COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES)	
COMPANY FOR AN ADJUSTMENT OF ITS)	CASE NO.
ELECTRIC RATES AND FOR CERTIFICATES)	2016-00370
OF PUBLIC CONVENIENCE AND NECESSITY)	

RESPONSE OF KENTUCKY UTILITIES COMPANY TO SECOND REQUEST FOR INFORMATION OF KENTUCKY LEAGUE OF CITIES DATED FEBRUARY 7, 2017

FILED: FEBRUARY 20, 2017

COMMONWEALTH OF KENTUCKY)) SS: COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbougb**, 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 1014 day of feling 2017.

edy Schoola (SEAL)

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

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.

Belle

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this 16th day of Actiun 2017.

Filequerter (SEAL)

My Commission Expires:

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

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

The undersigned, Kent W. Blake, being duly sworn, deposes and says that he is Chief Financial Officer 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.

Kent W. Blake

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this 20^{th} day of <u>Jebruan</u> 2017.

Jammy Elyy Notary Public (SEAL)

My Commission Expires:

November 9, 2018

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 $\frac{2017}{4}$ day of $\frac{4640443}{4}$ and $\frac{2017}{4}$.

Judy Scholes (SEAL)

Notary Publy

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

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.

Mut

Subscribed and sworn to before me, a Notary Public in and before said County and State, this <u>AOM</u> day of <u>FERENCY</u> 2017.

Vidystehertis (SEAL)

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

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. Mallov

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this JOH day of Fetricity 2017.

under the (SEAL)

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

COMMONWEALTH OF KENTUCKY)) SS: COUNTY OF JEFFERSON)

The undersigned, Gregory J. Meiman, being duly sworn, deposes and says that he is Vice President, Human Resources 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.

Gregory J. Meiman

Subscribed and swom to hefore me, a Notary Public in and before said County

and State, this 16th day of Fetiling 2017.

Judy Clertin (SEAL)

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

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 employee 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

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this Hold day of Settly ____ 2017.

Judyschoole (SEAL)

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

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.

uly Schooles (SEAL)

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

COMMONWEALTH OF PENNSYLVANIA)) SS: COUNTY OF CUMBERLAND)

The undersigned, **John J. Spanos**, being duly sworn, deposes and says he is Senior Vice President, for Gannett Fleming Valuation and Rate Consultants, LLC, that he has personal knowledge of the matters set forth in the 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.

anos

Subscribed and sworn to before me, a Notary Public in and before said County and

Commonwealth, this gill day of _____ 2017.

Lustr (SEAL) Notary Public

My Commission Expires:

February 21, 2019

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Cheryl Ann Rutter, Notary Public East Pennsboro Twp., Cumberland County My Commission Expires Feb. 20, 2019 MEMPER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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 John _day of _ferring 2017.

Juldy Schooles (SEAL)

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

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 1

Responding Witness: Lonnie E. Bellar

- Q-1. Referring to KU's Response to KLC 1-8:
 - a. Provide a schedule quantifying the costs incurred that are associated with the 2006 Settlement Agreement for the years 2015 through 2018 and the Test Year.
 - b. Explain and provide workpapers showing how a decision to source energy from MISO changes the amount of KU's Misc. Transmission Expense.
 - c. Define the acronyms ITO and RC as shown in the Attachment.
 - d. Explain the fluctuations in the ITO expenses shown in the Attachment.
 - e. Explain how the TVA RC is determined.

A-1.	a. 2015	\$5,393,017
	2016	\$5,908,118
	2017	\$6,664,570
	2018	\$6,992,666
	Test Yr.	\$6,830,622

- b. KU's Miscellaneous Transmission Expense changes because of decisions made by KU transmission customers. If an eligible transmission customer elects to purchase energy from MISO, miscellaneous transmission expense increases. If an eligible transmission customer who previously elected to purchase energy from MISO decides no longer to do so, miscellaneous transmission expense decreases. The Company based its forecast on long term transmission service requests known at the time of the forecast and anticipated short term requests from eligible customers. See attached.
- c. Independent Transmission Organization ("ITO") and Reliability Coordinator ("RC")
- d. The fluctuations in the ITO expenses shown in the attachments are due to the execution of a new ITO contract. The latest annual contract price (for the combined companies) was \$2,749K annually. The recent execution of the new ITO contract (which goes into effect on 9/1/2017) was negotiated with a

contract price of \$2,479K annually (for the combined companies) with a 1.5% annual escalator (down from 2.5% in the current contract). Thus, from January to August 2017, the higher current contract price will be paid, and then a significant reduction for the remaining four months in 2017. 2018 will be the first full year at the lower price, and the slight increases shown in 2019 - 2021 are indicative of the annual escalator.

e. We interpret your question to mean how the TVA RC costs are determined. LG&E/KU has a negotiated contract with TVA to perform the function of the Reliability Coordinator.

