and ash ponds. The costs to remove asbestos and cover ash ponds are included separately in the cost of service through the accounting for asset retirement obligations.

Net Salvage – Transmission, Distribution and General Plant

The net salvage percentages used in this report for Transmission, Distribution and General Plant are expressed as percent of original cost and are based on the Company's experience combined with the judgment of the analyst. KPCo maintains salvage and removal costs in its depreciation ledger at the functional plant level, rather than by primary plant accounts. To determine gross salvage, gross removal and net salvage percentages for individual plant accounts, original cost retirements, salvage and removal were taken from the Company's account history in its PowerPlant software which detailed these

amounts by account for the period 2000 to 2013. Gross salvage and cost of removal percentages were calculated using the data from this fourteen year time period for each account. The salvage and removal percentages for each account were then netted to determine a net salvage percentage for each account.

The net salvage percents were converted to net salvage ratios (1 minus the net salvage percentage) and appear in Column IV on Schedule I and were used to determine the total amount to be recovered through depreciation. The same net salvage was also reflected in the determination of the calculated depreciation requirement, which was used to allocate accumulated depreciation at the functional group to the accounts comprising each group.

5. Net Salvage - Ratios

The net salvage ratios shown on Schedule I of this report may be explained as follows:

- a. Where the ratio is shown as unity (1.00), it was assumed that the net salvage in that particular account would be zero.
- b. Where the ratio is less than unity, it was assumed that the salvage exceeded the removal costs. For example, if the net salvage were 20%, the net salvage ratio would be expressed as .80.
- c. Where the ratio is greater than unity, it was assumed that the salvage was less than the cost of removal. For example, if the net salvage were minus 5%, the net salvage ratio would be expressed as 1.05.

IV. CALCULATION OF DEPRECIATION REQUIREMENT AT DECEMBER 31, 2013

The accumulated depreciation by functional group was allocated to individual plant accounts based on the calculation of a depreciation requirement (theoretical reserve) for each plant account using the average service life, curve type and net salvage amount recommended in this study.

V. <u>STUDY RESULTS</u>

Production, Transmission, Distribution and General plant results are discussed below. In addition, Transmission, Distribution and General Plant average service life, retirement dispersion pattern and net salvage percentages used to calculate each primary plant account depreciation rate are shown on Schedule III where the mortality characteristics and net salvage values for the current rates are also shown. The changes to the mortality characteristics follow trends shown by historical retirement experience. Gross salvage and gross cost of removal percentages were largely based on the history of each account for the period 2000-2013.

Steam Production Plant

Depreciation rates for Mitchell Plant were calculated by plant account with the expectation that the total cost including net salvage would be recovered by 2040 which is the estimated retirement date for Mitchell Plant. New depreciation rates for Big Sandy Plant were not recommended by the depreciation study. The comparison of steam production depreciation accruals on Schedule II using the currently approved depreciation rates and the study depreciation rates includes

Mitchell Plant. The original cost and accumulated depreciation amounts used for Mitchell Plant are 50% of the plant's original cost and accumulated depreciation on KPCo's books at December 31, 2013.

The decrease in steam production depreciation expense due to a change in depreciation rates was primarily due to the longer life estimate for Mitchell Plant in this proceeding (2040 retirement date) versus a previously estimated 2031 retirement date. The depreciation study doesn't recommend any changes to the Big Sandy Plant's depreciation rates.

Terminal demolition costs are included in the steam production depreciation rates. The estimates of demolition costs were developed by Sargent & Lundy. S&L estimated demolition cost in 2013 dollars for Big Sandy Plant and Mitchell Plant (KPCo's 50% share) was \$28,831,786 and \$21,185,697, respectively.

Transmission Plant

The depreciation rates for Transmission plant increased from 1.71% to 2.66% due to increases in the net salvage ratio for five accounts (accounts 352, 353, 354, 355 and 356) and decreases in the average service life for two accounts (accounts 354, and 355). The increase was partially offset by an increase in the average service life for account 352.

Distribution Plant

The depreciation rates for Distribution plant increased from 3.52% to 4.48% due to increases in the net salvage ratio for nine accounts (accounts 361, 362, 364, 365, 367, 368, 369, 371 and 373) and a decrease in the average service life for one account (account 370). The increase was partially offset by a decrease in the net salvage ratio for account 370 and by increases in the

average service life for five accounts (accounts 361, 362, 366, 369 and 373).

General Plant

The depreciation rates for General plant increased from 2.54% to 4.42% due to increases in the net salvage ratio for three accounts (accounts 391, 394 and 398) and a reduction in the average service life for account 390. The increase was partially offset by a decrease in the net salvage ratio for account 397.

SCHEDULE I – EXPLANATION OF COLUMN HEADINGS

Schedule I shows the determination of the recommended annual depreciation accrual rate by primary plant accounts by the straight line remaining life method. An explanation of the schedule follows:

Column I - Account number.

Column II - Account title.

Column III - Original Cost at December 31, 2013

Column IV - Net Salvage Ratio.

Column V - Total to be Recovered (Column III) * (Column IV).

Column VI - Calculated Depreciation Requirement.

Column VII - Allocated Accumulated Depreciation - accumulated depreciation

(book reserve) spread to each account on the basis of the Calculated Depreciation Requirement shown in Column VI.

Column VIII - Remaining to be Recovered (Column V - Column VII).

Column IX - Average Remaining Life.

Column X - Recommended Annual Accrual Amount.

Column XI - Recommended Annual Accrual Percent or Depreciation Rate

(Column X/Column III).

KENTUCKY POWER COMPANY SCHEDULE I - CALCULATION OF DEPRECIATION RATES BY THE REMAINING LIFE METHOD BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013 AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES

									Annual A	ccrual
Acct. No.	Account Title	Original Cost	Net Salvg. Ratio	Total to be Recovered	Calculated Depreciation Requirement	Accumulated Depreciation	Remaining to Be Recovered	Avg. Remain Life	Amount	Percent
<u>(1)</u>	<u>(II)</u>	(111)	<u>(IV)</u>	(A)	<u>(VI)</u>	(VII)	_(VIII)	(1X)	(X)	<u>(XI)</u>
STEAM	PRODUCTION PLANT									
Big San	dy Plant (1)									
311 312 312 314 315 316	Structures & Improvements Boiler Plant Equipment Boiler Plant Equip SCR Catalyst (2) Turbogenerator Units Accessory Electrical Equip. Misc. Power Plant Equip.	43,291,665 362,456,070 8,147,622 109,522,949 16,513,202 8,709,178	(1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1)	30,726,379 177,325,748 5,742,300 61,149,688 12,896,303 <u>5,351,493</u>	(1) (1) (1) (1) (1) (1)	(1) (1) (1) (1) (1) (1)	1,636,425 13,700,839 389,456 4,139,967 624,199 329,207	3.78% 3.78% 4.78% 3.78% 3.78% 3.78%
	Total	548,640,686				293,191,911			20,820,093	3.79%
Mitchell	I Plant (3)									
311 312 312 314 315 316	Structures & Improvements Boiler Plant Equipment Boiler Plant Equip SCR Catalyst (2) Turbogenerator Units Accessory Electrical Equip. Misc. Power Plant Equip.	42,000,197 765,644,984 8,190,115 53,295,697 17,080,672 7,693,412	1.07 1.07 1.00 1.07 1.07	44,940,211 819,240,133 8,190,115 57,026,396 18,276,319 8,231,951	18,282,178 245,324,500 4,023,394 29,106,660 9,466,086 3,289,590	16,183,402 238,518,432 2,378,493 33,613,523 11,043,285 3,072,520	28,756,809 580,721,701 5,811,622 23,412,873 7,233,034 <u>5,159,431</u>	25.01 24.25 4.07 23.84 25.81 23.96	1,149,812 23,947,287 1,023,764 982,084 280,242 215,335	2.74% 3.13% 12.50% 1.84% 1.64% 2.80%
	Total	893,905,077	1.07	955,905,125	309,492,408	304,809,655	651,095,470	23.59	27,598,524	3.09%
	Total Steam Prod. Plant	1,442,545,763	0.66	955,905,125	309,492,408	598,001,566	651,095,470	13.45	48,418,617	3.36%
TRANS	MISSION PLANT									
350.1 352 353 354 355 356 357 358	Land Rights Structures & Improvements Station Equipment Towers & Fixtures Poles & Fixtures OH Conductor & Devices Undergrad Conduit Undergrad Conductor	26,456,147 6,636,668 170,843,671 94,517,543 74,696,720 122,537,908 11,590 106,066	1.00 1.10 1.03 1.10 1.61 1.27 1.00	26,456,147 7,300,335 175,968,981 103,969,297 120,261,719 155,623,143 11,590 106,066	8,498,622 3,172,075 34,476,675 56,679,229 28,658,583 70,585,347 4,345 49,568	7,016,166 2,618,754 28,462,741 46,792,396 23,659,527 58,272,803 3,587 40,922	19,439,981 4,681,581 147,506,240 57,176,901 96,602,192 97,350,340 8,003 65,144	50.91 33.93 40.20 23.20 32.75 27.32 23.13 23.44	381,850 137,978 3,669,309 2,464,522 2,949,685 3,563,336 346 2,779	1.44% 2.08% 2.15% 2.61% 3.95% 2.91% 2.99% 2.62%
	Total Transmission Plant	495,806,313	1.19	589,697,279	202,124,444	166,866,896	422,830,383	32.11	13,169,805	2.66%
DISTRIE	BUTION PLANT									
360.1 361 362 364 365 366 367 368 369 370 371 373	Land Rights Structures & Improvements Station Equipment Poles, Towers, & Fixtures OH Conductor & Devices Underground Conductor Line Transformers Services Meters Installations on Custs. Prem. Street Lighting & Signal Sys.	5,343,520 4,372,006 83,664,562 180,551,331 179,538,721 6,377,091 9,812,956 119,012,919 53,900,363 24,723,287 20,056,550 3,349,341	1.00 1.12 1.07 1.30 0.94 1.00 1.13 1.01 1.38 0.97 1.32 1.24	5,343,520 4,896,647 89,521,081 234,716,730 168,766,398 6,377,091 11,088,640 120,203,048 74,382,501 23,981,588 26,474,646 4,153,183	1,411,791 1,354,850 18,549,279 68,606,654 33,083,601 1,464,955 1,655,544 28,150,578 17,054,558 10,273,269 7,344,863 1,231,600	1,371,633 1,316,312 18,021,648 66,655,150 32,142,543 1,423,285 1,608,452 27,349,840 16,569,444 9,981,048 7,135,393 1,196,567	3,971,887 3,580,335 71,499,433 168,061,580 136,623,855 4,953,806 9,480,188 92,853,208 57,813,057 14,000,540 19,338,707 2,956,616	55.18 50.63 26.16 19.82 20.90 34.66 37.43 19.15 15.41 9.72 7.95 14.07	71,981 70,716 2,733,159 8,479,394 6,537,027 142,926 253,278 4,848,731 3,751,658 1,440,385 2,432,542 210,136	1.35% 1.62% 3.27% 4.70% 3.64% 2.24% 2.58% 4.07% 6.96% 5.83% 12.13% 6.27%
	Total Distribution Plant	690,702,647	1.11	769,905,074	190,181,542	184,771,861	585,133,213	18.89	30,971,931	4.48%

KENTUCKY POWER COMPANY SCHEDULE I - CALCULATION OF DEPRECIATION RATES BY THE REMAINING LIFE METHOD BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013 AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES

									Annual Ad	crual
Acct. No.	Account Title	Original Cost	Net Salvg. Ratio	Total to be Recovered	Calculated Depreciation Requirement	Accumulated Depreciation	Remaining to Be Recovered	Avg. Remain Life	Amount	Percent
(1)	<u>(II)</u>	(111)	(IV)	(V)	_(VI)	(VII)	(VIII)	(IX)	<u>(X)</u>	(XI)
GENER	AL PLANT									
389.1	Land Rights	37,384	1.00	37,384	11,898	6,909	30,475	51.13	596	1.59%
390	Structures & Improvements	19,811,669	1.00	19,811,669	9,535,669	5,537,254	14,274,415	18.15	786,469	3.97%
391	Office Furniture & Equipment	1,683,333	1.00	1,683,333	377,310	219,100	1,464,233	27.15	53,931	3.20%
392	Transportation Equipment	14,768	1.00	14,768	1,742	1,012	13,756	26.46	520	3.52%
393	Stores Equipment	164,548	1.00	164,548	60,496	35,129	129,419	18.97	6,822	4.15%
394	Tools Shop & Garage Equip.	3,553,696	1.09	3,873,529	1,042,908	605,604	3,267,925	21.92	149,084	4.20%
395	Laboratory Equipment	141,765	1.00	141,765	89,929	52,221	89,544	10.97	8,163	5.76%
396	Power Operated Equipment	5,931	1.00	5,931	2,728	1,584	4,347	13.50	322	5.43%
397	Communication Equipment	7,318,955	0.97	7,099,386	2,872,871	1,668,243	5,431,143	13.10	414,591	5.66%
398	Miscellaneous Equipment	1,065,616	1.03	1,097,584	464,407	269,676	827,908	11.54	71,743	6.73%
	Total General Plant	33,797,665	1.00	33,929,897	14,459,958	8,396,732	25,533,165	17.11	1.492,241	4.42%
	Total Depreciable Plant	2,662,852,388		2,349,437,375	716,258,352	958,037,055	1,684,592,231		94,052,594	<u>3.53</u> %

N/A = Not Applicable

Notes:

- (1) The Company plans to retire Big Sandy Unit 2 at the end of May 2015 and the coal related portions of Unit 1 in 2016. Since the Commission authorized (Case No. 2012-00578) the Company to recover the coal-related portion of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and any other site related retirement costs, this depreciation recommends that the existing approved depreciation rates for Big Sandy Plant be retained until a future proceeding that includes the remaining portion of Big Sandy Unit 1 and the cost to re-power this unit to use natural gas.
- (2) An annualized depreciation rate for Big Sandy Plant's SCR Catalyst was calculated using currently approved rates and included in the above analysis. A separate depreciation rate was calculated for Mitchell Plant's SCR Catalyst using AEP Air Emmissions Control estimated average life for the catalyst.
- (3) Mitchell Plant cost at December 31, 2013. At December 31, 2013 the Mitchell Plant was jointly owned 50% by Kentucky Power Company and 50% by AEP Generating Resources and therefore the cost shown above is 50% of the total Mitchell Plant depreciable plant in service. The Mitchell Plant cost includes 50% of the investment in the gypsum plant underloader located at the Mountaineer Generating Station.

KENTUCKY POWER COMPANY SCHEDULE II - COMPARE DEPRECIATION EXPENSE USING CURRENT AND STUDY RATES ANNUAL DEPRECIATION RATES AND ACCRUALS BY THE REMAINING LIFE METHOD BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013

			CURRENT				
ACCT.		ORIGINAL	APPROVED	ANNUAL	STUDY	STUDY	DIFFERENCE
NO.	ACCOUNT TITLE	COST	RATE	ACCRUAL	RATE	ACCRUAL	(DECREASE)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
111	751	701	7-7	701	701	77.7	707
STEAM	PRODUCTION PLANT						
OTZM	T KOBOOTION LANCE						
BIG SA	ANDY PLANT (a)						
					717-71-4570-7170		
311	Structures & Improvements	43,291,665	3.78%	1,636,425	3.78%	1,636,425	0
312	Boiler Plant Equipment	362,456,070	3.78%	13,700,839	3.78%	13,700,839	0
312		8,147,622	4.78%	389,456	4.78%	389,456	0
314	Turbogenerator Units	109,522,949	3.78%	4,139,967	3.78%	4,139,967	0
315	Accessory Electrical Equipment	16,513,202	3.78%	624,199	3.78%	624,199	0
316	Misc. Power Plant Equip.	<u>8,709,178</u>	3.78%	<u>329,207</u>	3.78%	329,207	<u>0</u>
	Total	548,640,686	3.79%	20,820,093	3.79%	20,820,093	<u>o</u>
MITCH	IELL PLANT - (b)						
311	Structures & Improvements	42,000,197	2.87%	1,205,406	2.74%	1,149,812	(55,594)
312	Boiler Plant Equipment	765,644,984	3.90%	29,860,154	3.13%	23,947,287	(5,912,867)
312	Boiler Plant Equip SCR Catalyst (c)	8,190,115	10.00%	819,012	12.50%	1,023,764	204,752
314	Turbogenerator Units	53,295,697	2.86%	1,524,257	1.84%	982,084	(542,173)
315	Accessory Electrical Equipment	17,080,672	2.39%	408,228	1.64%	280,242	(127,986)
316	Misc. Power Plant Equip.	7,693,412	2.79%	214,646	2.80%	215,335	689
	Total	893,905,077	3.81%	34,031,703	3.09%	27,598,524	(6,433,179)
	Total Otacas Baseduration Bland						
	Total Steam Production Plant	1,442,545,763	3.80%	<u>54,851,796</u>	3.36%	<u>48,418,617</u>	(6,433,179)
TRANS	SMISSION PLANT						
350 1	Land Rights	26,456,147	1.71%	452,400	1.44%	381,850	(70,550)
352	Structures & Improvements	6,636,668	1.71%	113,487	2.08%	137,978	24,491
353	Station Equipment	170,843,671	1.71%	2,921,427	2.15%	3,669,309	747,882
354	Towers & Fixtures	94,517,543	1.71%	1,616,250	2.61%	2,464,522	848,272
355	Poles & Fixtures	74,696,720	1.71%	1,277,314	3.95%	2,949,685	1,672,371
356		an and a second and	1.71%		2.91%		and the second second
1000	OH Conductor & Devices	122,537,908		2,095,398		3,563,336	1,467,938
357	Underground Conduit	11,590	1.71%	198	2.99%	346	148
358	Underground Conductor & Devices	106,066	1.71%	<u>1,814</u>	2.62%	<u>2,779</u>	<u>965</u>
	Total Transmission Plant	495,806,313	1.71%	8,478,288	2.66%	13,169,805	4,691,517
DISTR	IBUTION PLANT						
200 4	Land Dights	E 040 E00	2 500/	400 000	1 250/	74 004	(440 444)
	Land Rights	5,343,520	3.52%	188,092	1.35%	71,981	(116,111)
361	Structures & Improvements	4,372,006	3.52%	153,895	1.62%	70,716	(83,179)
362	Station Equipment	83,664,562	3.52%	2,944,993	3.27%	2,733,159	(211,834)
364	Poles, Towers, & Fixtures	180,551,331	3.52%	6,355,407	4.70%	8,479,394	2,123,987
365	Overhead Conductor & Devices	179,538,721	3.52%	6,319,763	3.64%	6,537,027	217,264
366	Underground Conduit	6,377,091	3.52%	224,474	2.24%	142,926	(81,548)
367	Underground Conductor	9,812,956	3.52%	345,416	2.58%	253,278	(92,138)
368	Line Transformers	119,012,919	3.52%	4,189,255	4.07%	4,848,731	659,476
369	Services	53,900,363	3.52%	1,897,293	6.96%	3,751,658	1,854,365
370	Meters	24,723,287	3.52%	870,260	5.83%	1,440,385	570,125
371	Installations on Custs. Prem.	20,056,550	3.52%	705,991	12,13%	2,432,542	1,726,551
373	Street Lighting & Signal Sys.	3,349,341	3.52%	<u>117,897</u>	6.27%	<u>210,136</u>	92,239
	Total Distribution Plant	690,702,647	3.52%	24,312,736	4.48%	30,971,933	6,659,197

KENTUCKY POWER COMPANY SCHEDULE II - COMPARE DEPRECIATION EXPENSE USING CURRENT AND STUDY RATES ANNUAL DEPRECIATION RATES AND ACCRUALS BY THE REMAINING LIFE METHOD BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013

ACCT.	ACCOUNT TITLE (2)	ORIGINAL COST (3)	CURRENT APPROVED RATE (4)	ANNUAL ACCRUAL (5)	STUDY RATE (6)	STUDY ACCRUAL (7)	DIFFERENCE (DECREASE) (8)
<u>(1)</u>	751	727	741	101	70)	7/1	701
GENER	AL PLANT						
389.1	Land Rights	37,384	2.54%	950	1.59%	596	(354)
390	Structures & Improvements	19,811,669	2.54%	503,216	3.97%	786,469	283,253
391	Office Furniture & Equipment	1,683,333	2.54%	42,757	3.20%	53,931	11,174
392	Transportation Equipment	14,768	2.54%	375	3.52%	520	145
393	Stores Equipment	164,548	2.54%	4,180	4.15%	6,822	2,642
394	Tools Shop & Garage Equipment	3,553,696	2.54%	90,264	4.20%	149,084	58,820
395	Laboratory Equipment	141,765	2.54%	3,601	5.76%	8,163	4,562
396	Power Operated Equipment	5,931	2.54%	151	5.43%	322	171
397	Communication Equipment	7,318,955	2.54%	185,901	5.66%	414,591	228,690
398	Miscellaneous Equipment	1,065,616	2.54%	27,067	6.73%	71,743	44,676
	Total General Plant	33,797,665	2.54%	<u>858,462</u>	4.42%	1,492,241	633,779
	Total Depreciable Plant	2.662.852.388	3.32%	88,501,282	3.53%	94,052,596	5,551,314

Notes:

- (a) The depreciation study recommends that the current approved depreciation rates for Big Sandy Plant remain in effect until the next base case which will reflect the retirement of Big Sandy Unit 2 in 2015, the coal related portions of Unit 1 in 2016 and the cost to re-power Unit 1 to burn natural gas. Therefore there is no change in depreciation expense due to a change in depreciation rates for Big Sandy Plant.
- (b) The current approved rates for Mitchell Generating Plant are from AEP affiliated company, Ohio Power Company as per the Order in Case No. 2012-00578.
- (c) The depreciation rate was revised for the SCR catalyst at Mitchell Generating Station using AEP Generation's estimated average life for the catalyst of 8 years.

KENTUCKY POWER COMPANY SCHEDULE III - COMPARISON OF MORTALITY CHARACTERISTICS DEPRECIATION STUDY AS OF DECEMBER 31, 2013

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		<u>Ex</u>	isting F	Rates (Se	e note, be	low)		Cu	rrent Stud	ly Rates	
		Average	:		Cost of	Net	Average			Cost of	Net
		Service	Iowa	Salvage	Removal	Salvage	Service	Iowa	Salvage	Removal	Salvage
		Life	Curve	Factor	Factor	Factor	Life	Curve	Factor	Factor	Factor
		(Years)					(Years)				
TRANS	SMISSION PLANT										
350.1	Rights of Way	75	R4.0	N/A	N/A	0%	75	R4.0	0%	0%	0%
352.0	Structures & Improvements	55	S1.5	N/A	N/A	0%	60	\$3.0	0%	10%	-10%
353.0	Station Equipment	50	R _{0.5}	N/A	N/A	25%	50	L0.5	8%	11%	-3%
354.0	Towers & Fixtures	55	R4.0	N/A	N/A	0%	51	S6.0	3%	13%	-10%
355.0	Poles & Fixtures	45	R3.0	N/A	N/A	0%	43	L3.0	2%	63%	-61%
356.0	Overhead Conductor & Devices	50	R3.0	N/A	N/A	10%	50	\$6.0	6%	33%	-27%
357.0	Underground Conduit	37	R2.0	N/A	N/A	0%	37	R2.0	0%	0%	0%
358.0	Underground Conductor and Devices	44	R1.0	N/A	N/A	0%	44	R1.0	0%	0%	0%
DISTR	IBUTION PLANT										
360.1	Rights of Way	75	R4.0	N/A	N/A	0%	75	R4.0	0%	0%	0%
361.0	Structures & Improvements	65	L0.5	N/A	N/A	0%	70	R2.0	4%	16%	-12%
362.0	Station Equipment	25	L0.0	N/A	N/A	25%	33	R0.5	10%	17%	-7%
364.0	Poles, Towers, & Fixtures	28	L0.0	N/A	N/A	25%	28	R0.5	18%	48%	-30%
365.0	Overhead Conductor & Devices	26	R1.5	N/A	N/A	25%	26	L0.0	30%	24%	6%
366.0	Underground Conduit	37	R2.0	N/A	N/A	0%	45	R3.0	0%	0%	0%
367.0	Underground Conductor	44	R1.0	N/A	N/A	0%	44	R _{0.5}	1%	14%	-13%
368.0	Line Transformers	25	R1.5	N/A	N/A	15%	25	L0.0	29%	30%	-1%
369.0	Services	18	R2.0	N/A	N/A	0%	20	L0.0	1%	39%	-38%
370.0	Meters	27	R _{0.5}	N/A	N/A	0%	17	R4.0	22%	19%	3%
371.0	Installations on Custs. Prem.	11	L0.0	N/A	N/A	30%	11	L0.0	1%	33%	-32%
373.0	Street Lighting & Signal Sys.	15	L0.0	N/A	N/A	15%	20	L0.0	1%	25%	-24%
GENE	RAL PLANT										
389.1	Rights of Way	75	R4.0	N/A	N/A	0%	75	R4.0	0%	0%	0%
390.0	Structures & Improvements	45	L3.0	N/A	N/A	0%	35	L2.0	1%	1%	0%
391.0	Office Furniture & Equipment	35	R0.5	N/A	N/A	10%	35	SQ	0%	0%	0%
392.0	Transportation Equipment	30	R3.0	N/A	N/A	0%	30	SQ	0%	0%	0%
393.0	Stores Equipment	30	R1.0	N/A	N/A	0%	30	SQ	0%	0%	0%
394.0	Tools Shop & Garage Equipment	30	R0.5	N/A	N/A	0%	30	SQ	0%	9%	-9%
395.0	Laboratory Equipment	30	L5.0	N/A	N/A	0%	30	SQ	0%	0%	0%
396.0	Power Operated Equipment	N/A	N/A	N/A	N/A	N/A	25	SQ	0%	0%	0%
397.0	Communication Equipment	22	L3.0	N/A	N/A	0%	22	SQ	6%	3%	3%
	Miscellaneous Equipment	20	S5.0	N/A	N/A	0%	20	SQ	0%	3%	-3%
								A			

Note: Kentucky Power Company's existing depreciation rates are from Case No. 91-066. No detail of Cost of Removal % and Salvage Factor % is available from the order from that Case.



Mitchell Plant Unit 1 & 2 CONCEPTUAL DEMOLITION COST ESTIMATE

Prepared for: American Electric Power

Project No. 11488-066 March 20, 2013 Revision 0

Sargent & Lundy

55 East Monroe Street Chicago, IL 60603-5780 USA



Issue Summary Page

Revision Number	Date	Purpose	Prepared By	Reviewed By	Approved By	Pages Affected
Α	02/22/13	Comments	R. Kinsinger	J. A. Evanchik D. F. Franczak	20	All
0	03/20/13	Use	R. Kinsinger	J. A. Evanchik J. A. Ewnchih D. F. Franczak	S. R. Bertheau	All



TABLE OF CONTENTS

Secti	<u>on</u>	Page
1	INTRODUCTION	1
2	COST ESTIMATE SUMMARY	1
3	TECHNICAL BASIS	2
4	COMMERCIAL BASIS	3
4.1	General Information	3
4.2	Quantities/Material Cost	3
4.3	Construction Labor Wages	3
4.4	Scrap Value	4
4.5	Indirect Costs	4
4.6	Escalation	4
4.7	Contingency	5
4.8	Assumptions	5
5	REFERENCES	7

EXHIBIT DESCRIPTION

1 Conceptual Demolition Cost Estimate No. 31982B



1.0 INTRODUCTION

The Mitchell Plant is located near Moundsville, West Virginia in Marshall County. The plant consists of two (2) generating units with a total generating capacity of 1,632 megawatts (816, MW per unit). Units 1 & 2 were placed in operation in 1971.

American Electric Power (AEP) recently contracted Sargent & Lundy, LLC. (S&L) to prepare a conceptual demolition cost estimate using 1st Quarter 2013 pricing levels. The objective of the conceptual demolition cost estimate is to determine the gross demolition costs for Mitchell Plant Units 1 and 2 (including gross salvage credits and any other benefits). The cost estimate considers the demolition/dismantlement methodology which complies with current OSHA rules and regulations.

2.0 COST ESTIMATE SUMMARY

Conceptual Demolition Cost Estimate No. 31982B, dated March 20, 2013, was prepared and is included as Exhibit 1. The cost estimate is structured into a code of accounts as identified in Table 2-1.

Table 2-1
Cost Estimate Code of Accounts

Account Number	Description		
10	Demolition Costs (including steel, equipment & piping scrap value)		
18 Scrap Value Costs			
91 Other Direct & Construction Indirect Costs			
93	Indirect Costs		
94	Contingency Costs		
96	Escalation Costs		

The results of the cost estimate are provided in Table 2-2 below:



Table 2-2 Cost Estimate Results Summary

Description	Total Cost	
Demolition Cost	\$62,531,960	
Scrap Value	\$(38,063,765)	
Direct Cost Subtotal	\$24,468,195	
Indirect Cost	\$ 2,446,800	
Contingency Cost	\$15,456,400	
Total Project Cost	\$42,371,395	

3.0 TECHNICAL BASIS

The scope of dismantlement includes the complete Mitchell Plant Units 1 & 2 generating facility and plant common services associated with both units. Common facilities include:

- > 1,200 ft Chimney
- > 1,000 ft Chimney
- > Various Buildings
- > FGD Common Equipment

The following are excluded from the scope of the conceptual demolition cost estimate.

- > Bottom Ash Pond
- > Asbestos Removal
- > Switchyard

The scope of the demolition cost estimate is based on a review of the facility by two (2) S&L employees conducted in January 2013 for development of the demolition cost estimate.



4.0 COMMERCIAL BASIS

4.1 General Information

The Conceptual Demolition Cost Estimate prepared for the Mitchell Plant is a conceptual estimate of the cost to dismantle Mitchell Plant Units 1 and 2.

Costs were calculated for (1) demolition of existing plant structures and equipment and associated site restoration costs, (2) scrap value of steel and copper, (3) associated indirect costs, and (4) contingency. All units used in the cost estimate are U.S. Standard and all costs are in US Dollars (1st Quarter 2013 levels). A two (2) year demolition schedule is anticipated not including asbestos removal (to be performed prior to start of demolition work).

4.2 Quantities/Material Cost

Quantities of pieces of equipment and/or bulk material commodities used in this cost estimate were intended to be reasonable and representative of projects of this type. Material quantities were estimated from the site plot plan and other drawings and data provided by AEP and Plant Personnel.

4.3 Construction Labor Wages

Craft labor rates (Craft Hourly Rate) for the cost estimate were calculated as Non-Union West Virginia Craft Labor rates based on Personnel Administration Services (PAS) Inc. "2013 Merit Shop Wage and Benefit Survey". The craft rates were incorporated into work crews appropriate for the activities by adding allowances for small tools, construction equipment, insurance, and site overheads to arrive at crew hourly rates detailed in the cost estimate. A 1.00 regional labor productivity multiplier was included based on Compass International Global Construction Yearbook, 2013 Edition, for non-union work in West Virginia.

4.3.1 Labor Work Schedule and Incentives

The estimate assumed a 5x8 work week. No other labor incentives are included.

4.3.2 Construction Indirects

Allowances were included in the cost estimate as direct costs as noted for the following:

> Freight: Material and scrap freight included in the material and scrap costs.



- > Additional Crane Allowance: None included. Cost of cranes and construction machinery are included in the labor wage rates.
- Mobilization and Demobilization: Included in labor wage rates.
- Scaffolding: Included in labor wage rates.
- > Consumables: Included in material and labor costs.
- > Per Diem Costs: Excluded from the estimate.
- > Contractor's General and Administrative Costs and Profit: Included in the labor wage rates.

4.4 Scrap Value

The value of scrap was determined by a 12 month average (March 2012 through February of 2013) using Zone 4 (USA Midwest) of the "Scrap Metals Market Watch" (www.americanrecycler.com).

Since the values obtained are delivered pieces, 10% of the values obtained were deducted to pay for separation, preparation and shipping to the mills. This resulted in realized prices of:

- ➤ Mixed Steel Value @ \$287/Ton
- ➤ Copper Value @ \$6,091/Ton
- > Stainless Steel @ \$1,336/Ton

<u>Note:</u> 1 Ton = 2,000 Lbs

All steel is considered to be mixed steel unless otherwise noted.

4.5 Indirect Costs

Allowances were included in the cost estimate as indirect costs as noted for the following:

- > Engineering, Procurement and Project Services: None included.
- > Construction Management Support: None included.
- Owners Cost: Included as 10.0% of the total direct cost. Owners Costs include owner project engineering, administration and construction management, permits and fees, legal expenses, taxes, etc.

4.6 Escalation

No allowance for escalation was included in the cost estimate. All costs are determined in 1st Quarter 2013 levels.



4.7 Contingency

Allowances were included in the cost estimate as contingency as noted for the following:

- ➤ Scrap Value: Included as a 15.0% reduction in the salvage value resulting in a total net reduction in the salvage value. The contingency assumes a potential drop in salvage value thus increasing the project cost.
- Material: Included as 15.0% of the total material cost.
- > Labor: Included as 15.0% of the total labor cost.
- > Indirect: Included as 15.0% of the total indirect cost.

4.8 Assumptions

The following assumptions apply to the cost estimate.

- > All chemicals will be removed by the Owner prior to demolition, from the facilities to be demolished.
- > All coal and fuel oil will be consumed prior to demolition.
- > Catalyst, if any, is assumed to be removed and returned to the OEM by others, prior to demolition.
- > All electrical equipment and wiring is de-energized prior to start of dismantlement.
- ➤ No extraordinary environmental costs for demolition have been included. Removal of five (5) feet of fill inside the bermed areas around the oil tanks and metal cleaning waste tank is included.
- > Asbestos and PCB's are removed from site by others prior to start of demolition.
- > Bottom Ash Pond is not included. These costs will be determined by the Owner.
- ➤ Demolition of the two (2) chimneys will be subcontracted. One chimney is 1,200 ft high and the second is 1,000 ft high. The 1,200 ft chimney is approximately 200 ft from WV Route 2 and the 1,000 ft chimney is approximately 600 ft from the same road. Also, in the opposite direction the 1,200 ft chimney is approximately 1,500 ft from the Ohio River and the 1,000 ft chimney is approximately 1,250 ft from the river. Therefore Careful Demolition (top down demolition process) will be used to dismantle the chimneys as opposed to explosive demolition (which can scatter debris onto the road and into the river). Each chimney is demolished by breaking it up from the top and dropping the debris down the throat of the chimney and removing the debris periodically through the duct openings on the sides of the chimney (located 75 to 100 ft above grade). The remaining portion of the chimney below the duct openings is then demolished as any other structure.



- > Switchyards within the plant boundaries are not part of the scope, neither are access roads to these facilities. Fences and gates needed to protect the switchyard will be left in place. The other site fences are removed.
- All items above grade and to a depth of 2 foot will be demolished. Any other items buried more than 2 foot will remain in place. All foundations are removed and buried on site with the exception of power block (turbine building, boiler building and service building), FGD building, limestone preparation building, gypsum dewatering building and the two (2) chimney thick mat foundations at grade. These foundations will have two (2) feet of soil spread over them and will be graded into the surrounding area.
- > Underground piping, conduit and cable ducts will be abandoned in place.
- > Underground piping larger than 4 feet diameter will be filled with sand or slurry and capped at the ends to prevent collapse. Non-metal pipe will be collapsed.
- > All demolished materials are considered debris, except for organic combustibles and non-embedded metals which have scrap value.
- The basis for salvage estimating is for scrap value only. No resale of equipment or material is included.
- Handling, on-site and off-site disposal of hazardous materials would be performed in compliance with methods approved by Owner.
- ➤ Disturbed areas will be buried under 2 feet of topsoil mulched and seeded with grass no other landscaping is included.
- > All borrow material is assumed to be purchased from nearby (10 mile round trip) offsite sources.
- Debris not suitable for burial is to be disposed of off-site. Assumed distance to final disposal is within a 5 mile haul.



5.0 REFERENCES

Drawings utilized in the preparation of this demolition cost estimate are identified in Table 5-1.

Table 5-1 **Reference Drawings**

Unit	Document Number	Revision	Title
12	E-1000	1	34.5KV & Coal Handling-1000
12	E-1100	0	Fish Creek Station 69KV/34.5KV One Line Diagram & Protection
12	1200D	23	Coal Handling Barge Unloading Auxiliary One-Line Diagram
12	1200E	16	Coal Handling Auxiliary One-Line Diagram.
12	1200H	1	Coal Handling Auxiliary One-Line Diagram Car Thawing
12	121001	3	FGD One Line Diagram
			Electrical 138-13.8 KV Substation Line 2 Bus B One Line
12	121102	4	Diagram
12	121020	5	Dry Sorbent 13.8kv Auxiliary One Line Diagram
12	121101	4	Electrical 138-13.8 KV Substation Line 1 Bus A One Line Diagram
12	50008	8	General Arrangement Precipitator Install Comp Plan Below El. 676-0
12	50009	4	General Arrangement Precipitator Install Plan Above El 676-0
12	50012	3	General Arrangement Precipitator Access & Rectifier Removal
12	5028A	0	Arrangement And Details Feeder Down Spout Unit 1 And 2
12	5030	16	Plot Plan
12	5031	2	General Cross Sects
12	5032	1 .	General Cross Sects @ General
12	5034	2	Long Sects Thru Heater Bay
12	5035	1	Long Sects Thru Steam General
12	5036	1	Cross Sects Pulv Bay
12	5041	2	Plans Heater Bay & Steam General El. 58-0, 70-0, & 80-0
12	5042	2	Slag Blower Platforms - Heater Bay And Turbine Room Roof
12	5043	1	Plans Deaer & Upper Level Slag Blowers Platform
12	5044	1	Comp Main Floor
12	5044A	0	Property Plan & Ash Storage Area
12	5044B	2	Equipment Location - Conners Run Pump House
12	5070000A	1	Site Layout
12	5070000A	0	General Arrangement FGD Building El. 667'-0"
12	5070000B	0	General Arrangement FGD Building El. 705'-0"
12	5070000C	0	General Arrangement FGD Building El. 720'-0"
12	5070000D	0	General Arrangement FGD Building El. 743'-0"
12	5070000E	0	General Arrangement FGD Building El. 755'-2 1/2"
12	5070000F	0	General Arrangement FGD Building El. 776'-3"
12	5070000G	0	General Arrangement FGD Building El. 798'-0 1/2"
12	5070000H	0	General Arrangement FGD Building Elevation Looking East
12	50700001	0	General Arrangement FGD Building Elevation Looking North
12	5070000J	0	General Arrangement FGD Building Laboratory
12	5070001A	0	General Arrangement Dewatering Area El. 667'-0"
12	5070001B	0	General Arrangement Dewatering Area El. 695'-0"
12	5070001C	0	General Arrangement Dewatering Area El. 729'-6"



Mitchell Plant Unit 1 & 2 American Electric Power Conceptual Demolition Cost Estimate March 20, 2013

Unit	Document Number	Revision	Title
12	5070001D	0	General Arrangement Dewatering Area El. 757'-4" & El. 781'-0"
12	5070001E	0	General Arrangement Dewatering Area Elevation Looking North
12	5070002A	0	General Arrangement Reagent Prep Area El. 667'-0"
12	5070002B	0	General Arrangement Reagent Prep Area El. 705'-1 1/4"
12	5070002C	0	General Arrangement Reagent Prep Area El. 729'-6" & El 784'-2"
12	5070003	0	General Arrangement Urea U2a Area
12	5070006	. 0	General Arrangement Service Water Area Plan View
12	5070007	0	General Arrangement Existing Aux Boiler Stack Relocation
12	5070007A	0	Elevation Auxilliary Boiler Stack Relocations
12	5070008A	1	General Arrangement Dry Solid Sorbent System Enlarged Plan
12	5070008B	0	General Arrangement Dry Solid Sorbent System Section A-A
12	5070008C	0	General Arrangement Dry Sorbent System Overall Plan
12	5070008D	0	General Arrangement Dry Solid Sorbent System Section B-B
12	5070009	0	General Arrangement Coal Blending System Plan
12	5070010	0	General Arrangement Gypsum Conveyors To Wallboard Plant
. 12	5078000B	2	Hydraulic Profile
.12	5078000C	2	Key Plan
12	5078000J	2	Piperack Enlarged Lower Plan
12	5078000K	2	Piperack Enlarged Middle Plan
12	5078000L	2	Piperack Enlarged Upper Plan
* * *			General Arrangement FGD Reagent Prep Area Ground Floor
12	12-5080022	1	El 667'-0"
12	12-5080023	1	General Arrangement FGD Reagent Prep Area Plan At El. 681'-6-1/4"
12	12-5080024	1	General Arrangement FGD Reagent Prep Area Plan At Platform El 705'-1 1/4"
12	12-5080025	. 1	General Arrangement FGD Reagent Prep Area Plan At Platform El 741'-1 1/4"
12	12-5080026	1	General Arrangement FGD Reagent Prep Area Front Section F1-F1
12	12-5080027	1	General Arrangement FGD Reagent Prep Area Front Section F2-F2
12	12-5080028	1	General Arrangement FGD Reagent Prep Area Front Section F3-F3
12	12-5080029	1	General Arrangement FGD Reagent Prep Area Front Section F4-F4
12	12-5080030	1	General Arrangement FGD Reagent Prep Area Side Section S1-S1
12	12-5080031	1	General Arrangement FGD Reagent Prep Area Side Section S2-S2
12	5080074	2	General Arrangement FGD Byproduct Dwt Area Side Section S3-S3
12	5080302	0	Design Arrangement Abs Area Pipe Ground Floor To El 692'-0"
12	548839E	1	General Arrangement FGD Maintenance Storage Area Ground Floor To El 667'-0"
12	549320E	2	Erection Arrangement Drb-4z Pc Fired Burner CW
12	549321E	2	Erection Arrangement Drb-4z Pc Fired Burner CW
12	549322E	2	Erection Arrangement Drb-4z Pc Fired Burner CW
12	549323E	2	Erection Arrangement Drb-4z Pc Fired Burner CW



Mitchell Plant Unit 1 & 2 American Electric Power Conceptual Demolition Cost Estimate March 20, 2013

Unit	Document Number	Revision	Title
2-8-	71002-MA-0-		. 4
12	5090100	0	SCR System Equipment Arrangement Plan
1	1200A1	20	Aux One Line Diagram Sheet 1 Of 2
1	1200A2	20	Aux One Line Diagram Sheet 2 Of 2
1	12001	5	Precipitator Auxiliary One-Line
1 .	12002	5	Precipitator Equip Power Dist Aux One-Line Diagram
1	121002	2	Unit 1 FGD 13.8kv - 4.16kv Auxiliary One Line Diagram
1	50003	7	Fly Ash Removal Wet System Unit 1
1	50010	2	General Arrangement Precipitator Install Sections
1	5033	2	Long Sects Thru Turbine Room
1	5037	6	Basement Plan Elevation 1' -0' Unit 1
1	5038	3	Miscellaneous FI & Platform Below Main Floor
1	5039	2	Main Fl Plan El 36-0
1	5040	2	Heater Bay & Steam Gen El 46'0" 48'0" & 52'6"
1	5090000	2	SCR General Arrangement Elevation A/10 Looking South
1	5090001	2	SCR General Arrangement Elevation B/11 Looking West
1	5090002	2	SCR General Arrangement Elevation C/12 Looking East
1	5090003	1	SCR General Arrangement Elevation D/13 Looking West
E			SCR General Arrangement Elevation H/14 & J/14 Center and
1	5090004	2	Outbound Return Ducts
1	5090005	1	SCR General Arrangement Plan View E/20
1	5090006	2	SCR General Arrangement Plan View F/21
1	5090007	2	SCR General Arrangement Plan View G/22
1	5090008	1	SCR General Arrangement Plan View H/23
2	1200A2	19	Aux One Line Diagram Sheet 2 Of 2
2	1200A1	19	Aux One Line Diagram Sheet 1 Of 2
2	121003	3	Unit 2 FGD 13.8kv - 4.16kv Auxiliary One Line Diagram
2	50011	2	General Arrangement Precipitator Install Sections
2	50014	0	Arrangement FGD Fan Room New Motors & Rotors
2	5033	1	Long Sects Thru Turbine Room
2	5037	3	Basement Plan Elevation 1" - 0"
2	5038	2	Miscellaneous Floors & Platform Below Main Floor
2	5039	3	Main Floor Plan El 36-0
2	5040	2	Heater Bay & Steam Generator El 46-0; 48-0 & 52-6
2	5090000	1	SCR General Arrangement Elevation A/10 Looking South
2	5090001	1	SCR General Arrangement Elevation B/11 Looking West
2	5090002	1	SCR General Arrangement Elevation C/12 Looking East
2	5090003	1	SCR General Arrangement Elevation D/13 Looking West
2	5090005	1	SCR General Arrangement Plan View E/20
2	5090006	1.	SCR General Arrangement Plan View F/21
2	5090007	1	SCR General Arrangement Plan View G/22
2	5090008	1	SCR General Arrangement Plan View H/23

12 = Common For Units 1 & 2

1 = Unit 1

2 = Unit 2



Mitchell Plant Unit 1 & 2 American Electric Power Conceptual Demolition Cost Estimate March 20, 2013

EXHIBIT 1 Mitchell Plant Units 1 & 2 Conceptual Demolition Cost Estimate No. 31982B

EXHIBIT DAD-3 Page 14

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

Project name

Mitchell Plant

Estimator

RCK

Labor rate table

13NUWV

Project No.

