

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND)	
ELECTRIC COMPANY FOR AN ADJUSTMENT)	CASE NO.
OF ITS ELECTRIC AND GAS RATES AND FOR)	2016-00371
CERTIFICATES OF PUBLIC CONVENIENCE)	
AND NECESSITY)	

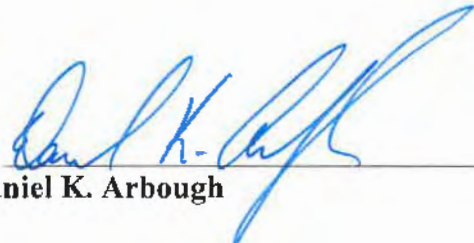
RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
SECOND SET OF DATA REQUESTS OF
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.
DATED FEBRUARY 7, 2017

FILED: FEBRUARY 20, 2017

VERIFICATION

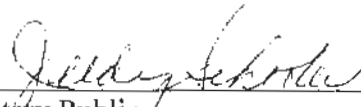
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is Treasurer for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.



Notary Public (SEAL)

My Commission Expires:
JUDY SCHOULER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

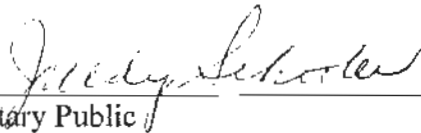
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Senior Vice President – Operations for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 16th day of February 2017.

 (SEAL)
Notary Public

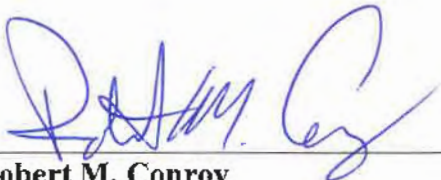
My Commission Expires:

JUDY SCHOLLER
Notary Public, State at Large, KY
~~My commission expires July 11, 2018~~
Notary ID # 512743

VERIFICATION

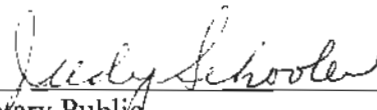
COMMONWEALTH OF KENTUCKY)
) **SS:**
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President – State Regulation and Rates for Louisville Gas and Electric Company and Kentucky Utilities Company, an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February _____ 2017.




Notary Public (SEAL)

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

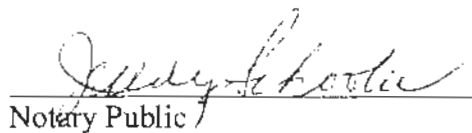
VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Director – Rates for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.


Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.

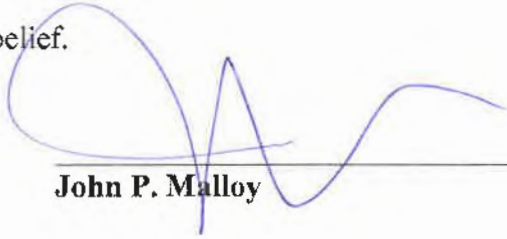
 (SEAL)
Notary Public

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

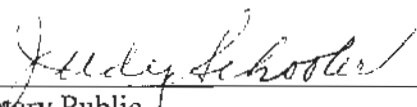
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **John P. Malloy**, being duly sworn, deposes and says that he is Vice President – Gas Distribution for Louisville Gas and Electric Company and Kentucky Utilities Company, an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



John P. Malloy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.



Notary Public (SEAL)

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Valerie L. Scott**, being duly sworn, deposes and says that she is Controller for Kentucky Utilities Company and Louisville Gas and Electric Company and an employce of LG&E and KU Services Company, and that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge and belief.

Valerie L. Scott
Valerie L. Scott

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.

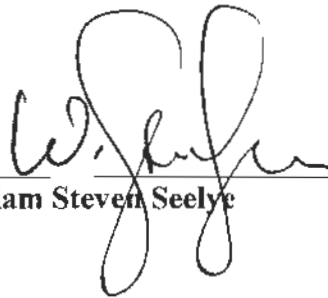
Judy Scholler (SEAL)
Notary Public

My Commission Expires:
JUDY SCHOLLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

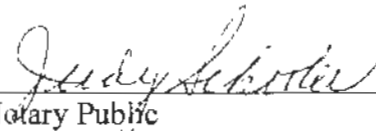
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **William Steven Seelye**, being duly sworn, deposes and states that he is a Principal of The Prime Group, LLC, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



William Steven Seelye

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 13th day of February 2017.

 (SEAL)

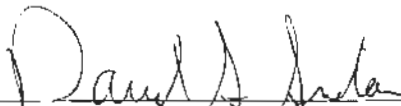
Notary Public

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

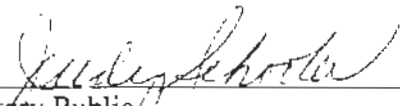
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **David S. Sinclair**, being duly sworn, deposes and says that he is Vice President, Energy Supply and Analysis for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



David S. Sinclair

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.



Notary Public, (SEAL)

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
~~My~~ commission expires July 11, 2018
Notary ID # 512743

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 Ratc Consultants, LLC, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John J. Spanos
John J. Spanos

Subscribed and sworn to before me, a Notary Public in and before said County and Commonwealth, this 9th day of February 2017.

Cheryl Ann Rutter (SEAL)
Notary Public

My Commission Expires:

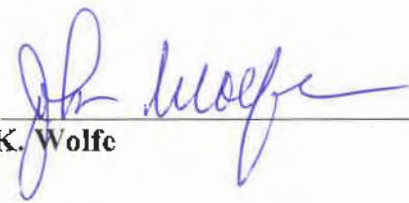
February 20, 2019

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

VERIFICATION

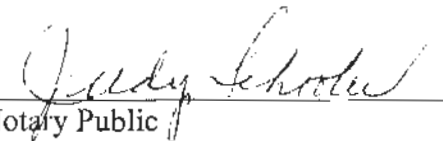
COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **John K. Wolfe**, being duly sworn, deposes and says that he is Vice President - Electric Distribution for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



John K. Wolfe

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of February 2017.

 (SEAL)

Notary Public

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID# 512743

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 1

Responding Witness: John J. Spanos

- Q.2-1. Refer to the response to KIUC 1-2(a), which requested a copy of all source documents relied on for the decommissioning cost estimates. No source documents were provided. Either provide the documents or indicate that they are not available and provide the reason why they are not available.
- A.2-1. The documents supplied in response to KIUC 1-2 were the supporting documents that can be produced. In preparing the decommissioning cost estimates, Mr. Spanos relied upon proprietary studies for which he does not have necessary consents to disclose and his general knowledge of industry information on decommissioning costs. Attached is a file which shows the calculation of the decommissioning costs referenced in Mr. Spanos's depreciation study.

LOUISVILLE GAS AND ELECTRIC
DECOMMISSIONING COSTS RELATED TO GENERATING UNITS

UNIT (1)	ESTIMATED RETIREMENT YEAR (2)	MW (3)	ESTIMATED DECOMMISSIONING COSTS (\$/KW) (4)	TOTAL DECOMMISSIONING COSTS (CURRENT \$) (5)=(3)*(4)	TOTAL DECOMMISSIONING COSTS (FUTURE \$) (6)	ESTIMATED TERMINAL RETIREMENTS (7)
STEAM						
MILL CREEK 1	2032	303	40	12,120,000	18,903,064	
MILL CREEK 2	2034	301	40	12,040,000	19,728,942	
MILL CREEK 3	2038	391	40	15,640,000	28,288,474	
MILL CREEK 4	2042	477	40	19,080,000	38,093,125	
TOTAL MILL CREEK				58,880,000	105,013,605	(1,452,787,796)
TRIMBLE COUNTY 1	2050	383	40	15,320,000	37,266,441	
TRIMBLE COUNTY 2	2066	102	40	4,080,000	14,733,338	
TOTAL TRIMBLE COUNTY				19,400,000	51,999,779	(535,583,282)
TOTAL STEAM				78,280,000	157,013,384	(1,988,371,079)
HYDRO						
OHIO FALLS	2045	52	10	520,000	1,118,004	(92,590,980)
TOTAL HYDRO				520,000	1,118,004	(92,590,980)
OTHER						
CANE RUN 7	2055	31	20	620,000	1,706,358	
CANE RUN 11	2018	14	20	280,000	309,068	
TOTAL CANE RUN				900,000	2,015,426	(90,119,059)
ZORN AND RIVER ROAD GAS TURBINE	2019	14	10	140,000	158,397	(1,857,026)
PADDY'S RUN 11	2018	12	10	120,000	132,458	
PADDY'S RUN 12	2018	23	10	230,000	253,877	
PADDY'S RUN 13	2031	84	10	840,000	1,278,159	
TOTAL PADDY'S RUN				1,190,000	1,664,494	(37,931,804)
BROWN 5	2031	65	10	650,000	989,052	
BROWN 6	2029	55	10	550,000	796,564	
BROWN 7	2029	55	10	550,000	796,564	
TOTAL BROWN				1,750,000	2,582,180	(60,738,943)
TRIMBLE COUNTY 5	2032	46	10	460,000	717,443	
TRIMBLE COUNTY 6	2032	46	10	460,000	717,443	
TRIMBLE COUNTY 7	2034	59	10	590,000	966,784	
TRIMBLE COUNTY 8	2034	59	10	590,000	966,784	
TRIMBLE COUNTY 9	2034	59	10	590,000	966,784	
TRIMBLE COUNTY 10	2034	59	10	590,000	966,784	
TOTAL TRIMBLE COUNTY				3,280,000	5,302,022	(100,724,301)
TOTAL OTHER				7,260,000	11,722,519	(291,371,133)

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 2

Responding Witness: John J. Spanos

- Q.2-2. Provide all evidence relied on to demonstrate that the net negative terminal salvage proposed by Mr. Spanos does not include remediation of the ash ponds, the costs of which are authorized for recovery through the environmental surcharge.
- A.2-2. The costs for negative terminal net salvage for the remediation of ash ponds have been segregated. The ash pond remediation costs were set out from all other terminal net salvage as shown by the 0% net salvage for Accounts 311.1 and 312.1. The asset costs are shown in Accounts 311.1 and 312.1. There has not been any terminal net salvage for remediation of ash ponds at Cane Run Units 1 through 6 included based on the calculation set forth on pages VI-4 through VI-10 of Exhibit JJS-LGE-1. The assigned terminal net salvage for Cane Run does not include any environmental surcharge amounts. The terminal net salvage for all other steam assets have been calculated as shown on pages VIII-2 and VIII-3 of Exhibit JJS-LGE-1.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 3

Responding Witness: John J. Spanos

- Q.2-3. Refer to the response to KIUC 1-5(a), which requested a copy of all source documents relied on for the proposed CT life spans. No source documents were provided. Either provide the documents or indicate that they are not available and provide the reason why they are not available.
- A.2-3. The proposed CT life spans utilized in the depreciation study were supplied by Generation Services Engineering which were not changed from the last study. The life spans are also supported by the life spans of others within the industry as shown by the attached schedule. See also the response to KIUC 2-5.

KENTUCKY UTILITIES/LOUISVILLE GAS & ELECTRIC

Life Spans of Representative Simple Cycle Gas Power Plants

UTILITY	UNIT	LOCATION	LIFE SPAN
Simple Cycle Plants			
Dominion Resources, Inc.	Darbytown	Virginia	36
Dominion Resources, Inc.	Remington	Virginia	36
Dominion Resources, Inc.	Ladysmith	Virginia	36
Dominion Resources, Inc.	Elizabeth River	Virginia	36
Kansas City Power and Light	West Gardner	Kansas	35
Kansas City Power and Light	Hawthorn 7	Missouri	35
Kansas City Power and Light	Hawthorn 8	Missouri	35
Kansas City Power and Light	Miami County	Kansas	35
Midamerican Energy Co.	Pleasant Hill	Iowa	40
Alliant Energy - Iowa	Lime Creek	Iowa	40
Alliant Energy - Iowa	Burlington Terra Comfort	Iowa	28
Greater Missouri Operations	South Harbor Unit 1	Missouri	35
Greater Missouri Operations	South Harbor Unit 2	Missouri	35
Greater Missouri Operations	South Harbor Unit 3	Missouri	35
Greater Missouri Operations	Crossroads Unit 1	Mississippi	35
Greater Missouri Operations	Crossroads Unit 2	Mississippi	35
Greater Missouri Operations	Crossroads Unit 3	Mississippi	35
Greater Missouri Operations	Crossroads Unit 4	Mississippi	35
Energy Mississippi, Inc.	Attala Unit 1	Mississippi	30
Duke Energy Indiana	Cayuga CT Unit 4	Indiana	40
Duke Energy Indiana	Madison	Ohio	40
Duke Energy Indiana	Wheatland Unit 1	Indiana	35
Duke Energy Indiana	Wheatland Unit 2	Indiana	35
Duke Energy Indiana	Wheatland Unit 3	Indiana	35
Duke Energy Indiana	Wheatland Unit 4	Indiana	35
Duke Energy Carolinas	Lincoln	North Carolina	31
Duke Energy Carolinas	Mill Creek	South Carolina	30
Oklahoma Gas & Electric Co.	Horseshoe Lake 9 & 10	Oklahoma	35
Omaha Public Power District	Cass County Unit 1	Nebraska	40
Omaha Public Power District	Cass County Unit 2	Nebraska	40
Omaha Public Power District	Sarpy County Unit 3	Nebraska	40
Omaha Public Power District	Sarpy County Units 4 & 5	Nebraska	40
South Carolina Electric & Gas Co.	Hagood Unit 4	South Carolina	34
South Carolina Electric & Gas Co.	Urquhart 4	South Carolina	26
Wisconsin Power and Light Co.	Fond Du Lac #2	Wisconsin	41
Wisconsin Power and Light Co.	Fond Du Lac #3	Wisconsin	41
Wisconsin Power and Light Co.	Neenah	Wisconsin	35
Wisconsin Public Service Company	DePere	Wisconsin	35
Wisconsin Public Service Company	Pulliam Unit 31	Wisconsin	34
Wisconsin Public Service Company	West Marinette Unit 33	Wisconsin	45
Wisconsin Public Service Company	West Marinette Unit 34	Wisconsin	36
Florida Power and Light Company	Fort Myers Unit 3	Florida	30
Pacific Gas & Electric Company	Humboldt Bay CTs	California	30
Sierra Pacific Power Company	Clark Mountain 3	Nevada	30
Sierra Pacific Power Company	Clark Mountain 4	Nevada	30
Sierra Pacific Power Company	Tracy 8, 9, 10	Nevada	30
Nevada Power Company	Harry Allen 3	Nevada	30