	Jan-17		Feb-17	Mar-17	4	Apr-17	May-17		Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17		2017
Loads - LG&E and KU	MV	N	MW	MW		MW	MW		MW	MW	MW	MW	MW	MW	MW		
OMU PTP	103		103	103		103	103		103	103	103	103	103	103	103		
KMPA	128	3	128	128		128	128		128	128	128	128	128	128	128		
KYMEA	20)	20	20		20	20		20	20	20	20	20	20	20		
Misc Exp - LG&E and	KU, \$'s																
OMU	189,623	3	189,623	189,623		189,623	189,623		195,206	195,206	195,206	199,326	199,326	199,326	\$ 199,326	\$	2,331,034
OMU SFP and NF	15,000)	15,000	15,000		15,000	15,000		15,000	15,000	15,000	15,000	15,000	15,000	\$ 15,000	\$	180,000
KMPA	501,772	2	501,772	501,772		501,772	501,772		517,558	517,558	517,558	517,558	517,558	517,558	\$ 517,558	\$	6,131,763
KYMEA	78,402	2	78,402	78,402		78,402	78,402		80,868	80,868	80,868	80,868	80,868	80,868	\$ 80,868	\$	958,088
26A	36,31	l	36,311	36,311		36,311	43,963		43,963	43,963	43,963	43,963	43,963	43,963	\$ 43,963	\$	496,948
Total	821,108	3	821,108	821,108		821,108	828,760		852,595	852,595	852,595	856,715	856,715	856,715	856,715		10,097,833
KU Expense	541,931	l	541,931	541,931		541,931	546,981		562,713	562,713	562,713	565,432	565,432	565,432	565,432	\$	6,664,570
	Jan-18		Feb-18	Mar-18	1	Apr-18	May-18		Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18		2018
Loads - LG&E and KU	MV	17	MW	MW		MW	MW		MW	MW	MW	MW	MW	MW	MW		
OMU PTP	103		103	103		103	103		103	103	103	103	103	103	103		
KMPA	103		103	103		103	103		103	103	103	103	103	103	103		
KYMEA	20		20	20		20	20		20	20	20	20	20	20	20		
KT WIL/Y	20	,	20	20		20	20		20	20	20	20	20	20	20		
Misc Exp - LG&E and	KU, \$'s																
OMU	\$ 199,326	5\$	199,326	\$ 199,326	\$	199,326	\$ 199,326	\$	207,092	\$ 207,092	\$ 207,092	\$ 211,212	\$ 211,212	\$ 211,212	\$ 211,212	\$	2,462,751
OMU SFP and NF	\$ 15,000) \$	15,000	\$ 15,000	\$	15,000	\$ 15,000	\$	15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$	180,000
KMPA	\$ 517,558	3\$	517,558	\$ 517,558	\$	517,558	\$ 517,558	\$	535,699	\$ 535,699	\$ 535,699	\$ 535,699	\$ 535,699	\$ 535,699	\$ 535,699	\$	6,337,683
KYMEA	\$ 80,868	3 \$	80,868	\$ 80,868	\$	80,868	\$ 80,868	\$	83,703	\$ 83,703	\$ 83,703	\$ 83,703	\$ 83,703	\$ 83,703	\$ 83,703	\$	990,263
26A	\$ 52,021	\$	52,021	\$ 52,021	\$	52,021	\$ 52,021	\$	52,021	\$ 52,021	\$ 52,021	\$ 52,021	\$ 52,021	\$ 52,021	\$ 52,021	\$	624,252
Total	864,773	3	864,773	864,773		864,773	864,773		893,515	893,515	893,515	897,635	897,635	897,635	897,635		10,594,949
								+									
KU Expense	\$ 570,750)\$	570,750	\$ 570,750	\$	570,750	\$ 570,750	\$	589,720	\$ 589,720	\$ 589,720	\$ 592,439	\$ 592,439	\$ 592,439	\$ 592,439	\$	6,992,666
	Jul-17		Aug-17	Sep-17		Oct-17	Nov-17		Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	5	Test Year
KU Test year	562,713	3	562,713	565,432		565,432	565,432		565,432	\$ 570,750	\$ 570,750	\$ 570,750	\$ 570,750	\$ 570,750	\$ 589,720		6,830,622