11488-066

Station Name

Mitchell Plant 1, 2 and Common

Unit Location

West Virginia

Product Factor

Price Level 2013

Issue Date 3/2

3/20/2013

Estimate Date

3/14/2013

Reviewed By

JAE

Approved By

MNO

Status

Comments

Estimate No.

31982B

Estimate Class

Conceptual

Cost index

NUWV

ESTIMATE NO.: 31982B PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP./REV.; RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 15

Estimate Totals

Description	Amount	Totals	Hours	Percent of Total	
LABOR	46,995,884		589,630.602 hrs	110,91%	
MATERIAL	11,136,076			26.28%	
SUBCONTRACT	4,400,000			10.38%	
SCRAP RECOVERY	/38 063 765)			-89.83%	
SOIN RESOVER	24,468,195	24,468,195		57.75	57.75%
91-1 SCAFFOLDING 91-2 OT WORKING 5-10 HOUR DAYS					
91-3 OT Working 7-10 Hr Days					
91-2 PER DIEM					
91-5 CONSUMABLES					
91-6 FREIGHT ON EQUIPMENT					
91-7 FREIGHT ON SPECIAL EQUIP.					
91-8 FREIGHT ON MATERIAL					
91-9 FREIGHT ON SCRAP INCL					
91-10 SALES TAX					
1-11 CONTRACTOR'S G&A EXPENSE					
91-12 CONTRACTOR'S PROFIT					
71-12 GOTTI GOTOT (1011)		24,468,195			57,759
		- 1 - 1 - 1			
33-1 EP&P SERVICES					
93-2 CM SUPPORT					
93-3 START-UP/COMMISSIONING					
93-4 START-UP/SPARE PARTS					
93-5 EXCESS LIABILITY INSUR.					
93-6 SALES TAX ON INDIRECTS					
93-7 OWNER'S COST	2,446,800			5.77%	
93-8 EPC FEE	2,446,800	26,914,995		5,77	63.529
	2,446,600	20,914,895		5.77	63.52%
94-3 CONTINGENCY ON MATERIAL	1,670,400			3.94%	
94-4 CONTINGENCY ON LABOR	7,049,400			16,64%	
94-5 CONTINGENCY ON SUB.	660,000			1.56%	
94-6 CONTINGENCY ON SCRAP	5,709,600			13.48%	
94-7 CONTINGENCY ON SCRAP	367,000			0.87%	
94-7 CONTINGENCY ON INDIRECTS	15,456,400	42,371,395		36.48	100,009
	13,430,400	42,371,383		30,46	100.007
96-3 ESCALATION ON MATERIAL					
96-4 ESCALATION ON LABOR					
96-5 ESCALATION ON SUB. 96-6 ESCALATION ON SCRAP					
96-7 ESCALATION ON INDIRECTS		40 074 005			400.000
		42,371,395			100.009
98 INTEREST DURING CONSTR.					
		42,371,395			100.00%
Total		42,371,395 42,371,395			100.007

ESTIMATE NO.: 319828 PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP./REV.: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 16

Area	Group	DESCRIPTION	LABOR MAN HRS	LABOR AMOUNT	MATERIAL AMOUNT	SUB AMOUNT	PROCESS EQUIP AMOUNT	TOTAL AMOUNT
Common								
	10,00.00	WHOLE PLANT DEMOLITION	211,270	19,483,672	11,020,976	4,400,000		34,904,648
	18.00.00	SCRAP VALUE					(8,643,497)	(8,643,497
		Common	211,270	19,483,672	11,020,976	4,400,000	(8,643,497)	26,261,150
Unit 1					/			
	10.00,00	WHOLE PLANT DEMOLITION	190,383	13,835,429	57,550			13,892,979
	18.00.00	SCRAP VALUE					(14,999,173)	(14,999,173
		Unit 1	190,383	13,835,429	57,550		(14,999,173)	(1,106,194)
Unit 2								•
	10,00.00	WHOLE PLANT DEMOLITION	187,978	13,676,784	57,550			13,734,334
	18.00.00	SCRAP VALUE					(14,421,095)	(14,421,095)
		Unit 2	187,978	13,676,784	57,550		(14,421,095)	(686,761)

ESTIMATE NO.: 319828 PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP/REV: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3
Page 17

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
Common				1 10								
	10.00.00	10.21.00	WHOLE PLANT DEMOLITION CIVIL WORK									
				OFFSITE SUPPLY	438,827.00 CY	21,941		2,237,798	10,531,848			12,769,648
			SEED AND MULCH		136.00 AC	3,672	33.72 /MH	123,820	379,168			502,988
			PAVED SURFACES DEMOLITION - 228000 TRACK FEET of 110# RAILROAD	LEAVE ROAD TO SWITCHYARD	8,900.00 SY 228,000.00 TF	1,068	101.99 /MH 101.99 /MH	108,925				108,925 6,976,116
			TRACK DEMOLITION - PULL SHEET PILE & CAP FOR BARGE			1,766		180,094				180,094
			CELLS		654.00 TN	1,700	101.99 /MH	180,094				100,094
			DEMOLITION - PERIMETER FENCE CIVIL WORK	LEAVE SWITCHYARD FENCES	15,600.00 LF	624 97,471	101.99 /MH	9,690,395	10,911,016			20,601,411
			or the troops			51,471		0,000,000	10,011,010			20,001,411
		10.22.00	CONCRETE		6,500.00 CY	7,425	75.99 /MH	564,228				£44.000
			BUILDING PAD FOUNDATION 110LB/CY, OUTBUILDINGS & MISC FDNS		8,800.00 CY	7,425	HW 68'C	564,228				564,226
			EQUIPMENT FOUNDATION 110 LB/CY, MISC EQUIPMENT		1,300.00 CY	1,321		100,368		15		100,388
			INTAKE CLOSURE	GROUT OR SAND FILL	800.00 CY	800		60,792	73,800			134,392
			DEMOLITION, CONCRETE - REMOVE BARGE CELL, PILE CAPS		780.00 CY	1,404	75.99 /MH	106,690				106,690
			CONCRETE			10,950		832,075	73,600			905,675
		10.24.00	ARCHITECTURAL									
			BUILDING, FGD BLDG		2,100,000.00 CF	12,600		946,134				946,134
			BUILDING, DEWATERING AREA BLDG		800,000.00 CF	4,800		360,432		*	-	360,432
			BUILDING, REAGENT PREP AREA		830,000.00 CF	4,980		373,948				373,948
			BUILDING, SERVICE BLDG BUILDING, CEMS BLDG		1,040,400.00 CF 1,000.00 CF	12,485	75.09 /MH 75.09 /MH	937,484				937,484
			BUILDING, GYPSUM STORAGE BLDG		2,180,000.00 CF	12,960		973.166				973,166
			BUILDING, RELOCATED WAREHOUSE		39,600.00 CF	238		17,841		2		17,841
			BUILDING, MAINTENANCE SLURRY BLDG		10,032.00 CF	60		4,520				4,520
			BUILDING, CONSTRUCTION FACILITIES BLDG		184,800.00 CF	1,109		83,260				83,260
			BUILDING, ID FAN ELECTRICAL BLDG		19,600.00 CF	118		8,831				8,831
			BUILDING, RELOCATED ELECTRICAL BLDG		10,500.00 CF	63		4,731				4,731
			BUILDING, UREA UNLOADING BLDG		10,368.00 CF	62	75.09 /MH	4,671				4,671
			BUILDING, UREA HYDOLIZER & TANK BLDG BUILDING, CPS TREATMENT BLDG		265,200.00 CF 918,000.00 CF	1,591 5,508	75.09 /MH 75.09 /MH	119,483 413,596				119,483 413,596
			BUILDING, CPS WASTE TRANSFER HOUSE		20,000.00 CF	120		9,011		- 2		9,011
			BUILDING, RIVER WATER MAKEUP PUMP HOUSE		32,000.00 CF	192		14,417		2		14,417
			BUILDING, PRECIPITATOR PARTS WAREDHOUSE		268,000.00 CF	1,596		119,844				119,844
			BUILDING, TRACTOR SHED		72,000.00 CF	432	75.09 /MH	32,439		-		32,439
			BUILDING, HEAVY EQUIPMENT STORAGE BLDG		208,000.00 CF	1,248		93,712				93,712
			BUILDING, DELUGE VALVE BLDG		1,000.00 CF	6	75.09 /MH	451				451
			BUILDING, EXISTING CONSOL TRANSFER STATION #1 BUILDING, STATION HTS-3		64,800.00 CF 31,200.00 CF	389 187	75.09 /MH 75.09 /MH	29,195 14,057				29,195 14,057
			BUILDING, STATION HTS-28		58,000.00 CF	338		25,230				25,230
			BUILDING, STATION HTS-2A		96,000.00 CF	576		43,252				43,252
			BUILDING, COAL BLENDING SYSTEM ELECTRICAL ROOM		9,600.00 CF	58	75.09 /MH	4,325				4,325
			BUILDING, UTILITY SHOWER BLDG		65,450.00 CF	393	75.09 /MH	29,488				29,488
			BUILDING, TRAINING CENTER		50,400.00 CF	302		22,707				22,707
			BUILDING, MAIN GATE HOUSE		4,800.00 CF	29	75.09 /MH	2,163				2,163
			BUILDING, CONTROL ROOM SIMULATOR BLDG BUILDING, SOUTH WARE HOUSE COMPLEX - 4		73,500.00 CF 414,050.00 CF	2,484	75.09 /MH 75.09 /MH	33,115 188,548		•		33,115
			WAREHOUSES		414,000.00 Cr	2,404	73.08 IMI	040,001		0.		186,546
			ARCHITECTURAL			65,368		4,908,498				4,908,498
		10.25.00	CONCRETE CHIMNEY & STACK									
			1200' TALL CONCRETE CHIMNEY	PRICE SHOWN IS SUBCONTRACTED PRICE	1,200.00 VLF		75.99 /MH			2,400,000		2,400,000
			1000 TALL CONCRETE CHIMNEY	PRICE SHOWN IS SUBCONTRACTED PRICE	1,000.00 VLF		75,99 MH			2,000,000		2,000,000
			CONCRETE CHIMNEY & STACK							4,400,000		4,400,000
		10.31.00	MECHANICAL EQUIPMENT									
			TANK, DEWATERING HYDOCLONE FEED TANK A, 850,800	61'6' DIA X 63' HIGH	123.00 TN	329	65.69 /MH	21,589			4	21,589
			GALLON									

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ESTIMATE NO.: 319828 PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP/REV: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 18

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
	-	10.31.00	MECHANICAL EQUIPMENT TANK, DEWATERING HYDOCLONE FEED TANK B, 850,800	SIT DIA VAT NICH	123.00 TN	329	65.69 AH	21,589				21,58
			GALLON									
			TANK, RECLAIM WATER TANK A, 351,000 GALLONS	45' DIA X 58' HIGH	60.00 TN	160	65.69 /MH	10,531				10,53
			TANK, RECLAIM WATER TANK B, 351,000 GALLONS TANK, REAGENT SLURRY STORAGE TANK A, 457,920 GALLONS	45' DIA X 58' HIGH 50' DIA, X 50' HIGH	60.00 TN 64.00 TN	160 171	65.69 /MH 65.69 /MH	10,531 11,234		:		10,53
			TANK, REAGENT SLURRY STORAGE TANK B, 457,920 GALLONS	50' DIA. X 50' HIGH	64.00 TN	171	65.69 AMH	11,234				11,23
			TANK, MAINTENANCE STORAGE TANK, 1,417,000 GALLONS	61'6" DIA X 67 TALL	129.00 TN	345	65.69 MH	22,643				22,6
			TANK, FGD SERVICE WATER TANK, 399,480 GALLONS	36'6" DIA X 58'6" HIGH	37.00 TN	99	65.69 /MH	6,494				6,4
			TANK, UREA FEED TANK, 200,000 GALLONS	35' DIA X 30' HIGH	25.00 TN	67	65.69 /MH	4,388				4,3
			TANK, FUEL OIL STORAGE TANK, 500,000 GALLONS	52 DIA X 32 HIGH	50.00 TN	134	85.69 /MH	8,776				8,7
			TANKS, FUEL OIL STORAGE TANK, 1,500,000 GALLONS TANK, METAL CLEANING WASTE TREATMENT TANK, 1,000,000 GALLONS	80° DIA X 42° HIGH 70° DIA X 35° HIGH	131.00 TN 83.00 TN	350 222	85.69 /MH 85.69 /MH	22,994 14,568		:	7	22,9 14,5
			MECHANICAL EQUIPMENT - FGD EQUIPMENT		848.00 TN	1,308	65.69 MH	85,932				85,9
			MECHANICAL EQUIPMENT - DRY SORBENT SYSTEM		100.00 TN	203	65.69 /MH	13,302				13,3
			MECHANICAL EQUIPMENT			4,046		265,807				265,80
		10.33.00	MATERIAL HANDLING EQUIPMENT									
			MATERIAL HANDLING EQUIPMENT - LIMESTONE/GYPSUM GYPSUM CLAMSHELL UNLOADER		400.00 TN	810	65.69 /MH	53,209				53,2
			MATERIAL HANDLING EQUIPMENT - LIMESTONE//GYPSUM BUCKET BARGE UNLOADER		400.00 TN	810	65.69 /MH	53,209				53,2
			MATERIAL HANDLING EQUIPMENT - COAL BUCKET BARGE UNLOADER MATERIAL HANDLING EQUIPMENT - GYPSUM HANDLING		400.00 TN	810	65.69 MH	53,209		•	•	-
			SYSTEM MATERIAL HANDLING EQUIPMENT - LIMESTONE		2.152.00 TN 733.00 TN	4,358 1,484	65.69 AMH	286,264 97,505		9.0		286,2 97,5
			HANDLING SYSTEM MATERIAL HANDLING EQUIPMENT - COAL HANDLING		2,300.00 TN	4.658	65.69 /MH	305,951				305,9
			SYSTEM MATERIAL HANDLING EQUIPMENT - COAL HANDLING		944.00 TN	1,912	65.69 /MH	125,573				125,5
			SYSTEM - COAL BLENDING SYSTEM MATERIAL HANDLING EQUIPMENT			14,841		974,920				974,9
		10.35.00	PIPING									
		10.33.00	PIPING - CIRC WATER PIPING AND TUNNELS		1.00 LS	1,020	75.99 /MH	77,510				77,5
			PIPING - DEMO BOP PIPING AND HANGERS		1.00 LS	509	65.69 /MH	33,438				33,
			PIPING			1,529		110,946				110,9
		10.41.00	ELECTRICAL EQUIPMENT									
			MISCELLANEOUS ELECTRICAL EQUIPMENT		100.00 TN	267	65.69 /MH	17,552		+		17,5
			MISCELLANEOUS ELECTRICAL EQUIPMENT, TRANSFORMERS		406.60 TN	1,088	65.69 /MH	71,368		-		712
			ELECTRICAL EQUIPMENT			1,354		88,920				88,9
		10.42.00	RACEWAY, CABLE TRAY, & CONDUIT									
			RACEWAY, CABLE TRAY, & CONDUIT - RACEWAY, CABLE TRAY, & CONDUIT		396.00 TN	40 40	65.69 MH	2,601				2,0
		10.86.00	WASTE									
			WASTE - OIL CONTAMINATED FILL	ASSUMED 5 FEET DEEP IS CONTAMINATED	9.204.00 CY	10,918	168.91 /MH	1,843,812	0			1,843,1
			WASTE - METAL CLEANING TANK BERMED AREA CONTAMINATED FILL	ASSUMED 5 FEET DEEP IS CONTAMINATED	3,703.00 CY	4,392	168.91 /MH	741,812	ō			741,8
			WASTE - BUILDING WASTE - COMMON BLDGS		3,638.00 CY	364	65.69 /MH	23,885	36,360			60,2
			WASTE			15,671		2,609,509	36,360			2,645,80
			WHOLE PLANT DEMOLITION			211,270		19,483,672	11,020,976	4,400,000		34,904

18.00.00 SCRAP VALUE 18.10.00 MIXED STEEL

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ESTIMATE NO.: 31982B PROJECT NO.: 11488-086 ISSUE DATE: 3/20/2013 PREP/REV.: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 19

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Craw Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
		18.10.00	MIXED STEEL MIXED STEEL, DEWATERING HYDOCLONE FEED TANK A, 850 800 GALLON		-123.00 TN		65.97 /MH				(35,301)	(35,301)
			MIXED STEEL, DEWATERING HYDOCLONE FEED TANK B. 850,800 GALLON		-123.00 TN		65.97 /MH				(35,301)	(35,301)
			MIXED STEEL, RECLAIM WATER TANK A, 351,000 GALLONS		-60.00 TN		65.97 /MH				(17,220)	(17,220)
			MIXED STEEL, RECLAIM WATER TANK B, 351,000 GALLONS		-60.00 TN		65.97 /MH				(17,220)	(17,220)
			MIXED STEEL, REAGENT SLURRY STORAGE TANK A. 457,920 GALLONS		-64.00 TN		65.97 /MH				(18,368)	(18,368)
			MIXED STEEL, REAGENT SLURRY STORAGE TANK B. 457,920 GALLONS		-64 00 TN		65.97 /MH				(18,368)	(18,368)
			MIXED STEEL, MAINTENANCE STORAGE TANK, 1,417,000 GALLONS		-129.00 TN		65.97 /MH				(37,023)	(37,023)
			MIXED STEEL, FGD SERVICE WATER TANK, 399,480 GALLONS		-37.00 TN		65.97 /MH				(10,619)	(10,619)
			MIXED STEEL, UREA FEED TANK, 200,000 GALLONS		-25.00 TN		65.97 /MH				(7,175)	(7,175)
			MIXED STEEL, FUEL OIL STORAGE TANK, 500,000 GALLONS		-50.00 TN		65.97 MH				(14,350)	(14,350)
			MIXED STEEL, FUEL OIL STORAGE TANK, 1,500,000 GALLONS		-131.00 TN		65.97 /MH				(37,597)	(37,597)
			MIXED STEEL, METAL CLEANING WASTE TREATMENT TANK, 1,000,000 GALLONS		-83.00 TN		65.97 /MH				(23,821)	(23,821)
			MIXED STEEL, FGD BLDG FRAMING & GIRTS		-1,050.00 TN		65.97 /MH				(301,350)	(301,350)
			MIXED STEEL, DEWATERING AREA BLDG FRAMING & GIRTS		-400.00 TN		65.97 /MH				(114,800)	(114,800)
3			MIXED STEEL, REAGENT PREP AREA FRAMING & GIRTS		-414.00 TN		65.97 /MH				(118,818)	(118,818)
1			MIXED STEEL, SERVICE BLDG FRAMING & GIRTS		-520.00 TN		65.97 /MH				(149,240)	(149,240)
			MIXED STEEL REBAR RECOVERY FROM OUTBUILDINGS FOUNDATIONS & MISC FORS		-363.00 TN		65.97 /MH				(104,181)	(104,181)
			MIXED STEEL REBAR RECOVERY FROM 1200' CHIMNEY		-680.00 TN		65.97 AMH				(195,160)	(195,160)
			MIXED STEEL, STEEL LINER FROM 1200' CHIMNEY MIXED STEEL, EQUIPMENT FOUNDATION 110 LB/CY,		-1,005.00 TN		65.97 /MH				(288,435)	(288,435)
			MISC EQUIPMENT, REINFORCING		-72.00 TN		65.97 /MH			1	(20,664)	(20,664)
			MIXED STEEL REBAR RECOVERY FROM 1000' CHIMNEY MIXED STEEL, MECHANICAL EQUIPMENT - FGD		-730.00 TN -646.00 TN		65.97 /MH 65.97 /MH				(209,510)	(209,510)
			EQUIPMENT								(185,402)	(185,402)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - LIMESTONE/GYPSUM GYPSUM CLAMSHELL UNLOADER		400.00 TN		65.97 /MH				(114,800)	(114,800)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - LIMESTONE//GYPSUM BUCKET BARGE UNLOADER		-400.00 TN		65.97 /MH		•	•	(114,800)	(114,800)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - COAL BUCKET BARGE UNLOADER		-400.00 TN		65.97 /MH				(114,800)	(114,800)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - GYPSUM HANDLING SYSTEM		-728.00 TN		65.97 /MH				(208,936)	(208,938)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - LIMESTONE HANDLING SYSTEM		-2,158.00 TN		65.97 /MH				(619,346)	(619,346)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - COAL HANDLING SYSTEM, COMMON		-3,244.00 TN		65.97 /MH				(931,028)	(931,028)
			MIXED STEEL, MECHANICAL EQUIPMENT - DRY SORBENT SYSTEM		-100.00 TN		65.97 /MH				(28,700)	(28,700)
			MIXED STEEL, 228000 TF OF RAILROAD TRACK MIXED STEEL, DEMOLITION - PULL SHEET PILE & CAP		-8,388.00 TN -654.00 TN		65.97 MH 65.97 MH				(2,407,356) (187,698)	(2,407,356) (187,698)
			FOR BARGE CELLS								(,	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			MIXED STEEL, RACEWAY, CABLE TRAY, & CONDUIT - MIXED STEEL, MISCELLANEOUS ELECTRICAL		-396.00 TN -222.60 TN		65.97 /MH 65.97 /MH				(113,652) (63,886)	(113,652) (63,886)
			EQUIPMENT, TRANSFORMERS MIXED STEEL								(6,864,925)	(6,864,925)
		18.30.00	COPPER									
			COPPER SCRAP CABLE & COMMON		-200.00 TN		65.97 /MH				(1,218,200)	(1,218,200)
			COPPER, MISCELLANEOUS ELECTRICAL EQUIPMENT,		-92.00 TN		65.97 /MH				(560,372)	(560,372)
			TRANSFORMERS COPPER								(1,778,572)	(1,778,572)
			CDASSII ANN								100000000	

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ESTIMATE NO.: 31982B PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP//REV: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 20

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract	Process Equipment Cost	Total Cost
			SCRAP VALUE	100 100							(8,643,497)	(8,543,497)
			Common			211,270		19,483,672	11,020,976	4,400,000	(8,643,497)	26,261,150
Unit 1	10.00.00		WHOLE PLANT DEMOLITION									
	10.00.00	10.22.00	CONCRETE									
		A. C. (1900)	SUILDING PAD FOUNDATION 110 LB/CY, UNIT 1 COOLING TOWER BASIN		8,840.00 CY	9,945	75.99 /MH	755,721		*	7.	755,721
			ELEVATED FOUNDATION 110/CY, UNIT 1 COOLING TOWER SHELL		9,200.00 CY	5,511	75.99 /MH	418,768				418,786
			ELEVATED FOUNDATION, UNIT 1 TURBINE AND BLR BLDGS		2,000.00 CY	1,198	75.99 /MH	91,036				91,036
			TURBINE PEDESTAL FOUNDATION 140 LE/CY, UNIT 1 CONCRETE		7,778.00 CY	14,000	75.99 /MH	1,063,890		*	*.	1,063,890
			CONCRETE			30,654		2,329,413				2,329,413
		10.23.00	STEEL									
			DUCTWORK W/BREECHINGS AND STEEL SUPPORTS, UNIT 1		1,922.00 TN	5,138	65.97 /MH	338,794		.*		338,794
			STEEL			5,136		338,794				338,794
		10.24.00	ARCHITECTURAL									
			BUILDING, UNIT 1 POWER BLOCK, INCLUDING TURBINE BLDG, BOILER HOUSE PREHTR FAN ENCLOSURE &		8,500,000.00 CF	85,000	75.09 /MH	6,382,650		-		6.382,650
			COAL BUNKERS ARCHITECTURAL			85,000		6,382,650			19	6,382,650
						65,666		0,302,030				0,002,000
		10.31.00	MECHANICAL EQUIPMENT MAIN BOILER AND APPURTENANCES, UNIT 1		12,160.00 TN	24,624	71,44 /MH	1,759,139				1,759,139
			FD & ID FANS, UNIT 1		6,135.00 TN	12,423	71,44 /MH	887,526				887,526
			FEEDWATER DEARATING EQUIPMENT, UNIT 1		215.00 TN	435	85.69 /MH	28,600				28,600
			TANK, UNIT 1 CLEAN CONDENSATE TANK, 753,000 GALLONS	60' DIA X 40' HIGH	77.00 TN	208	65.69 /MH	13,515				13,515
			TANK, UNIT 1 CONTAMINATED CONDENSATE TANK, 500,000 GALLONS	50' DIA X 35' HIGH	50.00 TN	134	65.69 /MH	8,776		- 1		8,776
			TANK, UNIT 1 EQUALIZATION TANK, 220,800 GALLONS	38' DIA X 30" HIGH	30.00 TN	80	65.69 /MH	5,266				5,266
			TANK, UNIT 1 ABSORBER REACTION TANK		462.00 TN	1,234 545	65.69 /MH 65.69 /MH	81,092				81,092
			WATER TREATMENT DEMINERALIZATION & CHEMICAL TREATMENT EQUIPMENT, UNIT 1		269.00 TN	545	65.69 /MPI	35,783				35,783
			TURBINE GENERATOR, UNIT 1		2,045.00 TN	4,141	65.69 MH	272,031		•		272,031
			CONDENSER, UNIT 1		1,165.00 TN	2,359	65.69 /MH	154,971				154,971
			CIRCULATING WATER EQUIPMENT, UNIT 1 COOLING TOWER, UNIT 1 REMOVE FILL		484.00 TN 690,000.00 CF	980 4,140	65.69 /MH 65.69 /MH	84,383 271,957				64,383 271,957
			MECHANICAL EQUIPMENT - UNIT 1 MISC. POWER PLANT		613.00 TN	1,241	65.69 /MH	81,543			2	81,543
			MECHANICAL EQUIPMENT - DEMOLISH UNIT 1 TURBINE		1.00 LS	315	65.69 /MH	20,692				20,692
			ROOM OVERHEAD CRANE MECHANICAL EQUIPMENT - UNIT 1 DUST COLLECTORS		269.00 TN	545	65.69 /MH	35,783				35,783
			MECHANICAL EQUIPMENT - PRECIPITATORS UNIT 1		1,000.00 TN	2,025	65.69 /MH	133,022				133,022
			MECHANICAL EQUIPMENT - SCR UNIT 1		684.00 TN	1,345	65.69 /MH	88,327				88,327
			MECHANICAL EQUIPMENT			56,772		3,942,404				3,942,404
		10.33.00	MATERIAL HANDLING EQUIPMENT									
			MATERIAL HANDLING EQUIPMENT - UNIT 1 ASH HANDLING EQUIPMENT		377.00 TN	763	65.69 /MH	50,149				50,149
			MATERIAL HANDLING EQUIPMENT - UNIT 1 FUEL EQUIPMENT, CONVEYORS INCL TRUSSES & BENTS		1,432.00 TN	2,900	65.69 /MH	190,488				190,488
			MATERIAL HANDLING EQUIPMENT			3,663		240,637				240,637
		10.34.00	HVAC									
			HVAC - UNIT 1		1.00 LS	1,695	65.69 /MH	111,345				111,345
			HVAC			1,695		111,345				111,345
		10.35.00	PIPING									
			PIPING - UNIT 1 BOILER PLANT AND TURBINE PIPING		2,690.00 TN	5,719	65.69 /MH	375,677				375,677
RINT DATE 3/2	/20/2013 7:5	AM	Demolition\Mitchell		Page 7							

ESTIMATE NO.: 31982B PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREP/REV.: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 21

Area	Group	Phase	Description	Notes	Qu	antity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
			PIPING				5,719		375,677				375,677
		10.41.00	ELECTRICAL EQUIPMENT GENERATOR BUS TRANSFORMERS UNIT 1 MAIN POWER		3	28.00 TN	876	65.69 /MH	57,572				57,572
			TRANSFORMER STATION AUXILIARY TRANSFORMERS, UNIT 1 MAIN AUX TRANSFORMERS		1	9.00 TN	291	65.69 /MH	19,132				19,132
			ELECTRICAL EQUIPMENT				1,168		76,704				76,704
		10.86.00	WASTE - UNIT 1 COOLING TOWER FILL	FIBERGLASS AND WOOD		55.00 CY	258		16,784	25,550			42,334
			WASTE - USER DEFINED - UNIT 1 9LDG WASTE WASTE		3,2	00.00 CY	320 576		21,021 37,805	32,000 57,550			53,021 95,355
			WHOLE PLANT DEMOLITION				190,383		13,835,429	57,550			13,892,979
	18.00.00	18,10.00	SCRAP VALUE MIXED STEEL										
		10.10.00	MIXED STEEL, UNIT 1 CLEAN CONDENSATE TANK, 753,000 GALLONS			77.00 TN		65.97 /MH		3		(22,099)	(22,099)
			MIXED STEEL, UNIT 1 CONTAMINATED CONDENSATE TANK, 500,000 GALLONS		*	50.00 TN		65.97 /MH				(14,350)	(14,350)
			MIXED STEEL, UNIT 1 EQUALIZATION TANK. 220,800 GALLONS			30.00 TN		65.97 /MH				(8,610)	(8,610)
			MIXED STEEL, UNIT 1 POWER BLOCK, INCLUDING TURBINE BLDG, BOILER HOUSE PREHTR FAN ENCLOSURE & COAL BUNKERS		4,2	50.00 TN		65.97 /MH				(1.219,750)	(1,219,750)
			MIXED STEEL, REBAR RECOVERED, TURBINE PEDESTAL FOUNDATION 140 LB/CY, UNIT 1		4	87.00 TN		65.97 /MH				(134,029)	(134,029)
			MIXED STEEL, UNIT 1 COOLING TOWER REINFORCING RECOVERED			10.00 TN		65.97 MH				(126,280)	{126,280}
			MIXED STEEL, ELEVATED FOUNDATION, UNIT 1 TURBINE AND BLR BLDGS, REINFORCING MIXED STEEL, MAIN BOILER AND APPURTENANCES.			10.00 TN		65.97 /MH 65.97 /MH				(31,570)	(31,570)
			UNIT 1										
			MIXED STEEL, FO & ID FANS, UNIT 1 MIXED STEEL, DUCTWORK WIBREECHINGS AND STEEL			35.00 TN 22.00 TN		65.97 /MH 65.97 /MH		:		(1,760,745) (551,614)	(1,760,745) (551,614)
			SUPPORTS, UNIT 1 MIXED STEEL, FEEDWATER DEARATING EQUIPMENT,			15.00 TN		65.97 /MH				(81,705)	(81,705)
			UNIT 1 MIXED STEEL. WATER TREATMENT DEMINERALIZATION			59.00 TN		65.97 /MH		1		(77,203)	(77,203)
			& CHEMICAL TREATMENT EQUIPMENT, UNIT 1										151
			MIXED STEEL, UNIT 1 CONDENSER MIXED STEEL, MATERIAL HANDLING EQUIPMENT - UNIT			77.00 TN		65.97 /MH 65.97 /MH				(227,304) (108,199)	(227,304) (108,199)
			1 ASH HANDLING EQUIPMENT										
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - UNIT 1 FUEL EQUIPMENT, CONVEYORS INCL TRUSSES & BENTS		-1,4	32.00 TN		65.97 /MH				(410,984)	(410,984)
			MIXED STEEL, TURBINE GENERATOR, UNIT 1		-2,0	5.00 TN		65.97 /MH				(586,915)	(586,915)
			MIXED STEEL, CIRCULATING WATER EQUIPMENT, UNIT 1		-4	84.00 TN		65.97 /MH				(138,908)	(138,908)
			MIXED STEEL, MECHANICAL EQUIPMENT - UNIT 1 MISC, POWER PLANT EQUIPMENT			13.00 TN		65.97 /MH		,		(175,931)	(175,931)
			MIXED STEEL, MECHANICAL EQUIPMENT - UNIT 1 DUST COLLECTORS			59.00 TN		65.97 /MH				(77,203)	(77,203)
			MIXED STEEL, PIPING - UNIT 1 BOILER PLANT AND TURBINE PIPING		-2,0	00.00 TN		65.97 /MH				(772,030)	(772,030)
			MIXED STEEL, MECHANICAL EQUIPMENT - PRECIPITATORS UNIT 1			00.00 TN		65.97 /MH			-	(287,000)	(287,000)
			MIXED STEEL, GENERATOR BUS TRANSFORMERS UNIT 1 MAIN POWER TRANSFORMER			80.50 TN		65.97 /MH				(51,804)	(51,804)
			MIXED STEEL, STATION AUXILIARY TRANSFORMERS, UNIT 1 MAIN AUX TRANSFORMERS			56.00 TN		85.97 /MH				(16,072)	(16,072)
			MIXED STEEL, MECHANICAL EQUIPMENT - SCR UNIT 1 MIXED STEEL		-6	84.00 TN		65.97 /MH				(190,568)	(10,540,793)

18.20.00 STAINLESS STEEL

PRINT DATE 3/20/2013 7:54 AM \(\sitimberline\estimating\PROJECTS\-AEP\Demolition\Mitchell

ESTIMATE NO.: 31982B PROJECT NO.: 11488-066 ISSUE DATE: 3/20/2013 PREPJREV.: RCK/JAE APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 22

Area	Group	Phase	Description	Note	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
		18.20.00	STAINLESS STEEL STAINLESS STEEL, TANK, UNIT 1 ABSORBER REACTION		462,00 TN		65.97 /MH				(845,414)	(645,414)
			STAINLESS STEEL								(645,414)	(645,414)
		18.30.00	COPPER COPPER, UNIT 1 CONDENSER CU / NI TUBES COPPER, GENERATOR BUS TRANSFORMERS UNIT 1		-373.00 TN -200.00 TN		65.97 MH 65.97 MH		:		(2,271,943) (1,218,200)	(2,271,943) (1,218,200)
			MAIN POWER TRANSFORMER COPPER, STATION AUXILIARY TRANSFORMERS, UNIT 1 MAIN AUX TRANSFORMERS		-53.00 TN		65.97 /MH				(322,823)	(322,823)
			COPPER SCRAP VALUE								(3,812,966)	(3,812,966) (14,999,173)
			Unit 1			190,383	1	13,835,429	57,550		(14,999,173)	(1,106,194)
Unit 2												
	10.00.00	10.22.00	WHOLE PLANT DEMOLITION CONCRETE									
			BUILDING PAD FOUNDATION 110 LB/CY, UNIT 2 COOLING TOWER BASIN		8,840.00 CY	9,945		755,721				755,721
			ELEVATED FOUNDATION 110/CY, UNIT 2 COOLING TOWER SHELL		9,200.00 CY	5,511	75.99 /MH	418,768		14		418,766
			ELEVATED FOUNDATION, UNIT 2 TURBINE AND BLR BLDGS		2,000.00 CY	1,198	75.99 /MH	91,036				91,036
			TURBINE PEDESTAL FOUNDATION 140 LB/CY, UNIT 2 CONCRETE		7,778.00 CY	14,000 30,654	75.99 /MH	1,063,890 2,329,413				1,063,890 2,329,413
		10,23,00	STEEL			2,731	65,97 /MH					
			DUCTWORK W/BREECHINGS AND STEEL SUPPORTS, UNIT 2		1,022.00 TN		65.97 MH	180,150				180,150
			STEEL			2,731		180,150				180,150
		10.24.00	ARCHITECTURAL BUILDING, UNIT 2 POWER BLOCK, INCLUDING TURBINE BLDG, BOILER HOUSE PREHTR FAN ENCLOSURE & COAL BUNKERS		8,500,000.00 CF	85,000	75.09 /MH	6,382,650				6,382,650
			ARCHITECTURAL			85,000		6,382,650				6,382,650
		10.31.00	MECHANICAL EQUIPMENT				****					
			MAIN BOILER AND APPURTENANCES, UNIT 2 FD & ID FANS, UNIT 2		12,160.00 TN 6,135.00 TN	24,624 12,423		1,759,139 887,526				1,759,139 887,526
			FEEDWATER DEARATING EQUIPMENT, UNIT 2		215.00 TN	435		28,600				28,600
			TANK, UNIT 2 CLEAN CONDENSATE TANK, 753,000 GALLONS	60° DIA X 40° HIGH	77.00 TN	206		13,515			*	13,515
			TANK, UNIT 2 CONTAMINATED CONDENSATE TANK, 500,000 GALLONS	50° DIA X 35° HIGH	50.00 TN	134	65.69 /MH	8,776		٠.		8,776
			TANK, UNIT 2 EQUALIZATION TANK, 220,600 GALLONS	38' DIA X 30' HIGH	30.00 TN	80	65.89 MH	5,268				5,268
			TANK, UNIT 2 ABSORBER REACTION TANK		482.00 TN	1,234		81,092				81,092
			WATER TREATMENT DEMINERALIZATION & CHEMICAL TREATMENT EQUIPMENT, UNIT 2		269.00 TN	545	65.69 /MH	35,783			-	35,783
			TURBINE GENERATOR, UNIT 2		2,045.00 TN	4,141	65.69 /MH	272,031				272,031
			CONDENSER, UNIT 2		1,165.00 TN	2,359	65.69 MH	154,971				154,971
			CIRCULATING WATER EQUIPMENT, UNIT 2		484.00 TN	980		64,383				64,383
			COOLING TOWER, UNIT 2 REMOVE FILL MECHANICAL EQUIPMENT - UNIT 2 MISC. POWER PLANT		690,000.00 CF 613.00 TN	4,140		271,957 81,543				271,957 61,543
			EQUIPMENT									
			MECHANICAL EQUIPMENT - DEMOLISH UNIT 2 TURBINE ROOM OVERHEAD CRANE		1.00 LS	315		20,692			,	20,692
			MECHANICAL EQUIPMENT - UNIT 2 DUST COLLECTORS		269.00 TN	545		35,783			-	35,783
			MECHANICAL EQUIPMENT - PRECIPITATORS UNIT 2 MECHANICAL EQUIPMENT - SCR UNIT 2		1,000.00 TN 664.00 TN	2,025 1,345		133,022 68,327				133,022 88,327
			MECHANICAL EQUIPMENT		MI 200.000	56,772		3,942,404				3,942,404