KENTUCKY UTILITIES/LOUISVILLE GAS & ELECTRIC

Life Spans of Representative Simple Cycle Gas Power Plants

UTILITY	UNIT	LOCATION	LIFE SPAN
Nevada Power Company	Harry Allen 4	Nevada	30
Florida Power and Light Company	Fort Myers Unit 3	Florida	30
Pacific Gas & Electric Company	Humboldt Bay CTs	California	30

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 4

Responding Witness: John J. Spanos

Q.2-4. Refer to the response to KIUC 1-5(b). Provide a copy of all source documents relied on for the claims regarding dispatch and maintenance overhauls on the Brown 9 and 10 units compared to other CTs.

A.2-4. The explanation for Paddy's Run was set forth in the response to KIUC 1-5. The response to KIUC 1-5(b) for LG&E was not related to Brown 9 and 10.

The life spans for Brown 9 and 10 were established at the time the site visit was conducted in 2011 and then confirmed during the 2015 site visit. The degree of the overhaul and then the planned utilization produced the 37 and 36 year life spans..

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 5

Responding Witness: John J. Spanos

- Q.2-5. Refer to the response to KIUC 1-9. Identify the person who “projected the probable retirement dates” used by Mr. Spanos and provide a copy of all source documents relied for this projection. If none, then please so state.
- A.2-5. The Generation Services Engineering department supplied the probable retirement dates used by Mr. Spanos. The dates were consistent with the approved dates from the last study with the exception of Brown Units 1 and 2. The source document for the projections was produced in response to AG 1-156, Part 1 of 4, pp. 312-313. Generation Services also developed a depreciation study evaluation which was transmitted to Mr. Spanos for consideration in connection with probable retirement dates. That evaluation is attached.

Generation Services Engineering 2015 Depreciation Study Evaluation

[CONFIDENTIAL]

3/4/16

Methodology

Many factors influence the end of life for a generating station. To complete this analysis the following assumptions were made regarding factors outside the direct technical evaluation:

- All necessary environmental permits and licenses will be maintained
- Units will continue to operate in a manner that is consistent with recent operating practices, with a similar number of annual starts and stops, and annual generation.
- Units will continue to be operated in accordance with good industry practices with required renewals and replacements made in a timely manner

The generating stations were reviewed at a high level and although many individual components could fail it was decided that those would not constitute an "end of life" event and could be mitigated. The boiler drum and turbine/generator were the two components/systems identified where catastrophic failure would be consideration for retirement.

Although the boiler is a complex system with many elements, the boiler drum is a large single component with approximately 240k hours of defined life and is significantly influenced by thermal cycling. Electric Power Research Institute (EPRI) studies indicate that after approximately 1,700 normal start/stop cycles the risk of a critical flaw developing are greatly increased.

The turbine/generator is a single system, whose failure could lead to significant downtime and repair/replacement costs. Several key factors are taken into consideration when evaluating the generator such as insulation type, winding age, and recent inspection findings and test results. Wear, cracking, and blade condition are key considerations for the Turbine.

Review

The depreciation review process conducted by Generation Engineering consisted of evaluating key parameters (i.e. pressures, temperatures, voltages etc..) with equipment condition (i.e. inspection data, EPRI, IEEE, etc..) to provide a risk based assessment regarding the likelihood of equipment failure as compared to industry norms.

[CONFIDENTIAL]*Boiler*

EPRI states:

- A critical flaw size crack appears on average at around 30 year of service (240,000 hours).
- The average number of cycles of a coal drum unit has been 1,700 normal starts/stops to drive a critical flaw to failure.
- Natural Circulation boilers are more susceptible to ligament cracking than are Forced Circulation boilers.

The boiler review included previous inspection reports, and a review of design vs typical operating temperatures and pressures.

Generator

Generators are regularly inspected and electrically tested. Those results were reviewed along with any other known issues. In most cases where the generator winding was beyond design life, no known issues have been observed and no concerns exist regarding condition. However, assessments of Brown 1 and Brown 2 have identified discounts on their expected end of life due to generator condition.

Brown 1 has asphalt insulation and an observed shorted turn in the field winding. Electrical test results have been within normal expectations, however the armature winding is 59 years old with a design life of 30.

Brown 2 inspection and electrical test results have been as expected, however the armature windings has been in service for 52 years with an expected life of 30.

Turbine

Turbines are inspected on a routine basis with periodic repairs/overhauls to bring the unit to as designed operation. To-date no issues have been observed which did not allow a return to as designed operation.

Summary

Based on EPRI's research and the Generation Services Engineering review of units comparing their data, the boiler drum should not reduce the retirement year of each unit. While the EPRI "average end of drum life" for MC3 & MC4 are just short of the previous end of life depreciation study, the difference is not significant when considering these are typical and average numbers used from the analysis.

The end of life for Brown Unit 1 has been reduced 5 years from 2028 to 2023. The end of life for Brown Unit 2 has been reduced 5 years from 2034 to 2029.

There are no concerns regarding Turbine condition impacting unit end of life.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 6

Responding Witness: Valerie L. Scott / John J. Spanos

Q.2-6. Refer to the response to KIUC 1-11.

- a. The question asked for the amortization or depreciation period and the basis for the period that is proposed. The response did not address these questions. Provide this information.
- b. Describe how the depreciation rate will be determined and to what plant balance it will be applied if the retired plant costs have been removed from account 101 Electric Plant in Service and account 108 Accumulated Reserve for Depreciation.

A.2-6.

- a. The costs will be recovered through the remaining life of the existing plants still in service. This is consistent with group depreciation and the remaining life method.
- b. The depreciation rate for all assets are based on the life and salvage parameters as well as the plant to reserve ratio.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 7

Responding Witness: Lonnie E. Bellar / Christopher M. Garrett / John J. Spanos

Q.2-7. Refer to the response to KIUC 1-12. The Company did not provide the information requested and no other party can obtain the information that was requested from the schedules or workpapers provided in the filing or in response to discovery.

- a. Provide the demolition costs included in capitalization and rate base (gross demolition costs incurred (debit to accumulated depreciation), accumulated demolition costs recovered (credit to accumulated depreciation), and ADIT by month for the 13 months used in the test year to calculate capitalization.
- b. Provide the amortization or depreciation expense due to the demolition costs included in the revenue requirement.
- c. Provide the operating expenses by FERC account resulting from the demolition, if any, including property tax expense resulting from the increase in net plant due to debiting accumulated depreciation for the demolition costs.
- d. Provide the savings in operating expenses by FERC accounting resulting from the demolition, if any. If there are no savings reflected in the Company's operating expenses, then explain why there will be no savings, especially given that such savings were included in the rationale for the demolitions.

A.2-7.

- a. See attached.
- b. For the retired plants, there is no amortization or depreciation expense calculated for demolition costs for the revenue requirements. All retired plants are presented as fully depreciated. Based on group depreciation and the remaining life method, future terminal net salvage will be recovered over the life of other existing facilities.
- c. See attachment provided in subpart (a) for the associated property taxes. There are no O&M expenses associated with the demolition projects.

- d. There are no savings included in the forecasted test year for Cane Run because the demolitions are not expected to be complete until 2019. In regards to Paddys Run, total O&M included in the test year is \$21,938.

Louisville Gas and Electric Company
Plant Demolitions

	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	13-month Average 6/30/2018	(1) 13-month Average 6/30/2016
Accumulated Demolition Expenditures (108 Debits)															
Cane Run	4,070,499	5,701,095	7,331,690	8,962,285	10,592,880	12,223,475	13,854,071	15,235,095	16,616,119	18,123,695	19,631,282	21,093,141	22,554,999	13,537,717	3,050,000
Paddy's Run	17,803,098	19,509,901	21,407,879	22,689,429	24,208,754	24,208,754	24,208,754	24,208,754	24,208,754	24,208,754	24,208,754	24,208,754	24,208,754	23,022,238	8,698,229
*Paddy's Run Unitized	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	1,128,440	-
Total	23,002,038	26,339,436	29,868,009	32,780,155	35,930,075	37,560,670	39,191,266	40,572,290	41,953,314	43,460,890	44,968,477	46,430,336	47,892,194	37,688,396	11,748,229

	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	13-month Average 6/30/2018	13-month Average 6/30/2016
Terminal Net Salvage Reserve (108 Credits)															
Cane Run	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	-
Paddy's Run	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*Paddy's Run Unitized	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	4,836,314	-

	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	13-month Average 6/30/2018	13-month Average 6/30/2016
Accumulated Deferred Income Taxes (282)															
Cane Run	(297,902)	336,400	970,701	1,605,003	2,239,304	2,873,606	3,507,907	4,045,126	4,582,344	5,168,791	5,755,243	6,323,906	6,892,568	3,384,846	1,186,450
Paddy's Run	6,925,405	7,589,351	8,327,665	8,826,188	9,417,205	9,417,205	9,417,205	9,417,205	9,417,205	9,417,205	9,417,205	9,417,205	9,417,205	8,955,651	3,383,611
*Paddy's Run Unitized	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	438,963	-
Total	7,066,467	8,364,714	9,737,329	10,870,154	12,095,473	12,729,775	13,364,076	13,901,295	14,438,513	15,024,960	15,611,412	16,180,074	16,748,737	12,779,460	4,570,061

	6/30/2017	7/31/2017	8/31/2017	9/30/2017	10/31/2017	11/30/2017	12/31/2017	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	13-month Average 6/30/2018	13-month Average 6/30/2016
Total Rate Base / Capitalization															
Cane Run	(467,913)	528,381	1,524,675	2,520,968	3,517,262	4,513,556	5,509,849	6,353,655	7,197,461	8,118,590	9,039,726	9,932,921	10,826,117	5,316,557	1,863,550
Paddy's Run	10,877,693	11,920,549	13,080,214	13,863,241	14,791,549	14,791,549	14,791,549	14,791,549	14,791,549	14,791,549	14,791,549	14,791,549	14,791,549	14,066,588	5,314,618
*Paddy's Run Unitized	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	689,477	-
Total	11,099,257	13,138,407	15,294,366	17,073,687	18,998,288	19,994,582	20,990,875	21,834,681	22,678,487	23,599,616	24,520,752	25,413,947	26,307,143	20,072,622	7,178,168

	TYE 6/30/2018	TYE 6/30/2016	Difference / Rate Increase
Total Rate Base / Capitalization	\$ 20,072,622	\$ 7,178,168	\$ 12,894,454
Rate of Return (Pretax)	10.73%		10.73%
Return on Capitalization	\$ 2,153,586		\$ 1,383,442
Property Taxes	\$ 49,278	\$ 17,622	\$ 31,656
Total Revenue Requirement	\$ 2,202,864		\$ 1,415,098

(1) Response to Data Request KIUC 1-6, Case No. 2014-000372

* RWIP Closings to Accumulated Reserve excluded in initial response.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 8

Responding Witness: Valerie L. Scott / Daniel K. Arbough

Q.2-8. Refer to the response to KIUC 1-27.

- a. Provide the attachment to KIUC 2-17 in an Excel spreadsheet in live format and with formulas intact.
- b. Provide revised schedules for the base year and test year in the same format used for calendar years 2012 through 2016, separately showing the annual activity (deferrals) and the amortization expense.
- c. Provide the calculation of the activity and amortization expense for all regulatory assets by month in 2016, 2017, and 2018. Provide all electronic spreadsheets in live format with all formulas intact and a copy of all source documents relied on for the data or assumptions reflected in the calculations.
- d. Provide the calculation of the annual activity and amortization expense for all regulatory assets in the base year and test year that are reflected in the Company's filing. Provide all electronic spreadsheets in live format with all formulas intact and a copy of all source documents relied on for the data or assumptions reflected in the calculations.
- e. Provide a description of the forward starting swap losses regulatory asset and the basis for the amortization period.
- f. Provide a citation to the Orders in the proceedings cited for Commission approval of recovery and the amortization period for the forward starting swap losses.