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 2

Responding Witness: Lonnie E. Bellar

- Q-2. Referring to KU's Response to KLC 1-10(a), explain the difference between 2016 actual and 2016 forecasted.
- A-2. The lower spend in 2016 compared to the forecast is primarily driven by a change in corrosion fatigue scope determined after inspections. In addition, resources dedicated to dam impoundment originally forecasted to be expensed ultimately were used on the coal combustion residual rule project and were capitalized. Also, spending for university collaborations was lower than anticipated due to timing of project development and university negotiations with granting agencies.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 3

Responding Witness: Kent W. Blake

Q-3. Referring to KU's Response to KLC 1-14:

- a. Describe the nature of the unbudgeted capital projects.
- b. When will the unbudgeted capital projects be known?

A-3.

- a. In the context of the originally referenced document, unbudgeted capital projects would be those IT projects with associated hardware/software maintenance that were not explicitly known and identified at the time the IT budget for hardware/software maintenance expense was developed. As noted in Application Attachment to Tab 16 Item I, page 220, the contingency amount in the Company's business plan to cover such items was approximately \$1.4 million for 2017 and \$2.0 million for 2018. As such amounts are budgeted evenly across each year, this would mean that approximately \$1.7 million is included in the forecast test period. As a check on the reasonableness of this amount, such hardware/software maintenance expenses averaged \$2.0 million per year for the past 3 calendar years and were approximately \$1.7 million each year for 2015 and 2014.
- b. Such projects would become known at various points in time during the year in which such expenses are incurred.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 4

Responding Witness: William S. Seelye

- Q-4. Referring to KU's Response to KLC 1-18:
 - a. Identify what 12-month period is being used to quantify the LOLPs.
 - b. Explain how the proposed LOLPs were calculated if they were not based on historical information.
 - c. Explain how KU determined that the calculated LOLPs were reasonable.

A-4.

- a. The LOLPs were calculated for the period between July 1, 2017 and June 30, 2018.
- b. See the response to AG 1-276.
- c. The Companies estimated hourly LOLPs in an Excel model using simplified outage rate assumptions, which resulted in seasonal LOLPs similar to seasonal LOLPs calculated by the PROSYM software model using the same simplified outage rate assumptions, leading the Companies to conclude that the calculated LOLPs were reasonable. In addition, the Companies reviewed the hourly values to ensure that they were of the appropriate order of magnitude given the load levels at various times of day and times of year. See the attachment being provided in Excel format.

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

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 5

Responding Witness: John P. Malloy

- Q-5. Referring to KU's Response to KLC-19, please provide workpapers showing "Meter Retirement" by year by company.
- A-5. See attached.

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

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 6

Responding Witness: William S. Seelye

Q-6. Referring to KU's Response to KLC 1-20:

- a. Provide any documentation or final Commission Orders relied upon when responding to 20(a).
- b. Provide documentation or final Commission Orders supporting the statement that the ratemaking principle of gradualism has long been recognized by the Commission.
- c. Provide Mr. Seelye's specific experience with electric utility rates that led to his selection of a 15% rate of return threshold.

A-6.

- a. The principles of rate continuity and gradualism were cited, for example, in the Commission's Order, in Case No. 99-176 dated December 27, 1999, at page 38 and in its Order in Case No. 2000-080 dated September 27, 2000 at page 75. These orders are available on the Commission's website.
- b. See the response to part a.
- c. A 15% to 20% rate of return is a threshold frequently used by Mr. Seelye's electric utility clients. Often, if a rate of return exceeds 20%, the utility will lower the rates to the customer class.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 7

Responding Witness: William S. Seelye

- Q-7. Referring to KU's Attachment to Response to KLC 1-26(e), state the source and provide documents supporting each of the amounts.
- A-7. See the response to LFUCG 1-54.