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Page I

PROJECT NO.: 319828
PROJECT NO.: 11488-066
ISSUE DATE: 3/20/2013
PREP./REV.: RCK/JAE
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AMERICAN ELECTRIC POWER Decommissioning Study Mitchell Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3 Page 23

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
		10.33.00	MATERIAL HANDLING EQUIPMENT MATERIAL HANDLING EQUIPMENT - UNIT 2 ASH		377.00 TN	763	65.69 /MH	50,149				50,149
			HANDLING EQUIPMENT									
			MATERIAL HANDLING EQUIPMENT - UNIT 2 FUEL EQUIPMENT, CONVEYORS INCL TRUSSES & BENTS		1,432.00 TN	2,900	65.69 /MH	190,488		•		190,488
			MATERIAL HANDLING EQUIPMENT			3,663		240,637				240,637
		10.34.00	HVAC - UNIT 2		1.00 LS	1,695	65.69 /MH	111,345		2		111,345
			HVAC			1,695	00.05 IIII1	111,345				111,345
		10.35.00	PIPING									
			PIPING - UNIT 2 BOILER PLANT AND TURBINE PIPING PIPING		2,890.00 TN	5,719 5,719	65.69 /MH	375,677 375,677				375,677
						5,115		313,077				313,017
		10.41.00	ELECTRICAL EQUIPMENT GENERATOR BUS TRANSFORMERS UNIT 2 MAIN POWER TRANSFORMER		328.00 TN	876	65.69 /MH	57,572				57,572
			STATION AUXILIARY TRANSFORMERS, UNIT 2 MAIN AUX TRANSFORMERS		109.00 TN	291	65.89 /MH	19,132				19,132
			ELECTRICAL EQUIPMENT			1,168		76,704				76,704
		10.88.00	WASTE									
1			WASTE - UNIT 2 COOLING TOWER FILL WASTE - USER DEFINED - UNIT 2 BLDG WASTE	FIBERGLASS AND WOOD	2,555.00 CY 3,200.00 CY	256 320	65.69 /MH 65.69 /MH	16,784 21,021	25,550 32,000			42,334 53,021
			WASTE		0,200.00	576	00.00 /mil	37,805	57,550			95,355
			WHOLE PLANT DEMOLITION			187,978		13,676,784	57,550			13,734,334
	18.00.00		SCRAP VALUE									
		18,10,00	MIXED STEEL MIXED STEEL, UNIT 2 CLEAN CONDENSATE TANK,		-77.00 TN		65.97 /MH				(22,099)	(22,099)
			753,000 GALLONS								,	
			MIXED STEEL, UNIT 2 CONTAMINATED CONDENSATE TANK, 500,000 GALLONS		-50.00 TN		65.97 MH		- 1		(14,350)	(14,350)
			MIXED STEEL, UNIT 2 EQUALIZATION TANK, 220,600 GALLONS		-30.00 TN		65.97 MH				(0.010)	(8,610)
			MIXED STEEL, UNIT 2 POWER BLOCK, INCLUDING TURBINE BLDG, BOILER HOUSE PREHTR FAN ENCLOSURE & COAL BUNKERS		-4,250.00 TN		65.97 /MH				(1,219,750)	(1,219,750)
			MIXED STEEL, REBAR RECOVERED, TURBINE PEDESTAL FOUNDATION 140 LB/CY, UNIT 2		-467.00 TN		65.97 /MH		*		(134,029)	(134,029)
			MIXED STEEL, UNIT 2 COOLING TOWER REINFORCING RECOVERED		-440.00 TN		65.97 /MH				(126,280)	(126,280)
			MIXED STEEL, ELEVATED FOUNDATION , UNIT 2 TURBINE AND BLR BLDGS, REINFORCING		-110.00 TN		65.97 /MH				(31,570)	(31,570)
			MIXED STEEL, MAIN BÖILER AND APPURTENANCES, UNIT 2		-12,160.00 TN		65.97 /MH				(3,489,920)	(3,489,920)
			MIXED STEEL, FD & ID FANS, UNIT 2		-6,135.00 TN		85.97 /MH					(1,760,745)
			MIXED STEEL, DUCTWORK W/BREECHINGS AND STEEL SUPPORTS, UNIT 2		-1,022.00 TN		65.97 MH				(293,314)	(293,314)
			MIXED STEEL, FEEDWATER DEARATING EQUIPMENT, UNIT 2		-215.00 TN		65.97 /MH		*		(61,705)	(81,705)
			MIXED STEEL, WATER TREATMENT DEMINERALIZATION & CHEMICAL TREATMENT EQUIPMENT, UNIT 2		-269.00 TN		65.97 /MH				(77,203)	(77,203)
			MIXED STEEL, UNIT 2 CONDENSER		-792.00 TN		65.97 /MH			//2	(227,304)	(227,304)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - UNIT 2 ASH HANDLING EQUIPMENT		-377.00 TN		85.97 /MH					(108,199)
			MIXED STEEL, MATERIAL HANDLING EQUIPMENT - UNIT 2 FUEL EQUIPMENT, CONVEYORS INCL TRUSSES &		-1,432.00 TN		65.97 /MH				(410,984)	(410,984)
			BENTS				****					488 C
			MIXED STEEL, TURBINE GENERATOR, UNIT 2 MIXED STEEL, CIRCULATING WATER EQUIPMENT, UNIT 2		-2,045.00 TN -484.00 TN		65.97 /MH 65.97 /MH			115	(586,915) (138,908)	(586,915) (138,908)
			mode visca, GINGUSTING TIGHTER ENGINERY, UNIT 2		- O-, O-		00.87 IMI				(1.50,800)	(120,200)

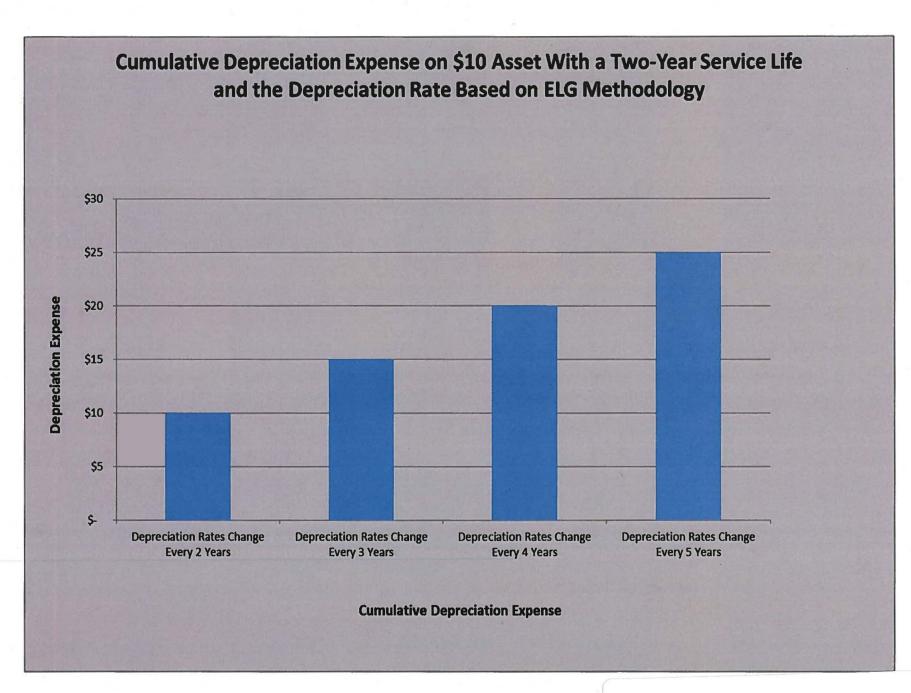
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ESTIMATE NO.: 319828
PROJECT NO.: 11488-088
ISSUE OATE: 3/20/2013
PREP./REV.: RCK/JAE
APPROVED: MNO

AMERICAN ELECTRIC POWER Decommissioning Study Mitcheil Plant Units 1, 2 and Common Facilities

EXHIBIT DAD-3
Page 24

Area	Group	Phase	Description	Notes	Quantity	Man Hours	Crew Rate	Labor Cost	Material Cost	Subcontract Cost	Process Equipment Cost	Total Cost
		18.10.00	MIXED STEEL MIXED STEEL, MECHANICAL EQUIPMENT - UNIT 2 MISC.		-613.00 TN		65.97 <i>(</i> MH				476 004	/47# A341
			POWER PLANT EQUIPMENT		-013.00 IN		1M/1 18.60				(175,931)	(175,931)
			MIXED STEEL, MECHANICAL EQUIPMENT - UNIT 2 DUST COLLECTORS		-269.00 TN		65.97 /MH				(77,203)	(77,203)
			MIXED STEEL, PIPING - UNIT 2 BÖILER PLANT AND TURBINE PIPING		-2,690.00 TN		65.97 /MH				,,	(772,030)
			MIXED STEEL, MECHANICAL EQUIPMENT - PRECIPITATORS UNIT 2		-1,000.00 TN		65.97 /MH			9.	(287,000)	(287,000)
			MIXED STEEL, GENERATOR BUS TRANSFORMERS UNIT 2 MAIN POWER TRANSFORMERS		-180.50 TN		65.97 /MH				(51,804)	(51,804)
			MIXED STEEL, STATION AUXILIARY TRANSFORMERS, UNIT 2 MAIN AUX TRANSFORMERS		-56.00 TN		65.97 /MH				(16,072)	(16,072)
			MIXED STEEL, MECHANICAL EQUIPMENT - SCR UNIT 2		-664.00 TN		65.97 /MH				(190,568)	(190,568)
			MIXED STEEL								(10,282,493)	(10,282,493)
		18.20.00	STAINLESS STEEL									
			STAINLESS STEEL, TANK, UNIT 2 ABSORBER REACTION TANK		-462.00 TN		65.97 /MH			•	(645,414)	(645,414)
			STAINLESS STEEL								(645,414)	(645,414)
		18.30.00	COPPER									
			COPPER, UNIT 2 CONDENSER CU / NI TUBES		-373.00 TN		65.97 /MH				(2,271,943)	(2,271,943
			COPPER, GENERATOR BUS TRANSFORMERS UNIT 2 MAIN POWER TRANSFORMER		-147,50 TN		65.97 /MH				(898,423)	(898,423
			COPPER, STATION AUXILIARY TRANSFORMERS, UNIT 2 MAIN AUX TRANSFORMERS		-53.00 TN		65.97 /MH				(322,823)	(322,823
			COPPER								(3,493,189)	(3,493,189)
			SCRAP VALUE								(14,421,095)	(14,421,095)
			Unit 2			187,978		13,676,784	57,550		(14,421,095)	(686,761)



Kentucky Registered Legislative Employers

March 26, 2019

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Twiggs, Jacqueline	7	415-389-6800		c/o Nielsen Merksamer, 2350 Kerner Blvd., Ste. 250, San Rafael CA 94901
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ATTORNEY GENERAL EXHIBIT 16

		-	
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Al J. Schneider Company (The)	502-568-4294	Oliver, Orson	Waterfront Plaza, Suite 250, 325 W. Main Street, Louisville KY 40202
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•			
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Allen Company (The)	859-543-3361	Gabbard, Jason	3009 Atkinson Ave., Ste. 300, , Lexington KY 40509
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Sanders, Richie	502-223-8967	Authorities de Authorities de California (* 17 de California de Californ	225 Capital Ave., Frankfort KY 40601
Alliance Coal, LLC	859-224-7225	Lovell, Heath	1146 Monarch Street, , Lexington KY 40513
Ashcraft, Raymond "Rusty" R	859-948-8575		North Star Strategies, LLC, 1890 Star Shoot Pkwy.Ste170113, Lexington KY 40509
Alliance for Solar Choice (The)	858-472-3889	Joy, Erica	595 Market Street, 29th Floor, San Francisco CA 94105
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Amazon.com Services, Inc.	202-442-2900	Cox, Braden	601 New Jersey Ave. NW, Suite 900, Washington DC 20001
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American Assn. for Marriage & Family Therapy	703-253-0453	Evans, Laura	112 S. Alfred St., Ste. 300, Alexandria VA 22314
Abell, Kelley	502-216-9990	,	P. O. Box 70331, , Louisville KY 40270
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American Assn. of University Women	202-728-7617	Nielson, Katherine	1310 L Street NW, Suite 1000, Washington DC 20005
Nielson, Katherine	202-728-7617		1310 L Street NW, Suite 1000, Washington DC 20005
American Automobile Assn.	703-684-1110	Griesmer, Ed	515 King St., Ste. 300, Alexandria VA 22314
Crigler, Julia B	502-548-7500	alteria di di Antonio di Paris del Californio di	10010 Covered Bridge Road, , Prospect KY 40059
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Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
FOR A STANDARD MADE OF THE TOTAL CONTROL OF THE STANDARD MADE OF THE STA	CONTRACTOR DECISION OF CONTRACTOR (CAR		PROCESSOR SECTION CONTRACTOR OF THE PROCESSOR OF THE PROC

American Caneer Society Caneer Action Network \$89-360-3289 \$90-360-3289 \$1504 College Way, Leckington KY 40502 \$1504 College Way, Leckington KY 40501 \$1504 College Way, Leckington KY 40502 \$1504 College Way, Leckington KY 40504 \$1504 College Way, Leckington KY 40504	Bennett,	502-594-9575		142 Southcreek, , Frankfort KY 40601	
Memerian Ching			Young, Kristy	State Company and Company an	
Power, Michael Powe					
Breeding, Carl W 502-332-4612 314 W. Main Steet, Distrator & \$100b, LLP, Frankfort KY 40601 May, Bert W 502-332-4613 314 W. Main Steet, Distrator & \$3.0b, LLP, Frankfort KY 40601 May, Bert W 502-332-4613 314 W. Main Steet, Distrator & \$3.0b, LLP, Frankfort KY 40601 May All Steet, Distrator & \$3.0b, LLP, Frankfort KY 40601 May May All Steet, Distrator & \$3.0b, LLP, Frankfort KY 40601 May	<u> </u>		Power, Michael		
Cress, F., Lloyd "Rusp" 502-324-613 314 W. Main Steep, Dismonce & Shohl, LLF, Frankforn KY, 40601 Marcina Childhood Cancer Organization 859-948-4626 819yd, Jamie E 3838 Distribution Dr., Beltsville MD 20705 747 Firebrook Bly Cancer 747 Firebrook	=				
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American College of Obstetrician/Gynecologist S02-649-2584 Krause, Dr. Miriam 4123 Dutchmans La., Suite 414, Lonisville KY 40207 Biagi, Mike S02-593-4575 PO Box 70331, Louisville KY 40270 Dudnewood IV, John T S02-223-5322 S024 S		502-581-9746			
Abell, Kelley 502-216-9990 P. O. Box 70331, Louisville KY 40270 PO Box 70313, Louisville KY 40270 PO Box 70314, Louisville KY 40270 PO Box 703		502-649-2584	Krause, Dr. Miriam		
Biggi, Mike \$02-593-4575 PO Box 70331, Louisville KY 40270					
Corrigan, Timothy R	**************************************	502-593-4575		PO Box 70331, Louisville KY 40270	
Underwood IV, John T 502-223-5322 5932 Timber Ridge Dr., #101., Prospect KY 40059	30 - 00-00	502-817-4177			
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Corrigan, Timothy R S02-817-4177 P. O. Box 70331, Louisville KY 40270	American Express Company	202-434-0155	Testa, Joseph	801 Pennsylvania Avenue, NW, Suite 650, Washington DC 20004	
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Helton, Mike D 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 229 Shelby Street, Frankfort KY 40601 302-226-3975 Shea, Michael 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Government Strategies, 229 Shelby Street, Frankfort KY 40601 302-226-3975 Goffe, Sheila 8051 Arco Corporate Dr., Raleigh NC 27617	Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
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Miller, Dustin S Shea, Michael Shea, Michael Sol-226-3975 Shea, Michael Sol-226-3975 Sol-226-3975 Goffe, Sheila Sol-226-3975 Goffe, Sheila Sol-226-3975 Sol-226-3975 Goffe, Sheila Sol-226-3975 Sol-226	Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Shea, Michael 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 American Kennel Club 919-816-3721 Goffe, Sheila 8051 Arco Corporate Dr., , Raleigh NC 27617	Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601	
,	Shea, Michael	502-226-3975			
Sexton, Robert T 5447 Watkins Rd., SW,, Pataskala OH 43062	American Kennel Club	919-816-3721	Goffe, Sheila	8051 Arco Corporate Dr., , Raleigh NC 27617	
	Sexton, Robert T	614-531-4426		5447 Watkins Rd., SW,, Pataskala OH 43062	

American Lung . in Kentucky	502-242-1065	Baker, Shannon	10168 Linn Station Road, Suite 100, Louisville KY 40223
Baker, Shannon	502-242-1065		10168 Linn Station Road, Suite 100, Louisville KY 40223
American Massage Therapy Assn.	847-905-1429	Specker, James	500 Davis St., Ste. 900, Evanston IL 60201
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
American Municipal Power	614-540-1111	Thompson, Jolene	1111 Schrock Road, Suite 100, Columbus OH 43229
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
American Petroleum Institute (API)	202-682-8219	Hanson, Rolf	1220 L Street NW, 12th Floor, Washington DC 20005
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
American Pharmacy Cooperative, Inc. (APCI)	205-277-1007	Eley, Bill	5601 Shirley Park Drive, , Bessemer AL 35022
Nelson, Brian L	270-779-0991		119 W. Todd Street, , Frankfort KY 40601
Nelson, Kim L	270-871-6290		119 W. Todd Street, 270-825-9022, Frankfort KY 40601
American Pharmacy Services Corporation	502-695-8899	Bouvette, Ralph E	102 Enterprise Drive, , Frankfort KY 40601
Barker, Nancy H	859-608-5899		340 Democrat Drive, , Frankfort KY 40601
Bouvette, Ralph E	502-695-8899		102 Enterprise Drive, , Frankfort KY 40601
American Property Casualty Insurance Assn.	404-261-8834	Jackson, Ronald	8700 W. Bryn Mawr Ave., Suite 1200S, Chicago IL 60631-3512
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
American Rental Assn.	703-684-1110	Hartgen, Jeffery A	515 King St., Ste. 300, , Alexandria VA 22314
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
American Water Works Assn. KY-TN Section	502-550-2992	Sanborn, Kay	3801 Springhurst Blvd., Suite 201, Louisville KY 40241
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Americans for Prosperity	703-224-3249	Bernson, Victor	1310 N. Courthouse Rd., Suite 700, Arlington VA 22201
McNeill, Andrew V	502-702-1643		996 Wilkinson Trace, Suite B3, Bowling Green KY 42103
Americans United for Sep. of Church & State	202-466-3234	Garrett, Margaret	1310 L St. NW, Suite 200, Washington DC 20005
Nartowicz, Nikolas	202-466-3234		1310 L Street NW Suite 200, AUFSCS, Washington DC 20005
Americas Health Insurance Plans	202-413-9817	Haffenbredl, Mary	4222 Bagley Parkway, , Madison WI 53705
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Goodman, Elizabeth C	202-955-4384		601 Pennsylvania Ave., NW, Ste. 500, Washington DC 20004
Haffenbredl, Mary	202-778-3200		4222 Bagley Pkwy., , Madison WI 53705
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Amgen, Inc.	202-585-9614	Sherman, Kathy	601 13th Street, NW, Suite 1100 North, Washington DC 20005
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176	× =	MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Johnson, Deron A	410-357-5776		305 Stable View Court, , Parkton MD 21120
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Amplify Education, Inc.	917-923-5379	Gonzales, Julia	55 Washington St., Ste. 800, Brooklyn NY 11201

Crigler, S02-548-7500 10010 Covered Bridge Road, , Prospect KY 40059 S0	
Gonzales, Juría 310-721-7047 55 Washington St., Ste. 800, Brooklyn NY 11201	
Hall, Katherine W 502-607-8670 205 W. Third Street, Frankfort KY 40601 Jennings, M. Patrick 502-607-8670 205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601 Thomas-Lentz, Karen 502-607-8670 205 W. Third Street, Frankfort KY 40601 Amrock 313-782-7526 Budzyn, Samantha 662 Woodward Ave., Detroit MI 48226 Budzyn, Samantha 313-338-0461 662 Woodward, Detroit MI 48226 Anheuser-Busch Companies 404-227-1420 Todd, Michele 890 Fawn Way, Marietta GA 30068 Cooper, John P 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Woodward, Russ 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Animal Policy Group, LLC 971-344-1347 Cushing, Mark 6339 Charlotte Pike #662, Nashville TN 37209 Babbage, Robert A 859-335-869 350 E. Short Street, Suite 212, Lexington KY 40507 Anthem, Inc. and Its Affiliates 502-889-2252 Ford, Lawrence H 13550 Triton Park Blvd., Louisville KY 40223 Bayens, Rachel P 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S 859-254-0000 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexing May, III, William H 859-254-0000 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Appalachian Citizens Law Center 606-633-3929 Addington, Wes 317 Main St., Whitesburg KY 41858	
Jennings, M. Patrick 502-607-8670 205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601 205 W. Third Street, Frankfort KY 40601 205 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S 202-226-3975 209 Shelby Street, Frankfort KY 40601 209 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200 Wernment Strategies, 229 Shelby Street, Frankfort KY 40601 200	
Thomas-Lentz, Karen 502-607-8670 205 W. Third Street, , Frankfort KY 40601	
Amrock 313-782-7526 Budzyn, Samantha 662 Woodward Ave., , Detroit MI 48226 Budzyn, Samantha 313-338-0461 662 Woodward, , Detroit MI 48226 Anheuser-Busch Companies 404-227-1420 Todd, Michele 890 Fawn Way, , Marietta GA 30068 Cooper, John P 502-223-8967 225 Capitol Avenue, , Frankfort KY 40601 Woodward, Russ 502-223-8967 225 Capital Avenue, , Frankfort KY 40601 Animal Policy Group, LLC 971-344-1347 Cushing, Mark 6339 Charlotte Pike #662, , Nashville TN 37209 Babbage, Robert A 859-335-5869 350 E. Short Street, Suite 212, Lexington KY 40507 Anthem, Inc. and Its Affiliates 502-889-2252 Ford, Lawrence H 13550 Triton Park Blvd., , Louisville KY 40223 Bayens, Rachel P 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Helton, Mike D 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S 859-254-0000 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexin Miller, Dustin S May, III, William H 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin Government Strategies, 229 Shelby Street, Frankfort KY 40601 Shea, Micha	
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Anheuser-Busch Companies 404-227-1420 Todd, Michele 890 Fawn Way, , Marietta GA 30068 Cooper, John P Woodward, Russ 502-223-8967 225 Capitol Avenue, , Frankfort KY 40601 Animal Policy Group, LLC Babbage, Robert A 971-344-1347 Cushing, Mark 6339 Charlotte Pike #662, , Nashville TN 37209 Anthem, Inc. and Its Affiliates 502-889-2252 Ford, Lawrence H 13550 Triton Park Blvd., , Louisville KY 40223 Bayens, Rachel P Ford, Lawrence H Helton, Mike D Helton, Mike D Huffman, Stephen S May, III, William H S59-254-0000 502-226-3975 September	
Cooper, John P 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Woodward, Russ 502-223-8967 225 Capital Avenue, Frankfort KY 40601 Animal Policy Group, LLC 971-344-1347 Cushing, Mark 6339 Charlotte Pike #662, Nashville TN 37209 Babbage, Robert A 859-335-5869 350 E. Short Street, Suite 212, Lexington KY 40507 Anthem, Inc. and Its Affiliates 502-889-2252 Ford, Lawrence H 13550 Triton Park Blvd., Louisville KY 40223 Bayens, Rachel P 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Ford, Lawrence H 502-889-2252 13550 Triton Park Blvd., Wellpoint, Inc./Anthem Blue, Louisville KY Helton, Mike D 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S May, III, William H 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S Shea, Michael 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Appalachian Citizens Law Center 606-633-3929 Addington, Wes 317 Main St., Whitesburg KY 41858	
Woodward, Russ 502-223-8967 Animal Policy Group, LLC Babbage, Robert A 859-335-5869 Bayens, Rachel P Ford, Lawrence H Fletton, Mike D Huffman, Stephen S May, III, William H May, III, William H Miller, Dustin S Shea, Michael Shea, Michael Appalachian Citizens Law Center Source A44-1347 Cushing, Mark Cushing, Mark 6339 Charlotte Pike #662, , Nashville TN 37209 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40507 350 E. Short Street, Suite 212, Lexington KY 40501 3550 Triton Park Blvd., Louisville KY 40601 3550 Triton Park Blvd., Wellpoint, Inc./Anthem Blue, Louisville KY 40601 360 Government Strategies, 229 Shelby Street, Frankfort KY 40601 370 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin Suite Street, St	
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Babbage, Robert A Anthem, Inc. and Its Affiliates Bayens, Rachel P Ford, Lawrence H So2-289-2252 Ford, Lawrence H Bayens, Rachel P Ford, Lawrence H So2-889-2252 Ford, Lawrence H So2-889-2252 Ford, Lawrence H So2-889-2252 Government Strategies, 229 Shelby Street, Frankfort KY 40601 13550 Triton Park Blvd., Louisville KY 40223 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S May, III, William H So2-246-3975 Miller, Dustin S So2-226-3975 Shea, Michael Appalachian Citizens Law Center 350 E. Short Street, Suite 212, Lexington KY 40507 13550 Triton Park Blvd., Louisville KY 40601 13550 Triton Park Blvd., Louisville KY 40601 13550 Triton Park Blvd., Louisville KY 40601 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexing Miller, Dustin S 129 Shelby Street, Frankfort KY 40601 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Appalachian Citizens Law Center 350 E. Short Street, Suite 212, Lexington KY 40507 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Appalachian Citizens Law Center	
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Bayens, Rachel P Ford, Lawrence H Ford,	
Ford, Lawrence H Helton, Mike D So2-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S May, III, William H S59-254-0000 Miller, Dustin S Shea, Michael So2-226-3975 Appalachian Citizens Law Center So2-289-2252 Government Strategies, 229 Shelby Street, Frankfort KY 40601 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 128 Street, Frankfort KY 40601 Shea, Michael Appalachian Citizens Law Center So2-226-3975 Addington, Wes 317 Main St., Whitesburg KY 41858	
Helton, Mike D 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Huffman, Stephen S 859-254-0000 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexir May, III, William H 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexir Miller, Dustin S 502-226-3975 502-226-3975 Shea, Michael 502-226-3975 Appalachian Citizens Law Center 606-633-3929 Addington, Wes 317 Main St., Whitesburg KY 41858	10223
Huffman, Stephen S May, III, William H 859-254-0000 Miller, Dustin S Shea, Michael Sol-226-3975 Appalachian Citizens Law Center 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexin 127 W. Main St. Equ	
May, III, William H 859-254-0000 Miller, Dustin S 502-226-3975 Shea, Michael Source Sheap Addington, Wes 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexi 229 Shelby Street, Frankfort KY 40601 Government Strategies, 229 Shelby Street, Frankfort KY 40601 317 Main St., Whitesburg KY 41858	gton KY 40507
Miller, Dustin S Shea, Michael Shea, Michael So2-226-3975 Shea, Michael So2-226-3975 Shea, Michael So2-226-3975 Appalachian Citizens Law Center So2-226-3975 Addington, Wes So2-226-3975 Addington, Wes So2-226-3975 Addington, Wes So2-226-3975 So2-226-397	_
Shea, Michael 502-226-3975 Government Strategies, 229 Shelby Street, Frankfort KY 40601 Appalachian Citizens Law Center 606-633-3929 Addington, Wes 317 Main St., , Whitesburg KY 41858	
Appalachian Citizens Law Center 606-633-3929 Addington, Wes 317 Main St., , Whitesburg KY 41858	
Cromer, Mary V 606-633-3929 317 Main St., Whitesburg KY 41858	
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Appalachian Regional Healthcare 859-226-2679 Phillips, Hollie H 1220 Harrodsburg Road, P. O. Box 8086, Lexington KY 40505	
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Appian 317-822-9205 Faulkenberg, Dennis E One North Capitol, Suite 1050, Indianapolis IN 46204	
Apple, Inc. 415-903-2800 Lim, Darrin 28 Liberty Ship Way, Suite 2815, Sausalito CA 94965	
Collins, Jena H 859-294-0157 Politicom Law LLP, 28 Liberty Ship Way Suite 2815, Sausalito CA 94	965
Appriss Inc. 502-815-3914 Cohen, Robert 10401 Linn Station Road, Suite 200, Louisville KY 40223	
Brown, Sherman A 502-875-0081 113 W. Main Street, , Frankfort KY 40601	
Busick, Jeffery M 502-875-0081 113 W. Main St., , Frankfort KY 40601	
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Milligan, Libby 502-875-0081 113 W. Main Street, , Frankfort KY 40601	
Niehaus, Matt 502-875-0081 113 W. Main St., Frankfort KY 40601	
Taylor, Robbin M 502-875-0081 113 W. Main St., Frankfort KY 40601	
Wickliffe, Amy 502-875-0081 113 W. Main Street, , Frankfort KY 40601	
Aramark Correctional Services, LLC 215-238-3437 Fast, Tamsin 1101 Market Street, 29th Floor, Philadelphia PA 19107	
Huffman, Stephen S 859-254-0000 127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexin	gton KY 40507
May, III, William H 859-254-0000 127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexis	gton KY 40507
ARQ 859-469-6813 Bruner, R. Jill 301 E Main St., Suite 1100, Lexington KY 40507	
Moss, David A 859-684-5797 1890 Star Shoot Pkwy., Ste. 170113, Lexington KY 40509	
Associated Builders & Contractors Indiana/Kentucky 317-596-4950 Gaylor, J. R. 5001 North Shadeland Avenue, , Indianapolis IN 46226	
Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Phillips, Travis 502-223-2180 302 Shelby St., , Frankfort KY 40601	
Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	

Thacker, A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Associated Builders & Contractors OH Valley	937-521-1588	Morris, John	33 Greenwood Lane, , Springboro OH 45066-3034
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Associated General Contractors of KY	502-223-8845	Vincent, Richard	632 Comanche Trail, , Frankfort KY 40601
Vincent, Richard	502-223-8845	Section of the sectio	632 Comanche Trail, P. O. Box 457, Frankfort KY 40602
Wolf, Ron	502-223-8845		632 Comanche Trail, , Frankfort KY 40601
Associates in Pediatric Therapy	502-633-1007	Sageser, Renea	90 Howard Dr., , Shelbyville KY 40065
Glisson, Vickie Y	502-645-8256	,	805 Oxmoor Woods Pkwy., , Louisville KY 40222
Association for Accessible Medicines	202-249-7100	Ryan, Tara	601 New Jersey Ave., NW, Ste. 850, Washington DC 20001
Brown III, John Y	502-558-2030	,	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Van Meter, Ashlie	202-249-7100		601 New Jersey Ave., NW, Ste. 850, Washington DC 20001
Association of Independent KY. Colleges & Univ.	502-695-5007	Cox, Gary S	484 Chenault Rd., , Frankfort KY 40601
Cox, Gary S	502-695-5007	, , ,	484 Chenault Rd., , Frankfort KY 40601
Assurant Solutions	305-253-2244	Bassett, Jr., Harry H	11222 Quail Roost Drive, , Miami FL 33157
Payton, Kevin W	502-223-2181	200000, 011, 22011, 21	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Astellas Pharma US Inc.	202-741-1970	Spinello, John	1001 G St. NW, Ste. 800/900E, Washington DC 20001
Giorgio, Sherri L	615-372-3613	Sp	10 Cadillac Drive, Suite 200, Brentwood TN 37027
AT&T	502-875-6816	Spade, Hollie	1535 Twilight Trail, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081	Space, 1101110	113 W. Main St., Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Mangeot III, Henri "Hank" L	502-582-1541		462 South 4th St., Ste. 2400 Meidinger Tower, Louisville KY 40202
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
McLean, Warren G	859-351-9475		302 Shelby Street, , Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Scarborough, Amy L	859-623-7272		201 South Third Street, , Richmond KY 40475
Spade, Hollie B	502-875-6816		1535 Twilight Trail, , Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, Frankfort KY 40601
Atlantic Bingo Supply Company	800-638-0144	Weinstein, Larry	1700 Midway Road, , Odenton MD 21113
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Atmos Energy	270-685-8024	Martin, Mark A	3275 Highland Pointe Drive, , Owensboro KY 42303
Ashcraft, Raymond "Rusty" R	859-948-8575		North Star Strategies, LLC, 1890 Star Shoot Pkwy.Ste170113, Lexington KY 40509
ATS Construction	859-223-7001	Martin, Rodney	3009 Atkinson Avenue, Suite 400, Lexington KY 40509
Kelly, Ginger H	502-229-5275	,,	1878 Graefenburg Rd., , Lawrenceburg KY 40342
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Kelly, Ste	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601
utism Speaks, Inc.	803-582-9905	Unumb, Lorri	1990 K Street, NW, , Washington DC 20006
Baldwin, Bart	 502-320-1143	50. U	420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
alanced Health KY	859-391-9149	Colvin, Garren	651 Perimeter Dr., Ste. 650, Lexington KY 40517-4139
Lewis, B. Riggs	502-817-9795		651 Perimeter Drive, Suite 650, Lexington KY 40517-4139
ank of America Corporation	302-432-0956	Jamison, Wendy	1020 N. French Street, DE5-002-03-11, Wilmington DE 19884
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, Frankfort KY 40601
ptist Health	502-253-4801	Baez, Lourdes C	2701 Eastpoint Parkway, , Louisville KY 40223
Baez, Lourdes C	502-253-4801		2701 Eastpoint Parkway, , Louisville KY 40223
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
ptist Life Communities	859-283-8600	Long, Dr. Robert H	1452 Donaldson Hwy., , Erlanger KY 41018
Crigler, Julia B	502-548-7500	-	10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 400
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
exter Healthcare Corp.	404-217-7618	Stoll, Elizabeth F	1266 W. Paces Ferry Rd., , Atlanta GA 30327
Payton, Kevin W	502-223-2181	,	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
eam Suntory, Inc.	202-962-0556	McNaughton, Terry	1050 K Street, Suite 1040, Washington DC 20001
Abell, Kelley	502-216-9990		P. O. Box 70331, Louisville KY 40270
Biagi, Mike	502-593-4575		PO Box 70331, Louisville KY 40270
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Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
havioral Health Advocates	606-451-0572	Hamm, Mark	480 E. University Dr., Ste. 7A, Somerset KY 42503
Baldwin, Bart	502-320-1143	, ·	420 Capital Ave., , Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
nefitfocus.com, Inc.	843-284-1052	Cavic, Paris	100 Benefitfocus Way, , Charleston SC 29492
Brown III, John Y	502-558-2030	5, 15 , 1	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
enevis	513-702-1057	Coleman, Ronnie	2510 Briarcliff Avenue, , Cincinnati OH 45212
Coleman, Ronnie	513-702-1057	Colomin, Monare	2510 Briarcliff Avenue, , Cincinnati OH 45212
est Friends Animal Society	618-550-9469	VanKavage, Elise "Ledy"	5001 Angel Canyon Rd., , Kanah UT 84741
Cox, Sam	859-533-7229	vanitavage, Dist Deal	269 Chestnut Ridge Dr., Lexington KY 40511
g Ass Fans	859-629-6203	Sawyer, Taylor	2348 Innovation Drive, , Lexington KY 40511
Sawyer, Taylor	859-629-6203	Surryer, raylor	2348 Innovation Drive, , Lexington KY 40511
Taylor, Judy	859-321-4272		2257 Terrace Woods Park, , Lexington KY 40513
g Rivers Electric Corporation	270-827-2561	Berry, Bob	201 Third Street, P. O. Box 24, Henderson KY 42419-0024
Wells, Sharla	270-827-2561	Del 1 3, Dob	201 Third Street, F. O. Box 24, Heilderson KT 42419-0024
rd Rides, Inc.	615-975-7152	Reed, Sam	865 Robertson Academy Rd., , Nashville TN 37220
Bentley, Jason R	502-875-1176	Recu, Sain	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		
Califor, Draildy P	302-073-1170		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601

Cutter, Se	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Bizzack Construction	859-299-8001	Evans, Martin	3009 Atkinson Ave., Ste. 200, , Lexington KY 40509
Kelly, Ginger H	502-229-5275	Dians, mai ten	1878 Graefenburg Rd., , Lawrenceburg KY 40342
Kelly, Steve	502-750-1552		633 Chamberlin Ave., Frankfort KY 40601
Blue Equity, LLC	502-589-8181	Blue, Jonathan S	P. O. Box 3222, Louisville KY 40201
Crigler, Julia B	502-548-7500	Diac, volution 5	10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Blue Grass Airport	859-425-3100	Frankl, Eric J	4000 Terminal Drive, Suite 206, Lexington KY 40510
Cooper, John P	502-223-8967	Platiki, Dite 5	225 Capitol Avenue, , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Bluegrass Community Bankers Association, Inc.	502-897-0554	Ross, Robert P	3932 Shelbyville Rd., Ste. 202, Louisville KY 40207
Brown, Donna G	270-422-4225	Ross, Robert I	170 Washington Street, , Brandenburg KY 40108
Bluegrass Fraternal Order of Police Lodge #4	859-255-7629	Muravchick, Brandon G	1097 Duvall St., Lexington KY 40517
Hawkins, Brad S	859-258-3600	Maravemen, Drandon G	1097 Duval Street, , Lexington KY 40517
Muraychick, Brandon G	859-258-3600		1097 Duval St., , Lexington KY 40517
Bluegrass Institute for Public Policy Solutions	859-444-5630	Waters, Jim	351 Pascoe Blvd., Suite 103G, Bowling Green KY 42104
Durand, Sarah	502-640-5472	Waters, om	6148 Mistflower Circle, , Prospect KY 40059
Waters, Jim	859-444-5630		351 Pascoe Blvd., Suite 103G, Bowling Green KY 42104
Bluegrass New Directions, Inc.	859-253-1686	Beatrice, Paul R	1351 Newtown Pike, , Lexington KY 40511
Whitehouse, David M	859-321-9562	Deatifice, I auf K	1201 Raeford Ln., P. O. Box 910590, Lexington KY 40513
Boardwalk Pipeline Partners	713-479-8059	McMahon, Michael E	9 Greenway Plaza, Suite 2800, Houston TX 77046
Brown, Sherman A	502-875-0081	Wichianon, Whenael E	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
McMahon, Michael E	713-479-8059		9 Greenway Plaza, Suite 2800, Houston TX 77046
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40001
Boone County Education Association	513-300-2232	Wilson, Mary M	75 Cavalier Blvd., Suite 324, Florence KY 41042
Wilson, Mary M	859-630-3539	Wison, Mary W	75 Cavalier Blvd., Ste. 324, Florence KY 41042
Bowling Green Area Chamber of Commerce	270-781-3200	Bunch, Ron	710 College Street, P. O. Box 51, Bowling Green KY 42102
Cooper, John P	502-223-8967	Builen, Ron	225 Capitol Avenue, Frankfort KY 40601
Sanders, Richie			
Boy Scouts of America	502-223-8967 9 72-580-7847	McGowan, Steve	225 Capital Ave., , Frankfort KY 40601 1325 W. Walnut Hill Ln., PO Box 152079, Irving TX 75015
Jenkins, John A	502-303-8778	WieGowan, Steve	, , ,
			715 Woodland Ave., Frankfort KY 40601
Salsman, Russ	502-299-6900	Buckley, Edward T	715 Woodland Ave, Frankfort KY 40601
Braeburn, Inc.	202-306-7940	Duckiey, Edward 1	1801 Cloverlawn Ct., , McLean VA 22101
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Buckley, Edward T	202-306-7940		47 Hulfish St., Suite 441, Princeton NJ 08542
Owens, Elizabeth M	502-229 - 5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601