A.2-8.

- a. See attachment being provided in Excel format.
- b. See the response to part d.
- c. See attachment being provided in Excel format.

- d. See attachment being provided in Excel format.

- e. By Order in Case No. 2014-00089 on June 16, 2014, LG&E was authorized by the KPSC to issue First Mortgage Bonds in aggregate principal amount of up to \$550 million and enter into hedging agreements (forward starting swaps) to lock in interest rates for debt to be issued in 2015. LG&E entered into hedging agreements totaling \$250 million for the 10 year bond and \$250 million for the 30 year bond. Debt was issued in September 2015, totaling \$300 million in 10 year First Mortgage Bonds and \$250 million in 30 year First Mortgage Bonds. The forward starting swaps were settled at a loss of \$14,076,899 related to the \$300 million, 10 year First Mortgage Bonds and \$29,611,403 related to the \$250 million, 30 year First Mortgage Bonds. The Report of Action, dated 10/16/2015 filed with the KPSC, indicated that the losses on the forward starting swaps settlement would be amortized over the life of the associated bonds (10 and 30 years). These regulatory assets were also described in the 2014 rate case (Case No. 2014-00372).

The losses on the settlement of the forward starting swaps are treated consistent with the regulatory liability which represents the gains on the settlement of forward starting swaps settled in 2013. By Order in Case No. 2012-00233, LG&E was authorized by the KPSC to enter into hedging agreements to lock in interest rates for debt that was issued in November 2013. In October 2012, LG&E entered into \$150 million of forward-starting swaps and in April 2013, LG&E added an additional \$100 million of forward-starting swaps. The initial swaps expired in September and LG&E received a payment of \$49,325,370.50, and LG&E entered into new forward-starting swaps with a total notional amount \$250 million, effectively extending the start date of the prior hedges from September 2013 to December 2013. New debt totaling \$250 million was issued in November 2013 and the hedges issued in September were terminated at the same time at a cost of \$6,297,402.74. The Report of Action, dated 12/13/2013 filed with the KPSC, indicated that the net gain on the forward starting swaps settlements totaling \$43,027,967.76 would be amortized over the 30 year life of the associated bonds. As such, the gains on the settlement of these forward starting swaps were recognized as regulatory liabilities in FERC account 254 and are being amortized over the life of the associated bonds. These regulatory liabilities were also described in the 2012 rate case (Case No. 2012-00222) and 2014 rate case (Case No. 2014-00372). Amortization of the gains is booked as a reduction to interest expense and was included in the test period in Case No. 2014-00372 and is included in the test period in this case.

- f. See the response to part e.

The attachments are
being provided in
separate files in Excel
format.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 9

Responding Witness: Counsel / Daniel K. Arbough

Q.2-9. Refer to the Attachment 2 to the response to KIUC 1-28.

- a. Provide a complete copy of this attachment with no redactions.
- b. Identify the person(s), employer(s), and position(s) who redacted sections of Attachment 2.
- c. For each redaction, describe the content of the redaction, provide all reasons why the content was redacted, and explain why the Company believes that the content should be redacted in this proceeding.

A.2-9.

- a) – c. Objection. The requested information is irrelevant to the subject matter of this proceeding, namely setting base rates for LG&E beginning July 1, 2017. The redacted data is non-responsive information regarding an entity that is not a party to the case, and does not charge any party to the case via intercompany transactions. Without waiver of this objection, the Company believes that the reference above should have been to Attachment 2 to the response to KIUC 1-29, not KIUC 1-28, and the response below reflects that belief.
- b. The redactions were approved by Daniel K. Arbough, the Company's Treasurer.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 10

Responding Witness: Daniel K. Arbough

Q.2-10. Provide a schedule showing the pension cost actuarial projections used for the budget and the actual pension cost recorded in total (expense plus capitalized) for each year 2012 through 2016.

A.2-10. See attached.

Louisville Gas and Electric's Actual Pension Costs					
	2012	2013~	2014^	2015*	2016
Service cost	8,791,157	10,002,618	7,897,007	9,226,418	8,230,199
Interest cost	32,535,851	31,246,136	33,345,549	30,180,400	31,567,362
Expected return on assets	(38,416,185)	(43,216,577)	(43,669,850)	(41,790,173)	(42,914,384)
Amortizations:					
Transition	-	-	-	-	-
Prior service cost	5,646,483	5,166,678	5,163,219	5,878,000	7,117,035
(Gain)/loss	16,114,113	24,195,944	9,561,235	16,161,780	8,284,904
ASC 715 NPBC	24,671,419	27,394,799	12,297,160	19,656,425	12,285,116

Louisville Gas and Electric's Projected Pension Costs					
	2012	2013~	2014^	2015*	2016
Service cost	9,556,420	8,162,300	9,406,326	10,044,668	8,818,260
Interest cost	34,881,903	34,131,636	34,333,511	36,028,373	32,144,785
Expected return on assets	(38,277,651)	(41,243,040)	(42,224,551)	(44,007,266)	(42,594,522)
Amortizations:					
Transition	-	-	-	-	-
Prior service cost	5,614,049	5,189,748	5,165,686	6,284,297	4,958,297
(Gain)/loss	15,603,208	9,752,808	15,732,116	23,633,297	8,988,044
ASC 715 NPBC	27,377,929	15,993,452	22,413,088	31,983,369	12,314,864

~ -Variance due predominantly due to a reduction in discount rate.

^ -Variance predominantly due to change in mortality table assumptions, combined with higher discount rates and asset returns.

* -Projections were prepared before the settlement of Case No. 2014-00372, which reduced actual amortization by \$5.7M. Also the projections assumed that all contributions would be made at year-end. However, contributions were made in January which significantly reduced costs. These costs reductions were partially offset by a change in plan design.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 11

Responding Witness: Daniel K. Arbough

- Q.2-11. Confirm that the 2017 pension cost actuarial projections that will be reflected in the 2017 actuarial report expected in the second quarter of 2017 likely will be less than those reflected in the 2016 projections for 2017 due to the fact that the actual earned returns in 2016 were greater than reflected in the ROA assumption.
- A.2-11. LG&E's actual return on assets in 2016 of 5.66% was not greater than the estimated return on assets of 7% which was reflected in the 2016 projections for 2017. Therefore, LG&E cannot confirm the statement in Question No. 2-11.

LOUISVILLE GAS AND ELECTRIC COMPANY

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**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 12

Responding Witness: Lonnie Bellar

Q.2-12. Refer to the response to KIUC 1-30. Provide a schedule showing transmission vegetation management costs by FERC account for each year 2007 through 2016, the base year, and the test year. On that same schedule, provide the transmission line miles by voltage.

A.2-12. Transmission vegetation management costs are recorded in FERC 571.

2007	\$665,992
2008	\$654,997
2009	\$538,612
2010	\$550,084
2011	\$1,205,731
2012	\$764,096
2013	\$1,058,715
2014	\$684,828
2015	\$793,878
2016	\$1,773,847
Base Yr.	\$2,056,123
Test Yr.	\$2,735,974

See Mr. Thompson's testimony, Exhibit PWT-2 (page 6, Table 1) for a breakdown of transmission line miles by voltage. The Company did not track lines miles worked by voltage for the years requested.

LOUISVILLE GAS AND ELECTRIC COMPANY

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**Response to Second Set of Data Requests of
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Question No. 13

Responding Witness: John P. Malloy

Q.2-13. Refer to the table and column heading “life of project” on page 6 of the Attachment to the response to KIUC 1-31. Provide the “Project Net Income” and “Project ROE” for each year over the projected life of the project.

A.2-13. LG&E assumes the intended reference is to KIUC 1-32. See attached.

Financial Analysis - Project Summary (\$000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Life of Project
Project Net Income	(\$997)	(\$1,142)	(\$313)	\$984	\$515	\$371	\$544	\$905	\$627	\$729	\$1,400	\$1,539	\$5,162
Project ROE	-21.1%	-10.0%	-2.5%	9.5%	5.7%	3.7%	5.5%	11.5%	7.8%	9.1%	23.8%	37.1%	5.1%

LOUISVILLE GAS AND ELECTRIC COMPANY

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**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
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Question No. 14

Responding Witness: John P. Malloy

- Q.2-14. Refer to the Attachment to the response to KIUC 1-31 and Attachment 1 to the response to KIUC 1-32.
- a. Explain why Attachment 1 to the response KIUC 1-32 shows no reduction in O&M expense for the avoided Client Specific Maintenance cited in the Attachment to the response to KIUC 1-31 as one reason to migrate to a later version of the SAP software.
 - b. Provide the savings from the avoided Client Specific Maintenance and demonstrate that these savings are reflected in the test year expenses.
- A.2-14. The Company assumes the intended references are to the attachment to the response to KIUC 1-32 and to Attachment 1 to the response to KIUC 1-33.
- a. The attachment to KIUC 1-32 does not cite avoided Client Specific Maintenance cost as a reason to migrate to a later version of the SAP software. Indeed, the Companies are continuing with their existing support agreement, which is why Attachment 1 to KIUC 1-33, which shows incremental O&M, not total O&M, does not contain an entry for Client Specific Maintenance. For clarification, “Client Specific Maintenance” is a support level, not a separate product, agreement, or contract; rather, under the Companies’ existing and continuing support agreement with SAP, there are different levels of support provided, and which level the Companies receive—for the same contract price—depends on the product being supported and age. For CRM 5.2, the Companies are receiving a support level called “Client Specific Maintenance” because, as noted in the attachment to KIUC 1-32, “LKS is the only SAP customer in North America still utilizing CRM 5.2.” Upon upgrading to CRM 7.4 as part of the SAP Upgrade Project, the Companies will receive a higher level of support (“Enterprise Level Support”) for the same price they are paying today under their annual support agreement with SAP. Therefore, because the Companies are not avoiding any annual support costs as part of the SAP Upgrade Project, there is no entry in Attachment 1 to KIUC 1-33 reflecting an O&M reduction related to annual support costs.

Note: The Investment Plan noted CRM was going to be upgraded to 7.2. Since the start of the project, it has been determined a newer version of CRM, 7.4, will be implemented.

- b. See the response to part a.

LOUISVILLE GAS AND ELECTRIC COMPANY

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**Response to Second Set of Data Requests of
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Dated February 7, 2017**

Question No. 15

Responding Witness: Lonnie E. Bellar

Q.2-15. Refer to the Attachment to the response to KIUC 1-34.

- a. Provide the Excel spreadsheet in live format and with all formulas intact.
- b. Provide annual totals.

A.2-15.

- a.-b. Assuming this question should have referred to KIUC 1-35, see attachment being provided in Excel format.

The attachment is being provided in a separate file in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 16

Responding Witness: Christopher M. Garrett

- Q.2-16. Provide the Company's projected federal and state NOL ADIT amounts on a total Company and jurisdictional basis at December 31, 2014, December 31, 2015, December 31, 2016, and at the end of each month in the base year and the test year. Provide the calculations of taxable income/(losses) each year/month and the carryforward each year/month.
- A.2-16. See the response to AG 1-142 for federal NOL amounts at December 31, 2014, December 31, 2015, and December 31, 2016. There was no state NOL at December 31, 2014, December 31, 2015, and December 31, 2016.

Attached are the monthly taxable income/(losses) schedules for the base year and test year, including carryforward additions/(utilizations).