The bulb and the photocell costs are determined by purchase agreements between Company Operations and the supplier. The labor is determined using a 2-man crew at \$19.38 per hour. The total is the sum of the bulb, photocell and labor. The operation and maintenance cost is the total divided by six years to develop the per year cost. The operation and maintenance is then divided by 12 to develop the monthly unit cost.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 8

Responding Witness: William S. Seelye

Q-8. Referring to KU's Response to KLC 1-27:

- a. State the source of the material costs.
- b. State the labor cost assumptions (hours, cost per hour).
- c. State the assumptions used in determining the overhead costs.
- d. Provide a workpaper showing how the Total Costs were translated into a fixture charge.

A-8.

- a. Company vendor.
- b. In the response to KLC 1-27, the labor amounts are determined based on agreements with contract labor and are paid for the job performed and not by the hour. KU did not calculate company labor regarding the installation of the fixtures.
- c. The overheads implemented are based on contract labor expenses and storage, freight and handling for the forecasted test period. Said amounts are 14.5% and 32.5% respectively.
- d. See Seelye testimony Exhibit WSS-5 and response to PSC 1-54 attachment Att_KU_PSC_1-54_KULights.xlsx.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 9

Responding Witness: Robert M. Conroy/William S. Seelye

- Q-9. Referring to KU's Response to KLC 1-29:
 - a. Provide all studies conducted within the past three years of the Company's timedifferentiated energy costs by rating period.
 - b. Provide a schedule showing the loss-adjusted energy usage by customer class for the summer peak and winter peak periods as defined under the BIP method for the test year. If test year information is not available, provide the schedule for the most recent historical period.
 - c. Provide a schedule showing the test-year fuel and purchased power energy costs for the summer peak, winter peak, and all other periods as defined under the BIP method. If test year information is not available, provide the schedule for the most recent historical period.
- A-9.
- a. The only study conducted within the past three years of the Company's timedifferentiated energy costs by rating period was for the test year in the rate case as described in the response to part c.
- b. The Company has not performed the requested analysis, but the information necessary to perform the analysis can be found in the Excel file provided as an attachment to the Company's response to PSC 2-97 in the file labeled 2016 PSC DR2 KU Attach to Q97.xlsx.
- c. For the test year of the rate case, the average LG&E and KU combined production energy cost per kWh (fuel and variable production expenses) for the time-of-day periods set forth in Rates TODS, TODP, RTS, and FLS are as follows:

Peak	\$ 0.02447
Intermediate	\$ 0.02441
Off-Peak	\$ 0.02395

Purchased power energy costs by time-of-day period are not available.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 10

Responding Witness: Lonnie E. Bellar

- Q-10. Referring to KU's Response to KLC 1-42, please provide the factors driving the changes in the retirement dates for Brown Unit 1 (2028 to 2023) and Brown Unit 2 (2034 to 2029).
- A-10. Generator design life and as found conditions were the primary factors in the retirement dates for both Brown Unit 1 and Brown Unit 2. At the time of the evaluation in 2016, Brown Unit 1 had an observed shorted turn in the field winding and an armature winding which was 59 years old with a design life of 30 years. Brown Unit 2 had an armature winding which was 52 years old with a design life of 30 years.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 11

Responding Witness: John J. Spanos

- Q-11. Referring to KU's Response to KLC 1-44, please provide the factors driving the changes in the survivor curve and net salvage percentages for Account 312.
- A-11. The change in survivor curve for Account 312 was from the current estimate of 60-R2.5 to the proposed estimate of 65-R2 and a 100-S4 for ash ponds. The factors driving the change is the segregation of ash pond assets from the rest of the assets in Account 312, as well as the addition of 4 years of transactional data and updated plans for the assets. The plans include the expectations that some assets will be replaced earlier and some will last longer.

The primary driver for the change in net salvage percentages is the inclusion of the more appropriate terminal net salvage component.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 12

Responding Witness: John P. Malloy

Q-12. Referring to KU's Response to KLC 1-46:

- a. Clarify whether the answer provided is for the year 2015 or the year 2016. If information is total of 2015 and 2016, provide the information for each year.
- b. Explain what is meant by "public authorities."
- c. Provide rate descriptions for business partners that previously had "public authorities" provided as the description.
- d. For responses to part B (alternative rate) that state "On Best Rate" provide the alternative rate the account could use.
- e. Would the accounts with alternative rates listed excluding those accounts currently "on best rate" save money by switching to the alternative rate provided?
- f. For responses to part B (alternative rate) that state anything other than "On Best Rate" provide the answer to part C as if the account had paid under the alternative rate provided.