Same Injury A.	Projection 4 of Ventucky	502 403 0600	Daywolds, James E	7321 New LaGrange Road, Suite 100, Louisville KY 40222
Brighspring Fieath Services 592-249-2605 Demeriti, Daryn 9901 Lian Station Road, Louiville KY 40223 Aball, Kelley 502-216-9990 Sun, Shetly 1125 Tri-Sitter Pkeys, #700, Curnee IL 60031 Brighsfar Care 847-69-2008 Sun, Shetly 1125 Wrister Pkeys, #700, Curnee IL 60031 Brown, Sherman A 502-375-0081 113 W. Main St., Frankfort KY 40601 Googbegan, J. Smald 502-375-0081 113 W. Main St., Frankfort KY 40601 Martin, Andrew "Skipper" 502-375-0081 11007 Greenock Court, Louisville KY 40243 MCCarthy, III, John T 502-375-0081 113 W. Main Street, Frankfort KY 40601 Miligan, Libby 502-375-0081 113 W. Main Street, Frankfort KY 40601 Typer, Robbin M 502-375-0081 113 W. Main Street, Frankfort KY 40601 Wickliffs, Arry 302-375-0081 1100 Military M. Main Street, Frankfort KY 40601 Bristol-New Segulbe Company 202-375-0081 1100 Military M. Main Street, Frankfort KY 40601 Calc, Grout 403-232-5344 1100 Military M. Main Street, Frankfort KY 40601 Brotherhood of Mainteanne Way Employees 270-379-3220 Aldridge, Bryan T P. O. Box 217, Millwood KY 42762 Pullyse, C	Brain Injury Af of Kentucky	502-493-0609	Reynolds, James E	
Aball, Kelley 502-16-9990 P. D. Box 70331, Louisville KY 40270	· ·		Demonitt Domin	
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Bristol-Myers Squibb Company 202-783-8617 Thompson, Tamar 801 Penasylvania Ave, NW, Suite 32S, Washington DC 20004 Cale, Grant 630-232-5834 Aldridge, Bryan T 221 N. Cambridge Dr., Geneva IL 60134 Brotherhood of Maintenance Way Employees 202-808-6448 Hogue, Charles R 25 Louisiana Avenue WW, 7th Floor, Washington DC 20001 Hayes, Corey D 606-706-9182 10 Envor-Perman Corporation 502-774-7870 Cheuvront, Jr., Karl R 850 Dixie Highway, P. O. Box 1808, Louisville KY 40201-1080 Babbage, Julic 859-335-5869 859 Dixie Highway, P. O. Box 1808, Louisville KY 40201-1080 Babbage, Robert A 859-335-5869 350 E. Short St. Suite 212, Lexington KY 40507 Babbage, Robert A 859-335-5869 60e, Brian 118 Ird Heighmay, P. O. Box 1808, Louisville KY 40201-1080 Caesars Enterprise Services, LLC 702-477-6204 Maddox, John 205 E. Short Street, Suite 212, Lexington KY 40507 Caesars Enterprise Services, LLC 702-477-6204 Maddox, John 119 W. Todd Street, Jexine 214, Lexington KY 40507 Nelson, Kimi L 270-877-8091 119 W. Todd Street, Jexine 214, Lexington KY 40501 Bakley, Amy 202-296-5469 Bolt, Jacqueline M 1400 T Street, NW, Suite 1200, Was				
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Addridge, Bryan T 270-879-820 P. O. Box 217, Millwood KY 42762			Aldridge, Bryan T	
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Campaign For Tobacco Free Kids 202-296-5469 Bolt, Jacqueline M 1400 I Street, NW, Suite 1200, Washington DC 20005 Barkley, Amy 202-296-5469 220 Fairmeade Road, Louisville KY 40207 Cardinal Aluminum 502-560-4208 Eifler, Timothy J 6910 Preston Hwy., Louisville KY 40259-0987 Williams, Ellen 502-330-2658 P.O. Box 4618, Frankfort KY 40602 CareSource Management Services Co. 502-213-4700 Taylor, Mike 10200 Forest Green Blvd, Suite 400, Louisville KY 40223 Payton, Kevin W 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, Loveland OH 45140 Payton, Kevin W 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180	Nelson, Brian L	270-779-0991		119 W. Todd Street, , Frankfort KY 40601
Barkley, Amy 202-296-5469 220 Fairmeade Road, , Louisville KY 40207 Cardinal Aluminum 502-560-4208 Eifler, Timothy J 6910 Preston Hwy., , Louisville KY 40259-0987 Williams, Ellen 502-330-2658 P.O. Box 4618, , Frankfort KY 40602 CareSource Management Services Co. 502-213-4700 Taylor, Mike 10200 Forest Green Blvd, Suite 400, Louisville KY 40223 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Muller, John 390 Wards Corner Road, , Loveland OH 45140 Payton, Kevin W 502-223-2180 Muller, John 390 Wards Corner Road, , Loveland OH 45140 Phillips, Travis 502-223-2180 Muller, John 390 Wards Corner Road, , Loveland OH 45140 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 3	Nelson, Kim L	270-871-6290		119 W. Todd Street, 270-825-9022, Frankfort KY 40601
Cardinal Aluminum 502-560-4208 Eifler, Timothy J 6910 Preston Hwy, Louisville KY 40259-0987 Williams, Ellen 502-330-2658 P.O. Box 4618., Frankfort KY 40602 CareSource Management Services Co. 502-213-4700 Taylor, Mike 10200 Forest Green Blvd, Suite 400, Louisville KY 40223 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, Loveland OH 45140 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 586	Campaign For Tobacco Free Kids	202-296-5469	Bolt, Jacqueline M	1400 I Street, NW, Suite 1200, Washington DC 20005
Williams, Ellen 502-330-2658 P.O. Box 4618, Frankfort KY 40602 CareSource Management Services Co. 502-213-4700 Taylor, Mike 10200 Forest Green Blvd, Suite 400, Louisville KY 40223 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, Loveland OH 45140 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby St., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120	Barkley, Amy	202-296-5469		220 Fairmeade Road, , Louisville KY 40207
CareSource Management Services Co. 502-213-4700 Taylor, Mike 10200 Forest Green Blvd, Suite 400, Louisville KY 40223 Payton, Kevin W 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby St., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Payton, Kevin W 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby Str., Frankfort KY 40601 Slaton, Daniel 502-223-2180 302 Shelby Str., Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Neal, Chris	Cardinal Aluminum	502-560-4208	Eifler, Timothy J	6910 Preston Hwy., , Louisville KY 40259-0987
Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby St., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, Loveland OH 45140 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capital Avenue, Frankfort KY 40601 Woodward, Russ	Williams, Ellen	502-330-2658		P.O. Box 4618, , Frankfort KY 40602
Phillips, Travis 502-223-2180 302 Shelby St., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, , Loveland OH 45140 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby Str., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capital Avenue, , Frankfort KY 40601 Neal, Chris 703-304-6691 S860 Trinity Pkwy., Suite 600, Centreville VA 20120 Woodward, Russ 502-223-8967 225 Capital Avenue, , Frankfort KY 40601	CareSource Management Services Co.	502-213-4700	Taylor, Mike	10200 Forest Green Blvd, Suite 400, Louisville KY 40223
Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carespring Healthcare Management 513-943-4000 Muller, John 390 Wards Corner Road, , Loveland OH 45140 Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby Street, Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capitol Avenue, , Frankfort KY 40601 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Woodward, Russ 502-223-8967 225 Capital Avenue, , Frankfort KY 40601	Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A Wilson, Marc A Carespring Healthcare Management Payton, Kevin W Phillips, Travis Slaton, Daniel Slaton, Daniel Thacker, Leigh A Wilson, Marc A S02-223-2180 Muller, John Muller, John Muller, John Muller, John Muller, John Muller, John Muller, John Muller, John Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Wilson, Marc A Carespring Healthcare Management Payton, Kevin W Phillips, Travis Slaton, Daniel Thacker, Leigh A Wilson, Marc A Carfax Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top	Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Carespring Healthcare Management Payton, Kevin W Soz-223-2181 Phillips, Travis Slaton, Daniel Thacker, Leigh A Wilson, Marc A Soz-223-2180 Cooper, John P Neal, Chris Neal, Chris Woodward, Russ Soz-223-8967 Wilson, Kevin W Soz-223-8967 Muller, John Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby St	Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 302 Shelby St., Frankfort KY 40601 Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Woodward, Russ 502-223-8967 225 Capital Avenue, Frankfort KY 40601	Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
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Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Thacker, Leigh A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Carfax 703-304-6691 Neal, Chris 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Cooper, John P 502-223-8967 225 Capitol Avenue, Frankfort KY 40601 Neal, Chris 703-304-6691 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Woodward, Russ 502-223-8967 225 Capital Avenue, Frankfort KY 40601				
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Neal, Chris 703-304-6691 5860 Trinity Pkwy., Suite 600, Centreville VA 20120 Woodward, Russ 502-223-8967 225 Capital Avenue, Frankfort KY 40601			Neal, Chris	
Woodward, Russ 502-223-8967 225 Capital Avenue, , Frankfort KY 40601				AND
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Cash Express LLC 931-260-6767 McNabb, Garry W P. O. Box 939, 714 North Dixie, Cookeville TN 38501	<u>.</u>			
	Cash Express LLC	931-260-6767	McNabb, Garry W	P. O. Box 939, 714 North Dixie, Cookeville TN 38501

Babbage, rt A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507	
Cash in a Dash, LLC	859-227-4465	Strong, Judith A	405 Hart Rd., , Lexington KY 40502	
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507	
Catholic Conference of KY	502-875-4345	Hall, Jason D	1042 Burlington Lane, , Frankfort KY 40601	
Hall, Jason D	502-875-4345		1042 Burlington Lane, , Frankfort KY 40601	
Vandiver, Andrew J	502-875-4345		1042 Burlington Lane, , Frankfort KY 40601	
Central Bridge Company, LLC	859-223-7001	Martin, Rodney	3009 Atkinson Avenue, Suite 220, Lexington KY 40509	
Kelly, Ginger H	502-229-5275		1878 Graefenburg Rd., , Lawrenceburg KY 40342	
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601	
Century Aluminum Company	859-948-4755	Harpole, Chadwick A	P. O. Box 500, 1627 State Hwy 271 N, Hawesville KY 42348	
Ashcraft, Raymond "Rusty" R	859-948-8575		North Star Strategies, LLC, 1890 Star Shoot Pkwy.Ste170113, Lexington KY 40509	
DeZee, John	831-917-8719		One South Wacker Dr, Suite 1000, Chicago IL 60606	
Dwyer, S. Gay	859-879-6838		143A Rumsey Circle, , Versailles KY 40383	
Early, Michael	312-696-3110		One South Wacker Drive, Suite 1000, Chicago IL 60606	
Harpole, Chadwick A	859-948-4755		P. O. Box 500, 1627 State Hwy. 271N, Hawesville KY 42348	
Taylor, Judy	859-321-4272		2257 Terrace Woods Park, , Lexington KY 40513	
Williams, Ellen	502-330-2658		P.O. Box 4618, , Frankfort KY 40602	
CenturyLink	615-584-7372	Ridley, Carolyn	2078 Quail Run Drive, , Bowling Green KY 42104	
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601	
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601	
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601	
Cerner	816-201-1693	Ervin, Doug	2800 Rockcreek Pkwy., , Kansas City MO 64117	
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270	
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270	
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601	
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601	
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601	
CGI Technologies & Solutions, Inc.	703-267-8125	Evans, Nicholas	Government Relations, 11325 Random Hills Rd., Fairfax VA 22030	
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601	
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601	
Chambers Medical Group	813-857-7004	Chambers, MD, Stephen F	905 Bayshore Blvd., , Tampa FL 33606	
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042	
Roberts, Shanna	859-244-3262	•	250 W. Main St., Ste. 2800, Lexington KY 40507	
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507	
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507	
Charter Communications	502-797-3930	U'Sellis, Benjamin	10168 Linn Station Rd., Suite 120, Louisville KY 40223	
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507	
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507	
Keller, Jason R	502-867-2207		10168 Linn Station Rd., Suite 120, Louisville KY 40223	
Chesapeake Appalachia, LLC	717-230-8620	Sheppard, Matthew	300 North 2nd St., 5th Floor, Harrisburg PA 17101	
Breeding, Carl W	502-352-4611	Sand have at the same at	314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601	
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601	
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601	
Child Care Advocates of Kentucky	502-855-0223	Magre, Steve	3000 Eastpoint Parkway, , Louisville KY 40223	
Magre, Steve	502-855-0223	Magre, Steve	1122 Rammers Avenue, Louisville KY 40204	
Child Care Council of KY, Inc.	859-254-9176	Stevenson, Bradley	2501 Sandersville Road, Suite 120, Lexington KY 40511	
Bird, Sharon	859-806-5551	Stevenson, Diadicy	611 Sawgrass Court, , Richmond KY 40475	
* 15 A	859-431-2075	Hammons, Michael		
Children, Inc.		mammons, Michael	333 Madison Avenue, Covington KY 41011	
Hammons, Michael	859-431-2075	Canhaun Mishalla M	333 Madison Avenue, Covington KY 41011	
Childrens Alliance	502-875-3399	Sanborn, Michelle M	420 Capitol Avenue, , Frankfort KY 40601	

Adams, N	502-875-3399		420 Capitol Avenue, , Frankfort KY 40601
Muse, Metissä F	502-875-3399		420 Capitol Avenue, Children's Alliance, Frankfort KY 40601
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Sanborn, Michelle M	502-875-3399		Children's Alliance, 420 Capitol Avenue, Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Childrens Home of Northern KY	859-261-8768	Wurth, Rick W	200 Home Road, , Covington KY 41011
Baldwin, Bart	502-320-1143		420 Capital Ave., , Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
Childrens Law Center, Inc.	859-431-3313	Beck, Acena	1002 Russell Street, , Covington KY 41011
Bear, Amanda M	859-253-3353		215 West Short Street, Suite 205, Lexington KY 40507
Beck, Acena	859-431-3313		1002 Russell St., , Covington KY 41011
Christian Science Committee on Pub. for KY, LLC	314-258-0974	Savoye, Craig	9401 Norton Commons Blvd., , Prospect KY 40059
Savoye, Craig	314-258-0974		9401 Norton Commons Blvd., , Prospect KY 40059
Churchill Downs Incorporated	502-636-4571	Wester, Elizabeth	600 N. Hurstborne Pkwy., Suite 400, Louisville KY 40222
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Flanery, Kevin	502-636-4575		700 Central Avenue, , Louisville KY 40208
Janes, Betsy B	502-636-4571		600 N. Hurstborne Pkwy., Ste. 400, Louisville KY 40222
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Wester, Elizabeth	502-636-4571		600 N. Hurstborne Pkwy., Suite 400, Churchill Downs, Louisville KY 40222
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Cigar Association of America, Inc.	202-223-8204	Williamson, Craig P	1100 G Street, NW, Suite 1050, Washington DC 20005-7405
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Cigna Corporate Services, LLC	770-261-3444	Oates, John	900 Cottage Grove Rd., B6LPA, Bloomfield CT 06002
Harrold, Michael	314-684-6373		1 Express Way, Mail Stop HQ2E03, St. Louis MO 63121
Cincinnati Bell Telephone	513-397-6351	Wilson, Christopher	221 E. Fourth St. 103-1280, P. O. Box 2301, Cincinnati OH 45202
Baird, Jason A	502-352-2987		305 Ann St., Suite 201, Frankfort KY 40601
Heckmann, Ted	513-397-1375		221 E. Fourth St. 103-1280, P. O. Box 2301, Cincinnati OH 45201-2301
Cincinnati/Northern KY International Airport	859-767-7990	McGraw, Candace S	P. O. Box 752000, , Cincinnati OH 45275-2000
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Cutter, Seth D	859-767-3169		P.O. Box 752000, , Cincinnati OH 45275-2000
Hartsough, Rebecca	859-335-5869		350 E. Short St., Ste. 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
McGraw, Candace S	859-767-3153		P.O. Box 752000, , Cincinnati OH 45275-2000
Citigroup Washington, Inc.	202-879-6887	Sweeney, Robert G	1101 Pennsylvania Avenue, NW, Suite 1000, Washington DC 20004
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Citizens for Responsible Pet Ownership	614-565-5522	Gonidakis, Esq., Michael L	88 E. Broad St., Ste. 1740, Columbus OH 43215
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601

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Slaton, D	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
City of Georgetown, KY	502-863-9800	Prather, Tom	100 N. Court Street, , Georgetown KY 40324
Whitehouse, David M	859-321-9562	rather, rom	1201 Raeford Ln., P. O. Box 910590, Lexington KY 40513
Cleanse Clinic Corp.	502-561-9443	Buridi, Abdul	720 W. Broadway, Ste. 202, Louisville KY 40202
Glisson, Vickie Y	502-645-8256	Darius, Abdui	805 Oxmoor Woods Pkwy., , Louisville KY 40222
Coalition of Ignition Interlock Manufacturers	800-880-3394	Coffey, Debra	500 E. Dallas Rd.,, Grapevine TX 76051
Bentley, Jason R	502-875-1176	Colley, Debla	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40001
Coca-Cola Bottling Co. Consolidated	513-527-5866	Richmond, Jennifer	5100 Duck Creek Rd., Cincinnati OH 45227
Potts, Roy	502-439-7542	Kienmond, Jennier	1714 Kensington Place Ln., Louisville KY 40205
Coca-Cola North America	734-394-6984	Sellman, Shannon	
	502-223-8967	Senman, Shannon	East US Operations VP, 1 Coca Cola Plaza, Atlanta GA 30313
Cooper, John P			225 Capitol Avenue, , Frankfort KY 40601
Potts, Roy	502-439-7542		1714 Kensington Place Ln., Louisville KY 40205
Woodward, Russ	502-223-8967	II I-CC A	225 Capital Avenue, , Frankfort KY 40601
Coin Laundry Association	703-684-1110	Hartgen, Jeffrey A	c/o MultiState Associates, Inc, 515 King Street, Suite 300, Alexandria VA 22314
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
College Board (The)	202-741-4798	Rohloff, Jason	4330 Gaines Ranch Loop, Suite 200, Austin TX 78735
Bassett, Stacy H	859-533-7714		1919 M. Street, NW, Suite 300, Washington DC 20036
Colon Cancer Prevention Project	502-290-0288	Smart, Amanda	10351 Linn Station Rd., P. O. Box 4039, Louisville KY 40204
Baird, Jason A	502-352-2987		305 Ann St., Suite 201, Frankfort KY 40601
Columbia Gas of KY, Inc.	859-288-0275	Miller, Jr., Herbert A	2001 Mercer Road, P. O. Box 14241, Lexington KY 40511-1018
Comcast	317-653-5951	Nemeth, Peter	5330 E. 65th St., , Indianapolis IN 46220
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Commerce Lexington	859-226-1616	Quick, Robert L	330 E. Main Street, Suite 205, P. O. Box 1968, Lexington KY 40507
Johnson, Andi	859-226-1616		330 East Main Street, Suite 205, Lexington KY 40507
Quick, Robert L	859-226-1616		330 E. Main Street, P. O. Box 1968, Lexington KY 40588
Taylor, Judy	859-321-4272		2257 Terrace Woods Park, , Lexington KY 40513
Commercial Specialty Truck Holding, LLC	859-234-1100	Nedley, Nathan D	200 Ladish Rd., , Cynthiana KY 41031
Sanders, Richie	502-223-8967		225 Capital Ave., Frankfort KY 40601
Commonwealth Chiropractic Alliance	502-533-5566	Helms, Kent	12909 Observation Cir., #203, , Louisville KY 40243
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
Commonwealth Credit Union	502-564-4775	Harbin, Karen	417 High St., , Frankfort KY 40601
Cutter, Sean M	502-875-1176	100 100 1001 Process 7 7 7 7 7	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Communicare	270-765-2605	Simpson, Dan	107 Cranes Roost Court, , Elizabethtown KY 42701
Brown III, John Y	502-558-2030	~p, ~	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Communications Workers of America	859-625-2947	Swiney, Joshua	P.O. Box 444, Winchester KY 40392
Communications workers of America	037-043-474/	Swiney, Justiua	1.0. Dua 444, , Winchester IL 1 40372

DeValdiv Jason	502-448-8998		PO Box 444, , Winchester KY 40392
Swiney, Josnua	859-893-1709		P. O. Box 444, , Winchester KY 40391
Community Action Kentucky, Inc.	502-205-1724	McCann, Roger	CAK Director, 101 Burch Court, Frankfort KY 40601
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
McCann, Roger	502-205-1724		101 Burch Court, , Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Community Coordinated Child Care 4-C	502-636-1358	Gadansky, Courtney	1215 South 3rd St., , Louisville KY 40203
Gadansky, Courtney	502-636-1358		1215 S. 3rd. St., , Louisville KY 40203
Community Farm Alliance Inc.	859-756-6378	Richards, Martin J	327 Chestnut St. Ste. #1, , Berea KY 40403
Cochran, James	859-940-2441		327 ChestnutSt., Ste. 1, Berea KY 40403
Richards, Martin J	859-756-6378		327 Chesnut St., Ste. #1, , Berea KY 40403
Voit, Kelsey	859-940-2441		327 Chestnut St., Ste. 1, Berea KY 40403
Community Ventures Corporation	859-231-0054	Smith, Kevin	1450 North Broadway, , Lexington KY 40505
Bird, Sharon	859-806-5551		611 Sawgrass Court, , Richmond KY 40475
CompTIA	630-282-4332	Madon, Alexi	3500 Lacey Rd., Ste. 100, Downers Grove IL 60515
Madon, Alexi	630-282-4332		3500 Lacey Rd., Ste. 100, Downers Grove IL 60515
Conduent, Inc. & its Affiliates	703-328-4994	Donalty, Tanya	750 First Street, NE, Suite 1020, Washington DC 20002
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Consumer Energy Alliance	713-337-8800	Ross, Brydon	2211 Norfolk St. #410, , Houston TX 77098
Ross, Brydon	502-657-6010		9900 Corporate Campus Dr., Ste. 3000, Louisville KY 40023
Consumer Healthcare Products Association	202-429-3521	Gutierrez, Carlos I	1625 Eye Street NW, Suite 600, Washington DC 20006
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Consumer Technology Assn. (CTA)	703-907-5226	Petricone, Michael	1919 S. Eads St., , Arlington VA 22202
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Continental Transport LLC	606-679-6301	Morris, Steve	300 Refinery Rd., , Somerset KY 42501
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
Convention of States Action	540-441-7227	Kelly, Robert	1464 Morena Blvd., , San Diego CA 92110
Coburn, Tom	540-441-7227		1464 Morena Blvd., , San Diego CA 92110
Martin, Grant	540-441-7227		1464 Morena Blvd., , San Diego CA 92110
Meckler, Mark	540-441-7227		1464 Morena Blvd.,, San Diego CA 92110
Sellers, Monica	540-441-7227		1464 Morena Blvd.,, San Diego CA 92110
CoreCivic	800-624-2931	Regens, Brad	10 Burton Hills Blvd., , Nashville TN 37215
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
Lankford, Jerry	615-263-3905		10 Burton Hills Blvd., CoreCivic, Nashville TN 37215
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601

Regens, B	615-263-6798		10 Burton Hills Blvd., , Nashville TN 37215
C . Tr	615-373-3100	King, Scott	103 Powell Ct., , Brentwood TN 37027
Brown III, John Y	502-558-2030	King, Scott	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Crowe Horwath, LLP	859-263-7344	Combs, Glen	541 Darby Creek Road, Suite 270, Lexington KY 40509
Crigler, Julia B	502-548-7500	Combs, Gien	10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
CSX Corporation	502-815-1865	Hall, David A	11492 Bluegrass Parkway, , Louisville KY 40299
Crigler, Julia B	502-548-7500	11111, 24114 11	10010 Covered Bridge Road, , Prospect KY 40059
Hall, David A	502-815-1865		11492 Bluegrass Parkway, , Louisville KY 40299
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
CTIA - The Wireless Assn.	202-736-3200	Keegan, Gerard	1400 16th Street NW, Suite 600, Washington DC 20036
McCabe, Lisa	202-736-3200	,	1400 16th St. NW, Ste. 600, Washington DC 20036
Cumberland River Comprehensive Care Center	606-528-7010	Jones, Danny	1203 American Greeting Card Rd, , Corbin KY 40701
Brown III, John Y	502-558-2030	55.103, 2 m.n.y	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Custom Data Processing	502-229-6236	Cochran, Stan	1408 S. Joilet, , Rommeoville IL 60446
Brown III, John Y	502-558-2030	,	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
CVS Health	202-772-3500	Woehrmann, Erik	1275 Pennsylvania Ave., NW Suite 700, Washington DC 20004
Bayens, Rachel P	502-226-3975	,	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Johnson, Larry	651-302-4318		13989 Dayton Way, , Rosemount MN 55068
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Daviess County Fiscal Court	270-685-8424	Smith, David	212 St. Ann Street, Suite 202, Owensboro KY 42303
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
DaVita Inc.	404-308-2443	McMullen, Jennifer	500 N. Capitol St. NW, Suite 300, Washington DC 20001
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Delaware North Companies	716-858-5289	McNeil, John	250 Delaware Ave., , Buffalo NY 14202
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
Dell Technologies, Inc.	202-674-2421	Turner, Cris	440 1st. St., NW, Ste. 820, Washington DC 20001
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601

Thomas-L Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Deloitte Consulting LLP	212-313-2877	Kumar, Mohan	30 Rockefeller Plaza, , New York NY 10112-0015
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Delta Air Lines Inc.	743-247-2270	Ornst, Patricia	125 W. 55th St., 2nd Floor, , New York NY 10019
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Ornst, Patricia	734-247-2270		125 W. 55th St., 2nd Floor, , New York NY 10019
Delta Dental Plan of Kentucky	502-736-4645	Mitchell, Pamela	P. O. Box 242810, , Louisville KY 40224-2810
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Delta Natural Gas Company Inc.	859-744-6171	Coker, Greg	3617 Lexington Road, , Winchester KY 40391
Coker, Greg	502-223-8967		225 Capital Ave., Capital Link Consultants, Frankfort KY 40601
Diabetes Caucus, Inc.	859-221-1032	Alexander, Doug	2453 Doubletree Court, , Lexington KY 40502
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
Diamond Game Enterprises	818-727-1690	Breslo, Bill	9340 Penfield Ave., , Chatsworth CA 91311
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Dish Network LLC	202-293-0981	Blum, Jeffrey	1110 Vermont Avenue NW, Suite 750, Washington DC 20005
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Dismas Charities Inc.	502-636-2033	Weis, Raymond J	2500 S. Seventh St., , Louisville KY 40208
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
DisposeRX, Inc.	859-537-2218	Donaldson, Ben M	102 Glory Coach Place, , Georgetown KY 40324
Donaldson, Ben M	859-537-2218		102 Glory Coach Place, , Georgetown KY 40324
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Distilled Spirits Council of the U.S.	202-628-3544	Gorman, Mark	1250 Eye Street NW, Suite 400, Washington DC 20005-3998
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Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
District Judges for a Better Commonwealth	502-802-6995	Bowles, David	600 W. Jefferson St., , Louisville KY 40202
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601

Nolan, Chris 56 Osborne, Sara L 56 Diversified Gas & Oil Corp. 2 Bentley, Jason R 56 Cantor, Brandy P 56 Cutter, Sean M 56 Higdon, James M 56 Lambert, Charles 56 Nolan, Chris 56 Osborne, Sara L 56 Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-875-1176 02-875-1176 02-875-1176 05-408-0909 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-2-875-1176 02-2-875-1176 02-2-875-1176 02-2-875-1176 02-2-1180 02-2-1180 02-2-1180	Hutson, Robert Brewer, Traci Finan, Griffin	MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1800 Corporate Dr., , Birmingham AK 35242 MML&K Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann St. Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Osborne, Sara L 56 Diversified Gas & Oil Corp. 2 Bentley, Jason R 56 Cantor, Brandy P 56 Cutter, Sean M 56 Higdon, James M 56 Lambert, Charles 56 Nolan, Chris 56 Osborne, Sara L 56 Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-875-1176 05-408-0909 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 03-875-1176 03-9494-7809 01-980-2133 02-223-2181 02-223-2180 02-223-2180 02-223-2180 02-223-2180 02-223-2180	Brewer, Traci	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1800 Corporate Dr., , Birmingham AK 35242 MML&K Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann St. Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Diversified Gas & Oil Corp. 22 Bentley, Jason R 50 Cantor, Brandy P 50 Cutter, Sean M 50 Higdon, James M 50 Lambert, Charles 50 Nolan, Chris 50 Osborne, Sara L 50 Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 50 Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	05-408-0909 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 059-494-7809 59-494-7809 101-980-2133 02-223-2181 02-223-2180 02-233-2180 02-223-2180 02-223-2180 02-223-2180	Brewer, Traci	1800 Corporate Dr., , Birmingham AK 35242 MML&K Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann St. Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Bentley, Jason R	02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 059-494-7809 01-980-2133 02-223-2181 02-223-2180 02-233-2180 02-223-2180 02-223-2180 02-223-2180	Brewer, Traci	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann St. Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Cantor, Brandy P 56 Cutter, Sean M 56 Higdon, James M 56 Lambert, Charles 56 Nolan, Chris 56 Osborne, Sara L 56 Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 059-494-7809 59-494-7809 101-980-2133 02-223-2181 02-223-2180 02-233-2180 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, 305 Ann St. Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., Frankfort KY 40601 1152 15th St., NW, Washington DC 20005
Cutter, Sean M 56 Higdon, James M 56 Lambert, Charles 56 Nolan, Chris 56 Osborne, Sara L 56 Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 02-875-1176 159-494-7809 101-980-2133 02-223-2181 02-223-2180 02-223-2180 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., Frankfort KY 40601 1152 15th St., NW, Washington DC 20005
Higdon, James M	02-875-1176 02-875-1176 02-875-1176 02-875-1176 59-494-7809 59-494-7809 101-980-2133 02-223-2181 02-223-2180 02-223-2180 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Lambert, Charles 56 Nolan, Chris 56 Osborne, Sara L 56 Down Syndrome Assn. of Central KY 85 Brewer, Traci 85 DraftKings, Inc. 36 Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-875-1176 02-875-1176 02-875-1176 059-494-7809 59-494-7809 101-980-2133 02-223-2181 02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Nolan, Chris 50 Osborne, Sara L 50 Down Syndrome Assn. of Central KY 80 Brewer, Traci 83 DraftKings, Inc. 30 Payton, Kevin W 50 Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	02-875-1176 02-875-1176 159-494-7809 59-494-7809 101-980-2133 02-223-2181 02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Osborne, Sara L 50 Down Syndrome Assn. of Central KY 88 Brewer, Traci 83 DraftKings, Inc. 30 Payton, Kevin W 50 Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	02-875-1176 59-494-7809 59-494-7809 01-980-2133 02-223-2181 02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180	to contract visits and section of the second section of the section of the second section of the sec	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Down Syndrome Assn. of Central KY 8 Brewer, Traci 8 DraftKings, Inc. 3 Payton, Kevin W 50 Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	59-494-7809 59-494-7809 101-980-2133 102-223-2181 102-223-2180 102-339-8400 102-223-2180 102-223-2180 102-223-2180	to contract visits and section of the second section of the section of the second section of the sec	1050 Chinoe Rd., Suite 204, Lexington KY 40502 1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
Brewer, Traci 88 DraftKings, Inc. 3 Payton, Kevin W 50 Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	59-494-7809 101-980-2133 102-223-2181 102-223-2180 102-339-8400 102-223-2180 102-223-2180 102-223-2180	to contract visits and section of the second section of the section of the second section of the sec	1050 Chinoe Rd., Suite 204, Lexington KY 40502 125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., , Frankfort KY 40601 1152 15th St., NW, , Washington DC 20005
DraftKings, Inc.3Payton, Kevin W50Phillips, Travis50Sechrist, Erica20Slaton, Daniel50Thacker, Leigh A50Wilson, Marc A50	01-980-2133 02-223-2181 02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180	Finan, Griffin	125 Summer Street, Suite 510, Boston MA 02110 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., Frankfort KY 40601 1152 15th St., NW, Washington DC 20005
Payton, Kevin W 56 Phillips, Travis 56 Sechrist, Erica 26 Slaton, Daniel 56 Thacker, Leigh A 56 Wilson, Marc A 56	02-223-2181 02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180	Finan, Griffin	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 302 Shelby St., Frankfort KY 40601 1152 15th St., NW,, Washington DC 20005
Phillips, Travis 50 Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	02-223-2180 02-339-8400 02-223-2180 02-223-2180 02-223-2180		302 Shelby St., Frankfort KY 40601 1152 15th St., NW, Washington DC 20005
Sechrist, Erica 20 Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	02-339-8400 02-223-2180 02-223-2180 02-223-2180		1152 15th St., NW, , Washington DC 20005
Slaton, Daniel 50 Thacker, Leigh A 50 Wilson, Marc A 50	02-223-2180 02-223-2180 02-223-2180		
Thacker, Leigh A 50 Wilson, Marc A 50	02-223-2180 02-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A 50 Wilson, Marc A 50	02-223-2180		
			Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
			Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
	13-287-2404	Session, Jr., Charles L	P. O. Box 960, 139 E. 4th St. Rm. 1409M, Cincinnati OH 45202
Bentley, Jason R 50	02-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
The state of the s	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-419-0290		139 E. 4th St., MS 1409-M, , Cincinnati OH 45201
	02-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
3	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	13-287-2404		139 E. Fourth Street, 1409M, Cincinnati OH 45202
ACCOUNTS ACC	62-233-0813	Egger, Reinhold	1775 Tysons Blvd., Suite 900, Tysons VA 22102
	02-875-1176	Egger, Keninola	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
* ·	02-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
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A CONTRACTOR OF THE PROPERTY O	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
	02-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
	02-558-5586	n.i.	Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
20 1 No. 1 N	59-745-9765	Bridges, Ann F	4775 Lexington Rd., , Winchester KY 40391
	59-745-9765		4775 Lexington Rd., , Winchester KY 40391
	02-875-4345	Vandiver, Andrew J	1042 Burlington Ln., , Frankfort KY 40601
	02-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
	02-607-8670		205 W. Third Street, , Frankfort KY 40601
	02-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
	02-607-8670		205 W. Third Street, , Frankfort KY 40601
Elevator Industry Work Preservation Fund 5	08-528-8843	Sullivan, Kevin	7 Village Green, , Norfolk MA 02056
	02-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Eli Lilly and Company 3	17-276-3294	O'Connor, Michael	8112 Henslow Court, , Montgomery AL 36117
Whitehouse, David M	59-321-9562		1201 Raeford Ln., P. O. Box 910590, Lexington KY 40513
Ellis Park Race Course, LLC 5	18-436-0786	Featherstonhaugh, James	111 Washington Ave., Ste. 501, Albany NY 12210
Abell, Kelley 50	02-216-9990		P. O. Box 70331, , Louisville KY 40270

Biagi, Mil	502-593-4575		PO Box 70331, , Louisville KY 40270
Enclara Pharmacıa	856-823-1574	Baach, Scott	1601 Cherry St., Ste. 1700, Philadelphia PA 19102
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Energy Systems Group	502-330-2331	Barton, Teresa	9877 Eastgate Ct., , Newburgh IN 47630
Coker, Greg	502-223-8967	=	225 Capital Ave., Capital Link Consultants, Frankfort KY 40601
Enterprise Holdings	502-479-4712	Christensen, Marc T	13425 Eastpointe Centre Dr, Suite 124, Louisville KY 40299
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, Frankfort KY 40601
EPIC Pharmacies, Inc.	270-732-0303	Hamm, Gary	142 Doris Court, , Elizabethtown KY 42701
Thomas-Lentz, Karen	502-607-8670	•	205 W. Third Street, , Frankfort KY 40601
Epilepsy Foundation Kentuckiana	502-637-4440	McGrath, Debbie	982 Eastern Parkway, , Louisville KY 40217
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
EQT Corporation	412-553-7764	Killion, Michael	EQT Plaza, 625 Liberty Avenue, Pittsburgh PA 15222
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Equestrian Events, Inc.	859-233-2362	Carter, Lee	PO Box 12110, , Lexington KY 40580-2110
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Equian, LLC	502-214-1194	Gibson, Daniel	9390 Bunsen Pkwy., , Louisville KY 40220
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Everytown for Gun Safety Action Fund	646-324-8250	Paone, Tara	P.O. Box 4184, , New York NY 10163
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Smith, Monisha	646-324-8250		P.O. Box 4184, , New York NY 10163
Excellence in Education in Action	850-391-4200	Peshek, Adam	P. O. Box 10691, , Tallahassee FL 32302
Mahoney, Ryan	850-391-4200		P. O. Box 10691, , Tallahassee FL 32302
Expedia, Inc.	737-346-0513	Stewart, Noah	1011 W. 5th Street, Suite 300, Austin TX 78703
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Exxon Mobil Corp.	415-389-6800	Lucas, Steven S	2350 Kerner Blvd., Ste. 250, San Rafael CA 94901

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Matusic,	415-389-6800		2350 Kerner Blvd., Ste. 250, San Rafael CA 94901
Fairness Campaign	502-893-0788	Faulkner, Judith	2263 Frankfort Avenue, , Louisville KY 40206
Hartman, Chris	502-893-0788	1	2263 Frankfort Avenue, Fairness Campaign, Louisville KY 40206
Family Foundation (The)	859-255-5400	Ostrander, Kent	P.O. Box 911111, 3060 Harrodsburg Rd., Lexington KY 40591
Cave, Stanton L	859-309-3000	Ostrinuci, item	P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-0457
Cothran, Martin	859-329-1919		247 Tuggle Road, , Danville KY 40422
Cuzick, Cole E	859-255-5400		3060 Harrodsburg Rd., , Lexington KY 40503
Johnson, Michael	859-255-5400		3060 Harrodsburg Rd., , Lexington KY 40503
Ostrander, Kent	859-255-5400		3060 Harrodsburg Rd. 2nd Floor, Family Foundation, Lexington KY 40591
Family Resource & Youth Services Coal. of KY, Inc.	859-333-4209	Jones, Michael A	2220 Nicholasville Road, Suite 110-333, Lexington KY 40503
Jones, Michael A	859-333-4209	001103)	2220 Nicholasville Road, Suite 110-333, Lexington KY 40503
Family Scholar House	502-584-8090	Dykstra, Cathe	403 Reg Smith Circle, , Louisville KY 40208
Brown, Sherman A	502-875-0081	Dynom a, Carne	113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, Frankfort KY 40601
FanDuel, Inc.	202-417-3525	Fox, Cory	300 Park Ave. South, 14th Floor, New York NY 10010
Payton, Kevin W	502-223-2181	104, 6019	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Sechrist, Erica	202-339-8400		1152 15th St., NW, , Washington DC 20005
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Farm Credit Mid-America	502-420-3735	Dagher, Joe	1601 UPS Drive, , Louisville KY 40223
Grayson, Trey	859-817-5930	Dugiter, ove	7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Fayette County Education Assn.	859-224-0907	Hiler, Jessica L	523 Wellington Way, Suite 180, Lexington KY 40503
Hiler, Jessica L	859-224-0907	The Gooden D	523 Wellington Way, Suite 180, Lexington KY 40503
Fayette County Public Schools	859-381-4100	Caulk, Emmanuel "Manny"	701 E. Main St., , Lexington KY 40507
Babbage, Julie	859-335-5869	Cuality Diffinition 17 anny	350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hartsough, Rebecca	859-335-5869		350 E. Short St., Ste. 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
Jansen, Jacob	859-335-5869		350 E. Short St., Ste. 212, Lexington KY 40507
FedEx Corporation	901-818-7171	Sain, A. J.	942 S. Shady Grove Rd., Memphis TN 38120
Travillion, Duple	901-818-7558	Sain, in the	942 S. Shady Grove Road, , Memphis TN 38120
Fern Creek Fire Dept.	502-657-1211	Mulvey, Nathan	9409 Old Bardstown Rd., , Louisville KY 40291
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Fidelity Investments	859-386-7155	Canafax, Kevin W	100 Magellan Way, KWGD, Covington KY 41015
Canafax, Kevin W	859-386-7155	Command Sherin II	100 Crosby Parkway, KP2L, Covington KY 41015
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601