Louisville Gas and Electric Company
Taxable Income
Response to Q-16
(\$ thousands)

Base Year Ending 2/28/17

	<u>MAR-2016</u>	<u>APR-2016</u>	<u>MAY-2016</u>	<u>JUN-2016</u>	<u>JUL-2016</u>	<u>AUG-2016</u>	<u>SEP-2016</u>	<u>OCT-2016</u>	<u>NOV-2016</u>	<u>DEC-2016</u>	<u>JAN-2017</u>	<u>FEB-2017</u>	<u>BASE YEAR</u>
Federal Taxable Income:													
Book Income	20,647	15,666	17,662	31,230	38,686	38,121	22,658	13,733	16,843	27,444	38,859	31,038	312,586
Permanent Differences	57	57	57	57	57	57	57	57	57	57	57	57	681
Other Timing Differences	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(2,365)	(28,380)
Property Related Timing Differences	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(36,658)	(439,902)
State Current Tax	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(139)	(1,673)
Federal Taxable Income/(Loss) Before NOL	(18,458)	(23,439)	(21,443)	(7,875)	(419)	(984)	(16,447)	(25,372)	(22,262)	(11,661)	(246)	(8,067)	(156,688)
NOL Addition/(Utilization)	18,458	23,439	21,443	7,875	419	984	16,447	25,372	22,262	11,661	246	8,067	156,688
Federal Taxable Income After NOL	-	-	-	-	-	-	-	-	-	-	-	-	-
State Taxable Income:													
Federal Taxable Income Before NOL	(18,459)	(23,440)	(21,444)	(7,876)	(420)	(986)	(16,448)	(25,374)	(22,263)	(11,662)	(247)	(8,068)	(156,688)
Addback State Current Tax	139	139	139	139	139	139	139	139	139	139	139	139	1,673
Addback Federal Tax Depreciation	18,517	18,517	18,517	18,517	18,517	18,517	18,517	18,517	18,517	18,517	18,517	18,517	222,198
Addback Bonus Depreciation	27,056	27,056	27,056	27,056	27,056	27,056	27,056	27,056	27,056	27,056	27,056	27,056	324,674
Deduct State Tax Depreciation	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(27,846)	(334,146)
Deduct State IRC Sec 199 Deduction	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(172)	(2,068)
State Taxable Income/(Loss)	(765)	(5,746)	(3,750)	9,818	17,274	16,708	1,246	(7,680)	(4,569)	6,032	17,447	9,626	55,643

Test Year Ending 6/30/18

	<u>JUL-2017</u>	<u>AUG-2017</u>	<u>SEP-2017</u>	<u>OCT-2017</u>	<u>NOV-2017</u>	<u>DEC-2017</u>	<u>JAN-2018</u>	<u>FEB-2018</u>	<u>MAR-2018</u>	<u>APR-2018</u>	<u>MAY-2018</u>	<u>JUN-2018</u>	<u>TEST YEAR</u>
Federal Taxable Income:													
Book Income	32,507	30,885	18,556	9,739	10,130	29,705	34,985	27,590	19,403	6,820	15,448	25,389	261,158
Permanent Differences	46	46	46	46	46	46	46	46	46	46	46	46	553
Other Timing Differences	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(976)	(11,712)
Property Related Timing Differences	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,821)	(23,819)	(23,819)	(285,846)
State Current Tax	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(180)	(2,163)
Federal Taxable Income/(Loss) Before NOL	7,576	5,954	(6,375)	(15,192)	(14,801)	4,774	10,054	2,659	(5,528)	(18,111)	(9,481)	460	(38,010)
NOL Addition/(Utilization)	(7,576)	(5,954)	6,375	15,192	14,801	(4,774)	(10,054)	(2,659)	5,528	18,111	9,481	(460)	38,010
Federal Taxable Income After NOL	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal NOL Carryforward	334,193	328,239	334,614	349,806	364,607	359,833	349,779	347,120	352,648	370,759	380,240	379,780	
State Taxable Income:													
Federal Taxable Income Before NOL	7,576	5,954	(6,374)	(15,191)	(14,801)	4,774	10,054	2,660	(5,527)	(18,111)	(9,483)	459	(38,010)
Addback State Current Tax	180	180	180	180	180	180	180	180	180	180	180	180	2,163
Addback Federal Tax Depreciation	25,030	25,030	25,030	25,030	25,030	25,030	25,030	25,030	25,030	25,030	25,030	25,030	300,354
Addback Bonus Depreciation	18,047	18,047	18,047	18,047	18,047	18,047	18,047	18,047	18,047	18,047	18,047	18,047	216,560
Deduct State Tax Depreciation	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(37,931)	(455,174)
Deduct State IRC Sec 199 Deduction	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(456)	(5,466)
State Taxable Income/(Loss)	12,446	10,824	(1,504)	(10,321)	(9,931)	9,644	14,924	7,530	(657)	(13,241)	(4,613)	5,329	20,427

Note: The taxable income amounts in the test year are absent proposed increases to rates in this rate case filing.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 17

Responding Witness: Christopher M. Garrett

Q.2-17. Provide a copy of all intercompany tax agreements to which the Company, LKS, and/or LKE is a party.

A.2-17. See attached.

**PPL AND CONSENTING MEMBERS OF ITS CONSOLIDATED GROUP
AGREEMENT FOR FILING CONSOLIDATED
INCOME TAX RETURNS AND FOR
ALLOCATION OF CONSOLIDATED INCOME
TAX LIABILITIES AND BENEFITS**

PPL (Parent) hereby agrees for itself and on behalf of its Members as of November 1, 2010 to join annually in the filing of a consolidated federal income tax return and to allocate the consolidated federal income tax liabilities and benefits among the Members of the consolidated group in accordance with the provisions of this Agreement.

WITNESSETH

WHEREAS, the parties hereto are Members of an affiliated group ("Affiliated Group") as defined in Section 1504(a) of the Internal Revenue Code of 1986, as amended ("Code"), of which the Parent is the common parent; and

WHEREAS, such Affiliated Group intends to file a U.S. consolidated income tax return for its tax period 2010 and for subsequent years; and

WHEREAS, PPL has historically determined its income tax allocation utilizing the principles of the "stand alone" or "separate company" method; and

WHEREAS, Kentucky Utilities Company ("KU") and Louisville Gas & Electric Company ("LG&E") were ordered in the Commonwealth of Kentucky Public Service Commission Case Nos. 2009-00548 and 2009-00549 to allocate income tax liabilities using the "stand alone" rate making principal; and

WHEREAS, Louisville Gas & Electric Company ("LG&E") was ordered in the Commonwealth of Kentucky Public Service Commission Case No. 89-374 to allocate income tax liabilities using the "stand alone" method; and

WHEREAS, Kentucky Utilities Company ("KU") was ordered in the Commonwealth of Kentucky Public Service Commission Case No. 10296 to allocate income tax liabilities using the "stand alone" method; and

WHEREAS, the Commonwealth of Kentucky Public Service Commission ordered LG&E and KU in case No. 97-300 to follow Corporate Policies and Guidelines for Intercompany Transactions which state: "The 'stand alone' method will be used to allocate the income tax liabilities of each entity."

WHEREAS, KU is subject to regulation by the Commonwealth of Virginia State Corporation Commission; and

WHEREAS, in 2008, Section 56.235(2)(A) the Code of Virginia was amended to state that "for ratemaking purposes, the Commission shall determine the federal and state income tax costs for investor-owned water, gas, or electric utility that is part of a publicly-traded,

consolidated group as follows: (i) such utility's apportioned state income tax costs shall be calculated according to the applicable statutory rate, as if the utility had not filed a consolidated return with its affiliates, and (ii) such utility's federal income tax costs shall be calculated according to the applicable federal income tax rate and shall exclude any consolidated tax liability or benefit adjustments originating from any taxable income or loss of its affiliates."

WHEREAS, it is the intent and desire of the parties hereto that a method be established for allocating the consolidated tax liability of the Affiliated Group among its Members, for reimbursing Parent for payment of such tax liability, for compensating any party for use of its losses or tax credits, and to provide for the allocation and payment of any refund or credit arising from a carryback, or carryforward of losses or tax credits from other tax years.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, the parties hereto agree as follows:

1. DEFINITIONS

"Associate company" is a consenting Member of the PPL consolidated group which agrees to be subject to this Agreement.

"Consolidated tax" is the aggregate current federal income tax liability for a tax year, being the tax shown on the consolidated federal income tax return of the Affiliated Group and any adjustments thereto, as described in Section 4 hereof. The Consolidated tax shall also mean the amount of the refund if the consolidated tax return shows a negative tax liability.

"Corporate tax credit" shall mean the negative Separate return tax of an Associate company for a taxable year, equal to the amount by which the Consolidated tax is reduced by including a loss, credit, carryover or other tax benefit of such Associate company in the consolidated return.

"Corporate taxable income" is the positive taxable income of an associate company for a tax year, computed as though such company had filed a separate return on the same basis as used in the consolidated return, except that dividend income or distributions from associate companies shall be disregarded, and other intercompany transactions, eliminated in consolidation, shall be given appropriate effect. Carryovers and carrybacks shall be taken into account unless the Member has been paid a Corporate Tax Credit therefore under paragraph 4 of this Agreement.

"Corporate taxable loss" is the taxable loss of an associate company for a tax year, computed as though such company had filed a separate return on the same basis as used in the consolidated return, except that dividend income from associate companies shall be disregarded, and other intercompany transactions, eliminated in consolidation, shall be given appropriate effect. Carryovers and carrybacks shall be taken into account unless Member has been paid a Corporate Tax Credit therefore under paragraph 4 of this Agreement.

"Member" is an Associate company, including a business as indicated in Section 3 herein, which agrees to be subject to this Agreement.

"PPL" means PPL Corporation, a Pennsylvania Corporation.

"Separate return tax" is the tax on the Corporate taxable income or loss of an associate company as though such company were not a Member of a consolidated group. For purposes of computing the Separate return tax of a Member which is a limited liability company, such Member shall be considered to possess and be entitled to use losses, carryovers, tax credits and other tax attributes (1) attributable to a predecessor of such Member taxable as a corporation or (2) arising while such Member is a limited liability company.

These definitions shall apply, as appropriate, in the context of the regular income tax and the Alternative Minimum Tax ("AMT") unless otherwise indicated in the Agreement.

2. A U.S. consolidated income tax return shall be filed by Parent, or its designee, for all tax periods covered under this Agreement and for which the Affiliated Group is required or permitted to file a consolidated tax return. Parent, or its designee, shall be responsible for the preparation of such returns, and shall be entitled to make all such elections under the Code as it shall deem appropriate or advisable in connection with those returns; provided that Parent, or its designee, shall have no liability to the subsidiaries for any errors or omissions in the preparation or filing of those returns, or in connection with those elections. Each of the undersigned Members shall, and shall cause their respective subsidiaries to execute and file such consents, elections, and other documents that Parent may determine are required or appropriate, in Parent's discretion and at its request, for the proper filing of, or in connection with, such returns, and take all such other actions as shall be required to give effect to the provisions of this Agreement. The undersigned Members and their respective subsidiaries are hereinafter collectively referred to as the "subsidiaries" or "Members", and individually referred to as a "subsidiary" or a "Member" and shall be bound by this agreement.

3. BUSINESSES OPERATING IN LLC OR LP FORM

For purposes of allocating the consolidated federal and state tax liabilities and tax benefits under this Agreement, each business operating as an LLC or LP shall be considered a Member, and shall be responsible for its allocable share of Corporate taxable income (or shall be entitled to a credit for its allocable share of Corporate taxable loss), as set forth in Sections 4 through 7 hereof. For purposes of this Agreement, the determination of a regulated business's allocable share shall be made (i) as if such regulated business was a regarded entity for U.S. federal income tax purposes and (ii) utilizing the separate "Corporate taxable income" or stand alone method.

4. TAX ALLOCATION PROCEDURES

The Consolidated tax shall be allocated among the Members of the group utilizing the separate "Corporate taxable income" or stand alone method, in the following manner:

a) Each Member, which has a Corporate taxable loss, will be entitled to a Corporate tax credit equal to the amount by which the consolidated regular income tax is reduced by including the Corporate taxable loss of such Member in the consolidated tax return. The Members having Corporate taxable income will be allocated an amount of regular income tax liability equal to the sum of the consolidated regular tax liability and the Corporate tax credits allocated to the Members having Corporate taxable losses based on the ratio that each such Member's Corporate taxable income bears to the total Corporate taxable income of all Members having Corporate

taxable income. If the aggregate of the Members' Corporate tax losses are not entirely utilized on the current year's consolidated return, the consolidated carryback or carryforward of such losses to the applicable taxable year(s) will be allocated to each Member having a Corporate taxable loss in the ratio that such Member's separate Corporate taxable loss bears to the total Corporate taxable losses of all Members having Corporate taxable losses.

Intercompany eliminations recorded by consolidation entries that affect the Consolidated tax will be assigned to the appropriate Member necessitating the intercompany elimination for the purpose of computing Separate return tax.

b) The consolidated AMT will be allocated among the Members in accordance with the procedures and principles set forth in Proposed Treasury Regulation Section 1.1502-55 in the form such regulation existed on the date on which this Agreement was executed. For purposes of this Agreement, any liability for alternative minimum tax shall be treated as part of the Member's separate tax liability provided that the entire Affiliated Group incurs an alternative minimum tax liability.

c) Tax benefits such as general business credits, foreign tax benefits, or other tax credits shall be apportioned directly to those Members whose investments or contributions generated the credit or benefit.

If the credit or benefit cannot be entirely utilized to offset current consolidated tax, the consolidated credit carryback or carryforward shall be apportioned to those Members whose investments or contributions generated the credit or benefit in proportion to the relative amounts of credits or benefits generated by each Member.

d) If the amount of consolidated tax allocated to any Member under this Agreement, as determined above, exceeds the separate return tax of such Member, such excess shall be reallocated among those Members who allocated tax liability is less than the amount of their respective separate return tax liabilities (i.e. sur-tax exemption). The reallocation shall be proportionate to the respective reductions in separate return tax liability of such Members. Any remaining unallocated tax liability shall be assigned to PPL. The term "tax" and "tax liability" used in the subsection shall include regular tax and AMT. Under no circumstances shall the amount of tax liability allocated to a Member of the Affiliated Group under this Agreement exceed its separate tax liability. The remaining cost or benefit will be allocated to the applicable business unit parent on at least an annual basis.

5. TAX PAYMENTS AND COLLECTIONS FOR ALLOCATIONS

Parent, or its designee, shall make any calculations on behalf of the Members necessary to comply with the estimated tax provisions of the Internal Revenue Code of 1986 as amended (the "Code"). Based on such calculations, Parent, or its designee, shall charge or refund to the Members appropriate amounts at intervals consistent with the dates indicated by Code Section 6655. Parent, or its designee, shall be responsible for paying to the Internal Revenue Service the consolidated current federal income tax liability.