A-12.

- a. The answer was provided as the total of 2015 and 2016. See attachment being provided in Excel format for split.
- b. Public authorities are any authority which has a legal mandate to govern, administrate a part or aspect of public life, such as all branches of the executive power of a state, province, municipality etc., including various chartered organizations holding their authority from the executive branch without being run by public officials.
- c. See attachment being provided in Excel format.
- d. The use of the term "On Best Rate" refers to a customer whose historical usage qualifies them for the rate they are currently on. Accounts that are "On Best Rate" are not eligible for an alternate rate based on an analysis of historical usage.

- e. Accounts eligible for an alternative rate may or may not save money by switching to the alternate rate. Since the customer knows their future plans and needs the best, the Company can assist the customer in making an informed decision. The Company provides a Rate Compare tool available in My Account, and customers can contact the Company for assistance with their own analysis.
- f. The Company has not performed such an analysis for the requested period as it would require original work. There was an analysis performed in September 2016 for the 12 months ending August 2016. See the attachment being provided in Excel format.

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

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 13

Responding Witness: John P. Malloy

- Q-13. Referring to KU's Response to KLC 1-46, provide a separate list of fire departments and indicate those paying under the volunteer fire department rate.
- A-13. See attachment being provided in Excel format.

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

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 14

Responding Witness: John P. Malloy

- Q-14. Referring to KU's Response to KLC 1-46: provide a schedule for each Municipal customer of KU showing the following information for each account for each KU Municipal customer for each calendar year of 2015 and 2016:
 - a. Total sum paid by Rate Class; and
 - b. Usage by Rate Class.
- A-14. See the attachment being provided in Excel format in response to Question No. 12 (a)(c).

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 15

Responding Witness: John K. Wolfe

- Q-15. Referring to KU's Response to KLC 1-48, confirm that this information is housed in the KU Customer Care Billing System (CCS).
- A-15. In the response to KLC 1-48, the first attachment depicting all non-Lexington cities served by KU resides in the Customer Care Billing System (CCS). The attachments associated specifically for Lexington originated from CCS and a data base maintained by the KU Lexington operations center.

CASE NO. 2016-00370

Response to Second Request for Information of Kentucky League of Cities Dated February 7, 2017

Question No. 16

Responding Witness: John K. Wolfe

- Q-16. Referring to KU's Response to KLC 1-51, confirm that this information is housed in the KU's Electric Distribution Operation's work management system (ARM).
- A-16. The information provided for KLC 1-51 resides in KU's Electric Distribution Operation's work management system, ARM.

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Question No. 17

Responding Witness: John K. Wolfe

- Q-17. Referring to KU's Response to KLC 1-51, confirm that this information is housed in the KU Geospatial Information System (GIS.
- A-17. The Company assumes this question is for KLC 1-54 and not KLC 1-51. The information provided for KLC 1-54 resides in KU's Geospatial Information System (GIS).
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Question No. 18

Responding Witness: Christopher M. Garrett

- Q-18. Refer to KU's Response to KLC 1-49 through KLC 1-58. It appears the responses were duplicated in the file produced by KU. Confirm that no differences exist between the KU responses to duplicate KLC questions 49-58.
- A-18. KU confirms that no differences exist between the KU responses to duplicate KLC 1-49 to 1-58. The responses were inadvertently included in the PDF twice.

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Question No. 19

Responding Witness: Gregory J. Meiman

- Q-19. Referring to KU's Response to KIUC 1-18, please provide examples of goals and achievement measures associated with each listed performance category:
 - a. Net Income
 - b. Cost Control
 - c. Customer Reliability
 - d. Customer Satisfaction
 - e. Individual / Team Effectiveness
- A-19. a. The Net Income goal reflects the company's budgeted revenue less operating, interest and income tax expense. Net income is not an incentive measure beginning in 2017.
 - b. The Cost Control goal is measured by O&M, which includes all labor and nonlabor operation and maintenance costs. These costs include those that are recovered through the Environmental Cost Recovery (ECR), Demand Side Management (DSM) and Gas Line Tracker (GLT) mechanisms, but excludes those items that are classified as Other Income and Expense. The expenses related to fuel for generation, power purchases and gas supply to serve customers are excluded.
 - c. Customer Reliability is measured by the System Average Interruption Duration Index (SAIDI). SAIDI is an industry recognized metric which has been used by the company for many years to measure reliability. By planning and executing restoration activities efficiently to reduce the duration of an outage, customers are positively impacted.
 - d. The customer satisfaction measure is determined by the Company's performance ranking within the peer group. The Company's market research vendor contacts randomly selected utility customers and customers from peer group companies and asks them about overall satisfaction with their respective utilities. The scores are compiled quarterly, and those results are used for the

incentive.