Slaton, D	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Financial Services Institute, Inc.	202-803-6061	Bellaire, David	1201 Pennsylvania Ave., NW, Ste. 700, Washington DC 20004
Foster, Michelle	202-517-6464	Demane, David	1201 Pennsylvania Ave., NW, Suite 790, Washington DC 20004
First Southern Funding, LLC	606-365-4340	Rousey, Jimmy	PO Box 328, 205 North Depot St., Stanford KY 40484
Cave, Stanton L	859-309-3000	1100009, 01111119	P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-0457
First Southern National Bank	606-365-4340	Rousey, Jimmy	PO Box 328, 205 North Depot St., Stanford KY 40484
Cave, Stanton L	859-309-3000	2104003, 01111113	P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-0457
Ford Motor Company	202-962-5392	Magleby, Curt	801 Pennsylvania Avenue NW, Suite 400, Washington DC 20004
Brown, Sherman A	502-875-0081	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Scales, Samuel	202-962-5416		1350 I Street, NW, Suite 450, Washington DC 20005
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Foundation for a Healthy KY	502-326-2583	Chandler, Ben	1640 Lyndon Farm Court, Suite 100, Louisville KY 40223
Chandler, Ben	502-326-2583		1640 Lyndon Farm Court, Suite 100, Louisville KY 40223
Hackbarth, Bonnie	502-326-2583		1640 Lyndon Farm Court, Suite 100, Louisville KY 40223
Kerley, Morgan A	502-326-2583		1640 Lyndon Farm Court, Suite 100, Louisville KY 40223
Foundation for Individual Rights in Education	215-717-3473	Cohn, Joe	510 Walnut St., Suite 1250, Philadelphia PA 19106
Cohn, Joseph	215-717-3473		510 Walnut St., Suite 1250, Philadelphia PA 19106
Coward, Tyler	215-717-3473		700 Pennsylvania Ave., SE, Ste. 340, Washington DC 20003
Franklin Simpson Industrial Authority	270-586-4477	Griffin, Dennis	109 S. Main Street, P. O. Box 876, Franklin KY 42135-0876
Sanders, Richie	502-223-8967		225 Capital Ave., , Frankfort KY 40601
Fraternal Order of Police Corrections Lodge 77	502-608-1929	Dotson, Tracy	3556 Taylor Blvd., , Louisville KY 40215
Johnson, Daniel	502-690-2230		3556 Taylor Blvd., FOP Lodge 77, Louisville KY 40215
Fresenius Medical Care North America	574-273-6787	Mentz, Keith	250 East Day Road, Suite 300, Mishawaka IN 46545
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Fund for the Arts	502-582-0100	Davis, JP	623 West Main St., , Louisville KY 40202
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Funeral Directors Assoc. of Ky., Inc.	502-223-0622	Fogle, Sidney	108 St. James Court, P. O. Box 4779, Frankfort KY 40604-4779
Crawford, Mark D	502-223-0622		108 St. James Court, P. O. Box 4779, Frankfort KY 40601
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Fogle, Sidney	502-223-0622		108 St. James Court, P. O. Box 4779, Frankfort KY 40604-4779
G2lytics	615-509-2095	Braswell, Ed	112 Westwood Pl., Ste. 150, Brentwood TN 37027
Gaddie-Shamrock, LLC	270-384-6850	Hinton, Mark	Hwy 55 South, P.O. Box 280, Columbia KY 42728
Kelly, Ginger H	502-229-5275		1878 Graefenburg Rd., , Lawrenceburg KY 40342
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601
Gateway Children's Services	859-498-9892	Gomes, Joe	37 N. Maysville Street, , Mt. Sterling KY 40353
Bird, Sharon	859-806-5551		611 Sawgrass Court, , Richmond KY 40475
Templin, Kaye J	859-498-9892		37 N. Maysville Street, , Mt. Sterling KY 40353

GenCanna Glol	202-257-9677	Robertson, Kathryn	321 Venable Rd., , Winchester KY 40391
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Genentech, Inc.	415-389-6800	Carson, James W	c/o Nielsen Merksamer, et. al., 2350 Kerner Blvd. Suite 250, San Rafael CA 9490
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Dempster, Amy	415-389-6800		c/o Nielsen Merksamer, et. al., 2350 Kerner Blvd. Suite 250, San Rafael CA 94901
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40001
	502-875-0081		
Wickliffe, Amy		Muhanan Dan	113 W. Main Street, , Frankfort KY 40601
General Cigar Company, Inc.	804-935-2829	Mulvaney, Dan	10900 Nuckols Road, Suite 100, Glen Allen VA 23060
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670	Description D	205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
General Motors LLC	202-775-5056	Roosa, Bryan R	25 Massachusetts Avenue, NW, Suite 400, Washington DC 20001
Dwyer, S. Gay	859-879-6838		143A Rumsey Circle, , Versailles KY 40383
Henning, Eric J	313-588-0152		159 4th Avenue North, Suite 100, Nashville TN 37219
Georgetown-Scott Co. Chamber of Commerce	502-863-5424	Conner, Jack	160 East Main Street, , Georgetown KY 40324
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Gilead Sciences, Inc.	650-522-5090	Hawkins, Kimberly	333 Lakeside Dr., , Foster City CA 94404
Brown, Sherman A	502-875-0081		113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Glaxo SmithKline	215-822-4657	Campolongo, Jim M	209 Mallard Dr., , North Wales PA 19454
Bryce, Chris	270-791-6564		125 Walnut Ridge Way, , Bowling Green KY 42104
Global Tel*Link Corporation (GTL)	703-955-3910	Walker, Jon	12021 Sunset Hills Road, Suite 100, Reston VA 20190
Huffman, Stephen S	859-254-0000	, , , , , , , , , , , , , , , , , , , ,	127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 4050
Good Food Institute (The)	202-670-1686	Almy, Jessica	1380 Monroe St. NW, Ste. 229, Washington DC 20010
Almy, Jessica	202-670-1686	rining, ocosica	1380 Monroe St. NW, Ste. 229, Washington DC 20010
Wheeler, Victoria	859-376-0417		1380 Monroe St. NW, Ste. 229, Washington DC 20010
Google, Inc. and its Affiliates		Lama Frin	**
Hester, Lilyn	415-903-2800 415-903-2800	Lama, Erin	28 Liberty Ship, Suite 2815, Sausalito CA 94965
•			c/o 28 Liberty Ship Way, Ste. 2815, Sausalito CA 94965
Miller, Dustin S	502-226-3975		229 Shelby Street, Frankfort KY 40601
Shea, Michael	502-226-3975	D	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Greater Lexington Convention & Visitors Bureau	859-233-1221	Ramer, Mary Q	250 W. Main Street, Suite 2100, Lexington KY 40507
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601

Higdon, J. M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Ramer, Mary Q	859-233-1221		250 W. Main Street, Suite 2100, Lexington KY 40507
Greater Louisville Association of Realtors	502-894-9860	Stephenson, Lisa	6300 Dutchmans Parkway, , Louisville KY 40205
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
Greater Louisville Medical Society	502-736-6302	Guinn, Bert	328 E. Main St., , Louisville KY 40202
Guinn, Bert	502-736-6302		Gr. Louis. Medical Society, 328 E. Main St., Louisville KY 40202
Greater Louisville, Inc.	502-625-0073	Davasher-Wisdom, Sarah	614 W. Main St., Suite 6000, Louisville KY 40202
Aull, Charles N	502-625-0034		614 W. Main St., Ste. 6000, Louisville KY 40202
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
Davasher-Wisdom, Sarah	502-625-0073		614 West Main Street, , Louisville KY 40202
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Wilbur, Iris	502-625-0059		614 W. Main St., Ste. 6000, Louisville KY 40202
Greater Owensboro Chamber of Commerce	270-926-1860	Brake, Candance C	200 East Third Street, , Owensboro KY 42303
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Green River Alliance Group	270-524-1980	Thomas, Glenn	PO Box 456, , Munfordville KY 42765
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Greenwich Biosciences, Inc.	415-903-2800	Skelton, Jennie U	28 Liberty Ship Way, Suite 2815, Sausalito CA 94965
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Guardian Healthcare Providers	615-377-9140	Ireland, Don	105 Westpark Dr., Suite 100, Brentwood TN 37027
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081	9	113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Hagan Properties	502-245-8800	White, David	12911 Reamers Road, , Louisville KY 40245
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Underwoo on P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
HCA Healthcare, anc.	615-344-2709	Grayson, Jon	One Park Plaza, Bldg. 1-E4, , Nashville TN 37203
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Taylor, Judy	859-321-4272		2257 Terrace Woods Park, , Lexington KY 40513
Williams, Ellen	502-330-2658		P.O. Box 4618, Frankfort KY 40602
HDR Engineering, Inc.	859-629-4833	Edelen, Ben	2517 Sir Barton Way, , Lexington KY 40509
Crigler, Julia B	502-548-7500	•	10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Healthcare Distribution Alliance	703-684-1110	Hartgen, Jeffery A	515 King St., Suite 300, Alexandria VA 22314
Lowe, Bryan	703-885-0214		901 N. Glebe Rd., , Arlington VA 22203
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Hearing Aid Association of Kentucky	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Heaven Hill Distilleries	502-413-0220	Kass, Larry	4500 Bowling Green Blvd., Ste. 300, Louisville KY 40207
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
HID Global	512-776-9225	Petrucci, Anthony	611 Center Ridge Drive, , Austin TX 78753
Grant, Chad	859-967-8020		Grant Consulting Group, 620 S. Capitol Ave. Suite 100, Lansing MI 48933
Highlands Health System	606-886-9558	Warman, Jr., Harold C	5000 Ky. Route 321,, Prestonsburg KY 41653
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Hinkle Contracting, LLC	859-987-3670	Winkleman, Larry	P. O. Box 200, 395 North Middleton Rd., Paris KY 40362-0200
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Home Builders Assn. of KY	502-875-5478	Weiss, Robert M	1040 Burlington Lane, , Frankfort KY 40601
Sanford, Anetha D	502-875-5478		1040 Burlington Lane, , Frankfort KY 40601
Weiss, Robert M	502-875-5478		1040 Burlington Lane, , Frankfort KY 40601
Home Builders Assn. of Lexington	859-273-5117	Johnson, Todd	3146 Custer Dr., , Lexington KY 40517
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Home of The Innocents	502-596-1042	Robinson, Paul	1100 E. Market St., Louisville KY 40206
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601

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McBraye Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Home School Legal Defense Assn.	540-338-8660	Mason, James	One Patrick Henry Circle, , Purcellville VA 20132
Schmidt, Thomas J	304-839-6468	wason, vanies	One Patrick Henry Circle, , Purcellville VA 20132
Homeless and Housing Coalition of Ky.	502-223-1834	Bush, Adrienne S	306 W. Main Street, Suite 207, Frankfort KY 40601
Bush, Adrienne S	502-223-1834	busin, real tentie 5	306 W. Main St., Suite 207, Frankfort KY 40601
Hopebridge	317-794-3211	May, Dennis	3500 DePauw Blvd., , Indianapolis IN 46268
Baldwin, Bart	502-320-1143	way, Dennis	420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
Hosparus, Inc.	502-719-8925	Orman, Sharon	3532 Ephraim McDowell Drive, , Louisville KY 40205
Cooper, Gwen	502-719-8925	Orman, Sharon	3532 Ephraim McDowell Dr., , Louisville KY 40205
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
Houchens Industries	270-780-2865	Coates, Spencer	700 Church Street, , Bowling Green KY 42101
Williams, Ellen	502-330-2658	Coates, Spencer	P.O. Box 4618, , Frankfort KY 40602
Humana Inc.	502-476-5878	Garrison, Travis	500 West Main Street, Louisville KY 40202
Bentley, Jason R	502-875-1176	Garrison, Travis	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Cutter, Sean M			
	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Garrison, Travis	502-301-2936		500 W. Main St., , Louisville KY 40202
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176	D Y	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Humane Society of the United States	202-452-1100	Bevan, Laura	1255 23rd Street NW, Suite 450, Washington DC 20037
Callahan, Kathryn	502-718-2592	M. H. M. L. I	12123 Shelbyville Road, Suite 100, Louisville KY 40243
IGT and Its Affiliates	401-392-7227	Mello, Michael	10 Memorial Blvd., , Providence RI 02903
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000	VII. 1	127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
Independent Electrical Contractors of KY/S.IN	502-493-1590	Klein, Ervin	1810 Plantside Dr., , Louisville KY 40299
Klein, Ervin	502-352-2575		3107 Diemer Ln., , Louisville KY 40601
Independent Ins. Agents of Ky, Inc.	502-245-5432	Purvis, Tara T	13265 O'Bannon Station Way, , Louisville KY 40223
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Purvis, Tara T	502-248-5432		13265 O'Bannon Station Way, , Louisville KY 40223
Indiana/KY/Ohio Regional Council of Carpenters	317-807-5722	Clark, Jason	771 Greenwood Springs Dr., , Greenwood IN 46143
Clark, Jason	513-539-2759		204 Garver Rd,,, Monroe OH 45050
Porter, Alexander	502-375-8667	1	1245 Durrett Ln., , Louisville KY 40213
Indivior, Inc.	801-643-7003	Hartgen, Jeffery A	c/o MultiState Associates, Inc, 515 King Street, Suite 300, Alexandria VA 22314
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Wright, Robert	410-501-9241		11 Meadowsweet Ct., , Reisterstown MD 21136
Injured Workers Pharmacy, LLC	978-208-5410	Jaffee, Danielle	P. O. Box 338, , Methuen MA 01844
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Institute for Justice	703-682-9320	Knepper, Daniel E	901 N. Glebe Road, Suite 900, Arlington VA 22203
Frommer, Robert	703-682-9320		901 N. Glebe Rd., Ste. 900, Arlington VA 22203
Panju, Arif	512-480-5936		816 Congress Ave., Ste. 960, Austin TX 78701

Insurance Autt ion Inc.	708-492-7357	Dotzeva, Katerina	2 Westbrook Corporate Center, Suite 500, Westchester IL 60154	
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601	
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601	
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601	
Insurance Institute of Kentucky	859-543-9759	Treesh, Mark A	P. O. Box 54542, , Lexington KY 40555-4542	
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601	
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601	
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601	
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Treesh, Mark A	859-543-9759		601 Kenova Trace, , Lexington KY 40511	
Interlock Industries	502-569-2007	Mackin, Craig	545 S. Third Street, Suite 310, Louisville KY 40202	
Brown, Sherman A	502-875-0081	,	113 W. Main Street, , Frankfort KY 40601	
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601	
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40001	
Wickliffe, Amy	502-875-0081			
International Assn. of Amusement Parks & Attr.	703-299-5755	Scheffer, Erika	113 W. Main Street, , Frankfort KY 40601	
Brown, Sherman A	502-875-0081	Schener, Erika	1448 Duke St., Alexandria VA 22314	
Busick, Jeffery M	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
			113 W. Main St., , Frankfort KY 40601	
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601	
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Wickliffe, Amy	502-875-0081		113 W. Main Street, Frankfort KY 40601	
Intrust Healthcare	502-292-2393	Holland, Dean	1405 Park Rd., Ste. 180, Anchorage KY 40223	
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601	
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504	
Investors Heritage Life Insurance Co.	502-223-2361	Hardy, Robert M	P. O. Box 717, 200 Capital Avenue, Frankfort KY 40602	
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Hardy, Robert M	502-223-2361		P. O. Box 717, c/o Becky Louden, Frankfort KY 40602	
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000	
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601	
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Iron Workers DC of Southern Ohio & Vicinity	937-746-0854	Woodward, William A	8401 Claude Thomas Rd., Suite 55, Franklin OH 45005	
Adkins, Jerald	502-320-3837		219 Blueridge Dr., , Frankfort KY 40601	
Arnold, Marjorie	859-516-3904		219 Blueridge Dr., , Frankfort KY 40601	
ITG Brands, LLC and its Affiliates	336-335-7718	Smith, Mark	714 Green Valley Rd,, Greensboro NC 27408	
McLean, Warren G	859-351-9475		302 Shelby Street, Frankfort KY 40601	
JACK Ohio LLC	313-309-7473	Reinhard, Dan	580 Monroe Ave., , Detroit MI 48226	

Payton, K W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Janus Capital Management LLC	303-782-3511	Mariani, Kristin	151 Detroit Street, , Denver CO 80206
Schrock, David	303-336-4277	wantani, mistin	151 Detroit Street, Denver CO 80206
Jefferson County Farm Bureau	502-473-0055	Shake, Calvin	4200 Gardiner View Ave., , Louisville KY 40213
Michaud, Matthew T	502-473-0055	Share, Carvin	4200 Gardiner View Avenue, P. O. Box 33067, Louisville KY 40213
Jefferson County Public Schools	502-485-3905	Lowe, Jonathan G	3332 Newburg Road, , Louisville KY 40218
Bentley, Jason R	502-875-1176	20110,001111111111111111111111111111111	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176	*	MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Piper, Abby E	502-485-3905		3332 Newburg Road, , Louisville KY 40218
Jefferson County Suburban Fire Service	502-572-3455	Livers, Terri	410 S. Fifth Street, Room 3, Louisville KY 40202
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
Jefferson County Teachers Association	502-454-3400	Flaherty, DeeAnn	Watterson City West Bldg., 1941 Bishop Lane - Suite 300, Louisville KY 40218
Flaherty, DeeAnn	502-454-3400		1941 Bishop Lane, Suite 300, Louisville KY 40218
McKim, Brent	502-454-3400		Watterson City West Bldg., 1941 Bishop Ln., Suite 300, Louisville KY 40218
Peden, James H	502-454-3400		1941 Bishop Ln., Ste 300, Watterson City West Building, Louisville KY 40218
Jeffersontown Fire Dept.	502-267-7300	Sebastian, James	10540 Watterson Trail, , Jeffersontown KY 40299
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Jobs for Kentucky's Graduates, Inc.	859-490-9977	Handziak, Lisa	269 Meadow Valley Rd., , Lexington KY 40511
Handziak, Lisa	859-490-9977		269 Meadow Valley Rd., , Lexington KY 40511
Jockey's Guild, Inc.	859-523-5625	Meyocks, Terence	448 Lewis Hargett Circle, Suite 220, Lexington KY 40503
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
Johnson & Johnson	513-474-4161	Rosenberry, Gordon H	1034 Nottingham Drive, , Cincinnati OH 45255
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Rosenberry, Gordon H	513-474-4161		1034 Nottingham Drive, , Cincinnati OH 45255
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
JPMorgan Chase Holdings LLC	551-205-2443	Bunt, Shawn	383 Madison Avenue, , New York NY 10067
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Junior Achievement Coalition (The)	859-219-2423	Hudgins, Lynn	2420 Spurr Rd. #150, , Lexington KY 40511
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Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
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		113 W. Main Street, , Frankfort KY 40601
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		113 W. Main Street, Frankfort KY 40601
		11007 Greenock Court, , Louisville KY 40243
		113 W. Main Street, , Frankfort KY 40601
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		P. O. Box 1690, , Lexington KY 40588
		300 W. Vine Street, Suite 2100, Lexington KY 40507
		191 Louisiana Ave., , Lexington KY 40502
		2257 Terrace Woods Park, , Lexington KY 40513
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		8000 Lyndon Centre Way, Ste. 101, Louisville KY 40222
	Jennings, Ched	401 W. Main St., Ste. 1910, Louisville KY 40202
	ounings, ones	7982 New LaGrange Rd., Ste. 1, Louisville KY 40222
	Marlow, Cindy	1404B Browns Lane, , Louisville KY 40207
	manon, chay	1404 B Browns Lane, , Louisville KY 40207
	Mahoney, Heather R	P.O. Box 1450, , London KY 40743
	,	210 N. Broadway #3, , Berea KY 40403
		735 Lampton Street #202, , Louisville KY 40204
		131 N. Mill St., , London KY 40741
		131 N. Mill Street, , London KY 40741
		250 Plaza Dr., Ste. 4, Lexington KY 40503
		131 N. Mill St., , London KY 40741
		306 Greenup St., #3, , Covington KY 41011
		250 Plaza Dr., Ste. 4, Lexington KY 40503
		PO Box 864, 152 North Lake Drive, Prestonsburg KY 416
		210 N. Broadway #3, , Berea KY 40403
		958 Collett Ave., , Bowling Green KY 42101
		131 North Mill St., , London KY 40741
		210 N. Broadway #3, , Berea KY 40403
		250 Plaza Drive, Lexington KY 40503
		250 Plaza Dr. Suite 4, KFTC, Lexington KY 40503
		735 Lampton Street, Suite 202, Louisville KY 40203
		958 Collett Ave. #500, Louisville KY 42101
		958 Collette Ave., Ste. 500, Bowling Green KY 42101
502-589-3188		P. O. Box 1450, 131 N. Mill Street, London KY 40743
202-289-2188		735 Lampton Street, Ste. 202, Louisville KY 40206
		250 Plane Deirie Cuite A VETO I VV 40502
859-276-0563 606-878-2161		250 Plaza Drive Suite 4, KFTC, Lexington KY 40503 131 North Mill St., , London KY 40741
	\$02-226-3975 \$404-290-4231 \$02-376-7402 703-416-0333 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0176 \$59-254-3412 \$59-254-3412 \$59-254-3412 \$59-254-3412 \$59-254-3412 \$59-254-3412 \$59-268-1883 \$59-321-4272 502-491-5600 \$02-491-5600 502-583-3882 \$02-327-6787 502-895-5025 \$59-276-0563 \$59-986-1624 270-853-3774 606-922-4685 606-878-2161 \$59-276-0563 \$606-878-2161 \$59-276-0563 \$606-263-4982 \$59-756-4027 270-282-4553 \$00-589-3188 270-282-4553 \$02-16-6642 606-878-2161	\$02-226-3975 \$404-290-4231 \$02-376-7402 \$703-416-0333 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$02-875-0081 \$859-254-3412 \$859-231-3011 \$859-268-1883 \$859-321-4272 \$02-491-5600 \$02-583-3882 \$02-327-6787 \$02-895-5025 \$859-276-0563 \$859-986-1624 \$270-853-3774 \$606-922-4685 \$606-878-2161 \$859-276-0563 \$606-878-2161 \$859-276-0563 \$606-263-4982 \$859-756-4027 \$270-282-4553 \$606-878-2161 \$859-276-0563

Offerman	606-878-2161		P.O. Box 1450, , London KY 40743
Perumal, Nikita	859-276-0563		250 Plaza Dr., Suite 4, Lexington KY 40503
Skaggs, Jessie	606-263-4982		152 North Lake Drive, , Prestonsburg KY 41653
Sparks, Caitlin	859-486-4015		203 Greenup St., , Covington KY 41011
Wadlington, Meredith	859-276-0563		250 Plaza Dr., Ste. 4, Lexington KY 40503
Zaring, Sasha	606-878-2161		210 N. Broadway #3, , Berea KY 40403
entuckyOne Health	502-489-3036	Craig, Sherri	2120 High Wickham Place, Suite 200, Louisville KY 40245
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Craig, Sherri	502-489-3036		2120 High Wickham Place, Suite 200, Louisville KY 40245
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
ey Assets Kentucky	859-226-5022	Hall, Jennifer	961 Beasley St., Ste. 170, Lexington KY 40509
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., Lexington KY 40504
y Bank National Assn.	614-460-3479	Wise, Charles B	88 E. Broad St., 2nd Floor, Columbus OH 43215
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
dz Club (The)	502-458-5433	Zimmerman, Lee	1101 Herr Lane, , Louisville KY 40222
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
The second secon	502-875-0081		The Control with a substitution of the Control of t
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt			113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081	D' L' All	113 W. Main Street, Frankfort KY 40601
och Co. Public Sector, LLC & Affiliates	404-652-5349	Richardson, Allen	133 Peachtree St., NE, 50th Floor, Atlanta GA 30303
Richardson, Allen	404-652-5349	6	133 Peachtree St., NE, 50th Floor, Atlanta GA 30303
VC Health Systems, Inc.	859-254-1035	Croney, Elizabeth	900 Beasley St., Suite 120, , Lexington KY 40509
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Y -811	502-442-3160	Vaughn, Timothy H	4501 Wolf Spring Drive, , Louisville KY 40241
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, Frankfort KY 40601
Vaughn, Timothy H	502-442-3160		4501 Wolf Spring Drive, , Louisville KY 40241
Y Academy of Audiology	859-977-7443	Haley, Adam	4446 E. High St., Ste. 10, Lexington KY 40507
Haley, Adam	859-977-7443		446 E High St., Suite 10, Lexington KY 40507
Y Academy of Eye Physicians & Surgeons	859-300-2213	Roach, Liz	P.O. Box 1615, 210 E High St #1615, Lexington KY 40507
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601

Thomas-I Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
KY Academy of ramily Physicians	888-287-0662	Stover, Gerry	P. O. Box 1444, , Ashland KY 41105
Bentley, Jason R	502-875-1176	Stover, Gerry	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
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Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
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Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short Street, Salte 212, Lexington KY 40507
KY Advocates for Representation Excellence	859-268-2770	Moutin Jannifor M	729 E. Main St., , Lexington KY 40502
Cox, Sam	859-533-7229	Martin, Jennifer M	269 Chestnut Ridge Dr., , Lexington KY 40511
	502-414-1259	Marthaler, Tiffany	
KY Affordable Housing Coalition	859-817-5930	Waithaler, Illiany	189 Alpine Dr., , Shelbyville KY 40065 7310 Turfway Rd., #210, , Florence KY 41042
Grayson, Trey Roberts, Shanna	859-244-3262		
Robertson, R. Brooke P	859-244-7596		250 W. Main St., Ste. 2800, Lexington KY 40507 Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
KY Alliance of Boys & Girls Clubs, Inc.	502-585-5437	Helgeson, Jennifer	3900 Crittenden Drive, , Louisville KY 40209
Baldwin, Bart	502-320-1143	Heigeson, Jennifer	
Kidder, Sarah	512-423-1749		420 Capital Ave., , Frankfort KY 40601 1902 Port Royal Ct., , Lexington KY 40504
KY Alternative Livestock Association	606-594-3116	Rowland, Robert O	
Rowland, Robert O	502-819-6780	Rowland, Robert O	226 Meadowbrook Road, , London KY 40744 PO Box 631, , Frankfort KY 40601
KY Ambulance Providers Assn.	502-348-4929	Prewitt, Joe	Mining at the state of the stat
	859-321-4272	Frewitt, Jue	1301 Atkinson Hill Avenue, , Bardstown KY 40004 2257 Terrace Woods Park, , Lexington KY 40513
Taylor, Judy	859-268-6332	Keeton, III, James E	* · · · · ·
KY American Water Company Brown, Sherman A	502-875-0081	Recton, 111, James E	External Gov. Affairs, 2300 Richmond Road, Lexington KY 40502 113 W. Main Street, , Frankfort KY 40601
	502-875-0081		
Busick, Jeffery M Geoghegan, J. Ronald	502-875-0081		113 W. Main St., , Frankfort KY 40601 113 W. Main Street, , Frankfort KY 40601
Keeton, III, James E	859-268-6339		
	502-875-0081		2300 Richmond Rd., , Lexington KY 40502 11007 Greenock Court, , Louisville KY 40243
Martin, Andrew "Skipper"	502-875-0081		113 W. Main Street, , Frankfort KY 40601
McCarthy, III, John T			production through the St. St. States
Milligan, Libby	502-875-0081 502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt			113 W. Main St., Frankfort KY 40601
Taylor, Robbin M Wickliffe, Arny	502-875-0081		113 W. Main St., , Frankfort KY 40601
Telephonetry in the Ballet 2002-100 big is in 12-bellet and	502-875-0081	Vina Warra	113 W. Main Street, , Frankfort KY 40601
KY Assn. for Career and Technical Education Brown, Sherman A	502-564-4286 502-875-0081	King, Wayne	1044 Wesbend, Frankfort KY 40601
Busick, Jeffery M			113 W. Main Street, , Frankfort KY 40601
Company of the Compan	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Stone, Michael R	502-223-1823		P. O. Box 4595, , Frankfort KY 40604-4595
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601

KY Assn. for E nic Development	502-227-9653	Tackett, Matt	101 Burch Ct., , Frankfort KY 40601
Tackett, Man	502-227-9653	Tackett, Matt	101 Burch Ct., Frankfort KY 40601
KY Assn. for Gifted Education KAGE	270-745-4301	Baldwin, Lynette	P. O. Box 9610, , Bowling Green KY 42101-9610
Baldwin, Lynette	270-745-4301	Zuia, Zjuotto	P. O. Box 9610, , Bowling Green KY 42101-9610
KY Assn. of Adult Day Centers (KAAD)	859-623-4080	Upchurch, Kelly	P. O. Box 572, , Richmond KY 40475
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
KY Assn. of Career Colleges & Schools	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
KY Assn. of Chiefs of Police	859-743-2920	Butler, Shawn	738 Timberline Drive, , Villa Hills KY 41017
Crowley, Patrick	859-360-3185	•	Strategic Advisers, LLC, 535 Madison Ave. 5th Floor, Covington KY 41011
KY Assn. of Children's Advocacy Centers	502-223-5117	Ruschell, Caroline	233 Woodspoint Rd., , Lexington KY 40502
Ruschell, Caroline	502-223-5117		233 Woodspoint Rd., , Lexington KY 40502
KY Assn. of Chiropractors	859-554-4498	Payne, Dr. Nicholas R	7349 Burlington Pike, , Florence KY 41042
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Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
KY Assn. of Circuit Court Clerks	606-546-3075	Helton, Greg	401 Court Square, PO Box 760, Barbourville KY 40906
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Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY Assn. of Convention & Visitors Bureaus	502-543-1901	Beam, Troy	142 Buffalo Run Rd., , Shepherdsville KY 40166
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Assn. of Counties	502-223-7667	Roy, Brian S	400 Englewood Drive, , Frankfort KY 40601
Hampton, Shellie S	502-223-7667		400 Englewood Drive, , Frankfort KY 40601
Henderson, Jim	502-223-7667		400 Englewood Dr., Frankfort KY 40601
Ornstein, Richard	502-223-7667		400 Englewood Dr., , Frankfort KY 40601
Recktenwald, Roger	502-223-7667		400 Englewood Drive, , Frankfort KY 40601
Roy, Brian S	502-223-7667		400 Englewood Drive, Ky. Assn. of Counties, Frankfort KY 40601
Sturgill, Timothy A	502-223-7667		400 Englewood Drive, , Frankfort KY 40601
Williams, Ellen	502-330-2658		P.O. Box 4618, , Frankfort KY 40602
KY Assn. of Criminal Defense Lawyers	502-594-1375	Brown, Donna	P. O. Box 326, , Hebron KY 41048
DiLoreto, Rebecca B	859-444-8959	D	P.O. Box 911131, , Lexington KY 40591
KY Assn. of Electric Cooperatives, Inc.	502-451-2430	Perry, Chris	P.O. Box 32170, 1630 Lyndon Farm Court, Louisville KY 40223
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Crigler, Chase C	502-451-2430		4515 Bishop Lane, , Louisville KY 40218
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601

Mayfield, L	502-451-2430		1630 Lyndon Farm Court, , Louisville KY 40223
Miller, Dusun S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
KY Assn. of Fire Chiefs	859-744-5902	Castle, Danny	722 Terry Drive, , Winchester KY 40391
Howser, David W	502-893-7825		240 Sears Ave., , Louisville KY 40207
Reckner, Jack V	502-639-3866		4604 Dove Lake Court, , Louisville KY 40299
KY Assn. of Food Banks	859-986-7422	Sandberg, Tamara S	P. O. Box 1824, , Berea KY 40403
Babbage, Julie	859-335-5869	6 ,	350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
Sandberg, Tamara S	859-358-6719		P. O. Box 1824, , Berea KY 40403
KY Assn. of Health Care Facilities	502-425-5000	Johnson, Elizabeth A	9403 Mill Brook Road, , Louisville KY 40223
Christiansen, Ashlea E	502-425-5000		9403 Mill Brook Rd., , Louisville KY 40223
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Johnson, Elizabeth A	502-425-5000		9403 Mill Brook Road, , Louisville KY 40223
Johnson, Wayne	502-425-5000		9403 Mill Brook Road, KY Assn. of Health Care Fac., Louisville KY 40223
Linder, Bruce	502-452-5000		9403 Mill Brook Rd, , Louisville KY 40223
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
KY Assn. of Health Plans Inc.	502-889-2252	Ford, Lawrence	2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
Stumbo, Stephanie L	859-368-7740	3014, 24	2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
KY Assn. of Health Underwriters	502-244-1002	Carlson, Daryl	12808 Townepark Way, Suite 200, Louisville KY 40243
Payton, Kevin W	502-223-2181	Carison, Dary	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
KY Assn. of Highway Contractors	502-223-3422	LaRue, P.E., M. Chad	P.O. Box 637, 119 West Broadway, Frankfort KY 40602
Bayens, Rachel P	502-226-3975	Darrac, 1123, 1711 China	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
LaRue, P.E., M. Chad	502-223-3422		KY Assn. Highway Contractors, 119 West Broadway, Frankfort KY 40601
Mayton, Dana	502-223-3422		119 W. Broadway, , Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
KY Assn. of Hospices and Palliative Care	800-876-6005	Fowler, Liz	2312 Alexandria Drive, , Lexington KY 40504
Bentley, Jason R	502-875-1176	Towner, Elle	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Shouse, Edwin	502-875-1176		305 Ann St., Ste. 308, Frankfort KY 40601
KY Assn. of Manufacturers	502-352-2485	Lingo, Lee S	609 Chamberlin Ave., Frankfort KY 40601
Bayens, Rachel P	502-226-3975	Dingo, Dec 3	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Brown, Donna G	270-422-4225		170 Washington Street, , Brandenburg KY 40108
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cioss, Jr., Dioya Rusty	302-332-7012		511 W. Main Street, Dinsmore & Short, LDF, Plankfull K1 40001

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Harvey, I e A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, MIKE D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Lingo, Lee S	502-352-2485		609 Chamberlin Ave., Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shasky, Kelly S	502-395-1661	3.	205A Capitol Avenue, Frankfort KY 40601
Shea, Michael	502-226-3975	F 11 7	Government Strategies, 229 Shelby Street, Frankfort KY 40601
KY Assn. of Master Contractors	502-352-2575	Faulkner, Lynn	142 Consumer Lane, Frankfort KY 40601
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A KY Assn. of Nurse Anesthetists	502-223-2180	Dhalma Austronia	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
	859-514-9210	Phelps, Autumn	201 E. Main St. Suite 1405, , Lexington KY 40507
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081 502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper" McCarthy, III, John T	502-875-0081		11007 Greenock Court, , Louisville KY 40243 113 W. Main Street, , Frankfort KY 40601
	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY Assn. of Nurse Practitioners & Nurse Midwives	502-333-0076	York, Jill	
Brown, Sherman A	502-875-0081	i ork, Jili	P. O. Box 991307, , Louisville KY 40299-1307
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Schuster, Sheila A	502-836-4222		8004 Lyndon Centre Way, Suite 202, Louisville KY 40222-3600
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY Assn. of Private Providers	859-893-3252	Callebs, Johnny	4300 Palmetto Court, , Lexington KY 40513
Callebs, Johnny	859-893-3252	Cancus, Johnny	4300 Palmetto Court, , Lexington KY 40513
KY Assn. of Professional Educators (KAPE)	888-438-7179	House, Donna G	269 Regency Circle, Ste. B, Lexington KY 40503
Chaney, Gregory	888-438-7179	House, Donna G	269 Regency Circle, Suite B, Lexington KY 40503
House, Donna G	888-438-7179		269 Regency Circle, Ste. B, Lexington KY 40503
Watkins, Jennie S	888-438-7179		269 Regency Circle, Ste. 2, Lexington KY 40503
KY Assn. of Radon Professionals	502-727-5063	Hoylman, Kyle	P.O. Box 99438, , Louisville KY 40269
Bentley, Jason R	502-875-1176	and Jiman, Injie	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Assn. of Regional MH-MR Programs, Inc.	859-272-6700	Shannon, Steve	152 W. Zandale Dr., Suite 201, Lexington KY 40503
Brown, Sherman A	502-875-0081	J	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
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Milligan,	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Schuster, Sheila A	502-836-4222		8004 Lyndon Centre Way, Suite 202, Louisville KY 40222-3600
Shannon, Steve	859-272-6700		152 West Zandale Drive, Suite 201, Lexington KY 40503
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY Assn. of School Administrators	502-875-3411	Young, V. Wayne	87 C. Michael Davenport Blvd., , Frankfort KY 40601
Brotzge, Andrew G	502-819-9005	,	1006 Westgate Place, Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Caldwell, Rhonda K	502-875-3411		87 C. Michael Davenport Blvd., Ky. Assn. of School Admin., Frankfort KY 40601
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
Young, V. Wayne	502-875-3411		87 C. Michael Davenport Blvd., Frankfort KY 40601
KY Assn. of School Councils	859-238-2188	Harmon, Ronda	P.O. Box 784, 217 S. 4th Street Unit C, Danville KY 40423
Harmon, Ronda	859-238-2188		P. O. Box 784, KASC, Danville KY 40423
Slone, Lynne S	859-494-5167		151 Strawberry Fields Rd., , Lexington KY 40516
KY Assn. of School Superintendents	859-568-2140	Shelton, Tom	2331 Fortune Dr., Suite 285, Lexington KY 40509
Coker, Greg	502-223-8967	,	225 Capital Ave., Capital Link Consultants, Frankfort KY 40601
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Shelton, Tom	859-568-2140		2331 Fortune Dr., Suite 285, Lexington KY 40509
KY Assn. of Sexual Assault Programs, Inc.	502-226-2704	Recktenwald, Eileen A	P. O. Box 4028, 83 C. Michael Davenport Blvd., Frankfort KY 40604
Kashan, Laela	502-226-2704	,	83 C. Michael Davenport Blvd., P.O. Box 4028, Frankfort KY 40604
Recktenwald, Eileen A	502-226-2704		P. O. Box 4028, , Frankfort KY 40604
KY Assn. of Transportation Engineers	859-816-8294	Rowland, Robert O	P. O. Box 774, , Frankfort KY 40602
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
KY Athletic Trainers' Society	859-301-9400	Helton, Scott	830 Thomas Moore Pkwy., Ste. 101, Edgewood KY 41017
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Bloyd, Jamie E	859-948-4626		4781 Firebrook Blvd., , Lexington KY 40513
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
KY Auctioneers Association	270-904-6902	Whitley, Charles	1306 Euclid Ave, , Bowling Green KY 42103
Taylor, Judy	859-321-4272	•	2257 Terrace Woods Park, , Lexington KY 40513
KY Auto & Truck Recyclers Association	502-223-5322	Underwood IV, John T	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Automobile Dealers Assn. (KADA)	502-695-3333	Williams, Gay F	152 Consumer Lane, , Frankfort KY 40601
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
Williams, Gay F	502-695-3333		152 Consumer Lane, Frankfort KY 40601
KY Automotive Industry Assn.	270-349-2355	Tatman, David E	609 Chamberlin Ave, ., Frankfort KY 40601
Tatman, David E	270-349-2355		609 Chamberlin Ave., Frankfort KY 40601
KY Bankers Association	502-582-2453	Cassady Jr., Ballard W	600 West Main Street, Suite 400, Louisville KY 40202
Cassady Jr., Ballard W	502-582-2453		600 W. Main Street, Suite 400, Louisville KY 40202
Cooper, John P	502-223-8967		225 Capitol Avenue, Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Sanders, Richie	502-223-8967		225 Capital Ave., , Frankfort KY 40601
Stamper, Debra	502-582-2453		600 W. Main Street, Suite 400, Louisville KY 40202
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
KY Baptist Convention	502-330-5024	Troth, Thomas M	1029 Aderly Lane, , Frankfort KY 40601
Troth, Thomas M	502-330-5024	ervetor. • see president	1029 Aderly Lane, , Frankfort KY 40601
KY Beer Wholesalers Assn.	859-846-4847	Harris, John	P. O. Box 4463, , Midway KY 40347-4463
	TOTAL		