After filing the consolidated federal income tax return and allocating the consolidated tax liability among the Members, Parent, or its designee, shall charge or credit, as appropriate, the

Members to reflect the difference between prior payments or credits and their current tax as allocated under this Agreement.

Charges or credits shall be made within ten business days after the returns are filed or estimated tax payments are made. Charges or credits are permitted to be made with each Member through the use of an intercompany account, as permitted under applicable state regulatory jurisdictions.

6. ALLOCATION OF STATE TAX LIABILITIES OR BENEFITS

The allocation of state and local income tax liabilities will be determined based on the application of one of the following filing methods:

- (1) Separate entity
- (2) Unitary group
- (3) Nexus Combined
- (4) Consolidated (mirrors the federal group);

provided, however, that no Member's state or local tax income tax liability under the Agreement shall exceed its state or local tax liability had it filed a separate return.

All tax cost or benefit determined under a separate entity filing will be allocated to the subsidiary that filed the separate return.

Tax cost or benefit determined for a unitary filing will be allocated to the applicable business unit (such as a regulated company or group of non-regulated companies), similar to a separate entity filing allocation. For example, if a business unit files a state unitary return including a parent entity and its subsidiaries, the entire state tax cost or benefit is allocated to the business unit. Further allocation within the business unit is optional at the discretion of the business unit.

Tax cost or benefit determined for a nexus combined filing will be allocated as if each entity or business unit filed a "stand alone" or separate entity return. Both apportionment factors and taxable income are to be considered in the allocation. Any remaining cost or benefit will be allocated to the applicable business unit parent on at least an annual basis.

Tax cost or benefit determined for a consolidated filing will be allocated based on each subsidiary's or business unit's nexus (as defined below) with the individual state or locality. For example, state tax determined in a consolidated return will be allocated as if the entity (or business unit) filed a "stand alone" or separate tax return using both: (a) the entity's (or business unit's) property, payroll, and receipts apportioned to the state and (b) their taxable income or loss. No tax cost or benefit will be allocated to any entity or business unit having no nexus in the state or locality. The remaining cost or benefit will be allocated to the applicable business unit parent on at least an annual basis.

For purposes of state and local allocations, the following definitions are provided:

"Nexus"-- The connection an entity has with a taxing jurisdiction generally represented by property and payroll. The applicable jurisdiction's nexus standards will determine whether tax

cost or benefit is allocated to an entity. (e.g., state sales or receipts of an entity may require inclusion in a consolidated return even though the entity itself does not have nexus and is protected by PL 86-272.)

"Unitary"--The relationship between related/affiliated Members generally within a consolidated group. The applicable jurisdiction will determine whether the entities are unitary. This often requires a presence of unity of ownership (e.g., over 50% owned by common parent), unity of operation (back-office or central support functions) and unity of use (centralized policies, common management forces, intercompany products flow or services provided by one entity to another).

"Nexus-combined"-- A return that includes only those entities having nexus in the applicable jurisdiction.

7. TAX RETURN ADJUSTMENTS

In the event the consolidated tax return is subsequently adjusted by the Internal Revenue Service, state tax authorities, amended returns, claims for refund, or otherwise, such adjustments shall be reflected in the same manner as though they had formed part of the original consolidated return. Interest paid or received, and penalties imposed on account of any adjustment will be allocated to the responsible Member. In the case of a refund, Parent shall make payment to each Member for its share of the refund, determined in the same manner as in paragraph 3 above, within ten business days after the refund is received by Parent, and in the case of an increase in tax liability, each Member shall pay to Parent its allocable share of such increased tax liability, penalties and interest within ten days after receiving notice of such liability from Parent.

8. NEW MEMBERS

If, at any time, any other company becomes a Member of the Affiliated Group, the parties hereto agree that such new Member may become a party to this Agreement by executing a duplicate copy of this Agreement. Unless otherwise specified, such new Member shall have similar rights and obligations to all other Members under this Agreement.

9. MEMBERS LEAVING THE AFFILIATED GROUP

In the event that any Member of the Affiliated Group at any time leaves the group and, under any applicable statutory provision or regulation, that Member is assigned and is deemed to take with it all or a portion of any of the tax attributes (including, but not limited to, net operating losses, credit carryforwards, and minimum tax credit carryforwards) of the Affiliated Group, then, to the extent the amount of the attributes so assigned differs from the amount of such attributes previously allocated to such Member under this Agreement, the leaving Member shall appropriately settle with the group. Such settlement shall consist of payment of a dollar-for-dollar basis for all differences in credits and, in the case of net operating loss differences, in an amount computed by reference to the highest marginal corporate tax rate. The settlement amounts shall be allocated among the remaining Members of the group in proportion to the relative level of attributes possessed by each Member and the attributes of each Member shall be adjusted accordingly.

10. SUCCESSORS, ASSIGNS

The provisions and terms of the Agreement shall be binding on and insure to the benefit of any successor or assignee by reason of merger, acquisition of assets, or otherwise, of any of the Members hereto.

11. AMENDMENTS AND TERMINATION

This Agreement may be amended at any time by the written agreement of the parties hereto at the date of such amendment and may be terminated at any time by the written consent of all such parties.

12. GOVERNING LAW

This Agreement is made under the law of the Commonwealth of Pennsylvania, which law shall be controlling in all matters relating to the interpretation, construction, or enforcement hereof.

13. EFFECTIVE DATE

This Agreement is effective for the allocation of the current federal income tax liabilities of the Members for the consolidated tax year (2010) and all subsequent years until this Agreement is revised in writing.

The above procedure for apportioning the consolidated annual net current federal and state tax liabilities and tax benefits of PPL and consenting Members of its consolidated group have been agreed to by each of the below listed Members of the consolidated group as evidenced by the signature of an officer of each business unit or sub-group parent company.

PPL CORPORATION

By: 

Alexander J. Tarok
Assistant Treasurer

LG&E AND KU ENERGY LLC

By: 

S. Bradford Rives
Chief Financial Officer

LOUISVILLE GAS AND ELECTRIC COMPANY

By: 

S. Bradford Rives
Chief Financial Officer

KENTUCKY UTILITIES COMPANY

By: 

S. Bradford Rives
Chief Financial Officer

LG&E ENERGY MARKETING INC.

By: 

S. Bradford Rives
Vice President and Controller

LG&E AND KU SERVICES COMPANY

By: 

S. Bradford Rives
Chief Financial Officer

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 18

Responding Witness: Daniel K. Arbough / Valerie L. Scott

- Q.2-18. Refer to the response to AG 1-31.
- a. Provide the annual amortization expense for the key man life insurance by FERC account for each year 2012 through 2016, the base year, and the test year.
 - b. Explain why the Company incurred these costs and provide all reasons why the Company believes the costs are reasonable to recover from customers.
 - c. If the Company records income or accretion in the cash value of the policies, then describe how these amounts are recorded for accounting purposes and how the income or accretion is reflected in the filing.
- A.2-18. a-c. LG&E does not have key man life insurance policies.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 19

Responding Witness: Valerie L. Scott

Q.2-19 Refer to the response to AG 1-78. The Company did not provide the information requested. Provide the information requested in electronic spreadsheet format.

A.2-19. See attachment being provided in Excel format.

The attachment is being provided in a separate file in Excel format.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 20

Responding Witness: John J. Spanos

- Q.2-20. Refer to the response to AG 1-181. Provide the depreciation rates without the proposed 2.5% escalation on terminal net salvage.
- A.2-20. The attached schedule sets forth the depreciation rates without the proposed 2.5% escalation of terminal net salvage.

**LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT**

**TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015**

ACCOUNT (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	CALCULATED ANNUAL		COMPOSITE REMAINING LIFE (9)=(6)/(7)		
						ACCRUAL AMOUNT (7)	ACCRUAL RATE (8)=(7)/(4)			
DEPRECIABLE PLANT										
STEAM PRODUCTION PLANT										
311.00	STRUCTURES AND IMPROVEMENTS									
	RIVERPORT DISTRIBUTION CENTER	95-R2.5	*	(25)	2,448,808.82	106,621	2,954,390	64,263	2.62	46.0
	MILL CREEK UNIT 1	95-R2.5	*	(7)	21,218,440.50	17,739,678	4,964,053	305,361	1.44	16.3
	MILL CREEK UNIT 2	95-R2.5	*	(7)	13,784,004.21	10,050,918	4,697,967	257,774	1.87	18.2
	MILL CREEK-SO2 UNIT 2	95-R2.5	*	(7)	4,905,069.31	908,754	4,339,670	236,363	4.82	18.4
	MILL CREEK UNIT 3	95-R2.5	*	(7)	23,447,354.22	20,789,953	4,298,716	196,821	0.84	21.8
	MILL CREEK-SO2 UNIT 3	95-R2.5	*	(7)	362,866.58	381,081	7,186	331	0.09	21.7
	MILL CREEK UNIT 4	95-R2.5	*	(7)	71,301,927.39	39,806,594	36,486,468	1,416,182	1.99	25.8
	MILL CREEK-SO2 UNIT 4	95-R2.5	*	(7)	5,774,012.27	2,402,114	3,776,079	144,662	2.51	26.1
	TRIMBLE COUNTY - UNIT 1	95-R2.5	*	(11)	107,440,308.95	62,804,985	56,453,758	1,715,132	1.60	32.9
	TRIMBLE COUNTY - SO2 UNIT 1	95-R2.5	*	(11)	889,015.22	63,579	923,228	27,376	3.08	33.7
	TRIMBLE COUNTY - UNIT 2	95-R2.5	*	(11)	16,230,214.94	1,622,756	16,392,783	337,731	2.08	48.5
	TRIMBLE COUNTY - SO2 UNIT 2	95-R2.5	*	(11)	69,933.48	4,574	73,052	1,505	2.15	48.5
	<i>TOTAL ACCOUNT 311 - STRUCTURES AND IMPROVEMENTS</i>				267,871,955.89	156,681,607	135,367,350	4,703,501	1.76	28.8
311.10	STRUCTURES AND IMPROVEMENTS - ASH PONDS									
	MILL CREEK UNIT 1 ASH POND	100-S4	*	0	411,750.29	409,203	2,547	155	0.04	16.4
	MILL CREEK UNIT 3 ASH POND	100-S4	*	0	1,263,768.52	1,143,318	120,451	5,358	0.42	22.5
	TRIMBLE COUNTY - UNIT 1 ASH POND	100-S4	*	0	4,942,817.00	2,913,165	2,029,652	58,899	1.19	34.5
	<i>TOTAL ACCOUNT 311.1 - STRUCTURES AND IMPROVEMENTS - ASH PONDS</i>				6,618,335.81	4,465,686	2,152,650	64,412	0.97	33.4
311.20	STRUCTURES AND IMPROVEMENTS - RETIRED PLANT									
	CANE RUN UNIT 1	95-R2.5	*	(10)	2,191,328.96	2,410,462	0	0	-	-
	CANE RUN UNIT 2	95-R2.5	*	(10)	1,227,964.74	1,350,761	0	0	-	-
	CANE RUN UNIT 3	95-R2.5	*	(10)	2,035,143.37	2,238,658	0	0	-	-
	CANE RUN UNIT 4	95-R2.5	*	(10)	1,912,802.31	2,104,083	0	0	-	-
	CANE RUN-SO2 UNIT 4	95-R2.5	*	(10)	17,192.20	18,911	0	0	-	-
	CANE RUN UNIT 5 AND SO2 UNIT 5	95-R2.5	*	(10)	2,776,066.69	3,053,673	0	0	-	-
	CANE RUN UNIT 6 AND SO2 UNIT 6	95-R2.5	*	(10)	7,143,949.34	7,858,344	0	0	-	-
	<i>TOTAL ACCOUNT 311.2 - STRUCTURES AND IMPROVEMENTS - RETIRED PLANT</i>				17,304,447.61	19,034,892	0	0	-	-
312.00	BOILER PLANT EQUIPMENT									
	MILL CREEK UNIT 1	54-R1.5	*	(7)	178,942,005.68	36,143,407	155,324,539	9,828,944	5.49	15.8
	MILL CREEK-SO2 UNIT 1	54-R1.5	*	(7)	16,929,429.83	9,483,324	8,631,166	557,246	3.29	15.5
	MILL CREEK UNIT 2	54-R1.5	*	(7)	195,105,935.45	28,923,192	179,840,159	10,194,116	5.22	17.6
	MILL CREEK-SO2 UNIT 2	54-R1.5	*	(7)	110,425,074.58	1,321,055	116,833,775	6,564,164	5.94	17.8
	MILL CREEK UNIT 3	54-R1.5	*	(7)	154,476,037.48	72,650,637	92,638,723	4,531,977	2.93	20.4
	MILL CREEK-SO2 UNIT 3	54-R1.5	*	(7)	63,286,858.14	31,775,161	35,941,777	1,760,615	2.78	20.4
	MILL CREEK UNIT 4	54-R1.5	*	(7)	456,780,256.78	120,187,548	368,567,327	15,246,344	3.34	24.2
	MILL CREEK-SO2 UNIT 4	54-R1.5	*	(7)	192,799,793.58	11,325,207	194,970,572	7,932,851	4.11	24.6
	TRIMBLE COUNTY - UNIT 1	54-R1.5	*	(11)	315,234,544.67	76,641,229	273,269,116	9,238,608	2.93	29.6
	TRIMBLE COUNTY - SO2 UNIT 1	54-R1.5	*	(11)	63,938,782.78	47,042,527	23,929,522	849,100	1.33	28.2
	TRIMBLE COUNTY - UNIT 2	54-R1.5	*	(11)	139,789,842.49	19,713,701	135,453,024	3,262,712	2.33	41.5
	TRIMBLE COUNTY - SO2 UNIT 2	54-R1.5	*	(11)	15,043,962.98	2,283,667	14,415,132	347,607	2.31	41.5
	<i>TOTAL ACCOUNT 312 - BOILER PLANT EQUIPMENT</i>				1,902,752,524.44	457,490,655	1,599,814,832	70,314,284	3.70	22.8

**LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT**

**TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015**

ACCOUNT (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	ACCURUAL RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)		
312.10	BOILER PLANT EQUIPMENT - ASH PONDS TRIMBLE COUNTY - UNIT 2 ASH POND	100-S4	*	0	5,057,242.50	695,214	4,362,028	126,436	2.50	34.5
	<i>TOTAL ACCOUNT 312.1 - BOILER PLANT EQUIPMENT - ASH PONDS</i>			5,057,242.50	695,214	4,362,028	126,436	2.50	34.5	
312.20	BOILER PLANT EQUIPMENT - RETIRED PLANT CANE RUN UNIT 1 CANE RUN UNIT 2 CANE RUN UNIT 3 CANE RUN UNIT 4 AND SO2 UNIT 4 CANE RUN UNIT 5 CANE RUN-SO2 UNIT 5 CANE RUN UNIT 6 CANE RUN-SO2 UNIT 6	54-R1.5	*	(10)	155,318.38 191,818.30 45,899.53 10,784,306.78 121,519.99	170,850 211,000 50,489 11,862,737 133,672	0 0 0 0 0	0 0 0 0 0	- - - - -	- - - - -
	<i>TOTAL ACCOUNT 312.2 - BOILER PLANT EQUIPMENT - RETIRED PLANT</i>			11,298,862.98	12,604,203	0	0	-	-	
312.02	BOILER PLANT EQUIPMENT - RAIL CARS CANE RUN RAIL CARS	25-R2.5	*	0	4,466,784.44	3,863,668	603,116	603,116	13.50	1.0
	<i>TOTAL ACCOUNT 312.02 - BOILER PLANT EQUIPMENT - RAIL CARS</i>			4,466,784.44	3,863,668	603,116	603,116	13.50	1.0	
314.00	TURBOGENERATOR UNITS MILL CREEK UNIT 1 MILL CREEK UNIT 2 MILL CREEK UNIT 3 MILL CREEK UNIT 4 TRIMBLE COUNTY - UNIT 1 TRIMBLE COUNTY - UNIT 2	60-R2.5	*	(7)	26,056,004.81 27,144,373.73 35,128,565.99 55,019,246.79 57,523,686.49 21,822,318.91	11,553,369 10,812,289 19,997,929 23,338,020 28,179,899 4,434,454	16,326,556 18,232,191 17,589,637 35,532,574 35,671,393 19,788,320	1,023,950 1,025,336 840,512 1,448,223 1,177,444 453,714	3.93 3.78 2.39 2.63 2.05 2.08	15.9 17.8 20.9 24.5 30.3 43.6
	<i>TOTAL ACCOUNT 314 - TURBOGENERATOR UNITS</i>			222,694,196.72	98,315,960	143,140,671	5,969,179	2.68	24.0	
314.10	TURBOGENERATOR UNITS - RETIRED PLANT CANE RUN UNIT 1 CANE RUN UNIT 2 CANE RUN UNIT 3 CANE RUN UNIT 4 CANE RUN UNIT 5	60-R2.5	*	(10)	1,099,327.82 80,617.90	7,068 547 32,812 1,209,261 88,680	0 0 0 0 0	0 0 0 0 0	- - - - -	- - - - -
	<i>TOTAL ACCOUNT 314.1 - TURBOGENERATOR UNITS - RETIRED PLANT</i>			1,179,945.72	1,338,368	0	0	-	-	
315.00	ACCESSORY ELECTRIC EQUIPMENT MILL CREEK UNIT 1 MILL CREEK-SO2 UNIT 1 MILL CREEK UNIT 2 MILL CREEK-SO2 UNIT 2 MILL CREEK UNIT 3 MILL CREEK-SO2 UNIT 3 MILL CREEK UNIT 4 MILL CREEK-SO2 UNIT 4 TRIMBLE COUNTY - UNIT 1 TRIMBLE COUNTY - SO2 UNIT 1 TRIMBLE COUNTY - UNIT 2	60-R3	*	(7)	18,025,740.40 202,167.22 8,520,586.26 2,652,362.06 15,226,752.73 2,531,772.82 30,114,624.76 1,671,038.70 49,259,197.22 2,736,920.21 10,707,823.19	10,743,237 202,539 6,042,370 765,601 13,762,601 2,750,734 17,803,481 551,225 27,949,947 2,346,076 1,046,909	8,544,305 13,780 3,074,657 2,072,426 2,530,024 (41,737) 14,419,167 1,236,786 26,727,762 691,905 10,838,775	535,248 903 175,930 112,693 125,436 0 594,264 47,350 906,728 23,693 235,669	2.97 0.45 2.06 4.25 0.82 - 1.97 2.83 1.84 0.87 2.20	16.0 15.3 17.5 18.4 20.2 - 24.3 26.1 29.5 29.2 46.0
	<i>TOTAL ACCOUNT 315 - ACCESSORY ELECTRIC EQUIPMENT</i>			141,648,985.57	83,964,720	70,107,850	2,757,914	2.54	25.4	

**LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT**

**TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015**

ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL		COMPOSITE REMAINING LIFE		
						ACCRUAL AMOUNT	ACCRUAL RATE			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)		
315.10	ACCESSORY ELECTRIC EQUIPMENT - RETIRED PLANT									
	CANE RUN UNIT 1			453,004						
	CANE RUN UNIT 2			14,197						
	CANE RUN UNIT 3			56,033						
	CANE RUN UNIT 4			618,589						
	CANE RUN-SO2 UNIT 4			88,099						
	CANE RUN-SO2 UNIT 5			188,197						
	CANE RUN-SO2 UNIT 6			163,225						
	<i>TOTAL ACCOUNT 315.1 - ACCESSORY ELECTRIC EQUIPMENT - RETIRED PLANT</i>				1,581,344					
316.00	MISCELLANEOUS PLANT EQUIPMENT									
	RIVERPORT DISTRIBUTION CENTER	50-R2.5	*	(5)	487,938.91	35,815	476,521	11,586	2.37	41.1
	MILL CREEK UNIT 1	50-R2.5	*	(7)	773,417.22	571,904	255,652	17,495	2.26	14.6
	MILL CREEK UNIT 2	50-R2.5	*	(7)	163,907.70	107,230	68,151	4,020	2.45	17.0
	MILL CREEK UNIT 3	50-R2.5	*	(7)	358,868.31	336,897	47,092	2,241	0.62	21.0
	MILL CREEK UNIT 4	50-R2.5	*	(7)	9,755,743.48	3,301,258	7,137,388	293,013	3.00	24.4
	MILL CREEK-SO2 UNIT 4	50-R2.5	*	(7)	43,211.57	25,844	20,392	815	1.89	25.0
	TRIMBLE COUNTY - UNIT 1	50-R2.5	*	(11)	2,918,490.40	1,486,749	1,752,775	64,442	2.21	27.2
	TRIMBLE COUNTY - UNIT 2	50-R2.5	*	(11)	3,149,018.07	290,574	3,204,836	76,312	2.42	42.0
	<i>TOTAL ACCOUNT 316 - MISCELLANEOUS PLANT EQUIPMENT</i>				17,650,595.66	6,156,271	12,962,807	469,924	2.66	27.6
316.10	MISCELLANEOUS PLANT EQUIPMENT - RETIRED PLANT									
	CANE RUN UNIT 1	50-R2.5	*	(10)	10.83	12	0	0	-	-
	CANE RUN UNIT 3	50-R2.5	*	(10)	44.28	49	0	0	-	-
	CANE RUN UNIT 5	50-R2.5	*	(10)	133,003.43	146,304	0	0	-	-
	CANE RUN-SO2 UNIT 5	50-R2.5	*	(10)	11.31	12	0	0	-	-
	CANE RUN UNIT 6 AND SO2 UNIT 6	50-R2.5	*	(10)	474,554.25	522,010	0	0	-	-
	<i>TOTAL ACCOUNT 316.1 - MISCELLANEOUS PLANT EQUIPMENT - RETIRED PLANT</i>				607,624.10	668,387	0	0	-	-
	TOTAL STEAM PRODUCTION PLANT				2,599,151,501.44	846,860,975	1,968,511,304	85,008,766		
	HYDROELECTRIC PRODUCTION PLANT									
331.00	STRUCTURES AND IMPROVEMENTS									
	OHIO FALLS - NON-PROJECT	100-S2	*	(2)	65,796.14	42,098	25,014	939	1.43	26.6
	OHIO FALLS - PROJECT 289	100-S2	*	(2)	7,806,211.99	4,275,424	3,686,912	124,155	1.59	29.7
	<i>TOTAL ACCOUNT 331 - STRUCTURES AND IMPROVEMENTS</i>				7,872,008.13	4,317,522	3,711,926	125,094	1.59	29.7
332.00	RESERVOIRS, DAMS & WATERWAY									
	OHIO FALLS - PROJECT 289	100-S2.5	*	(2)	17,038,183.00	2,954,321	14,424,626	154,660	0.91	93.3
	<i>TOTAL ACCOUNT 332 - RESERVOIRS, DAMS & WATERWAY</i>				17,038,183.00	2,954,321	14,424,626	154,660	0.91	93.3
333.00	WATER WHEELS, TURBINES & GENERATORS									
	OHIO FALLS - PROJECT 289	100-R3	*	(2)	62,117,401.34	3,775,862	59,583,887	2,014,898	3.24	29.6
	<i>TOTAL ACCOUNT 333 - WATER WHEELS, TURBINES & GENERATORS</i>				62,117,401.34	3,775,862	59,583,887	2,014,898	3.24	29.6

LOUISVILLE GAS AND ELECTRIC
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TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015