McLean, n G Payton, Kevin W	859-351-9475 502-223-2181		302 Shelby Street, , Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
200	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40001
Wilson, Marc A		Eugata Laglia A	P. O. Box 43394, , Louisville KY 40253-0394
XY Beverage Association	502-333-9724	Fugate, Leslie A	P. O. Box 43394, , Louisville KY 40253-0394
Fugate, Leslie A KY Blood Center	502-432-2050	Reed, William	3121 Beaumont Centre Circle, Lexington KY 40513
	859-276-2534	Reeu, william	
Jenkins, Pamela G	859-268-2933	Bustone Cuencini I	3609 Barrow Wood Ln., Lexington KY 40502
KY Bluegrass Cannabis LLC	502-819-6780	Brotzge, Gregory J	Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207 1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005		A CAMBRIC CLEAN THE CONTROL CO
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Rowland, Robert O	502-819-6780	We be ober	PO Box 631, , Frankfort KY 40601
KY Broadcasters Association	502-848-0426	Winkle, Chris	101 Enterprise Drive, Frankfort KY 40601
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180	20	302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180	11 1	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
KY Building Materials Assn.	502-223-5322	Underwood, Ryan	5932 Timber Ridge Dr, Suite 101, Prospect KY 40059
Underwood, Ryan	502-545-2597	THO. III.	5932 Timber Ridge Dr., Ste. 101, Prospect KY 40059
KY Cable Telecommunications Assn.	502-797-3930	U'Sellis, Benjamin	10168 Linn Station Rd., Suite 120, Louisville KY 40223
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
KY Cannabis Co.	859-963-3550	Polyniak, Adriane	159A E. Reynolds Rd., , Lexington KY 40517
Cox, Sam	859-533-7229		269 Chestnut Ridge Dr., , Lexington KY 40511
KY Cares 2018	502-298-1830	Smith, Lynn	5104 Wolf Pen Woods Dr., , Prospect KY 40059
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
KY CASA Network	502-238-2154	Bruns, Andrea	1640 Lyndon Farm Court, Suite 108, Louisville KY 40223
Babbage, Julie	859-335-5869		350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
KY Cattlemen's Association	859-278-0899	Maples, William David	176 Pasadena Drive, , Lexington KY 40503
Maples, William David	859-278-0899		176 Pasadena Dr., , Lexington KY 40503
Whitaker, Michelle N	859-278-0899		176 Pasadera Dr., , Lexington KY 40503
KY Cemetery Association	502-223-5322	Underwood IV, John T	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Center for the Arts Foundation, Inc.	502-584-7777	Baker, Kim	501 W. Main St., , Louisville KY 40202
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Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
KY Chamber of Commerce	502-695-4700	Watts, Ashli	464 Chenault Road, , Frankfort KY 40601
Adkisson, David C	502-695-4700		Ky. Chamber of Commerce, 464 Chenault Road, Frankfort KY 40601
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Burton, Travis	502-848-8734		464 Chenault Rd., Frankfort KY 40601

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Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601	
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Shanks, Kate	502-695-4700		464 Chenault Rd., , Frankfort KY 40601	
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Watts, Ashli	502-848-8766		464 Chenault Road, , Frankfort KY 40601	
Wickliffe, Amy	502-875-0081	Walter Adams	113 W. Main Street, , Frankfort KY 40601	
KY Chapter, American College of Cardiology	502-554-4909	Haley, Adam	446 E. High St., Ste. 10, Lexington KY 40507	
Haley, Adam	859-977-7443	M C II W :	446 E High St., Suite 10, Lexington KY 40507	
KY Chapter, American Soc. Landscape Architects	859-254-4018	McCalla, Kevin	P. O. Box 701334, , Louisville KY 40270	
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Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
KY Coal and Mineral County Coalition	502-223-5510	Young, Jerald C	350 Englewood Drive, , Frankfort KY 40601	
Tanner, Richard L	502-223-5510		350 Englewood Dr., , Frankfort KY 40601	
Young, Jerald C	502-223-5510		350 Englewood Drive, , Frankfort KY 40601	
KY Coal Association	859-233-4743	White, J. Tyler	880 Corporate Dr., #101, , Lexington KY 40503	
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601	
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
White, J. Tyler	859-233-4743		880 Corporate Dr., Ste. 101, Lexington KY 40503	
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
KY Coalition Against Domestic Violence	502-209-5382	Currens, Sharon A	111 Darby Shire Circle, , Frankfort KY 40601	
Arras, Isela	502-209-5382		111 Darby Shire Circle, , Frankfort KY 40601	
Currens, Sharon A	502-209-5382		111 Darby Shire Circle, , Frankfort KY 40601	
Gabbard, Lisa K	502-209-5382		111 Darby Shire Circle, , Frankfort KY 40601	
Johnson, Vickie	502-209-5382		111 Darby Shire Circle, , Frankfort KY 40601	
Savage, Mary E	502-209-5382		111 Darby Shire Circle, , Frankfort KY 40601	
Spradlin, Olivia B	502-209-5382		111 Darbyshire Circle, , Frankfort KY 40601	
KY Coalition to Abolish The Death Penalty	502-641-5557	Gallagher, Sandra "Kaye"	613 Zane Street, , Louisville KY 40203	
Heleringer, Robert L	502-327-6787		7982 New LaGrange Rd., Ste. 1, Louisville KY 40222	
KY Commonwealths Attorney Assn.	859-292-6580	Sanders, Rob	303 Court St., Ste. 605, Covington KY 41011	
Kelly, Ginger H	502-229-5275		1878 Graefenburg Rd., , Lawrenceburg KY 40342	
Kelly, Steve	502-750-1552		633 Chamberlin Ave., Frankfort KY 40601	
KY Community & Technical College System	202-641-0044	Lamond, Chris	1325 G. Street NW, Suite 1250, Washington DC 20005	
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059	
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601	
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601	
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601	
KY Concrete Association	502-695-1535	Messick, Finley	1 HMB Circle, , Frankfort KY 40601	
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601	
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601	
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601	
KY Concrete Pavement Association	502-695-1535	Messick, Finley	1 HMB Circle, , Frankfort KY 40601	
Brown III, John Y	502-558-2030	······································	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601	
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601	
Owells, Elizabeth Ivi	JUL-227*J 1UJ		200 D Capital Ave., , I fallkloft K 1 40001	
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Owens, L	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
KY Conservation committee	502-209-9659	Boldman, Lane	P. O. Box 1152, , Frankfort KY 40602
Boldman, Lane	502-209-9659	Doluman, Emic	P. O. Box 1152, , Frankfort KY 40602
Strobo, Randal A	502-290-9751		239 S. 5th Street, Suite 917, Louisville KY 40202
KY Constable Assn., Inc.	502-882-0522	Shuler, Jonathan	500 Public Square, Suite 2, Columbia KY 42728
Carl, Kenny	606-782-2493	Sharer, oonachan	P. O. Box 37, 143W. Miami St., Brooksville KY 41004
Rector, Jason	502-882-0522		89 Timber Lane, , Columbia KY 42728
Reynolds, Rick	270-849-7633		349 Chestnut Grove Road, , Campbellsville KY 42718
Shouse, Jerry	502-839-4041		1050 Hickory Hill Drive, , Lawrenceburg KY 40342
Shuler, Jonathan	606-560-4148		P.O. Box 461, , Beattyville KY 41311
KY Consumer Finance Assn.	502-226-3975	Miller, Dustin S	229 Shelby Street, , Frankfort KY 40601
Bayens, Rachel P	502-226-3975	minor, Dustin S	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
KY Council of Area Development Districts	502-875-2515	Wilder, Tony W	501 Capitol Avenue, , Frankfort KY 40601
Wilder, Tony W	502-875-2515	winder, rony w	501 Capital Ave., Frankfort KY 40601
KY Council of Churches	859-269-7715	Gillett, II, Donald K	P. O. Box 23171, 1125 Red Mile Rd., Lexington KY 40504
Gilbert, Kent H	859-986-3725	Ginetti, 11, Donata 11	200 Prospect St., Berea KY 40403
Gillett, II, Donald K	859-269-7715		1125 Red Mile Rd., Lexington KY 40504
KY Council on Problem Gambling	502-424-0176	Newman, Herbert Bud	4430 Manner Dale Dr., PO Box 4595, Louisville KY 40220
Stone, Michael R	502-223-1823	Newman, Herbert Bad	P. O. Box 4595, Frankfort KY 40604-4595
KY County Attorney's Assn.	502-875-8236	Patrick, Bill W	P. O. Box 4269, , Frankfort KY 40604
Patrick, Bill W	502-875-8236	attick, bill W	P. O. Box 4269, , Frankfort KY 40604
KY County Clerks' Association	502-227-2922	May, Jr., William I	1121 Collins Lane, P. O. Box 4156, Frankfort KY 40604-4156
May, Jr., William I	502-227-7275	iviay, 51., william 1	1121 Collins Lane, , Frankfort KY 40601
KY County Judge/Executive Assn.	502-223-5293	Lang, George "Vince"	115 East 2nd Street, , Frankfort KY 40601
Lang, George "Vince"	502-223-5293	Dailg, George Vince	115 East 2nd Street, Frankfort KY 40601
Williams, Ellen	502-330-2658		P.O. Box 4618, , Frankfort KY 40602
KY Credit Union League, Inc.	502-855-8206	Painter, Debbie	5111 Commerce Crossings Drive, Suite 210, Louisville KY 40229
Abell, Kelley	502-216-9990	I ainter, Debbie	P. O. Box 70331, Louisville KY 40270
Biagi, Mike	502-593-4575		PO Box 70331, Louisville KY 40270
Hagerty, Kyle R	502-855-8206		5111 Commerce Crossings Dr., Ste. 210, Louisville KY 40229
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Crushed Stone Assn.	502-223-3322	Rodgers, Nicholas S	P.O. Box 326, 119 W. Broadway, Frankfort KY 40602
Bentley, Jason R	502-875-1176	Rougers, Menoias 5	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		
			MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris Osborne, Sara L	502-875-1176		The state of the s
Rodgers, Nicholas S	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Dataseam Initiative, Inc.	502-223-2379 502-741-4755	Gupton, Brian	P. O. Box 326, 119 W. Broadway, Frankfort KY 40602
		Gupton, Brian	451 Baxter Ave., Ste. 109, P.O. Box 406818, Louisville KY 40204
Brown, Sherman A	502-875-0081 502-875-0081		113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M			113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601

Niehaus,	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Taylor, Robuth M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
KY Dental Association	502-489-9121	Whitehouse, Richard A	1920 Nelson Miller Pkwy., , Louisville KY 40223	
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Whitehouse, Richard A	502-489-9121		1920 Nelson Miller Pkwy., , Louisville KY 40223	
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
KY Dental Hygienists Association	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207	
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207	
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207	
KY Distillers' Assn.	502-875-9351	Gregory, Eric	614 Shelby Street, , Frankfort KY 40601	
Alvey, Bryan P	502-875-9351		614 Shelby Street, , Frankfort KY 40601	
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601	
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601	
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Edelstein, Alexandra M	502-875-9351		614 Shelby St., , Frankfort KY 40601	
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601	
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
KY Downs LLC	270-586-7778	Johnsen, Corey	5629 Nashville Rd, P. O. Box 405, Franklin KY 42135	
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270	
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270	
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601	
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270	
Sanders, Richie	502-223-8967		225 Capital Ave., , Frankfort KY 40601	
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059	
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601	
KY Education Association	502-875-2889	Ruble, Mary W	401 Capitol Avenue, , Frankfort KY 40601	
Campbell, Lee E	502-875-2889		401 Capitol Ave., , Frankfort KY 40601	
Denton, Tom	502-361-5738		616 W. Ashland Ave., , Louisville KY 40215	
Elridge III, Colmon	502-875-2889		401 Capitol Avenue, KEA, Frankfort KY 40601	
Ishmael, Kayne	502-875-2889		401 Capitol Avenue, , Frankfort KY 40601	
Ruble, Mary W	502-875-2889		401 Capitol Avenue, , Frankfort KY 40601	
Winkler, Stephanie	502-875-2889		401 Capitol Avenue, , Frankfort KY 40601	
KY Employers Mutual Insurance	859-425-7800	Feld, Tim	250 W. Main St., Suite 900, Lexington KY 40507	
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Copley, Gretchen	859-425-7800		250 W. Main Street, Suite 900, Lexington KY 40507	
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601	

Niehaus,	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Roboin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Y Equal Justice Center	859-233-3057	Seckel, Richard J	201 W. Short Street, Suite 310, Lexington KY 40507
Carter, Ben	502-509-3231		222 S. 1st St., Suite 305, Louisville KY 40202
Seckel, Richard J	859-233-3057		KY Equal Justice Center, 201 W. Short Street, Suite 310, Lexington KY 40507
Y Equine Education Alliance (KEEP)	859-259-0007	Jensen, Elisabeth	PO Box 54972, , Lexington KY 40555
Glasscock, Will	859-259-0007		P. O. Box 54972, , Lexington KY 40555
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 4050
Jensen, Elisabeth	859-259-0007		PO Box 54972, , Lexington KY 40555
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 405
Y Equipment Distributors	502-493-4339	Coultas, Dave	1801 Watterson Trl., , Louisville KY 40299
Moss, David A	859-684-5797		1890 Star Shoot Pkwy., Ste. 170113, Lexington KY 40509
Y Farm Bureau Federation	502-495-5000	Graham, Drew	9201 Bunsen Pkwy., P.O. Box 20700, Louisville KY 40250-0700
Biagi, Mike	502-593-4575		PO Box 70331, Louisville KY 40270
Graham, Drew	502-495-5101		9201 Bunsen Pkwy., P.O. Box 20700, Louisville KY 40250-0700
Harper, Jeff	502-495-5000		9201 Bunsen Parkway, P. O. Box 20700, Louisville KY 40250-0755
Kelly, Kyle W	502-495-5000		9201 Bunsen Parkway, P. O. Box 20700, Louisville KY 40250-0700
Y Farm Bureau Mutual Insurance Co.	502-495-5000	Kosse, L. Gregory	9201 Bunsen Parkway, P. O. Box 20700, Louisville KY 40250-0700
Kosse, L. Gregory	502-495-5000		9201 Bunsen Parkway, PO Box 20700, Louisville KY 40250-0700
Smith, Paula P	502-495-5000		9201 Bunsen Pkwy., P. O. Box 20700, Louisville KY 40250-0700
Y Financial Services Assn., Inc.	812-492-2493	Clancy, Austin	1 Station Place, Suite 304, Stamford CT 06902
Brown, Sherman A	502-875-0081	· ·	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Y Fire Fighters Association	606-922-7671	Suttles, Duane A	316 E. Third St., Grayson Fire Department, Grayson KY 41143
Kurtsinger, Michael J	859 - 256-3477	Suttledy Duality 12	118 James Court, , Lexington KY 40505
Lawson, David R	502-609-5576		10714 Old Taylorsville Road, , Louisville KY 40299
Rath, Steven	859-393-5810		128 Electric Ave., , Southgate KY 41071
Y Fire Sprinkler Contractors Assoc., Inc.	502-223-5322	Underwood IV, John T	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-5322	Chaciwood IV, John I	5932 Timber Ridge Drive, #101, Frospect KY 40059
Y Forest Industries Assn.	502-695-3979	Bauer, Robert J	106 Progress Drive, Frankfort KY 40601
Bauer, Robert J	502-695-3979	Dauci, Robeit J	100 Progress Drive, , Frankfort KY 40001
Y Guild of Brewers, Inc	502-515-0174	Selznick, Derek	2344 Valley Vista Rd., Louisville KY 40205
Buckley, Michael "Evan" E	859-368-7740	Science, Delek	2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
Selznick, Derek	502-581-9746		214 Claremont Ave., Louisville KY 40206
Stumbo, Stephanie L	859-368-7740		2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
Watson, Adam	502-515-0174		401 E. Main St., , Louisville KY 40202
Watson, Adam Y Habitat for Humanity, Inc.	502-513-0174	Shearer, Mary	330 N. Hubbards Ln. #3, , Louisville KY 40207
		Sucarci, mary	
Coker, Greg	502-223-8967	Mounties II Yel- I	225 Capital Ave., Capital Link Consultants, Frankfort KY 40601
Y Head Start Assn.	859-420-3372	Mountjoy, II, John J	101 Burch Court, , Frankfort KY 40601-4224
Coker, Greg	502-223-8967		225 Capital Ave., Capital Link Consultants, Frankfort KY 40601
Mountjoy, II, John J	859-420-3372		101 Burch Court, , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601

KY Health Res Alliance	502-320-1143	Baldwin, Bart	506 Matterhorn Drive, , Shelbyville KY 40065	
Baldwin, Bart	502-320-1143		420 Capital Ave., , Frankfort KY 40601	
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504	
KY Home Birth Coalition, Inc.	502-526-1988	DeLodder, Mary K	3908 Fairfield Meadows Dr., , Louisville KY 40245	
Baird, Jason A	502-352-2987		305 Ann St., Suite 201, Frankfort KY 40601	
Hillard, Jack E	502-352-2987		305 Ann Street, Suite 201, Frankfort KY 40601	
KY Home Care Association	317-775-6671	Reinhardt, Evan	6320 Rucker Road, Suite G, Indianapolis IN 46220	
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515	
Reinhardt, Evan	317-775-6671		6320 Rucker Rd., Ste. G, Indianapolis IN 46220	
KY Horsemen's Benevolent Protective Assn.	502-363-1077	Maline, Martin A	1729 South Fourth Street, , Louisville KY 40214	
Benson Jr., Robert P	502-583-8374		2150 One Riverfront Plaza, 401 W. Main St., Ste. 2150, Louisville KY 40202-4241	
KY Hospital Association	502-426-6220	Rust, Michael T	2501 Nelson Miller Parkway, P.O. Box 436629, Louisville KY 40253-6629	
Brezosky, Brian E	502-426-6220		2501 Nelson Miller Parkway, , Louisville KY 40223	
Cobb, Elizabeth G	502-992-4323		2501 Nelson Miller Pkwy., P. O. Box 436629, Louisville KY 40253	
Galvagni, Nancy	502-426-6220		2501 Nelson Miller Parkway, P.O. Box 436629, Louisville KY 40253-6629	
Kelly, Ginger H	502-229-5275		1878 Graefenburg Rd., , Lawrenceburg KY 40342	
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601	
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059	
Rust, Michael T	502-992-4323		2501 Nelson Miller Parkway, P. O. Box 436629, Louisville KY 40253-6629	
KY Independent Pharmacy Alliance	843-816-5690	Smith, Rosemary	P. O. Box 346, , Beattyville KY 41311	
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059	
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601	
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601	
KY Industrial Utilities Customers	502-223-8967	Cooper, John P	225 Capital Avenue, , Frankfort KY 40601	
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601	
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601	
KY Interactive, LLC	502-875-3733	Tompkins, Lee	229 W. Main Street, Suite 400, Frankfort KY 40601	
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507	
KY Jailers Association	270-887-4152	Boyd, Brad	410 W. 7th Street, , Hopkinsville KY 42240	
Kelly, Ginger H	502-229-5275		1878 Graefenburg Rd., , Lawrenceburg KY 40342	
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601	
KY Justice Association	502-339-8890	Fawns, Maresa T	10602 Timberwood Circle, Suite 8, Louisville KY 40223	
Fawns, Maresa T	502-339-8890		10602 Timberwood Circle, Suite 8, Louisville KY 40223	
Gillis, Griffin L	502-339-8890		10602 Timberwood Cir. #8, , Louisville KY 40223	
Williams, Nathan	502-587-2002		203 East Broadway, , Campbellsville KY 42718	
KY Kingdom, LLLP	502-473-0956	Gillim, Gaylee	P. O. Box 4563, , Louisville KY 40204	
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042	
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507	
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507	
KY Laborers District Council	502-839-8280	Isaacs, Mark	1994 Bypass South, , Lawrenceburg KY 40342	
Adkins, Jerald	502-320-3837		219 Blueridge Dr., , Frankfort KY 40601	
Arnold, Marjorie	859-516-3904		219 Blueridge Dr., , Frankfort KY 40601	
(Y Land Title Assn.	202-261-0310	Blosser, Elizabeth	1800 M St., NW, Ste. 300 South, Washington DC 20036-5828	
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601	
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243	
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601	
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601	

Taylor, R M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY League of Cities, Inc.	859-977-3719	Steiner, Jonathan	100 East Vine Street, Suite 800, Lexington KY 40507
Breeding, Carl W	502-352-4611	Communications of Communication (Communication) (Communication) (Communication)	314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Carroll, Bryanna L	800-876-4552		100 E. Vine Street, Suite 800, Lexington KY 40507
Chaney, James D	859-977-3719		Ky. League of Cities, 100 E Vine Street Suite 800, Lexington KY 40507-3700
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Steiner, Jonathan	859-977-3719		100 East Vine Street, Suite 800, Lexington KY 40507
KY League on Alcohol and Gambling Problems	502-244-4211	Cole, Donald R	12700 Townepark Way, Suite 204, Louisville KY 40243
Cole, Donald R	502-244-4211		12700 Townepark Way, Suite 204, Louisville KY 40243
Cole, Gene A	502-244-4211		12700 Townepark Way, Ste. 204, Louisville KY 40243-2542
KY Library Association	502-223-5322	Underwood IV, John T	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Liquor Retailers Coalition	859-291-4007	Stiles, Jon	95 Riveria Dr., , Bellevue KY 41073
Smith, Kristen	502-592-5584		205 W. Third St., , Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
KY Magistrates & Commissioners Assoc., Inc.	502-223-5510	Young, Jerald C	350 Englewood Drive, , Frankfort KY 40601
Tanner, Richard L	502-223-5510		350 Englewood Dr., , Frankfort KY 40601
Young, Jerald C	502-223-5510		350 Englewood Drive, , Frankfort KY 40601
KY Malt Beverage Council, Inc.	502-352-2740	Baird, Jason A	305 Ann St., Suite 201, Frankfort KY 40601
Baird, Jason A	502-352-2987		305 Ann St., Suite 201, Frankfort KY 40601
KY Manufactured Housing Institute	502-223-0490	Whittaker, Betty C	2170 US 127 South, , Frankfort KY 40601
Hanes, Logan	502-223-0490		2170 US 127S, , Frankfort KY 40601
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Robinson, Richard L	859-750-2422		1655 Ft. Myer, #201, , Alexandria VA 22209
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Whittaker, Betty C	502-223-0490		2170 US 127 South, , Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
KY Marina Association	270-388-2532	Edwards, Michele	15616 State Route 120, , Providence KY 42450
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Medical Association	502-814-1394	Padgett, Patrick T	9300 Shelbyville Rd., Suite 850, Louisville KY 40222
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lady, Lillian	502-814-1389		9300 Shelbyville Rd., Ste. 850, Louisville KY 40222
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Meadows, Cory W	502-426-6200		9300 Shelbyville Rd., Suite 850, Louisville KY 40222
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601

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Osborne,	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Padgett, Patrīck T	502-426-6200	Aldaidas T	9300 Shelbyville Rd., Suite 850, Louisville KY 40222
KY Medical Equipment Suppliers Assn., Inc.	859-940-8536	Aldridge, Teresa L	1303 US 127 S, Ste. 402 #394, Frankfort KY 40601
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Mental Health Coalition	502-836-4222	Johnson, Ramona	8004 Lyndon Centre Way, Suite 202, Louisville KY 40222-3600
Schuster, Sheila A	502-836-4222	n	8004 Lyndon Centre Way, Suite 202, Louisville KY 40222-3600
KY Municipal Energy Agency (KYMEA)	502-242-5636	Buresh, Doug	1700 Eastpoint Pkwy., Ste. 220, Louisville KY 40225
Bell, Stephanie	502-226-5050	Duport Foring Assetts C	1105 Jonestown Lane, , Lexington KY 40517
KY Municipal Utilities Association	502-223-2063	DuPont-Ewing, Annette C	110 A East Todd Street, , Frankfort KY 40601 305 Ann St., Suite 201, Frankfort KY 40601
Baird, Jason A	502-352-2987 502-226-5050		1105 Jonestown Lane, Lexington KY 40517
Bell, Stephanie DuPont-Ewing, Annette C	502-223-2063		110A East Todd Street, Frankfort KY 40601
	502-292-2393	Clore, Danielle	
KY Nonprofit Network, Inc.		Ciore, Daniene	P.O. Box 24362, 207 East Reynolds Rd., Ste. 250, Lexington KY 40524
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601
Clore, Danielle	859-963-3203		P.O. Box 24362, 207 East Reynolds Rd., Ste. 250, Lexington KY 40524
Kidder, Sarah	512-423-1749	Mangar Dalamar	1902 Port Royal Ct., Lexington KY 40504
KY Nurses Association	502-245-2843	Manson, Delanor	305 Townpark Cir., Suite 100, Louisville KY 40243
Schuster, Sheila A	502-836-4222	Clubik Danlaski Camilla	8004 Lyndon Centre Way, Suite 202, Louisville KY 40222-3600
KY Occupational Therapy Assn.	859-338-2651	Skubik-Peplaski, Camille	158 Winston Avenue, Lexington KY 40505
Thomas-Lentz, Karen	502-607-8670	W-44- Y D	205 W. Third Street, Frankfort KY 40601
KY Oil & Gas Association	502-226-1955	Watts, James Ryan	306 W. Main St., Suite 406, Frankfort KY 40601
Watts, James Ryan	502-226-1955	Designation District	306 W. Main St., Suite 406, Frankfort KY 40601
KY Optometric Association	502-875-3516	Bevington, Dinah	P.O. Box 572, 514 Capital Ave., Frankfort KY 40602
Bevington, Dinah	502-875-3516		514 Capital Ave, Frankfort KY 40601
Brown, Sherman A	502-875-0081		113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY Organ Donor Affiliates	502-581-9511	Bergin, Julie	10160 Linn Station Rd., , Louisville KY 40223
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
KY Paint Council	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40
Rowland, Robert O	502-819-6780	5 a. a. a. a. a. a. a. a.	PO Box 631, , Frankfort KY 40601
KY Partnership for Families & Children, Inc.	502-875-1320	Cecil, Carol W	207 Holmes St., 1st Ave, Frankfort KY 40601
Cecil, Carol W	502-875-1320		KPFC, 207 Holmes Street First Floor, Frankfort KY 40601
KY Petroleum Marketers Association	859-226-4374	Clark, Brian P	2365 Harrodsburg Road, Suite A325, Lexington KY 40504
Clark, Brian P	859-226-4374		2365 Harrodsburg Road, Suite A325, Lexington KY 40504
Stumbo, Stephanie L	859-368-7740		2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
KY Pharmacists Association	502-227-2303	Glasper, Mark A	96 C. Michael Davenport Blvd., , Frankfort KY 40601
Glasper, Mark A	502-227-2303		96 C. Michael Davenport Blvd., , Frankfort KY 40601
KY Physical Therapy Association	800-482-5792	Myers, Patrick	15847 Teal Road, , Verona KY 41092
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601

Thacker, A	502-223-218)	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-218)	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Y Podiatric Medical Assn.	502-223-532	2 Underwood IV, John T	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-532	2	5932 Timber Ridge Dr., #101, , Prospect KY 40059
Y Poultry Federation	270-404-227		P. O. Box 1137, , Bowling Green KY 42102
Pryor, J. Ronald	502-558-558		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Y Power Company	606-327-260		855 Central Avenue, Suite 200, Ashland KY 41101
Brown, Sherman A	502-875-008	4 Mar. Hamberton 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-008		113 W. Main St., , Frankfort KY 40601
Elliott, Amy J	502-696-701		718 Shelby St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-008		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-008		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-008		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-008		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-008		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-008		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-008		113 W. Main Street, , Frankfort KY 40601
Y Press Association	502-223-882		101 Consumer Lane, , Frankfort KY 40601
Pack, Ashley C	304-35 7- 993		707 Virginia Street East, Suite 1300, Charleston WV 25301
Payton, Kevin W	502-223-218		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-218		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-218		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-218		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thompson, David T	502-223-882		101 Consumer Lane, Frankfort KY 40601
Wilson, Marc A	502-223-218		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Y Primary Care Association	502-227-437		P. O. Box 751, 226 W. Main Street, Frankfort KY 40602
Harvey, Prentice A	502-223-233		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Miller, Dustin S	502-226-397		229 Shelby Street, , Frankfort KY 40601
Y Professional Fire Fighters	606-922-250		P. O. Box 1594, Ashland KY 41105
Baer, II, Larry J	606-922-250		P. O. Box 1594, Ashland KY 41105
Bartley, Christopher T	606-922-250		P. O. Box 1594, Ashland KY 41105
O'Neill, Brian C	606-922-250		P. O. Box 1594, Ashland KY 41105
Y Psychiatric Medical Assn.	502-695-484		PO Box 7246, , Louisville KY 40257
Sloan, Miranda	502-695-484		2206 Ballard School Rd., , LaGrange KY 40031
Y Psychological Association, Inc.	502-523-887		Director of Prof. Affairs, 6009-C Brownsboro Park Blvd, Louisville KY 4020
Brown, Sherman A	502-875-008		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-008		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-008		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-008		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-008		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-008		113 W. Main Street, Frankfort KY 40601
Niehaus, Matt	502-875-008		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-008		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-008		113 W. Main Street, Frankfort KY 40601
Y Public Library Association	859-578-360		2171 Chamber Center Dr., , Ft. Mitchell KY 41017
Brown, Sherman A	502-875-008	t	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-008	l	113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-008		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-008	L	11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-008	Ī	113 W. Main Street, Frankfort KY 40601

Milligan.	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Public Pension Coalition	606-922-2506	Baer, Joe	3559 Floyd Street, , Ashland KY 41102
Adkins, Jerald	502-320-3837		219 Blueridge Dr., , Frankfort KY 40601
Public Retirees	502-226-0273	Totten, Larry P	428 Village Drive, , Frankfort KY 40601
Hurst, Sarah P	502-229-0731		104 Old Station Road, , Frankfort KY 40601
Public Transit Assn.	502-561-3631	Hudson, Beecher	c/o Louisville Wheels Transp., P. O. Box 35364, Louisville KY 40232-5364
Barber Jr., Oliver H	502-585-2100		802 Lily Creek Rd., Ste. 101, Louisville KY 40243
Realtors	859-263-7377	Wilson, Richard	2708 Old Rosebud Road, Suite 200, Lexington KY 40509
Brown, Sherman A	502-875-0081		113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Stevens, Louis "Steve" E	859-263-7377		2708 Old Rosebud Road, Suite 200, Lexington KY 40509
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Wilson, Richard	859-263-7377		2708 Old Rosebud Rd., Ste. 200, Lexington KY 40509
Resources Council, Inc.	502-875-2428	FitzGerald, Thomas J	P.O. Box 1070, 213 St. Clair St. Ste. 200, Frankfort KY 40602-1070
FitzGerald, Thomas J	502-875-2428	razocialo, rnomas o	P. O. Box 1070, Frankfort KY 40602-1070
Restaurant Association	502-896-0464	Roof, Stacy	133 Evergreen Road, Suite 201, Louisville KY 40243
Roof, Stacy	502-896-0464	Root, Stacy	133 Evergreen Rd Suite 201, Ky. Restaurant Assn., Louisville KY 40243
Retail Federation	502-875-1444	Griffin, Tod A	340 Democrat Dr., , Frankfort KY 40601
Dwyer, S. Gay	859-879-6838	Grinii, Tod A	143A Rumsey Circle, , Versailles KY 40383
			* 16.00
Griffin, Tod A	502-875-1444		340 Democrat Dr., Frankfort KY 40601
Rodman, Kelli M	502-608-3782		340 Democrat Dr., Frankfort KY 40601
Stiglitz, Shannon P	502-875-1444	Abassas David HTCast T	340 Democrat Drive, , Frankfort KY 40601
Retired Teachers Association	502-231-5802	Abrams, Donald "Tim" T	7505 Bardstown Road, , Louisville KY 40291-3234
Abrams, Donald "Tim" T	502-231-5802		7505 Bardstown Rd., , Louisville KY 40291
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
Right to Life Association, Inc.	502-859-5959	Montgomery, Margie C	134 Breckinridge Lane, , Louisville KY 40207
Montgomery, Margie C	502-895-5959		134 Breckinridge Lane, , Louisville KY 40207-4931
Rural Water Association	270-843-2291	Larimore, Gary W	1151 Old Porter Pike, , Bowling Green KY 42103
Larimore, Gary W	270-843-2291		1151 Old Porter Pike, , Bowling Green KY 42103
School Boards Association	502-695-4630	Kennedy, Eric	260 Democrat Drive, , Frankfort KY 40601
Kennedy, Eric	502-695-4630		260 Democrat Dr., , Frankfort KY 40601
Science and Technology Corporation	859 233 3502	Samuel, Jr, Frank T	P. O. Box 1049, 200 W. Vine St., Suite 420, Lexington KY 40588
Ditto II, Dale S	859-233-3502		200 W. Vine St., Ste. 420, Lexington KY 40507
Henderson, Darrall	859-252-6019		200 W. Vine St., Ste. 420, Lexington KY 40507
Johnson, Richard A	859-255-3310		200 W. Vine Street, Suite 420, Lexington KY 40507
Labreveux, Maria E	859-246-3251		200 W. Vine Street Suite 420, P. O. Box 1049, Lexington KY 40588-1049
Mires, Anthony	859-233-3502		200 W. Vine Street, Suite 420, Lexington KY 40507
Pelphrey, Steven L	859-233-3502		200 W. Vine St., , Lexington KY 40507
Samuel, Jr, Frank T	859-246-3236		200 W. Vine St, Ste. 420, , Lexington KY 40507

Stiglitz, f)n P	502-875-1444		340 Democrat Drive, , Frankfort KY 40601
KY Self Insurers Association	502-223-5322	Underwood IV, John 1	5932 Timber Ridge Drive, #101, Prospect KY 40059
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Senior Living Association, Inc.	502-938-5102	White, Robert W	133 Evergreen Road, Suite 212, Louisville KY 40243
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
White, Robert W	502-938-5102		133 Evergreen Road, Suite 212, Louisville KY 40243
KY Sheriffs Assn.	502-552-3030	Burch, William H	P.O. Box 57, , Gilbertsville KY 40244
Burch, William H	502-552-3030		3318 Audubon Ridge Drive, , Louisville KY 40213
KY Smoke Free Assn.	502-836-6151	Florence, Tony	2612 Chamberlian Lane, , Louisville KY 40245
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
KY Society of Addiction Medicine	502-644-8315	Sloan, Miranda	P. O. Box 6082, , Louisville KY 40206
Sloan, Miranda	502-695-4843		2206 Ballard School Rd., , LaGrange KY 40031
KY Society of Anesthesiologists	859-323-7246	Harned, Dr. Michael	2400 Greatstone Point, , Lexington KY 40504
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Society of Certified Public Accountants	502-266-5272	Zibart, Darlene	1735 Alliant Avenue, , Louisville KY 40220
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Sanders, Richie	502-223-8967		225 Capital Ave., , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Zibart, Darlene	502-266-5272		1735 Alliant Avenue, , Louisville KY 40299
KY Society of Professional Engineers	502-695-5680	Fisher, Marcie	160 Democrat Drive, , Frankfort KY 40601
Biagi, Mike	502-593-4575		PO Box 70331, Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, Louisville KY 40270
KY Solar Industries Assn, LLC	877-312-7456	Partymiller, Matt	1038 Brentwood Ct., Ste. B, , Lexington KY 40511
Baird, Jason A	502-352-2987	2 D SOULD	305 Ann St., Suite 201, Frankfort KY 40601
KY Speech-Language-Hearing Association	800-837-2446	Yenerall, Diane	838 E. High Street, Suite 263, Lexington KY 40502
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
KY Staffing Association	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
KY State Acupuncture Association	502-330-4233	Rowland, Robert O	306 W. Main Street, Suite 609, Frankfort KY 40601
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780	~	Impact Government Relation Inc, 1006 Westgate Place, Louisville KY
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
KY State AFL-CIO	502-696-9002	Londrigan, William J	140 Kings Daughters Drive, Suite 100-200, Frankfort KY 40601
Londrigan, William J	502-696-9002		140 Kings Daughters Drive, Suite 100-200, Frankfort KY 40601
Wiggins, Jeff	502-696-9002		140 Kings Daughter Dr., Ste. 100-200, Frankfort KY 40601
KY State Beekeepers Association	502-227-7543	Fowler, Jr, George E	624 Blade Ave, , Frankfort KY 40601
Fowler, Jr, George E	502-227-7543	-	624 Blade Ave, , Frankfort KY 40601
KY State Building & Const. Trades Council	502-696-9566	Finn, William G	51 Sterling Road, , Louisville KY 40220
Finn, William G	502-696-9566		51 Sterling Road, , Louisville KY 40220
KY State Lodge Frat. Order of Police, Inc.	502-552-3030	Chenault, John	6204 Price Lane, , Louisville KY 40229
Chenault, John	502-968-0117	-	6204 Price Ln., , Louisville KY 40229

Fey Land	502-544-8669		6204 Price Lane Rd., , Louisville KY 40229
Fox, José Graudick, Skylar	502-968-0117		6204 Price Lane Road, , Louisville KY 40229
Jilek, Nicolai	502-968-0117		6204 Price Lane, , Louisville KY 40229
KY State Police Professional Assn. KSPPA	502-875-1625	Mullins, Tim	633 Chamberlin Ave., , Frankfort KY 40601
Kelly, Ginger H	502-229-5275	withing, 1 in	1878 Graefenburg Rd., , Lawrenceburg KY 40342
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601
KY State University	502-597-5054	Johnson, Rachelle	400 East Main St., Hume Hall, Frankfort KY 40601
Brown, Sherman A	502-875-0081	Johnson, Rachene	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
KY State University Foundation, Inc.	502-875-0187	Lyons, Donald	PO Box 4210, , Frankfort KY 40604-4210
Lambert, Charles	502-875-1176	•	MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
KY Telecom Association	502-699-2206	Campbell, Tyler	305 Ann St., Suite 202, Frankfort KY 40601
Campbell, Tyler	859-223-9001		851 Corporate Dr, Suite 105, Lexington KY 40503
KY Tennessee Water Environment Assn.	502-489-8484	Pavoni, Joe	C/O GRW, 9710 Bunsen Pkwy, Loisville KY 40299
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
KY Thoroughbred Assn.	859-381-1414	Morris, Chauncey O	4079 Iron Works Parkway, , Lexington KY 40511-8483
Morris, Chauncey O	859-381-1414		4079 Iron Works Parkway, , Lexington KY 40511
Switzer, David L	859-268-1883		191 Louisiana Ave., , Lexington KY 40502
KY Transportation Employees Association	502-331-3119	Rowland, Robert O	P.O. Box 4214, , Frankfort KY 40602
Brotzge, Andrew G	502-819-9005		1006 Westgate Place, , Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Rowland, Robert O	502-819-6780		PO Box 631, , Frankfort KY 40601
KY Travel Industry Association	502-223-8687	Phillips, Hank	931 East Main Street, , Frankfort KY 40601
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502 - 875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
KY Trucking Assn.	502-227-0848	Zink, Melissa	512 Capital Ave., , Frankfort KY 40601
O'Daniel Jr., H. Edward	859-336-9611		110 West Main Street, , Springfield KY 40069
KY United Methodist Homes for Children & Youth	859-523-4683	Coy, Randy	1115 Ash Grove Rd., , Nicholasville KY 40356
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749	Wantalkash B. L.	1902 Port Royal Ct., , Lexington KY 40504
KY Veterinary Medical Assn.	502-226-5862	Homelback, Debra	108 Consumer Lane, P. O. Box 4067, Frankfort KY 40604-4067
Taylor, Judy	859-321-4272	Cabandan Chair	2257 Terrace Woods Park, , Lexington KY 40513
KY Voices for Health	502-882-0584	Schuster, Sheila A	1640 Lyndon Farm Court, Suite 108, Louisville KY 40223
Beauregard, Emily	502-882-0584	Mantanana David	1640 Lyndon Farm Court, Suite 108, Louisville KY 40223
KY West Virginia State Alliance of YMCA's	859-254-9622 502-558-2030	Martorano, David	381 W. Loudon Ave, , Lexington KY 40508
Brown III, John Y	302-330-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601