	ACCOUNT (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	CALCULATED ANNUAL		COMPOSITE REMAINING LIFE (9)=(6)/(7)	
							ACCRUAL AMOUNT (7)	ACCRUAL RATE (8)=(7)/(4)		
334.00	ACCESSORY ELECTRIC EQUIPMENT OHIO FALLS - PROJECT 289	80-R4	*	(2)	8,220,468.78	2,561,842	5,823,036	196,531	2.39	29.6
	<i>TOTAL ACCOUNT 334 - ACCESSORY ELECTRIC EQUIPMENT</i>			8,220,468.78	2,561,842	5,823,036	196,531	2.39	29.6	
335.00	MISCELLANEOUS PLANT EQUIPMENT OHIO FALLS - NON-PROJECT	80-R2.5	*	(2)	25,458.41	6,273	19,695	704	2.77	28.0
	OHIO FALLS - PROJECT 289	80-R2.5	*	(2)	1,164,363.44	137,221	1,050,430	36,061	3.10	29.1
	<i>TOTAL ACCOUNT 335 - MISCELLANEOUS PLANT EQUIPMENT</i>			1,189,821.85	143,494	1,070,125	36,765	3.09	29.1	
336.00	ROADS, RAILROADS & BRIDGES OHIO FALLS - NON-PROJECT					872				
	OHIO FALLS - PROJECT 289	80-S4	*	(2)	29,930.61	18,886	11,643	693	2.32	16.8
	<i>TOTAL ACCOUNT 336 - ROADS, RAILROADS & BRIDGES</i>			29,930.61	19,758	11,643	693	2.32	16.8	
	TOTAL HYDROELECTRIC PRODUCTION PLANT			96,467,813.71	13,772,799	84,625,243	2,528,641			
	OTHER PRODUCTION PLANT									
341.00	STRUCTURES AND IMPROVEMENTS CANE RUN GT 11	55-R4	*	(3)	211,518.43	116,269	101,595	40,763	19.27	2.5
	CANE RUN CC 7	55-R4	*	(6)	16,720,973.73	4,003,389	13,720,843	355,873	2.13	38.6
	ZORN AND RIVER ROAD GAS TURBINE	55-R4	*	(8)	8,241.14	8,653	247	74	0.90	3.3
	PADDY'S RUN-GENERATOR 12	55-R4	*	(4)	64,113.35	59,183	7,495	3,019	4.71	2.5
	PADDY'S RUN-GENERATOR 13	55-R4	*	(4)	2,414,063.40	1,052,043	1,458,583	94,772	3.93	15.4
	BROWN COMBUSTION TURBINE #5	55-R4	*	(4)	870,738.10	418,308	487,260	31,696	3.64	15.4
	E W BROWN # 6	55-R4	*	(4)	105,977.86	50,957	59,260	4,414	4.17	13.4
	E W BROWN # 7	55-R4	*	(4)	144,356.29	69,649	80,482	5,999	4.16	13.4
	TRIMBLE COUNTY #5	55-R4	*	(4)	1,555,655.08	702,619	915,262	55,934	3.60	16.4
	TRIMBLE COUNTY #6	55-R4	*	(4)	1,467,923.89	666,526	860,115	52,574	3.58	16.4
	TRIMBLE COUNTY #7	55-R4	*	(4)	2,083,698.13	823,174	1,343,872	73,236	3.51	18.3
	TRIMBLE COUNTY #8	55-R4	*	(4)	2,075,526.50	819,945	1,338,603	72,948	3.51	18.4
	TRIMBLE COUNTY #9	55-R4	*	(4)	2,137,402.33	838,922	1,383,976	75,421	3.53	18.4
	TRIMBLE COUNTY #10	55-R4	*	(4)	2,132,789.69	837,111	1,380,990	75,258	3.53	18.4
	<i>TOTAL ACCOUNT 341 - STRUCTURES AND IMPROVEMENTS</i>			31,992,977.92	10,466,748	23,138,583	941,981	2.94	24.6	
342.00	FUEL HOLDERS, PRODUCERS AND ACCESSORIES CANE RUN GT 11	55-R2.5	*	(3)	319,042.17	174,257	154,356	61,859	19.39	2.5
	CANE RUN CC 7	55-R2.5	*	(6)	31,223,235.12	459,682	32,636,947	880,652	2.82	37.1
	CANE RUN GAS PIPELINE	55-R2.5	*	(6)	6,603,630.80	97,339	6,902,510	186,252	2.82	37.1
	ZORN AND RIVER ROAD GAS TURBINE	55-R2.5	*	(8)	23,433.81	17,033	8,276	2,387	10.19	3.5
	PADDY'S RUN-GENERATOR 11	55-R2.5	*	(4)	9,237.57	10,069	(462)	0	-	-
	PADDY'S RUN-GENERATOR 12	55-R2.5	*	(4)	21,667.08	18,481	4,053	1,627	7.51	2.5
	PADDY'S RUN-GENERATOR 13	55-R2.5	*	(4)	2,256,664.93	1,104,941	1,241,991	82,735	3.67	15.0
	BROWN COMBUSTION TURBINE #5	55-R2.5	*	(4)	846,906.63	358,748	522,035	34,714	4.10	15.0
	E W BROWN # 6	55-R2.5	*	(4)	745,241.96	146,491	628,561	47,334	6.35	13.3
	E W BROWN # 7	55-R2.5	*	(4)	483,544.93	19,025	483,862	36,267	7.50	13.3

**LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT**

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CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015**

ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL		COMPOSITE REMAINING LIFE		
						ACCRUAL AMOUNT	ACCRUAL RATE			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)		
TRIMBLE COUNTY #5	55-R2.5	*	(4)	97,996.90	44,930	56,987	3,570	3.64	16.0	
TRIMBLE COUNTY #6	55-R2.5	*	(4)	97,861.58	44,873	56,903	3,565	3.64	16.0	
TRIMBLE COUNTY CT PIPELINE	55-R2.5	*	(4)	2,000,796.10	910,510	1,170,318	65,739	3.29	17.8	
TRIMBLE COUNTY #7	55-R2.5	*	(4)	338,423.07	135,077	216,883	12,130	3.58	17.9	
TRIMBLE COUNTY #8	55-R2.5	*	(4)	337,096.18	134,548	216,032	12,082	3.58	17.9	
TRIMBLE COUNTY #9	55-R2.5	*	(4)	347,146.53	137,775	223,257	12,486	3.60	17.9	
TRIMBLE COUNTY #10	55-R2.5	*	(4)	361,860.02	142,662	233,672	13,065	3.61	17.9	
<i>TOTAL ACCOUNT 342 - FUEL HOLDERS, PRODUCERS AND ACCESSORIES</i>				46,113,785.38	3,956,441	44,756,181	1,456,464	3.16	30.7	
343.00	PRIME MOVERS									
	CANE RUN CC 7	35-R2	*	(6)	25,159,119.94	378,544	26,290,123	830,914	3.30	31.6
	PADDY'S RUN-GENERATOR 11	35-R2	*	(4)	16,843.43	0	17,517	7,035	41.77	2.5
	PADDY'S RUN-GENERATOR 12	35-R2	*	(4)	268,203.43	0	278,932	112,021	41.77	2.5
	PADDY'S RUN-GENERATOR 13	35-R2	*	(4)	22,139,250.16	6,701,017	16,323,803	1,160,590	5.24	14.1
	BROWN COMBUSTION TURBINE #5	35-R2	*	(4)	15,935,197.16	7,632,280	8,940,325	643,008	4.04	13.9
	E W BROWN # 6	35-R2	*	(4)	20,175,027.41	6,603,730	14,378,299	1,163,400	5.77	12.4
	E W BROWN # 7	35-R2	*	(4)	18,369,003.83	8,268,375	10,835,389	879,941	4.79	12.3
	TRIMBLE COUNTY #5	35-R2	*	(4)	13,578,278.24	5,680,100	8,441,309	570,424	4.20	14.8
	TRIMBLE COUNTY #6	35-R2	*	(4)	13,496,420.84	5,621,689	8,414,589	568,937	4.22	14.8
	TRIMBLE COUNTY #7	35-R2	*	(4)	15,407,573.33	5,163,654	10,860,222	654,458	4.25	16.6
	TRIMBLE COUNTY #8	35-R2	*	(4)	14,745,193.97	4,838,617	10,496,385	633,686	4.30	16.6
	TRIMBLE COUNTY #9	35-R2	*	(4)	14,530,190.91	4,969,811	10,141,588	612,933	4.22	16.5
	TRIMBLE COUNTY #10	35-R2	*	(4)	14,463,360.17	4,932,354	10,109,541	610,485	4.22	16.6
<i>TOTAL ACCOUNT 343 - PRIME MOVERS</i>				188,283,662.82	60,790,171	135,528,022	8,447,832	4.49	16.0	
344.00	GENERATORS									
	CANE RUN GT 11	60-S3	*	(3)	2,910,123.60	2,616,010	381,417	153,422	5.27	2.5
	CANE RUN CC 7	60-S3	*	(6)	31,742,426.62	532,375	33,114,597	849,964	2.68	39.0
	ZORN AND RIVER ROAD GAS TURBINE	60-S3	*	(8)	1,827,580.88	2,011,678	(37,891)	0	-	-
	PADDY'S RUN-GENERATOR 11	60-S3	*	(4)	1,523,115.56	1,660,196	(76,156)	0	-	-
	PADDY'S RUN-GENERATOR 12	60-S3	*	(4)	3,066,610.15	3,342,605	(153,330)	0	-	-
	PADDY'S RUN-GENERATOR 13	60-S3	*	(4)	6,144,295.60	2,557,436	3,832,631	248,239	4.04	15.4
	BROWN COMBUSTION TURBINE #5	60-S3	*	(4)	3,272,183.24	1,522,393	1,880,678	121,860	3.72	15.4
	E W BROWN # 6	60-S3	*	(4)	2,440,817.89	1,241,241	1,297,210	96,442	3.95	13.5
	E W BROWN # 7	60-S3	*	(4)	2,443,902.61	1,223,482	1,318,177	98,001	4.01	13.5
	TRIMBLE COUNTY #5	60-S3	*	(4)	1,553,077.96	694,348	920,853	56,043	3.61	16.4
	TRIMBLE COUNTY #6	60-S3	*	(4)	1,550,950.32	693,467	919,521	55,962	3.61	16.4
	TRIMBLE COUNTY #7	60-S3	*	(4)	1,744,404.67	677,221	1,136,960	61,688	3.54	18.4
	TRIMBLE COUNTY #8	60-S3	*	(4)	1,734,857.53	673,490	1,130,762	61,352	3.54	18.4
	TRIMBLE COUNTY #9	60-S3	*	(4)	1,745,589.16	673,270	1,142,143	61,969	3.55	18.4
	TRIMBLE COUNTY #10	60-S3	*	(4)	1,740,255.03	671,328	1,138,537	61,774	3.55	18.4
<i>TOTAL ACCOUNT 344 - GENERATORS</i>				65,440,190.82	20,790,540	47,946,109	1,926,716	2.94	24.9	
345.00	ACCESSORY ELECTRIC EQUIPMENT									
	CANE RUN GT 11	45-S2.5	*	(3)	143,715.91	130,386	17,641	7,111	4.95	2.5
	CANE RUN CC 7	45-S2.5	*	(6)	7,358,623.01	117,861	7,682,279	210,185	2.86	36.6
	ZORN AND RIVER ROAD GAS TURBINE	45-S2.5	*	(8)	94,068.64	51,946	49,648	14,584	15.50	3.4
	PADDY'S RUN-GENERATOR 11	45-S2.5	*	(4)	592,469.57	82,248	533,920	214,868	36.27	2.5
	PADDY'S RUN-GENERATOR 12	45-S2.5	*	(4)	898,168.62	568,899	365,196	146,526	16.31	2.5
	PADDY'S RUN-GENERATOR 13	45-S2.5	*	(4)	2,842,847.82	1,359,313	1,597,249	107,061	3.77	14.9
	BROWN COMBUSTION TURBINE #5	45-S2.5	*	(4)	2,602,373.29	1,277,247	1,429,221	95,902	3.69	14.9
	E W BROWN # 6	45-S2.5	*	(4)	979,635.94	494,082	524,739	40,178	4.10	13.1
	E W BROWN # 7	45-S2.5	*	(4)	962,647.17	482,946	518,207	39,708	4.12	13.1

**LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT**

**TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015**

ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL		COMPOSITE REMAINING LIFE
						ACCRUAL AMOUNT	ACCRUAL RATE	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
TRIMBLE COUNTY #5	45-S2.5	*	843,655.20	317,768	559,633	34,910	4.14	16.0
TRIMBLE COUNTY #6	45-S2.5	*	1,597,869.51	684,010	977,774	61,604	3.86	15.9
TRIMBLE COUNTY #7	45-S2.5	*	2,301,316.45	756,223	1,637,146	90,984	3.95	18.0
TRIMBLE COUNTY #8	45-S2.5	*	1,839,118.27	740,830	1,171,853	65,681	3.57	17.8
TRIMBLE COUNTY #9	45-S2.5	*	2,064,331.48	758,946	1,387,959	77,496	3.75	17.9
TRIMBLE COUNTY #10	45-S2.5	*	4,425,582.26	1,626,976	2,975,630	166,697	3.77	17.9
<i>TOTAL ACCOUNT 345 - ACCESSORY ELECTRIC EQUIPMENT</i>			29,546,423.14	9,449,681	21,428,095	1,373,495	4.65	15.6
346.00	MISCELLANEOUS PLANT EQUIPMENT							
	CANE RUN CC 7	* (6)	3,551.54	4	3,761	98	2.76	38.4
	ZORN AND RIVER ROAD GAS TURBINE	* (8)	9,488.39	4,131	6,116	1,747	18.41	3.5
	PADDY'S RUN-GENERATOR 11	* (4)	9,494.38	4,715	5,159	2,064	21.74	2.5
	PADDY'S RUN-GENERATOR 13	* (4)	1,283,450.74	613,583	721,206	47,158	3.67	15.3
	BROWN COMBUSTION TURBINE #5	* (4)	2,395,225.12	1,140,284	1,350,750	88,332	3.69	15.3
	E W BROWN # 6	* (4)	22,455.77	11,378	11,976	895	3.99	13.4
	E W BROWN # 7	* (4)	23,047.78	11,498	12,472	932	4.04	13.4
	TRIMBLE COUNTY #5	* (4)	14,528.92	6,024	9,086	555	3.82	16.4
	TRIMBLE COUNTY #7	* (4)	5,204.51	2,006	3,407	186	3.57	18.3
	TRIMBLE COUNTY #8	* (4)	5,182.59	1,999	3,391	186	3.59	18.2
	TRIMBLE COUNTY #9	* (4)	5,328.44	2,042	3,500	192	3.60	18.2
	TRIMBLE COUNTY #10	* (4)	25,332.91	6,364	19,982	1,085	4.28	18.4
<i>TOTAL ACCOUNT 346 - MISCELLANEOUS PLANT EQUIPMENT</i>			3,802,291.09	1,804,028	2,150,806	143,430	3.77	15.0
TOTAL OTHER PRODUCTION PLANT			365,179,331.17	107,257,609	274,947,796	14,289,918		
TRANSMISSION PLANT								
350.10	LAND AND LAND RIGHTS	0	8,587,652.59	2,965,005	5,622,648	97,954	1.14	57.4
352.10	STRUCTURES AND IMPROVEMENTS	(10)	12,348,843.04	1,935,360	11,648,367	215,708	1.75	54.0
353.10	STATION EQUIPMENT	(15)	177,220,906.50	67,453,599	136,350,443	2,853,420	1.61	47.8
354.00	TOWERS AND FIXTURES	(50)	43,937,509.41	24,518,155	41,388,109	808,496	1.84	51.2
355.00	POLES AND FIXTURES	(75)	72,622,298.38	22,514,553	104,574,469	2,166,154	2.98	48.3
356.00	OVERHEAD CONDUCTORS AND DEVICES	(75)	55,070,079.07	27,080,118	69,292,520	1,830,912	3.32	37.8
357.00	UNDERGROUND CONDUIT	(5)	2,278,627.52	647,631	1,744,928	41,653	1.83	41.9
358.00	UNDERGROUND CONDUCTORS AND DEVICES	(10)	7,425,136.30	2,917,032	5,250,618	180,906	2.44	29.0
TOTAL TRANSMISSION PLANT			379,491,052.81	150,031,453	375,872,102	8,195,203		
DISTRIBUTION PLANT								
361.00	STRUCTURES AND IMPROVEMENTS	(10)	7,496,623.44	2,161,463	6,084,823	153,417	2.05	39.7
362.00	STATION EQUIPMENT	(15)	130,844,529.79	41,811,140	108,660,069	2,752,950	2.10	39.5
364.00	POLES, TOWERS, AND FIXTURES	(80)	180,739,747.03	76,980,980	248,350,565	5,754,513	3.18	43.2
365.00	OVERHEAD CONDUCTORS AND DEVICES	(75)	294,631,650.78	112,310,961	403,294,428	9,584,229	3.25	42.1
366.00	UNDERGROUND CONDUIT	(30)	83,283,013.77	30,229,424	78,038,494	1,331,520	1.60	58.6
367.00	UNDERGROUND CONDUCTORS AND DEVICES	(40)	201,672,612.00	57,425,952	224,915,705	4,152,554	2.06	54.2
368.00	LINE TRANSFORMERS	(20)	158,614,044.23	73,969,647	116,367,206	3,690,557	2.33	31.5
369.10	SERVICES - UNDERGROUND	(50)	7,721,903.52	1,632,319	9,950,536	287,905	3.73	34.6
369.20	SERVICES - OVERHEAD	(100)	22,546,422.62	22,883,145	22,209,700	583,539	2.63	37.4
370.00	METERS	*	35,084,451.85	30,874,317	4,210,135	978,050	2.79	4.3
370.10	METERING EQUIPMENT	0	6,686,008.69	3,209,284	3,476,725	220,824	3.30	15.7
	METERS - RESERVE AMORTIZATION			(9,685,852)	9,685,852			
370.20	METERS - AMS	0	1,195,968.08	8,471	1,187,497	81,896	6.85	14.6
373.10	STREET LIGHTING AND SIGNAL SYSTEMS - OVERHEAD	(30)	41,270,079.16	12,097,349	41,553,754	2,222,181	5.38	18.7

LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015

ACCOUNT (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	CALCULATED ANNUAL ACCRUAL RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
373.20 STREET LIGHTING AND SIGNAL SYSTEMS - UNDERGROUND	38-R2.5	(40)	56,446,011.68	25,998,412	53,026,004	2,052,285	3.64	25.8
TOTAL DISTRIBUTION PLANT			1,228,233,066.64	481,907,012	1,331,011,493	33,856,420		

LOUISVILLE GAS AND ELECTRIC
ELECTRIC PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND
CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AS OF DECEMBER 31, 2015

ACCOUNT (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	CALCULATED ANNUAL ACCRUAL AMOUNT (7)	CALCULATED ANNUAL ACCRUAL RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)	
GENERAL PLANT									
392.00	TRANSPORTATION EQUIPMENT - CARS AND LIGHT TRUCKS	14-S2	0	740,166.03	406,577	333,589	30,479	4.12	10.9
392.10	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS AND OTHER	13-R2	0	3,030,111.14	1,676,043	1,354,068	126,695	4.18	10.7
392.20	TRANSPORTATION EQUIPMENT - TRAILERS	25-L4	0	499,404.83	117,081	382,324	26,639	5.33	14.4
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	6,352,111.78	2,319,470	4,032,642	271,901	4.28	14.8
396.10	POWER OPERATED EQUIPMENT - LARGE MACHINERY	20-S1.5	0	1,877,867.31	1,760,648	117,219	7,153	0.38	16.4
396.20	POWER OPERATED EQUIPMENT - OTHER	22-S1	0	204,508.94	79,507	125,002	7,309	3.57	17.1
397.20	COMMUNICATION EQUIPMENT - DSM	10-SQ	0	4,947,585.72	997,917	3,949,669	607,641	12.28	6.5
TOTAL GENERAL PLANT				17,651,755.75	7,357,243	10,294,513	1,077,817		
TOTAL DEPRECIABLE PLANT				4,686,174,521.52	1,607,187,091	4,045,262,451	144,956,765		
NONDEPRECIABLE PLANT									
301.00	ORGANIZATION			2,240.29					
310.20	LAND			6,427,075.15					
330.20	LAND			6.50					
340.20	LAND			20,260.01					
350.20	LAND			2,560,181.12					
360.20	LAND			4,100,654.47	31				
TOTAL NONDEPRECIABLE PLANT				13,110,417.54	31				
TOTAL ELECTRIC PLANT				4,699,284,939.06	1,607,187,122	4,045,262,451	144,956,765		

* LIFE SPAN PROCEDURE IS USED. CURVE SHOWN IS INTERIM SURVIVOR CURVE
 ** TERMINAL NET SALVAGE FACTOR WHICH IS BASED ON VINTAGE AND FUTURE COSTS
 *** RESERVE AMOUNT TO BE RECOVERED AT END OF REPLACEMENT PROGRAM

NOTE: Accrual rates for the Brown Solar Assets when placed in service June 2016 will be as follows:

Account	Rate
34100	4.24%
34400	4.61%
34500	4.36%
34600	4.25%

Accrual rates for the Electric Vehicle Charging Station Assets when placed in service June 2016 will be as follows:

Account	Rate
37100	10.00%

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 21

Responding Witness: John K. Wolfe

Q.2-21. Refer to the response to AG 1-230. Provide the storm damage expense for the base year and the test year.

A.2-21. The storm damage expense for the base year is \$4,403,783 and the test year is \$5,233,614.

LOUISVILLE GAS AND ELECTRIC COMPANY**CASE NO. 2016-00371****Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017****Question No. 22****Responding Witness: John P. Malloy**

Q.2-22. Provide the number of MV90 meters in use, by rate schedule, for the most recent 12 month period available. Also provide the total number of meters (all types) by rate schedule for the same 12 month period.

A.2-22.

Count of MV-90 Billable Meters		
Rate	KU	LGE
Special Contracts		7
FLS	1	
GS 3Ø	2	9
PS Primary	7	4
PS Secondary	11	76
RTOD E	2	2
RTS	29	21
TOD Primary	280	142
TOD Secondary	669	444
Total	1,001	705

For all non-residential meters, the counts provided are as of September 2016, which are the most recent counts readily available. Residential meter counts are as of February 2017, and should be comparable to the numbers of residential meters in service as of September 2016.

Count of Meters		
Rate	KU	LG&E
Special Contracts		7
AES 1Ø	341	-
AES 3Ø	265	-
FLS	1	-
GS 1Ø	69,720	30,164
GS 3Ø	19,803	17,383
PS Primary	238	84
PS Secondary	4,722	3,126
RS	440,695	368,764
RTS	31	22
TOD Primary	285	143
TOD Secondary	663	457

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 23

Responding Witness: John P. Malloy

- Q.2-23. The Companies have indicated that they do not plan to replace MV90 meters with AMS. Are there other meters in use for rate schedules TOD-Secondary, TOT-Primary, RTS, FLS or Special Contracts that will not be replaced by AMS. If so, identify, by rate schedule, the number of such meters (other than MV90) that will not be replaced by AMS.
- A.2-23. No. The Companies plan on exchanging all of the electric meters excluding the MV-90 billable meters with AMS meters. Note, the majority of gas indices will be changed instead of the meter.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 24

Responding Witness: William S. Seelye

- Q.2-24. With regard to TAB “Meters” in the Company’s class cost of service studies, the average cost of a secondary voltage residential meter is shown to be \$63.93. In the Company’s 2014 case, the corresponding meter cost is shown to be \$63.61. Please confirm that the average residential meter cost for the June 30, 2018 ending test year is \$63.93 and that it includes the impact of AMS replacements. If the Company cannot confirm this, please explain why the test year meter costs, including AMS replacements, has not been used in the calculation of the meter allocation factors.
- A.2-24. The calculation of meter costs included in the Meters tab of the cost of service study, and as used in the development of the allocation factor for meters in the cost of service study, is based on historical equipment and labor costs for meter installations during the months prior to the Company’s application in this proceeding. It is assumed that the relative relationship between rate classes will remain the same as the historical cost relationship.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 25

Responding Witness: Robert M. Conroy

Q.2-25. Referring to LG&E's response to KIUC 1-48(c), Attachment 1:

- a. Did LG&E conduct similar rate comparisons for CSR customers that did not request such comparisons?
- b. If the answer to the preceding request is yes, please provide such comparisons in native format with working formulas and all links intact.

A.2-25.

- a. No, LG&E did not conduct similar rate comparisons for CSR customers that did not request such comparisons.
- b. Not applicable.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 26

Responding Witness: David S. Sinclair

Q.2-26. Referring to LG&E's responses to KIUC 1-55(c)-(e):

- a. Please explain in detail whether CSR load subject to a 10-minute notice of interruption would qualify as operating reserve as defined in the response to KIUC 1-55(c).
- b. Explain in detail how LG&E treats load subject to the interruption provisions of Rate FLS (System Contingencies and Industry Performance Criteria section) in meeting system operating reserve requirements.

A.2-26.

- a. As indicated in the response to KIUC 1-56(c), for curtailable load to qualify as operating reserves, the curtailable load must be fully removable from system load within a 15 minute period. Therefore the load must first be in place on the system (the Company cannot be assured that the curtailable customer has load to reduce) and second, must be removable within a 15 minute period. Thus, if a CSR load was subject to a 10-minute notice, the load must first be occurring on the system and second must be removed within 5 minutes after the 10-minute notice period expired. Furthermore, for interruptible load to qualify as operating reserve, no restrictions on the number or frequency of requests could be in place.
- b. LG&E does not consider FLS load in meeting its operating reserve requirements, which consist of spinning reserves and non-spinning (supplemental) reserves. Both spinning and supplemental reserves must be available to serve load within a 15 minute period. For curtailable load to qualify as operating reserves, the curtailable load must be fully removable from system load within a 15 minute period. The execution of a FLS interruption requires a 5 minute notice, can last no longer than ten minutes, and may not be fully removable from the system. Therefore, FLS does not qualify as an operating reserve and is not considered when determining the need for operating reserve capacity.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

**Response to Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated February 7, 2017**

Question No. 27

Responding Witness: David S. Sinclair

Q.2-27. Referring to LG&E's response to KIUC 1-62(b):

- a. Please describe and explain in detail the justification for the August 2010 change in Rider CSR that restricted interruption requests to periods in which all generating units were dispatched.
- b. Please identify each occasion and the exigent circumstances under which LG&E would have invoked a physical curtailment of CSR load since January 2014 to the present if the interruption restriction noted in the preceding request had not been in place.

A.2-27.

- a. Prior to August 2010, the CSR tariff effective February 6, 2009 allowed for curtailments for any reason for a limited number of hours annually.

Effective February 6, 2009 the CSR1 tariff stated:

“Customer may, at Customer’s option, contract with Company to curtail service upon notification by Company. Requests for curtailment shall not exceed two hundred (200) hours per year nor shall any single request for curtailment be for less than thirty (30) minutes or for more than fourteen (14) hours per calendar day, with no more than two (2) requests for curtailment per calendar day within these parameters. Company may request or cancel a curtailment at any time during an hour, but shall give no less than twenty (20) minutes notice when either requesting or canceling a curtailment.”

Effective August 1, 2010, the CSR10 tariff stated:

“Company may request at its sole discretion up to 100 hours of physical curtailment per year without a buy-through option during system reliability events. For the purposes of this rider, a system reliability event is any condition or occurrence: 1) that impairs KU and LG&E’s ability to

maintain service to contractually committed system load; 2) where KU and LG&E's ability to meet their compliance obligations with NERC reliability standards cannot otherwise be achieved; or 3) that KU and LG&E reasonably anticipate will last more than six hours and could require KU and LG&E to call upon automatic reserve sharing ("ARS") at some point during the event."

This new language was agreed to as part of the settlement as described in the June 7, 2010 Stipulation and Recommendation (pages 227 and 230) between the Companies and several parties (including the Kentucky Industrial Utility Customers, Inc.) in the rate proceedings in Case No. 2009-00549. The Stipulation and Recommendation can be found at:

http://psc.ky.gov/PSCSCF/2009%20cases/2009-00549/20100608_KU_and_LGE_Stipulation_and_Recommendation.PDF.

Note, the new language did not explicitly restrict "interruption requests to periods in which all generating units were dispatched" although as a practical matter, the circumstances described in the tariff would likely result in all available units being committed.

- b. See the response to KIUC 1-62b. As stated, the Company is not able to identify the specific hours for additional physical curtailment. Also see the Company's response to KIUC 1-61.