Owens, E th M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
KY Wholesale Distributors Assn.	502-243-9280	Morris, Ronald C	7014 Hughes Ave., , Crestwood KY 40014
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, Louisville KY 40270
Morris, Ronald C	502-243-9280		7014 Hughes Ave., , Crestwood KY 40014
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
KY Wired Operations Co., LLC	859-303-9904	Morphonios, Robert	101 Helm St., #150, , Lexington KY 40505
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
KY Workers' Association (KWA)	502-876-5557	Wolfinbarger, Stephanie	640 S. 4th St., Suite 400, Louisville KY 40202
Litafik, Thomas J	606-794-8959		365 S. Upper St. #3, , Lexington KY 40508
KY Youth Advocates, Inc.	502-895-8167	Grieshop, Tara	10200 Linn Station Road, Suite 310, Louisville KY 40223
Brooks, Terry	502-895-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
Downs, Cortney	502-895-8167		10200 Linn Station Rd., , Louisville KY 40223
Grieshop, Tara	502-895-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Kalra, Mahak	502-859-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Kelly, Harper	502-895-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Moody, Shannon	502-895-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Tennen, Patricia B	502-895-8167		10200 Linn Station Rd., Ste. 310, Louisville KY 40223
Lake Cumberland MH/MR Board, Inc.	606-679-4782	Loy, Beverly S	130 Southern School Rd., , Somerset KY 42501
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Lancaster Bingo Company	800-866-5001	Smith, John	200 Quarry Rd., , Lancaster OH 43130
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Larue County	270-358-4400	Turner, Tommy	209 W. High Street, , Hodgenville KY 42748
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
LeadingAge Kentucky	502-992-4380	Veno, Timothy L	2501 Nelson Miller Parkway, , Louisville KY 40223
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
Veno, Timothy L	502-992-4380		2501 Nelson Miller Pkwy., , Louisville KY 40223
Legal Aid of the Bluegrass	859-957-0186	Crabtree, Joshua B	104 E. Seventh Street, Covington KY 41011
Bentley, Jason R	502-875-1176	•	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
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Crabtree, a B	859-957-0186		104 E. Seventh Street, , Covington KY 41011
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Legalize KY Now, Inc.	502-314-8068	Ward, Michael D	1905 Deer Park Ave., P. O. Box 5742, Louisville KY 40255
Denton, Julie	502-376-7402	War a, Michael 2	2303 Braided Tail Court, , Louisville KY 40245
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
Leitchfield Grayson Co. Industrial Auth.	270-302-2202	Cooper, Dudley	425 S. Main St., , Leitchfield KY 42754
Sanders, Richie	502-223-8967	cooper, Dualey	225 Capital Ave., Frankfort KY 40601
Lexington Medical Society	859-278-0569	Hickey, Christopher M	2628 Wilhite Court, Suite 201, Lexington KY 40503
Hickey, Christopher M	859-278-0569	Trickey, Caristopher W	2628 Wilhite Court, Suite 201, Lexington KY 40503
Lexington Public Library Foundation	859-231-5557	Donworth, Anne	140 E. Main St., Lexington KY 40507
Babbage, Julie	859-335-5869	2011101111,111110	350 E. Short St, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Hogan, Lauren	859-335-5869		350 E. Short St, Ste. 212, Lexington KY 40507
Lexington-Fayette Urban County Government	859-258-3100	Atkins, Kevin	Office of the Mayor, 200 East Main Street, Lexington KY 40507
Taylor, Judy	859-321-4272	,	2257 Terrace Woods Park, , Lexington KY 40513
Lexmark International, Inc.	859-232-2303	Brewer, Patrick T	740 W. New Circle Rd., , Lexington KY 40550
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Brewer, Patrick T	859-232-2303		740 New Circle Road, LexMark International, Inc., Lexington KY 40550
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
May, Bert W	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
LG&E and KU Energy LLC	859-367-1271	Freibert, Jr., David J	220 West Main Street, P. O. Box 32010, Louisville KY 40202
Abell, Kelley	502-216-9990	TOOL JOSEPH CONTRACTOR OF STATE OF STAT	P. O. Box 70331, Louisville KY 40270
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Clark, Caroline P	502-627-2988		220 W. Main Street, , Louisville KY 40202
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Freibert, Jr., David J	859-367-1271		One Quality Street, , Lexington KY 40507
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
LHC Group, Inc.	502-891-1000	Myers, Keith	9510 Ormsby Station Road, Suite 300, Louisville KY 40223
Fleming, Jr., Denis	502-891-1000		9510 Ormsby Station Rd., Suite 300, Louisville KY 40223
Liberty Mutual Insurance Group	617-357-9500	Lynch, William	175 Berkeley Street 07E, , Boston MA 02116
O'Daniel Jr., H. Edward	859-336-9611		110 West Main Street, , Springfield KY 40069
LifePoint Health	615-920-7676	Critchlow, David	330 Steven Springs Way, , Brentwood TN 37027
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Lime	503-272-1685	Sadle, Sam	85 2nd St., , San Francisco CA 94105
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
Logan Aluminum	502-560-4208	Eifler, Timothy J	PO Box 3000, , Russellville KY 42276
Williams, Ellen	502-330-2658	2	P.O. Box 4618, , Frankfort KY 40602
Louisville & Jefferson County Metro Government	502-574-2003	Massey, Sara M	527 W. Jefferson Street, Suite 400, Louisville KY 40202
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601

Cantor, P P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
Massey, Sara M	502-574-2023		527 W. Jefferson Street, Suite 400, Louisville KY 40202
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Louisville & Jefferson County Metropolitan Sewer	502-540-6274	Sydnor, PE, Wesley	700 West Liberty Street, , Louisville KY 40203-1911
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Sydnor, PE, Wesley	502-540-6274		700 W. Liberty St., , Louisville KY 40203
Louisville Apartment Assn.	502-426-6140	Carey, JD	7410 New LaGrange Rd., Suite 200, Louisville KY 40222
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Carey, JD	502-426-6140		7410 New LaGrange Rd., Suite 200, Louisville KY 40222
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Louisville Convention & Visitor's Bureau	502-584-2121	Williams, Karen	401 W. Main Street, Suite 2300, Louisville KY 40202-4223
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Louisville Free Public Library Foundation, Inc.	502-574-1679	Gordon, Chandra	301 York Street, , Louisville KY 40203
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, Frankfort KY 40601
Louisville Regional Airport Authority	502-363-8501	Mann, Dan	P. O. Box 9129, Louisville Int. Airport, Louisville KY 40209-0129
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Harvey, Prentice A Helton, Mike D	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
MEITON WILKELL	502 224 2075		Consumment Strategies 220 Shall- Strate Frank Co. 1777 40504
Miller, Dustin S	502-226-3975 502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601 229 Shelby Street, , Frankfort KY 40601

Shea, Mi	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Louisville Soccer Alliance, Inc.	502-458-1177	Hayes, Michael	P.O. Box 34113, 1503 Sylvan Wynde, Louisville KY 40232
Barber Jr., Oliver H	502-585-2100		802 Lily Creek Rd., Ste. 101, Louisville KY 40243
Louisville Theatrical Assn.	502-569-3066	Broecker, Leslie	620 W. Main St., , Louisville KY 40202
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Louisville Water Company	502-569-3675	Bruce, PE, Spencer W	550 South Third Street, , Louisville KY 40202
Guenthner, J. Vincent	502-569-3600		Louisville Water Co., 11811 Robindale Road, Louisville KY 40243
Lyft, Inc.	832-814-2136	Mansur, Sara	185 Berry St., Ste. 5000, San Francisco CA 94107
Patton, Matthew R	517-763-3624		WeWork Kinzie, 17th Floor, 20 W. Kinzie, Chicago IL 60654
MAGNA Pharmaceuticals	502-254-5552	Lesser, Warren	10801 Electron Dr., , Louisville KY 40299
Abell, Kelley	502-216-9990		P. O. Box 70331, Louisville KY 40270
Biagi, Mike	502-593-4575		PO Box 70331, Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, Louisville KY 40270
Magna Services of America, Inc.	248-631-5330	Rice, Misti	750 Tower Dr., Mail Code 3400, Troy MI 48098
Battista, Dex	248-631-5362	·	750 Tower Dr., Mail Code 3400, Troy MI 48098
MAGO Construction	502-348-3953	Mathis, Mark	1551 E. John Rowan Blvd., PO Box 669, Bardstown KY 40004
Marathon Petroleum Company LP	419-672-4873	Osting, Erin L	539 South Main Street, , Findlay OH 45840
Osting, Erin L	502-892-2032		1007 Twilight Trl., , Frankfort KY 40601
Shasky, Kelly S	502-395-1661		205A Capitol Avenue, , Frankfort KY 40601
Stevens, Roy E	502-227-8043		1095 Bittersweet Ln., , Frankfort KY 40601
March of Dimes	859-402-1706	Thompson, Katrina	207 E. Reynolds Road, Suite 110, Lexington KY 40517
Marijuana Policy Project	202-905-2025	Simon, Matt	2370 Champlain St. NW, Ste. 12, Washington DC 20009
Simon, Matt	202-905-2025		2370 Champlain St. NW, Ste. 12, Washington DC 20009
Marsy's Law for All	702-766-9097	Kaye, Jeff	9500 W. Flamingo Road, Suite 202, Las Vegas NV 89147
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Maryhurst	502-245-1576	Lambeth, Judy	1015 Dorsey Lane, , Louisville KY 40223
Baldwin, Bart	502-320-1143		420 Capital Ave., , Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
Masonic Communities KY	502-259-9627	Judy, J. Scott	3761 Johnson Hall Dr., , Masonic Home KY 40041
Ammon, Lisa	502-753-8843		3761 Johnson Hall Dr., , Masonic Home KY 40041
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
MasterCard International Inc.	202-414-8011	Dwyer, Patrick	1401 Eye Street NW, Suite 210, Washington DC 20005-6552
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601

Theolean	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, A			The State of the Control of the Cont
Wilson, Marc A	502-223-2180	Cases David	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Maximus	703-251-8500	Casey, David	1891 Metro Center Drive, , Reston VA 20190
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
May Commercial Group	859-263-2424	May, C. J.	1800 Star Shoot Parkway, Suite 170/165, Lexington KY 40509
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
MCG Health, LLC	206-389-5300	Baker-Miller, Donna	901 Fifth Ave., Ste. 2000, Seatle WA 98164
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
McLane Company, Inc.	254-771-7954	Garcia, Neftali J	4747 McLane Parkway, , Temple TX 76504
Nelson, Brian L	270-779-0991		119 W. Todd Street, , Frankfort KY 40601
Nelson, Kim L	270-871-6290		119 W. Todd Street, 270-825-9022, Frankfort KY 40601
Med Center Health	270-745-1500	Sowell, Ron	800 Park St., , Bowling Green KY 42101
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Merck Sharp & Dohme Corp. & Its Affiliates	415-389-6800	Kaune, Jason D	Nielsen Merksamer, et. al., 2350 Kerner Blvd. Suite 250, San Rafael CA 94901
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Sanders, Marlene L	415-389-6800		c/o Nielsen Merksamer et al, 2350 Kerner Blvd. Suite 250, San Rafael CA 94901
Merscorp Holdings, Inc.	703-684-1110	Hartgen, Jeffery A	c/o Multistate Associates Inc., 515 King Street Suite 300, Alexandria VA 22314
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Messer Construction	502-261-9775	Rasinen, Erin	11001 Plantside Dr., , Louisville KY 40299
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Metro United Way	502-292-6126	Johnson, Adria	334 E. Broadway St., , Louisville KY 40202
Simpson, Mandy	502-292-6169	001113011,720111	334 E. Broadway St., , Louisville KY 40202
Michter's Distillery, LLC	502-774-2300	Magliocco, Joseph	2351 New Millennium Drive, , Louisville KY 40216
Brown, Sherman A	502-875-0081	Magnocco, Joseph	113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main Street, Frankfort KY 40601
	502-875-0081		113 W. Main Street, Frankfort KY 40601
Geoghegan, J. Ronald			Security to a security to the security of the
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601

Milligan,	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Microsoft Corporation	202-263-5957	Gavin, Anne	1401 Eye Street, NW, Suite 500, Washington KY 20005
Hall, Katherine W	502-607-8670		205 W. Third Street, Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
MillerCoors LLC	414-931-3129	Swetkofske, Matthew	3939 West Highland Blvd., , Milwaukee WI 53208
Allen, James "Jitter" W	502-699-2163		1303 U. S. 127 South, Suite 402, Frankfort KY 40601
Magee, Linda T	502-227-9059	50%	1303 US 127 S, Suite 402, Frankfort KY 40601
Molina Healthcare, Inc.	683-802-0373	Smyth, Cameron	200 Oceangate, Ste. 100, Long Beach CA 90802
Crigler, Julia B	502-548-7500	-	10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
McGivern, Kelly	614-400-9884		3257 Northampton Drive, , Hillard OH 43026
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Monarch Private Capital	404-520-8826	Carson, John	3414 Peachtree Rd., Ste. 825, Atlanta GA 30326
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Morehead State University	606-783-2053	Patrick, Beth	202 Howell McDowell Admin. Bld, , Morehead KY 40351
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Mortenson Dental Partners	502-254-6067	Hahn, Mark	11801 Brinley Ave, , Louisville KY 40243
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
Motion Picture Assn. of America	202-378-9140	Stevenson, Vans	1600 Eye Street, NW,, Washington DC 20006
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Motorola Solutions	708-785-8298	Newman, Paul	500 West Monroe, 43rd Floor, Chicago IL 60661
Ackerman, Kenneth	502-494-6682		203 Lanark Place, , Louisville KY 40243
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Burton, Scott	312-825-5307		500 W. Monroe, 43rd. Floor, Chicago IL 60661
Galvin, Frank	219-742-2243		1505 Lafeyette St., , Valparaiso IN 46383
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Rummel, Robert	440-610-9421		2934 Riviera Ln., , Westlake OH 44145
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Mountain Assn. for Community Economic Devel.	859-986-2373	Hille, Peter J	433 Chestnut Street, , Berea KY 40403
Bailey, Jason M	859-986-2373		433 Chestnut Street, Mountain Assn. for Comm. Devel, Berea KY 40403
Baumann, Anna E	859-671-0236		433 Chestnut Street, , Berea KY 40403
Bills, Josh	859-986-2373		433 Chestnut St., , Berea KY 40403
Hille, Peter J	859-671-0230		433 Chestnut Street, , Berea KY 40403
Pugel, Dustin	859-671-0213		433 Chestnut Street, , Berea KY 40403
Ray, Carolyn T	859-986-2373		433 Chestnut Street, , Berea KY 40403
Spalding, Ashley	859-671-0216		433 Chestnut Street, , Berea KY 40403
Thomas, Pamela J	859-986-2373		433 Chestnut St,, Berea KY 40403

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Whaley,	859-986-2373		433 Chestnut St., , Berea KY 40403
Zeller, Sarair	859 - 986-2373		433 Chestnut Street, , Berea KY 40403
Mountain Enterprises, Inc.	859-299-7001	Annis, Phillip C	P. O. Box 13130, , Lexington KY 40583-3130
Allen, James "Jitter" W	502-699-2163		1303 U. S. 127 South, Suite 402, Frankfort KY 40601
Magee, Linda T	502-227-9059		1303 US 127 S, Suite 402, Frankfort KY 40601
furray State University	270-809-3834	Miller, Robert	100 Pogue Library, , Murray KY 42071
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Iylan, Inc.	202-507-5318	Chiles, Colin	660 North Capitol Street NW, Suite 600, Washington DC 20001
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
ational Alliance for Public Charter Schools	505-670-6795	Grover, Lisa S	1101 15th Street, NW, Suite 1010, Washington DC 20005
Adams, Joel A	202-670-6795		1101 15th St, NW, Ste. 1010, Washington DC 20005
Grover, Lisa S	202-289-2700		1101 15th St, NW, Ste. 1010, Washington DC 20005
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
tional Alliance on Mental Illness KY	606-677-4066	Cunningham, Melony J	2441 S. HWY. #27, , Somerset KY 42501
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
ational Assn. for Gun Rights	877-405-4570	Flugaur, Ryan	2300 W. Eisenhower Blvd., , Loveland CO 80537
Boudreau, Brenden	970-460-9037	. , ,	2300 W. Eisenhower Blvd., , Loveland CO 80537
Flugaur, Ryan	877-405-4570		2300 W. Eisenhower Blvd., , Loveland CO 80537
Yates, Aaron	859-338-0483		1052 Ramblewood Way, , Lexington KY 40509
tional Assn. of Mutual Insurance Co.(NAMIC)	317-876-4266	Harrison, Julie	3601 Vincennes Rd., , Indianapolis IN 46258
Kirkner, Andrew	317-875-5250		3601 Vincennes Road, , Indianapolis IN 46258
tional Community Pharmacists Assn.	703-600-1186	LaViolette, Karry	100 Daingerfield Rd., , Alexandria VA 22314
Magner, Matthew	703-600-1186	Enviolette, Karry	100 Daingerfield Rd., , Alexandria VA 22314
tional Council of State Boards of Nursing	312-525-3702	Livanos, Nicole	111 E. Wacker Dr., Ste. 2900, Chicago IL 60601-4277
Taylor, Judy	859-321-4272	Elvanos, ricore	2257 Terrace Woods Park, , Lexington KY 40513
Williams, Ellen	502-330-2658		P.O. Box 4618, , Frankfort KY 40602
tional Council on Compensation Insurance	561-945-4517	Preston, Clarissa A	901 Peninsula Corporate Circle, , Boca Raton FL 33487
O'Daniel Jr., H. Edward	859-336-9611	Treston, Charlessa A	110 West Main Street, , Springfield KY 40069
ational Federation of Independent Business	615-872-5326	Salvar Carry M	53 Century Blvd., Suite 250, Nashville TN 37214
15 Sept. 17		Selvy, Gary M	
Underwood IV, John T	502-223-5322	DeVentor Mores	5932 Timber Ridge Dr., #101, , Prospect KY 40059
tional Heritage Academies	877-223-6402	DeKraker, Megan	3850 Broadmoor Ave., SE, Ste. 201, Grand Rapids MI 49512
Grayson, Trey	859-817-5930 850-244-3262		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225	Emanualism Alberto	250 W. Main Street, Suite 2800, Lexington KY 40507
tional Multiple Sclerosis Society	202-408-1500	Emanuelson, Abby C	107 Sir Walker Ln., , Cary NC 27519
Emanuelson, Abby C	303-698-8775	P.1. 7	107 Sir Walker Ln., , Cary NC 27519
tional Rifle Assn. of America	703-267-1250	Biles, Lacey	c/o Office of General Counsel, 11250 Waples Mill Road, Fairfax VA 22030
Commerford, John	703-267-1250		c/o Office General Counsel, 11250 Waples Mill Rd., Fairfax VA 22030
Thomm II, Arthur	703-267-1250		11250 Waples Mill Rd., , Fairfax VA 22030
tional Taxpayers Union (NTU)	703-683-5700	Sepp, Pete	122 C St., NW, Ste. 650, Washington DC 20001
Sepp, Pete	703-683-5700		122 C St., NW, Ste. 650, Washington DC 20001
ational Tobacco Company	502-778-4421	Cushman, Brittani	5201 Interchange Way, , Louisville KY 40229
Sanders, Richie	502-223-8967		225 Capital Ave., , Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
ational Waste & Recycling Assn.	800-679-6269	Macenas, Peggy	115 East Ogden Ave., Suite 117-313, Naperville IL 60563
Breeding, Carl W	502-352-4611		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Cress, Jr., Lloyd "Rusty"	502-352-4612		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601

May, Be	502-352-4613		314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601
Nationwide Insurance	614-249-2070	McCutchan, Lindsey	One Nationwide Plaza 1-32-404, , Columbus OH 43215
Behrens, Mark	202-639-5621	_	1155 F St., NW, Ste. 200, Shook, Hardy & Bacon LLP, Washington DC 20004
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
McCutchan, Lindsey	614-249-2070		One Nationwide Plaza 1-32-404, , Columbus OH 43215
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Necco	606-571-4213	Priddy, Pamela	1404 North Race St., Suite 302, Cincinnati OH 45202
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
NeuroRestorative	502-493-1609	Stahl, Jane	4511 Bardstown Rd., , Louisville KY 40218
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
New Meridian Corp.	512-809-9308	Rountree, Cory	9390 Research Blvd., Ste. 310, Austin TX 78759
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
NextEra Energy Resources, LLC	561-304-6751	Applebaum, David B	700 Universe Blvd., , Juno Beach FL 33408
Stumbo, Stephanie L	859-368-7740		2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
NFL - National Football League	703-684-1110	Hartgen, Jeffrey A	515 King Street, Suite 300, Alexandria VA 22314
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Yates, Marvin	703-684-1110		515 King St., Ste. 300, Alexandria VA 22314
Norfolk Southern Corporation	317-472-2844	Sublette, Derek	101 W. Ohio Street, Suite 2000, Indianapolis IN 46204
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Northern KY Chamber of Commerce	859-578-8800	Cooper, Brent	300 Buttermilk Pk. Suite 330, P. O. Box 17416, Ft. Mitchell KY 41017-0416
Babbage, Robert A	859-335-5869	•	350 E. Short Street, Suite 212, Lexington KY 40507
Baldwin, Kristin M	859-578-6386		300 Buttermilk Pike, Suite 330, Ft. Mitchell KY 41017
Cooper, Brent	859-578-8800		300 Buttermilk Pike, Suite300, Ft. Mitchell KY 41017
Norton Healthcare, Inc.	502-420-2229	Chapman, Laura N	4967 US Highway 42, Suite 100, Louisville KY 40222
Abell, Kelley	502-216-9990	•	P. O. Box 70331, Louisville KY 40270
Delaney-Ellis, Kem	502-420-2227		4967 U.S. Highway 42, Ste. 100, Louisville KY 40222
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059
Notarize	310-480-6538	Chodos, Michael	745 Boylston St., Ste. 600, Boston MA 02116
Novartis Services, Inc.	202-662-4361	Casserly, Daniel	701 Pennsylvania Ave. N.W., Suite 700, Washington DC 20004

Hohenwa	717-514-9480		74 Old English Ln.,, Elizabethtown PA 17022
Novo Nordisk, Inc.	609-786-4454	Kelly, Brian	800 Scudders Mill Road, , Plainsboro NJ 08536
Babbage, Robert A	859-335-5869	• ·	350 E. Short Street, Suite 212, Lexington KY 40507
Nucor Corp.	704-353-9074	Eaton, Chad	1915 Rexford Rd., , Charlotte NC 28211
Bentley, Jason R	502-875-1176	i-1	MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Objectiv Growth, LLC	954-649-7205	Orthwein, Clark	50 Lock Rd., , Deerfield Beach FL 33442
Underwood, Jason P	502-376-3100	,	3301 Trinity Road, , Louisville KY 40206
Ohio Valley ISRI	502-261-2021	Miller, Jeff	11209 Electron Dr., , Louisville KY 40299
Babbage, Robert A	859-335-5869	,	350 E. Short Street, Suite 212, Lexington KY 40507
Oldcastle Materials, Inc.	512-861-7100	Lindsey, Ryan	11714 Wilson Parke Ave., Ste. 155, Austin TX 78726
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
May, III, William H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY 40507
Operation UNITE	606-330-1400	Handy, Tom	350 Cap Dr., , London KY 40744
Brown, Sherman A	502-875-0081	,	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Opportunity Solutions Project	850-792-4704	Brown, Andrew	75 N. Woodward Ave. #80038, , Tallahassee FL 32313
Brown, Sherman A	502-875-0081	contract designed to Proceedings and Commences.	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Organization for International Investment	202-659-1903	Hoffman, Evan	1225 19th St., NW, Ste. 501, Washington DC 20036
Hoffman, Evan	202-659-1903	*	1225 19th St, NW, Ste. 501, Washington DC 20036
Our Lady of Bellefonte Hospital	606-833-4002	Halter, Kevin	St. Christopher Drive, , Ashland KY 41101
Hinkle, Lisa E	502-875-1176		MML&K, St. National Bank Bldg., 305 Ann Street, Suite 308, Frankfort KY 40601
Outdoor Advertising Assoc. of KY	859-255-5592	Fahey, Tom	2437 Fortune Drive, Suite 125, Lexington KY 40509
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A			
	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180 502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601

D	502 075 0001		112 W Main Change Frankfort VV 40401
Brown, S n A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jetrery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081	7.1 O() 1 M	113 W. Main Street, Frankfort KY 40601
Owensboro Health	270-417-4823	Johnson, Stephen M	1201 Pleasant Valley Rd., P. O. Box 20007, Owensboro KY 42304
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670	Eiffen Timesher I	205 W. Third Street, , Frankfort KY 40601
Owl's Head Alloys	502-560-4208	Eifler, Timothy J	187 Mitch McConnell Way, , Bowling Green KY 42101
Williams, Ellen	502-330-2658	C	P.O. Box 4618, Frankfort KY 40602
Paducah & Louisville Railway, Inc.	270-444-4430	Garrett, Thomas	200 Clark Street, , Paducah KY 42003
Dwyer, S. Gay	859-879-6838	Wilson Conduc	143A Rumsey Circle, , Versailles KY 40383
Paducah Area Chamber of Commerce	270-443-1746	Wilson, Sandra	P. O. Box 810, 300 S. 3rd. St., Paducah KY 42003
Cooper, John P	502-223-8967	Manakilandi MD Yammiak	225 Capitol Avenue, , Frankfort KY 40601
Pain Management Centers of America	502-554-8373	Manchikanti, MD, Laxmaiah	2831 Lone Oak Rd., , Paducah KY 42003
Glisson, Vickie Y	502-645-8256	Martin Chan	805 Oxmoor Woods Pkwy., , Louisville KY 40222
Partnership to Protect Patient Health(PPPH)	202-499-4114	Martin, Chase	1275 Pennsylvania Ave., Ste. 1100A, Washington DC 20004
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Flowers, Derek	515-229-0096		1275 Pennsylvania Ave., Ste. 1100A, Washington DC 20004
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081	Down in Wills C	113 W. Main Street, , Frankfort KY 40601
Passport Foundation	502-212-6802	Deonarine, Keisha S	5100 Commerce Crossings Drive, , Louisville KY 40229
Deonarine, Keisha S	502-212-6802	Constant Yest	5100 Commerce Crossings Drive, , Louisville KY 40229
Pegasus Institute	774-392-2105	Crawford, Josh	235 S. 5th Street, , Louisville KY 40202
Crigler, Julia B	502-548-7500	D 187. 1 1897	10010 Covered Bridge Road, , Prospect KY 40059
People Advocating Recovery (PAR)	502-552-8573	Barry, Michael W	1425 Story Avenue, , Louisville KY 40206
Barry, Michael W	502-552-8573	.	1425 Story Avenue, , Louisville KY 40206
Pet Food Institute	202-791-9440	Basu, Ab	1020 19th St., NW, , Washington DC 20036
Pryor, J. Ronald	502-558-5586		Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
Pfizer Inc.	415-903-2800	Skelton, Jennie U	28 Liberty Ship Way, Suite 2815, Sausalito CA 94965
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Orr, Kevin	415-903-2800		28 Liberty Ship Way, Suite 2815, Sausalito CA 94965

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Taylor, R M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Auny	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Williams, Molly	415-903-2800		28 Liberty Ship Way, Ste. 2815, Sausalito CA 94965
Pharmaceutical Care Management Assn. (PCMA)	202-207-3619	Rowley, Lauren	325 7th St. NW, 9th Floor, Washington DC 20004
Kelly, Ginger H	502-229-5275	-	1878 Graefenburg Rd., , Lawrenceburg KY 40342
Kelly, Steve	502-750-1552		633 Chamberlin Ave., , Frankfort KY 40601
Shrader, Melodie D	202-756-5741		325 7th St. NW, 9th Floor, Washington DC 20004
Pharmaceutical Research & Manuf. of America	202-835-3547	McKay, Kenneth	950 F Street, NW, Suite 300, Washington DC 20004
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Moorhead, Kristina	317-295-2964		1402 N. Hawthorne Ln., , Indianapolis IN 46219
Pinnacle Treatment Centers KY-I, LLC	859-613-3722	Broce, Holly	105 E. Side Dr., , Georgetown KY 40324
Broce, Holly	859-613-3722		105 East Side Dr., , Georgetown KY 40324
Case, Todd	859-300-1238		105 E. Side Dr., Georgetown KY 40324
Cull, Marie Alagia	502-226-4157		210 Washington St., P. O. Box 1515, Frankfort KY 40602-1515
Planned Parenthood Advocates of IN & KY	317-637-4343	Gillespie, Christie	200 S. Meridian Street, Suite 400, Indianapolis IN 46225
Hall, Sara	502-400-2316		842 S. 7th St., , Louisville KY 40203
Wieder, Tamarra	502-400-2310		842 S. 7th St., , Louisville KY 40203
Plantmix Asphalt Industry of KY, Inc.	502-223-3415	Wood, Brian K	119 W. Broadway, P.O.Box 286, Frankfort KY 40602
Brown, Sherman A	502-875-0081	,	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081	F-	113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Gibbs, Erin P	502-223-3415		P.O. Box 286, 119 W. Broadway, Frankfort KY 40602
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Wood, Brian K	502-223-3415		119 West Broadway, P. O. Box 286, Frankfort KY 40602
PLS Financial Services	312-907-6495	Ritchie, Jill	One South Wacker Dr, 36th Floor, Chicago IL 60606
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Roberts, Shanna	859-244-3262		250 W. Main St., Ste. 2800, Lexington KY 40507
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Poe Companies, LLC	502-292-6800	Poe, Steve	1250 River Road, , Louisville KY 40206
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Pomeroy IT	859-466-4092	Kiser, Brett	1020 Petersburg Rd., , Hebron KY 41048
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Powerhouse Gaming	804-404-6821	Freels, Nathan	16029 Continental Blvd., Colonial Heights VA 23834
Brown III, John Y	502-558-2030	42	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Dizabeth H	302-227-3103		200 D Suprim 1110., , I failkfort fe i 10001

		and the second		271
Owens, L	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601)
Premier Integrity solutions	270-866-3144	Ragle, Angela	7 Jamestown St, , Russell Springs KY 42642	
Coker, Greg	502-223-8967		225 Capital Ave., Capital Link Consultants, Frankfort KY 40601	
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601	
Prevent Child Abuse Kentucky	859-225-8879	Seyfred, Jill E	801 Corporate Drive, Suite 120, Lexington KY 40503	
Hicks, Ally	502-223-2180		302 Shelby St., , Frankfort KY 40601	
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601	
Seyfred, Jill E	859-225-8879		801 Corporate Drive, Suite 120, Lexington KY 40503	
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601	
Prichard Committee for Academic Excellence	859-233-9849	Ramsey, Brigitte B	Security Trust Building, 271 W Short St. Ste 202, Lexington KY 40507	
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Belin, Rachel	859-233-9849		2117 Woodley Circle, , Lexington KY 40502	
Harvey, Prentice A	502-223-2338		232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000	
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601	
Papka, Perry	859-233-9849		271 W. Short St, Suite 202, Lexington KY 40507	
Ramsey, Brigitte B	859-233-8949		271 W. Short Street, Suite 202, Lexington KY 40507	
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601	
Professional Insurance Agents of Kentucky	502-875-3888	LeMay, Christi	107 Consumer Lane, P. O. Box 4205, Frankfort KY 40604	
LeMay, Christi	502-875-3888		107 Consumer Lane, P. O. Box 4205, Frankfort KY 40604	
Underwood IV, John T	502-223-5322		5932 Timber Ridge Dr., #101, , Prospect KY 40059	
Property Valuation Administrators Assn. of Ky.	859-595-0911	Bushart, William Mack	514 Colby Road, , Winchester KY 40391	
Bushart, William Mack	859-595-0911		514 Colby Road, , Winchester KY 40391	
Taylor, Judy	859-321-4272		2257 Terrace Woods Park, , Lexington KY 40513	
Purdue Pharma L.P.	203-588-7129	O'Donnell, Matthew	One Stamford Forum, 201 Tressor Blvd., Stamford CT 06901-3431	
Allen, James "Jitter" W	502-699-2163		1303 U. S. 127 South, Suite 402, Frankfort KY 40601	
Magee, Linda T	502-227-9059		1303 US 127 S, Suite 402, Frankfort KY 40601	
Rosen, Brian	614-488-3143		1515 Woodstock Dr., , Oakwood OH 45419	
Purple Toad Winery	270-519-9933	Dossey, Allen	4275 Old US Hwy. 45 S, , Paducah KY 42003	
Baldwin, Bart	502-320-1143		420 Capital Ave., , Frankfort KY 40601	
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504	
Quicken Loans	313-782-7526	Yoscovits, Eugene	1050 Woodward Ave., , Detroit MI 48226	
Yoscovits, Eugene	313-782-7526		1050 Woodward Ave., , Detroit MI 48226	
R. L. Polk & Company	248-728-7087	Tedford, Audrey R	26533 Evergreen, Suite 900, Southfield MI 48076	
RAI Services Company	336-741-3514	Spross, David L	401 North Main Street, , Winston-Salem NC 27102	
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601	
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601	
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601	
Recurrent Energy, LLC	415-675-1500	Kalikow, Jeffrey	3000 Oak Rd., Ste. 300, Walnut Creek CA 94597	
Stegall, Rachel	415-298-1869		3000 Oak Rd., Ste. 300, Walnut Creek CA 94597	
Red Mile (The)	859-255-0752	Costa, Joe	1200 Red Mile Rd., , Lexington KY 40504	
Huffman, Stephen S	859-254-0000		127 W. Main St Equus Bldg., HCM Government Relations LLC, Lexington KY 40507	

May, III, m H	859-254-0000		127 W. Main St. Equus Bldg., HCM Government Relations LLC, Lexington KY
Region 8, UAW	615-443-7654	Lundberg, Kristy	151 Maddox Simpson Parkway, , Lebanon TN 37090
Lundberg, Kristy	615-443-7654		151 Maddox-Simpson Pkwy., , Lebanon TN 37090
Reid Investments, LLC	615-975-9484	Reid, Rayford T	220 Great Circle Rd., Suite 130, Nashville TN 37228
Sanders, Richie	502-223-8967		225 Capital Ave., Frankfort KY 40601
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
RELX Inc.	202-857-8235	Burton, Jon	1150 18th Street, NW, Suite 600, Washington DC 20036
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Republic Bank & Trust Company	502-560-8636	Trager-Kusman, Andrew	601 W. Market Street, , Louisville KY 40202
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Republic Services, Inc.	816-600-4662	Piazza, Susan	2706 NE Independence Ave., , Lee's Summit MO 64064
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Rhino Resource Partners	859-389-6500	Boone, Rick	424 Lewis Hargett Circle, Suite 250, Lexington KY 40503
Moss, David A	859-684-5797		1890 Star Shoot Pkwy., Ste. 170113, Lexington KY 40509
River Metals Recycling LLC	859-292-8400	Lappin, Brian S	334 Beechwood Road, Suite 401, Fort Mitchell KY 41017
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
RiverValley Behavioral Health	270-689-6700	Peralta, Wanda F	1100 Walnut St., , Owensboro KY 42301
Baldwin, Bart	502-320-1143		420 Capital Ave., Frankfort KY 40601
Kidder, Sarah	512-423-1749		1902 Port Royal Ct., , Lexington KY 40504
RJ Corman Railroad	859-881-2441	Rush, Noel	101 R. J. Corman Drive, , Nicholasville KY 40356
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Rogers Group, Inc.	615-780-5747	Rose, Daniel C	421 Great Circle Road, , Nashville TN 37228
Bayens, Rachel P	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
RSC Insurance Brokerage, Inc.	317-575-7672	Volkmar, Karl G	160 Federal St., , Boston MA 02110
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Rx Development Associates, Inc.	850-577-9090	Cerio, Timothy M	301 S. Bronough St., Ste. 600, Tallahassee FL 32301
Dolen, Rosmond J	502-587-3736		101 S. 5th St., 3500 National City Tower, Louisville KY 40202
Safelite Group, Inc.	614-210-9394	Zajic, Scot	7400 Safelite Way, , Columbus OH 43235
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Safety Edge, LLC	336-301-3896	Fisher, John	506 S. E. Beach Dr., , Bald Head Island NC 28461
Moss, David A	859-684-5797		1890 Star Shoot Pkwy., Ste. 170113, Lexington KY 40509
Sage Therapeutics	617-949-4285	Grisco, Todd	215 First Street, , Cambridge MA 02142
Mills, Scott	617-949-4285		15612 Hawks Way, , Carmel IN 46033
Saint Elizabeth Healthcare	859-301-2111	Nields, Rosanne	One Medical Village Drive, , Edgewood KY 41017

Nields, R	859-301-6328		1 Medical Village Drive, , Edgewood KY 41017
Payton, Kevid W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Sedmak, Scott	859-301-2111		One Medical Village Dr., , Edgewood KY 41017
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Sanofi US	206-320-0536	Calvert, Deanne	1122 E. Pike Street, Suite 1002, Seattle WA 98122
Hall, Katherine W	502-607-8670		205 W. Third Street, , Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Ketterbaugh, Steve	615-828-7037		1114 Olde Cameron Lane, , Franklin TN 37067
Thomas-Lentz, Karen	502-607-8670		205 W. Third Street, Frankfort KY 40601
SAP Public Services	601-402-0451	Seale, Steve	Ronald Reagan Bldg. Suite 600, 1300 Pennsylvania Ave. NW, Washington DC 20004
Brown III, John Y	502-558-2030	304.0, 300.0	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Save the Children	202-640-6654	Denney, Kaitlin	2000 L. Street, NW, Suite 500, Washington DC 20036
Shrader, Melodie D	202-756-5741	Denuej, Mainin	325 7th St. NW, 9th Floor, Washington DC 20004
Sazerac Company	512-426-7825	Duhr, Kellie	10101 Linn Station Road, Suite 400, Louisville KY 40223
Brown, Mark L	502-696-5978	Dun, Keme	Sazerac Company, 10101 Linn Station Rd Ste 400, Louisville KY 40223
	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Crigler, Julia B	512-426-7825		1101 W. 34th St. #302, , Austin TX 78705
Duhr, Kellie			205 W. Third Street, Frankfort KY 40601
Hall, Katherine W	502-607-8670		
Jennings, M. Patrick	502-607-8670	OlConnon Bob	205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Scientific Games Corporation	702-897-7150	O'Connor, Rob	6601 Bermuda Road, , Las Vegas NV 89119
Cooper, John P	502-223-8967	Annualis Torret	225 Capitol Avenue, , Frankfort KY 40601
SI Group Client Services dba Swisher Intl., Inc.	904-353-4311	Augustus, Joseph	459 East 16th Street, , Jacksonville FL 32206
Crigler, Julia B	502-548-7500		10010 Covered Bridge Road, , Prospect KY 40059
Thomas-Lentz, Karen	502-607-8670	Callina Wadaa B	205 W. Third Street, , Frankfort KY 40601
Signature HealthCare Consulting Services, LLC	502-568-7800	Gallin, Kathy E	12201 Bluegrass Parkway, , Louisville KY 40299
Gallin, Kathy E	502-568-7800		12201 Bluegrass Parkway, , Louisville KY 40299
Smart Transportation Division/KY	740-533-9055	Cassity, Jared	343 Township Rd. #1329, , Ironton OH 45638
Cassity, Jared	740-533-9055		343 Township Road #1329, , Ironton OH 45638
Software Information Systems, LLC (SIS)	859-977-4747	Sigg, Patrick	165 Barr St., Lexington KY 40507
Young, Michael	502-395-1000		P. O. Box 11534, , Lexington KY 40576
Southern KY Film Commission, Inc.	270-528-7819	Shepperd, Coni	PO Box 385, , Horse Cave KY 42749
Schrage, Ethan	859-368-7740		2365 Harrodsburg Rd., Ste. B325, Lexington KY 40504
Stumbo, Stephanie L	859-368-7740	9	2365 Harrodsburg Road, Suite B-325, Lexington KY 40504
Special Olympics of Kentucky	502-695-8222	Mazzoni, Trish	105 Lakeview Court, , Frankfort KY 40601
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Spero Health	859-209-2287	Priest, Steve	461 South Fourth Street, , Danville KY 40422
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081	76	113 W. Main St., , Frankfort KY 40601
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Geoghege onald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Angrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Spin	888-249-9698	Kyuhoon No, Brian	450 Mission St., Ste. 400, San Franscisco CA 94105
Brown, Sherman A	502-875-0081	Kyunoon 10, Di lan	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
State Farm Insurance Group	404-335-2000	Simkins, Steve	285 Peachtree Center Ave., Ste. 1200, Atlanta GA 30303-1220
Harvey, Prentice A	502-223-2338	Similar, Steve	232 St. Clair Street, P.O. Box 1588, Frankfort KY 40602-0000
Miller, Dustin S	502-226-3975		229 Shelby Street, , , Frankfort KY 40601
State Volunteer Mutual Insurance Company	615-846-8205	Edwards, Sherie	101 Westpark Drive, Suite 300, Brentwood TN 37024
Brown, Sherman A	502-875-0081	Edwards, Sherie	113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Status Solutions	866-846-7272	Hensley, Leah	999 County Line Rd. W, , Westerville OH 43082
Bryant, Desmond A	866-846-7272	Hensiey, Lean	999 County Line Rd. W, , Westerville OH 43082
Vandergriff, Roger	866-846-7272		999 County Line Rd. W, , Westerville OH 43082
Sugar Creek Capital	314-968-2205	Hite, Chris	17 W. Lockwood Ave., , St. Louis MO 63119
Grayson, Trey	859-817-5930	Titte, Chris	7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Sullivan University System	502-819-6780	Brotzge, Gregory J	1006 Westgate Place, , Louisville KY 40207
Brotzge, Andrew G	502-819-9005	Brotzge, Gregory 3	1006 Westgate Place, Louisville KY 40207
Brotzge, Gregory J	502-819-6780		Impact Government Relation Inc, 1006 Westgate Place, Louisville KY 40207
Sunovion Pharmaceuticals Inc.	508-357-7330	Rasmussen, Eric	84 Waterford Drive, , Marlborough MA 01752
Calloway, Daniel	440-241-8600	Rasinussen, El ic	10499 Forestview Dr., Strongsville OH 44136
Severoni, Anthony	484-840-1682		10 William Howard Dr., Glen Mills PA 19342
Sunrise Children's Services	502-538-1000	Suttles, Dale	300 Hope Street, , Mt. Washington KY 40047
Whitehouse, David M	859-321-9562	Suttles, Date	1201 Raeford Ln., P. O. Box 910590, Lexington KY 40513
Susan B. Anthony List	317-440-6998	Liebel, Susan	2800 Shirlington Road, Suite 1200, Arlington VA 22206
Liebel, Susan	317-440-6998	Litter, Susali	2223 Pamela Dr., Indianapolis IN 46220
Swedish Match North America, LLC	804-787-5151	Mulvaney, Dan	1021 East Cary Street, Suite 1600, Richmond VA 23219
Hall, Katherine W	502-607-8670	with ancy, Dan	205 W. Third Street, Frankfort KY 40601
Jennings, M. Patrick	502-607-8670		205 W. Third Street, Commonwealth Alliances, Frankfort KY 40601
Jennings, ivi. I au iek	302-007-0070		200 W. Linia Street, Commonweath Amances, Flankfolt & I 40001

Synergy Rehat on	502-561-7000	McNatt, Carrie	825 S. 6th St., , Louisville KY 40203
McNatt, Carrie	502-561-7000		825 S. 6th St., , Louisville KY 40203
T Mobile USA, Inc.	615-424-9224	Briggs, Stacey	695 Grassmere Park, , Nashville TN 37211
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Tahirih Justice Center	571-282-6161	Smoot, Jeanne	6402 Arlington Blvd., Ste. 300, Falls Church VA 22042
Smoot, Jeanne	571-282-6161	~	Attn: Tahirih Justice Center, 6402 Arlington Blvd., Ste. 300, Falls Church VA 22042
Teach for America Appalachia	859-492-9165	Gabbard, Robin	470 Main Street, Suite 1, Hazard KY 41701
Payton, Kevin W	502-223-2181	311251114, 1132111	Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
	212-916-5932	Criffith Adalman Amy	730 Third Ave., , New York NY 10017
Teachers Insurance & Annuity Assn. (TIAA)		Griffith-Adelman, Amy	2000 Waterfront Plaza, 325 West Main St., Suite 2000, Louisville KY 40202
Underwood Jr., Jack R	502-587-7711	McMehen Den	
Team Taylor County	270-465-9636	McMahan, Ron	205 N. Columbia Ave., Campbellsville KY 42718
Babbage, Robert A	859-335-5869	Walata ala Bata	350 E. Short Street, Suite 212, Lexington KY 40507
Terrace Metrics	800-470-4401	Zdolsheck, Dale	1122 Herschel Ave., Cincinnati OH 45208
Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Phillips, Travis	502-223-2180		302 Shelby St., Frankfort KY 40601
Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Thacker, Leigh A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Texas Public Policy Foundation	512-472-2700	Glod, Greg	901 Congress Ave., , Austin TX 78701
Warren, Julie	615-383-6431		201 4th Ave. N., The Beacon Center, Nashville TN 37219
Toyota Motors North America, Inc.	202-463-6845	Kirkhorn, Erik	325 7th Street NW, Suite 1000, Washington DC 20004
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Menke, Kim	502-868-2530		1001 Cherry Blossom Way, , Georgetown KY 40324
TracFone Wireless, Inc.	859-268-6332	Lang, Leighton	9700 N. W. 112th Avenue, , Miami FL 33178
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Track Group	877-260-2010	Swando, Matthew	200 E. 5th Avenue, Unit 100, Naperville IL 60563
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Transit Authority of River City	502-561-5100	Risco, Jr., Ferdinand L	1000 W. Broadway, , Louisville KY 40203
Bayens, Rachel P	502-226-3975	• contraction of the state of t	Government Strategies, 229 Shelby Street, Frankfort KY 40601
Helton, Mike D	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Miller, Dustin S	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Treatment Advocacy Center	703-294-6001	Berger, Francesca	200 N. Glebe Rd., Ste. 801, Arlington VA 22203
Gray, John Michael E	606-677-4066		2520 Bardstown Rd., Ste. 7, Louisville KY 40205
Gray, John Michael E	000-077-4000		2020 Darasiowii ING., SIG. 1, LOUISYIIIC IN 1 TOZUS

Turo, Inc.	866-735-2901	Peacock, Michelle	116 Montgomery St., Ste. 700, San Francisco CA 94105
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Lambert, Charles	502-875-1176		MML&K, Suite 308, 305 Ann Street, Frankfort KY 40601
McBrayer, W. Terry	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Nolan, Chris	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Tyson Foods, Inc.	479-290-6695	Bradley, Ruth	2200 Don Tyson Pkwy., , Springdale AR 72762
Pryor, J. Ronald	502-558-5586	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Capitol Solutions, LLC, 8913 Dolls Eyes Street, Prospect KY 40059
U.S. Chamber Institute for Legal Reform	202-463-5724	Skelo, Lana	1615 H Street NW, , Washington DC 20062
Skelo, Lana	202-463-5724		1615 H. St., NW, , Washington DC 20062
U.S. Justice Action Network	202-624-7720	Harris, Holly	444 N. Capitol St. NW, Suite 200, Washington DC 20001
Harris, Holly	202-624-7720	,,	444 N. Capitol St. NW, Suite 200, Washington DC 20001
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
U.S. Precedent	859-335-5869	Babbage, Robert A	350 E. Short Street, Suite 212, Lexington KY 40507
Babbage, Robert A	859-335-5869	zazonge, modere in	350 E. Short Street, Suite 212, Lexington KY 40507
U.S. Term Limits	231-282-1167	Tillman, Scott	3270 Suntree Blvd., Ste. 201, Melbourne FL 32940
Dukette, Aaron	859-779-0181		120 Pay Lake Road, , London KY 40744
U.S.A. Drone Port	606-487-3267	Massey, Bart	1 Community College Dr., , Hazard KY 41701
Moss, David A	859-684-5797	Maddey, Barr	1890 Star Shoot Pkwy., Ste. 170113, Lexington KY 40509
Uber	202-794-7387	Theunissen, Trevor	1455 Market Street, Ste. 400, San Francisco CA 94103
Brown III, John Y	502-558-2030	incumssen, iteroi	JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Juliano, Nicholas	404-790-1585		1201 Peachtree Street NE, Suite 1800, Atlanta GA 30361
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Underwriters Safety & Claims, Inc.	502-489-6800	Ferguson, Scott	1700 Eastpoint Parkway, P. O. Box 23790, Louisville KY 40223
Brown, Sherman A	502-875-0081	reiguson, scott	113 W. Main Street, Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
O'Daniel Jr., H. Edward	859-336-9611		110 West Main Street, , Springfield KY 40069
Taylor, Robbin M	502-875-0081		113 W. Main St., Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
United Food & Commercial Workers Union	502-582-3508	Blair, Bob	3330 Pinecroft Drive, , Louisville KY 40219
Blair, Caitlin L	502-582-3508	Dian', Dob	3330 Pinecroft Drive, , Louisville KY 40219
United Healthcare Services, Inc.	702-240-8858	Tinker, Ann	2716 N. Tenaya Way, , Las Vegas NV 89128
Crawford, Kevin	615-684-6302	Tillker, Aun	424 Church St., Ste. 2000, Nashville TN 37219
Denton, Julie	502-376-7402		2303 Braided Tail Court, , Louisville KY 40245
Hampton, Michael R	317-715-7056		7440 Woodland Drive, , Indianapolis IN 46278
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
United Mine Workers of America	270-821-2774	Earle, Stephen J	The state of the s
Earle, Stephen J	270-821-2774	Earle, Stephen J	1285 Island Ford Rd., , Madisonville KY 42431 1285 Island Ford Road, , Madisonville KY 42431
United Parcel Service	502-329-6526	D'Andrea, Nicholas	The first contract the contract of the contrac
Crigler, Julia B	502-548-7500	D Aliui ca, Micholas	1400 N. Hurstbourne Parkway, C/O AILEEN HAWES, Louisville KY 40223 10010 Covered Bridge Road, Prospect KY 40059
	502-329-6760		•
D'Andrea, Nicholas	JUL-329-0 /0U		1400 N. Hurstbourne Pkwy., , Louisville KY 40223

Krider, Nicole B 502-292-5343 334 E. Broadway, Ste. 308, Louisville KY 40202 Middleton, Kevin 502-292-5342 334 E. Broadway, Suite 308, Louisville KY 40202 Universal Guaranty Life Insurance Co. 606-365-4340 Rousey, Jimmy PO Box 328, 205 North Depot St., Stanford KY 40484	77 W W (W	500 (07 0(70		ONE WETE A GRAND TO THE A WAY ACCOUNT
Thomas=Lentz, Karen S02-07-8570 P30-84F11 Partingen_Jefflery A S15 King 8t, Part A P40-001 Partingen_Jefflery A S15 King 8t, Part R P40-001 Partingen_Jefflery A P40-001 P40				
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Noonan, Edward 704-19-6-2464 502-534-5356 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 502-538-5366 5			/ Year A	
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United Services Automobile Association 615-844-6183 Harney, Tracey G 1616 Westgate Circle, Suitz 204, Breatwood TN 37027 Molf. & Suits 204, Breatwood TN 37027 Molf. & Molf. & Suits 208, Frankfort KV 40601 Molf. & Suits 208, Frankfor				
Bentley, Jason R 502-875-1176 MM.L.R. Suite 308, 305 Am Street, Frankfort KY 40601				
Cantor, Brandy P Cottler, Seam M Highon, James M Lambert, Charles S02-875-1176 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Milghon, James M Lambert, Charles S02-875-1176 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Milledk, 305 Ann Street, Suite 308, Frankfort KY 40601 Obbone, Sara L Distered Key, Jim H S02-875-3332 S02-875-3332 Walson, Keyin Walson, Walson, Walson Wa			Harney, Tracey G	
Cottor, Seam M S02-473-1176 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601				
Higdon, James M S02-875-1176 MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601				
Lainbert, Charles McBrayer, W. Terry McBrayer, W. Terry McBrayer, W. Terry Nolan, Chris Suborne, Sara L Suborn				
MeBrayer, W. Terry 502-875-1176 MML&K., 305 Am Street, Suite 308, Frankfort KY 40601 Ozborne, Sara L 502-875-1176 MML&K., 305 Am Street, Suite 308, Frankfort KY 40601 Ozborne, Sara L S02-875-3332 Thompson, Ernest R 85 C. Michael Davenport Bibd., Suite B, Frankfort KY 40601 MML&K., 305 Am Street, Suite 308, Frankfort K	The state of the s			
Nolan, Chris 502-875-1176 MML.&K., 305 Ann Street, Suite 308, Frankfort KY 40601	-			
Octobers, Sara L				
Walton, Kevin Soc. 2475-3332 Soc. Michael Davenport Blvd., Suite B., Frankfort KY 40601				
Key, Jim H		502-875-1176		
Walton, Kevin United Way of Greater Cincinnati Johnson-Noem, Tara 859-647-5528 Payton, Kevin W 502-223-2181 Phillips, Travis Slaton, Daniel Wilson, Marc A 502-223-2180 United Way of Kentucky Sulton, Caniel Way of Kentucky Krider, Nicole B Middleton, Kevin University Life Insurance Co. University Lafth Care, Inc. Bell, Jill Breeding, Carl W 502-358-8315 Crarter, Mark B 502-858-8315 Crass, Jr., Lloyd "Rusty" 502-352-4613 University of Louisville Crass, Jr., Lloyd "Rusty" 502-352-4613 University of Louisville Brown, Sherman A 502-875-0081 Busick, Jeffery M 602-875-0081 Midleton, Key Sulton, Carly Coephgan, J. Ronald Martin, Andrew "Skipper" MCAlthy, Main Street, Frankfort KY 40601 Main Street, Fr			Thompson, Ernest R	- · · · · · · · · · · · · · · · · · · ·
United Way of Greater Cincinnati	Key, Jim H	502-875-3332		85 C. Michael Davenport Blvd., , Frankfort KY 40601
Johnson-Noem, Tara	Walton, Kevin	270-875-7822		8550 Hwy 2096, USW Local 9443, Robards KY 42452
Payton, Kevin W 502-223-2181 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Phillips, Travis 502-223-2180 302 Shelby Str.et, Frankfort KY 40601 302 Shelby Str.et, Frankfort KY 40601 302 Shelby Str.et, Frankfort KY 40601 302 Shelby Street, Frankfort KY 40601 303 Shelby Street, Frankfort KY 40601 304 Shelby Street, Frankfort KY 40601 305 Shelby Street, Frankfort KY 40601	United Way of Greater Cincinnati	859-647-5528	Johnson-Noem, Tara	2400 Reading Road, , Cincinnati OH 45202
Phillips, Travis S02-223-2180 302 Shelby St., Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40202 334 E. Broadway, Suite 308, Louisville KY 40202 334 E. Broadway, Suite 308, Louisville KY 40202 University Health Care, Inc.	Johnson-Noem, Tara	859-647-5528		2146 Chamber Center Dr., Fort Mitchell KY 41017-1669
Slaton, Daniel 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelp Shelf KY 40202 Top Shelf Lobby, 302 Shelp Street, Frankfort KY 40601 Top Shelf Lobby, 302 Shelp Shelf KY 40202 Top Shelf Lobby, 302 Shelp Shelf KY 40202 Top Shelf Lobby, 302 Shelf KY 40202 Top Shelf Lobby, 302 Shelf KY 40204 Top Shelf Lobby, 302 Shelf KY 40204 Top Shelf Lobby, 302 Shel	Payton, Kevin W	502-223-2181		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Wilson, Marc A 502-223-2180 Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601 United Way of Kentucky 502-292-5341 Middleton, Kevin P. O. Box 4653, 334 East Broadway Suite 308, Louisville KY 40204-0653 Middleton, Kevin 502-292-5342 Middleton, Kevin P. O. Box 4653, 334 East Broadway, Suite 308, Louisville KY 40202 Middleton, Kevin P. O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40484 P. O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-045′ Duiversity Health Care, Inc. 502-585-3851 Carter, Mark B 5100 Commerce Crossings Dr., Louisville KY 40229-2128 Bell, Jill J 502-585-7983 5100 Commerce Crossings Dr., Louisville KY 40229-2128 Breeding, Carl W 502-352-4611 5100 Commerce Crossings Dr., Louisville KY 40229 Cress, Jr., Lloyd "Rusty" 502-352-4612 5100 Commerce Crossings Dr., Louisville KY 40229 Serville Felix, Carl 502-212-6756 5100 Commerce Crossings Dr., Louisville KY 40229 May, Bert W 502-352-4613 14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 5100 Commerce Crossings Dr., Louisville KY 40229 Middleton, Kevin 2018 Marin, Andrew "Skipper" 502-875-0081 113 W. Main Street, Frankfort KY 40601 113 W. Main Street, Frankfort KY 40601 Martin, Andrew "Skipper" 502-875-0081 113 W. Main Street, Frankfort KY 40601 113 W. Main Street, Frankfort KY 40601 Martin, Andrew "Skipper" 502-875-0081 113 W. Main Street, Frankfort KY 40601 113 W. Main Street, Frankfort KY 406	Phillips, Travis	502-223-2180		302 Shelby St., , Frankfort KY 40601
United Way of Kentucky Krider, Nicole B S02-292-5341 Middleton, Kevin P. O. Box 4653, 334 East Broadway Suite 308, Louisville KY 40204-0653 Krider, Nicole B S02-292-5342 Middleton, Kevin S02-292-5342 334 E. Broadway, Ste. 308, Louisville KY 40202 334 E. Broadway, Ste. 308, Louisville KY 40202 Universal Guaranty Life Insurance Co. 606-365-4340 Cave, Stanton L S93-309-3000 Cave, Stanton L S93-309-3000 University Health Care, Inc. S02-585-8351 Carter, Mark B S100 Commerce Crossings Dr., Louisville KY 40229 Breeding, Carl W S02-352-4611 Carter, Mark B S02-585-7983 S100 Commerce Crossings Dr., Louisville KY 40229 Breeding, Carl W S02-352-4611 Carter, Mark B S02-585-8316 Cress, Jr., Lloyd "Rusty" S02-352-4612 Felix, Carl May, Bert W S02-352-4613 University of Louisville S02-852-4876 My, Bert W S02-857-5081 Brown, Sherman A S02-875-0081 Busick, Jeffery M S02-875-0081 Geoghegan, J. Ronald Martin, Andrew "Skipper" S02-875-0081 Milligan, Libby S02-875-0081 Milligan, Libby S02-875-0081 Nichaus, Matt S02-875-0081 Milligan, Libby Nichaus, Matt S02-875-0081 Nichaus, Math S02-875-0081 Nichaus Gooden Red, Suite Good, Jacksonville FL 32256 Goovernment Strategies, 229 Shelby Street, Frankfort KY 40601	Slaton, Daniel	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Krider, Nicole B	Wilson, Marc A	502-223-2180		Top Shelf Lobby, 302 Shelby Street, Frankfort KY 40601
Middleton, Kevin 502-292-5342 334 E. Broadway, Suite 308, Louisville KY 40202	United Way of Kentucky	502-292-5341	Middleton, Kevin	P. O. Box 4653, 334 East Broadway Suite 308, Louisville KY 40204-0653
Universal Guaranty Life Insurance Co. Cave, Stanton L 859-309-3000 Cave, Stanton L 859-309-3000 P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-045' University Health Care, Inc. Bell, Jill J S02-585-8351 Carter, Mark B S100 Commerce Crossings Dr., , Louisville KY 40229 Breeding, Carl W Carter, Mark B S02-352-4612 Felix, Carl May, Bert W University of Louisville S02-352-4613 University of Louisville S02-855-0081 Brown, Sherman A S02-875-0081 Busick, Jeffery M Geoghegan, J. Ronald Martin, Andrew "Skipper" S02-875-0081 Martin, Andrew "Skipper" S02-875-0081 Milligan, Libby Niehaus, Matt S02-875-0081 Taylor, Robbin M Wickliffe, Amy Veritee S04-421-7330 Barnes, John Bayens, Rachel P Ross 298, 295 North Depot St., Stanford KY 40484 P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-045' P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-045' Carter, Mark B S100 Commerce Crossings Dr., , Louisville KY 40229 314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 S100 Commerce Crossings Dr., , Louisville KY 40229 314 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 113 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 113 W. Main Street, Frankfort KY 40601 113 W.	Krider, Nicole B	502-292-5343		334 E. Broadway, Ste. 308, Louisville KY 40202
Cave, Stanton L 859-309-3000 P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-045	Middleton, Kevin	502-292-5342		334 E. Broadway, Suite 308, Louisville KY 40202
University Health Care, Inc. S02-885-8351 Carter, Mark B S100 Commerce Crossings Dr., , Louisville KY 40229-2128 Bell, Jill J S02-885-9983 S100 Commerce Crossings Drive, , Louisville KY 40229 Breding, Carl W S02-352-4611 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Carter, Mark B S02-885-8316 S100 Commerce Crossings Dr., , Louisville KY 40229 Cress, Jr., Lloyd "Rusty" S02-352-4612 S100 Commerce Crossings Dr., , Louisville KY 40229 Cress, Jr., Lloyd "Rusty" S02-352-4612 S100 Commerce Crossings Dr., , Louisville KY 40229 May, Bert W S02-352-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Felix, Carl S02-875-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 University of Louisville S02-887-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Busick, Jeffery M S02-875-0081 S02-875-0	Universal Guaranty Life Insurance Co.	606-365-4340	Rousey, Jimmy	PO Box 328, 205 North Depot St., Stanford KY 40484
University Health Care, Inc. S02-885-8351 Carter, Mark B S100 Commerce Crossings Dr., , Louisville KY 40229-2128 Bell, Jill J S02-885-9983 S100 Commerce Crossings Drive, , Louisville KY 40229 Breding, Carl W S02-352-4611 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Carter, Mark B S02-885-8316 S100 Commerce Crossings Dr., , Louisville KY 40229 Cress, Jr., Lloyd "Rusty" S02-352-4612 S100 Commerce Crossings Dr., , Louisville KY 40229 Cress, Jr., Lloyd "Rusty" S02-352-4612 S100 Commerce Crossings Dr., , Louisville KY 40229 May, Bert W S02-352-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Felix, Carl S02-875-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 University of Louisville S02-887-4613 S14 W. Main Street, Dinsmore & Shohl, LLP, Frankfort KY 40601 Busick, Jeffery M S02-875-0081 S02-875-0	Cave, Stanton L	859-309-3000		P.O. Box 910457, 3060 Harrodsburg Rd, Ste. 200, Lexington KY 40591-0457
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Miller, D	502-226-3975		229 Shelby Street, , Frankfort KY 40601
Shea, Michael	502-226-3975		Government Strategies, 229 Shelby Street, Frankfort KY 40601
Verizon Wireless, Cellco Partnership	317-633-6250	Krevda, Neil	115 West Washington Street, Suite 340 South, Indianapolis IN 46204
Shasky, Kelly S	502-395-1661		205A Capitol Avenue, , Frankfort KY 40601
Vertex Pharmaceuticals Inc.	617-961-7770	Olson, Richard	50 Northern Avenue, , Boston MA 02210
Grant, Chad	859-967-8020		Grant Consulting Group, 620 S. Capitol Ave. Suite 100, Lansing MI 48933
Parta, Abigail	651-552-7236		1430 Wilson Court, , South St. Paul MN 55075
Volunteers of America Mid-States	502-636-4636	Scofield, Doug	570 South Fourth Street, Ste. 100, Louisville KY 40202
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Walker Company (The)	859-498-0092	Walker, Art	PO Box 308, , Mount Sterling KY 40353
Bentley, Jason R	502-875-1176		MML&K Suite 308, 305 Ann Street, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Wallitsch, James	502-296-8780	Wallitsch, James	4319 Lincoln Rd., , Louisville KY 40220
Underwood, Jason P	502-376-3100		3301 Trinity Road, , Louisville KY 40206
Waste Management, Inc. (WMI)	513-482-4880	Trent, Kathryn A	5751 Center Hill Avenue, , Cincinnati OH 45232
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601
Trent, Kathryn A	513-482-4880		5751 Center Hill Avenue, , Cincinnati OH 45232
Woodward, Russ	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Waterfront Botanical Gardens	502-572-7643	Maier, Kasey	PO Box 5056, , Louisville KY 40255
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270
WellCare of Kentucky, Inc.	813-206-4198	Morris, Heather	8735 Henderson Rd, Building 1, 2nd Floor, Tampa FL 33634
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270
Jones, William A	502-226-0887		13551 Triton Park Blvd., Ste. 1800, Louisville KY 40223
Ridenour, Michael L	502-226-0887		13551 Triton Park Blvd., Suite 1800, Louisville KY 40223
Wellpath	502-389-5801	Traczewski, Jeff	1283 Murfreesboro Road, Suite 500, Nashville TN 37217
Grayson, Trey	859-817-5930		7310 Turfway Rd., #210, , Florence KY 41042
Robertson, R. Brooke P	859-244-7596		Lexington Financial Center, 250 W. Main Street Suite 2800, Lexington KY 40507
Robertson, Steve	859-244-3225		250 W. Main Street, Suite 2800, Lexington KY 40507
Westcare Foundation	606-754-7077	Wright, Stephen	10057 Elkhorn Creek, , Ashcamp KY 41512
Cantor, Brandy P	502-875-1176		MML&K, 305 Ann St. Suite 308, Frankfort KY 40601
Cutter, Sean M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Higdon, James M	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Osborne, Sara L	502-875-1176		MML&K, 305 Ann Street, Suite 308, Frankfort KY 40601
Western KY Coal Association	270-871-6290	Nelson, Kim L	1822 N. Main Street, P. O. Box 65, Madisonville KY 42431
Nelson, Brian L	270-779-0991		119 W. Todd Street, , Frankfort KY 40601
Nelson, Kim L	270-871-6290		119 W. Todd Street, 270-825-9022, Frankfort KY 40601
Westlake Chemical Corporation	713-585-7976	Swearngan, Chip	Westlake Center, Suite 600, 2801 Post Oak Blvd., Houston TX 77056
Babbage, Robert A	859-335-5869		350 E. Short Street, Suite 212, Lexington KY 40507
Windstream Communications, Inc.	859-357-6125	Shearer, Jeanne S	130 W. New Circle Road, Suite 170, Lexington KY 40505
Cooper, John P	502-223-8967		225 Capitol Avenue, , Frankfort KY 40601

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Shearer, S	859-357-6125		130 W. New Circle Road, Suite 170, Lexington KY 40505
Woodward, Kuss	502-223-8967		225 Capital Avenue, , Frankfort KY 40601
Wine & Spirits Wholesalers of KY, Inc.	502-893-9795	Meyer, Daniel R	311 B Wendover Avenue, , Louisville KY 40207
George, Charles	502-893-9795		311-B Wendover Avenue, , Louisville KY 40207
Meyer, Daniel R	502-893-9795		311 B. Wendover Ave, , Louisville KY 40207
Owens, Elizabeth M	502-229-5765		205 B Capital Ave., , Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Wine Institute	803-237-9719	Limbaugh, Hunter	413 E. Springs Rd., , Columbia SC 29223
Jenkins, Pamela G	859-268-2933		3609 Barrow Wood Ln., , Lexington KY 40502
Wrigley Media Group	859-266-3776	Hancock, Jayne	804 Newton Circle, , Lexington KY 40511
Hancock, Jayne	859-266-3776		804 Newtown Circle, , Lexington KY 40511
Xerox Corporation	202-962-7849	Donalty, Tanya	1800 M Street, NW, North Tower, 5th Floor, Washington DC 20036
Brown III, John Y	502-558-2030		JYB3 Group, 205 Capital Avenue, Suite B, Frankfort KY 40601
Owens, Laura E	502-229-5764		205 Capital Avenue, Suite B, Frankfort KY 40601
Yum! Brands, Inc.	202-534-4936	Hixson, Jon	300 New Jersey Avenue NW, Suite 601, Washington DC 20002
Brown, Sherman A	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Busick, Jeffery M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Geoghegan, J. Ronald	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Martin, Andrew "Skipper"	502-875-0081		11007 Greenock Court, , Louisville KY 40243
McCarthy, III, John T	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Milligan, Libby	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Niehaus, Matt	502-875-0081		113 W. Main St., , Frankfort KY 40601
Taylor, Robbin M	502-875-0081		113 W. Main St., , Frankfort KY 40601
Wickliffe, Amy	502-875-0081		113 W. Main Street, , Frankfort KY 40601
Zoll	615-290-3027	Benson-Scearce, Dena	406B Rudolph Ave., , Nashville TN 37206
Abell, Kelley	502-216-9990		P. O. Box 70331, , Louisville KY 40270
Benson-Scearce, Dena	615-707-0246		121 Gamma Dr., , Pittsburgh NC 15238
Biagi, Mike	502-593-4575		PO Box 70331, , Louisville KY 40270
Corrigan, Timothy R	502-817-4177		P. O. Box 70331, , Louisville KY 40270

Case No. 2018-00281 Atmos Energy Corporation, Kentucky Division Staff DR Set No. 2 Question No. 2-64 Page 1 of 1

REQUEST:

Refer to the application, Schedules E and H-1. Confirm that the Kentucky income tax rate is 5 percent. If confirmed, provide revised schedules.

RESPONSE:

Confirmed. Effective to tax years beginning on or after January 1, 2018, the Kentucky income tax rate is 5 percent. Since the Company is a fiscal year filer, this change in rate is applicable beginning in the Company's fiscal year ended September 30, 2019.

Please see Attachment 1 for a revised revenue requirement model that incorporates the following changes when compared to the Company's originally filed model:

1. Updated the state income tax rate to 5%.

2. Included the adjustment for AGA and KY Chamber dues as discussed in the Company's response to AG DR No. 1-57.

Included the adjustment for payroll taxes as discussed in the Company's response to Staff DR No. 2-25.

4. Corrected the base period capital structure as discussed in the Company's responses to Staff DR Nos. 2-33 and 2-34.

5. Corrected a formula error in the KY Plant Data-2018 case file for Division 002 depreciation expense forecast. Please see Attachment 2 provided by Company as part of revised revenue requirement model.

ATTACHMENTS:

ATTACHMENT 1 - Atmos Energy Corporation, Staff_2-64_Att1 - 2018 KY Rev Req Model.xlsx, 121 Pages.

ATTACHMENT 2 - Atmos Energy Corporation, Staff_2-64_Att2 - KY Plant Data-2018 case.xlsx, 46 Pages.

Respondents: Jennifer Story and Greg Waller

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2018-00281 Base Period: Twelve Months Ended December 31, 2018

Forecasted Test Period: Twelve Months Ended March 31, 2020

Schedule	Description	Filing Requirement
Α	Summary	FR 16(8)(a)
В	Rate Base	FR 16(8)(b)
С	Operating Income (Revenues & Expenses)	FR 16(8)(c)
,D	Adjustments to Operating Income by Account	FR 16(8)(d)
E	Income Tax Calculation	FR 16(8)(e)
F	Rule F Compliance Adjustments	FR 16(8)(f)
G	Payroll Analysis	FR 16(8)(g)
Н	Gross Revenue Conversion Factor	FR 16(8)(h)
1	Comparative Income Statements	FR 16(8)(i)
J	Cost of Capital	FR 16(8)(j)
K	Comparative Financial Data	FR 16(8)(k)

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2018-00281 Base Period: Twelve Months Ended December 31, 2018 Forecasted Test Period: Twelve Months Ended March 31, 2020

FR 16(8)(b)

SCHEDULE B

Rate Base

Schedule	Pages	Description	 *
	_	1.8	10
B-1	2	Rate Base Summary	
B-2	14	Plant in Service by Account and Sub Account	
B-3	14	Accumulated Depreciation & Amortization	
B-3.1	5	Depreciation Expense	
B-4	2	Allowance for Working Capital	
B-4.1	2	Working Capital Components - 13 Month Averages	
B-4.2	2	Cash Working Capital - 1/8 O&M Expenses	
B-5	2	Deferred Credits & Accumulated Deferred Income Taxes	
B-6	2	Customer Advances For Construction	

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2018-00281 Overall Financial Summary

Forecasted Test Period: Twelve Months Ended March 31, 2020

Туре	XBase PeriodXForecasted Period of Filing:XOriginalUpdatedpaper Reference No(s)	Revised		FR 16(8)(a) Schedule A Witness: Waller
Line No.	Description	Supporting Schedule Reference	Base Jurisdictional Revenue Requirement	Forecasted Jurisdictional Revenue Requirement
	(a)	(b)	(c)	(d)
1	Rate Base	B-1	\$414,053,383	\$ 495,967,913
2	Adjusted Operating Income	C-1	\$ 27,501,643	\$ 27,525,325
3	Earned Rate of Return (line 2 divided by line 1)	J-1.1	6.64%	5.55%
.4	Required Rate of Return	J-1	8.15%	7.95%
5	Required Operating Income (line 1 times line 4)	C-1	\$ 33,745,351	\$ 39,429,449
6	Operating Income Deficiency (line 5 minus line 2)	C-1	\$ 6,243,708	\$ 11,904,124
7	Gross Revenue Conversion Factor	н	1.34184	1.34184
8	Revenue Deficiency (line 6 times line 7)		\$ 8,378,050	\$ 15,973,418
9	Amortization of Excess ADIT	WP B.5 F1		(1,463,766)
10	Revenue Increase Requested	C-1		\$ 14,509,652
11	Adjusted Operating Revenues	C-1	*	\$ 169,717,866
12	Revenue Requirements (line 10 plus line 11)	C-1		\$ 184,227,518

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2018-00281 Jurisdictional Rate Base Summary as of March 31, 2020

Ту		Base Period_XForecasted Period Filing:XOriginalUpdatedRevise er Reference No(s).	d		Sch	16(8)(ledule ness:	· •
_	Line No.	Rate Base Component	Supporting Schedule Reference	Forecasted Test Period Ending Balance		13	Forecasted Test Períod B Month Average
	1	Plant in Service	B-2 F	\$ 763,121,143	\$		724,669,367
	2	Construction Work in Progress	B-2 F	39,130,198			39,130,198
	3	Accumulated Depreciation and Amortization	B-3 F	 (199,412,545)			(194,453,459)
	.4	Property Plant and Equipment, Net (Sum Line 1 Thru 3)		\$ 602,838,796	\$		569,346,106
	5	Cash Working Capital Allowance	B-4.2 F	\$ 2,692,759	\$		2,692,759
	6	Other Working Capital Allowances (Inventory & Prepaids)	B-4.1 F	(1,652,038)	•		9,023,857
	7	Customer Advances For Construction	B-6 F	(747,234)			(747,234)
	8	Regulatory Assets / Liabilities	WP B.5 F1; F.6	(32,827,677)			(33,020,670)
	9	Deferred Inc. Taxes and Investment Tax Credits	B-5 F	(54,145,487) *			(51,326,905)
	10	Rate Base (Sum Line 4 Thru 8)		\$ 516,159,118	\$		495,967,913

*Test Period ending ADIT balance does not include forecasted change in NOLC.
Forecasted change in NOLC is calculated on 8.5F on a 13 month average basis only and included in rate base and revenue requirement.

Case No. 2017-00349 Atmos Energy Corporation, Kentucky Division Forecasted Test Period Filing Requirements MFR FR 16(8)(b) Page 1 of 1

REQUEST:

Section 16. Applications for General Adjustments of Existing Rates.

- (8) Each application seeking a general adjustment in rates supported by a forecasted test period shall include:
 - (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;

RESPONSE:

Please see attachment FR_16(8)(b)_Att1, Schedules B-1 - B-6 and workpapers.

ATTACHMENT:

ATTACHMENT 1 - Atmos Energy Corporation, FR_16(8)(b)_Att1 - Schedules B-1 - B-6 and WPs.xlsx, 53 Pages.

Respondents: Greg Waller and Laura Gillham

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2017-00349 Base Period: Twelve Months Ended December 31, 2017 Forecasted Test Period: Twelve Months Ended March 31, 2019

FR 16(8)(b)

SCHEDULE B

Rate Base

Schedule	Pages	Description					
B-1	2	Rate Base Summary					
B-2	14	Plant in Service by Account and Sub Account					
B-3	14	Accumulated Depreciation & Amortization					
B-3.1	5	Depreciation Expense					
B-4	2	Allowance for Working Capital					
B-4.1	2	Working Capital Components - 13 Month Averages					
B-4.2	2	Cash Working Capital - 1/8 O&M Expenses					
B-5	2	Deferred Credits & Accumulated Deferred Income Taxes					
B-6	2	Customer Advances For Construction					

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2017-00349 Jurisdictional Rate Base Summary as of December 31, 2017

Type of	XBase PeriodForecasted Period Filling:XOriginalUpdatedRevise aper Reference No(s).	d		FR 16(8)(b)1 Schedule B-1 Witness: Waller
Line No.	Rate Base Component	Supporting Schedule Reference	Base Period Ending Balance	Base Period 13 Month Average
1	Plant in Service	B-2 B	\$ 609,603,942	\$ 580,489,691
2	Construction Work in Progress	B-2 B	27,493,203	22,166,217
3	Accumulated Depreciation and Amortization	B-3 B	(191,190,491)	(185,290,734)
4	Property Plant and Equipment, Net (Sum line 1 Thru 3)		\$ 445,906,654	\$ 417,365,173
5	Cash Working Capital Allowance	B-4.2 B	\$ 3,370,236	\$ 3,370,236
6	Other Working Capital Allowances (Inventory & Prepaids)	B-4.1 B	14,276,317	10,581,761
7	Customer Advances For Construction	B-6 B	(1,437,537)	(1,455,773)
8	Regulatory Assets	F.6		
9	Deferred Inc. Taxes and Investment Tax Credits	B-5 B	(65,525,547)	(60,474,501)
10	Rate Base (Sum line 4 Thru 8)		\$ 396,590,124	\$ 369,386,897

Atmos Energy Corporation, Kentucky/Mid-States Division Kentucky Jurisdiction Case No. 2018-00281 13 Month Average Capital Structure

13 Month Average Capital Structure Base Period: Twelve Months Ended December 31, 2018 Forecasted Test Period: Twelve Months Ended March 31, 2020

Data:	_XBase Period_		asted Period							FR 16(8)(j)	
		riginal	Updated	Revised					S	Schedule J-1	
Work	paper Reference No	(s)		PROPO				OSED RATES Witness: Christian			
-1			Base Period				Forecasted Period				
Line		Workpaper		Percent		Weighted		Percent		Weighted	
No.	Class of Capital	Reference	Amount	of Total	Cost Rate	Cost	Amount	of Total	Cost Rate	Cost	
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	
			\$000	%	%	%	\$000	%	%	%	
1	SHORT-TERM DE	BT	281,542	3.47%	2.40%	0.08%	281,542	3.44%	2.40%	0.08%	
2	LONG-TERM DEE	зт	3,068,315	37.83%	5.22%	1.97%	3,131,315	38.31%	4.72%	1.81%	
3	Total DEBT		3,349,857	41.30%		2.05%	3,412,857	41.75%		1.89%	
4	PREFERRED STO	оск	0	0.00%	0.00%	0.00%	0	0.00%	0.00%	0.00%	
5	COMMON EQUIT	Υ	4,760,181	58.70%	10.40%	6.10%	4,760,181	58.24%	10.40%	6.06%	
6	Other Capital		0	0.00%	0.00%	0.00%	0	0.00%	0.00%	0.00%	

8.15%

8,173,038

100.0%

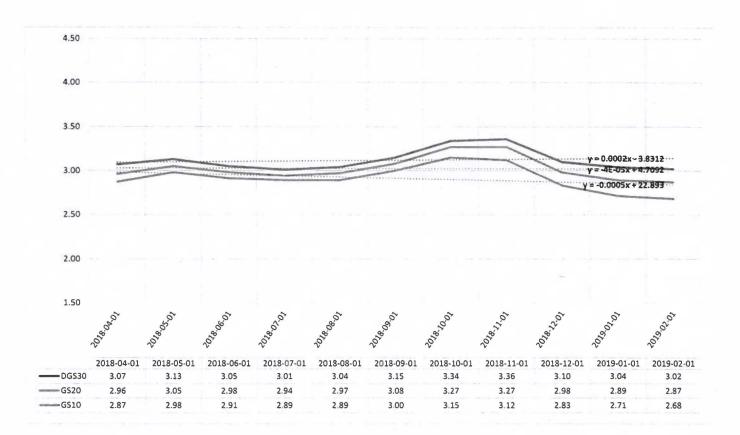
7.95%

8,110,038

100.0%

Total Capital

CURRENT RATES Base Period Forecasted Period Line Workpaper Percent Weighted Percent Weighted Cost Rate Cost Rate Class of Capital Reference of Total of Total Amount Amount Cost No. Cost (C)_ (E) % (F) \$000 (H) % (I) % (A) (B) (D) (G) \$000 8 SHORT-TERM DEBT 281,542 3.47% 2.40% 0.08% 281,542 3.44% 2.40% 0.08% 9 LONG-TERM DEBT 3,068,315 37.83% 4.72% 1.79% 3,131,315 38.31% 4.72% 1.81% 10 Total DEBT 3,349,857 41.30% 1.87% 3,412,857 41.75% 1.89% PREFERRED STOCK 0 0 0.00% 11 0.00% 0.00% 0.00% 0.00% 0.00% COMMON EQUITY 4,760,181 4,760,181 6.28% 3.66% 12 58.70% 8.13% 4.77% 58.24% 13 Other Capital 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 8,110,038 8,173,038 5.55% **Total Capital** 100.0% 6,64% 100.0% 14



Raab Testimony

Exhibit PHR-5, page 2 of 2

Table updated with percent of revenue added

	Revenue Deficiency at Equalized Proposed Return						
	Minimum	Maximum	Average		Percentage of Revenue Proposed		
	Revenue Increase	Revenue Increase	Revenue Increase	Proposed			
	Indicated	Indicated	Indicated	Revenue Increase	From Average		
Residential Sales	\$4,793,913	\$16,807,675	\$9,850,847	\$8,410,568	85.38%		
Non-Residential Firm Sales	-\$490,279	\$2,544,230	\$1,156,890	\$3,426,441	296.18%		
Non-Residential Interruptible Sales	\$286,770	\$560,382	\$444,793	\$47,663	10.72%		
Firm Transport	-\$1,246,885	\$3,401,852	\$1,273,455	\$1,499,112	117.72%		
Interruptible Transport	-\$901,727	\$4,355,841	\$1,729,568	\$1,071,753	61.97%		
Total Company	\$14,455,554	\$14,455,554	\$14,455,554	\$14,455,538	100.00%		

Raab Testimony

Rate of Return at Present and Proposed Rates for each COSS

Source:

PHR-2, page 1

PHR-3, page 1 PHR-4, page 1

	Customer/Demand Study		Demand	Only Study	Demand/Commodity Study	
	Return at Present	Return at Proposed	Return at Present	Return at Proposed	Return at Present	Return at Proposed
	Rate	Rates	Rate	Rates	Rate	Rates
Residential Sales	3.95%	6.06%	5.65%	8.07%	6.40%	8.95%
Non-Residential Frim Sales	8.00%	10.92%	5.99%	8.53%	6.67%	9.34%
Non-Residential Interruptible Sales	0.35%	1.91%	-1.96%	-0.86%	-1.50%	-0.32%
Firm Transport	10.39%	13.58%	5.40%	7.71%	3.60%	5.58%
Interruptible Transport	9.87%	12.40%	5.05%	6.89%	2.39%	3.85%
Total Company	5.58%	7.95%	5.58%	7.95%	5.58%	7.95%

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