e. Annual individual and team effectiveness measures are established to ensure the Company is collectively working to achieve strategic business goals. Goals vary by individual and by department and support respective department business objectives. Team effectiveness measures may include safety, reliability and budget goals.

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Question No. 20

Responding Witness: Gregory J. Meiman

- Q-20. Referring to KU's Response to KIUC 1-18, are any of the goals associated with Individual/Team Effectiveness related to achieving specific financial based goals such as earnings, earnings per share (EPS), return on equity, etc.? If yes, please provide the amounts in the base period and test period related to these goals. Provide work papers detailing how these amounts were determined.
- A-20. No. None of the goals related to Individual / Team Effectiveness are related to earnings, earnings per share (EPS), or return on equity.

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Question No. 21

Responding Witness: William S. Seelye

- Q-21. Referring to KU's Response to Staff 1-87b, provide the increases including all applicable riders.
- A-21. KU assumes the reference is to Staff 2-87b as there is no Staff 1-87. The Company has not performed the requested analysis. The detailed analysis without the riders is provided in response to PSC 3-22. The applicable charges for the riders for both the base year and test year are shown in Att_KU_PSC_1-53_ElecScheduleM_Forecasted.xlsx provided as a separate Excel attachment to the response to PSC 1-53.

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Question No. 22

Responding Witness: John K. Wolfe

- Q-22. Referring to KU's Response to Staff 1-90, provide documents that LED Fixtures have shorter lives due to temperature fluctuations in the field.
- A-22. Assuming the reference is to PSC 2-90, KU does not have documentation. Certain Company personnel have become educated on LED lighting by attending lighting seminars, by reaching out to other electric utilities that have implemented LED lighting and by discussing the service life issue with numerous manufacturing representatives. Through these interactions, a 50,000 hour life cycle was determined which equates to approximately 13 years.

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Question No. 23

Responding Witness: John P. Malloy

- Q-23. Referring to Attachment 1, page 27, of KU's Response to LFUCG 1-28, explain the meaning of the phrase "True-up cost of service study."
- A-23. The phrase "True-up cost of service study" refers to updating the lighting rates with current costs.

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Question No. 24

Responding Witness: John P. Malloy

Q-24. Referring to Attachment 2 of KU's Response to LFUCG 1-28:

- a. Regarding page 14, explain the cross-subsidization of the current monthly charge.
- b. Regarding page 15, explain the meaning of FAC cross-subsidization.

A-24.

- a. Cross-subsidization of the current monthly charge refers to grouping similar light offerings and all associated costs into one rate code with one cost.
- b. FAC (Fuel Adjustment Clause) cross-subsidization refers to grouping similar light offerings and their FAC costs (a component of all costs) into one rate code with one cost.

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Question No. 25

Responding Witness: John K. Wolfe

- Q-25. Referring to KU's Response to KSBA 1-14, please provide documents supporting the statement that LED maintenance costs are more expensive than existing HPS Mercury Vapor and Metal Halide Technologies.
- A-25. See the response to Question No. 22 and LFUCG 1-72 and 1-73. KU does not have documentation. LED maintenance is estimated to require replacing the entire fixture on average of once every 13 years, whereas HPS, Mercury Vapor and Metal Halide fixtures require the replacement of only their bulb and photocell on average of once every six years.

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Question No. 26

Responding Witness: Christopher M. Garrett

- Q-26. Quantify the portion of the proposed electric rate increase that is related to the recovery of fuel and purchased power energy-related costs or other costs that are recoverable in the Fuel Adjustment Clause.
- A-26. None of the proposed electric rate increase is related to fuel and purchased powerenergy costs recoverable through the Fuel Adjustment Clause. Recoverable fuel and purchased power-energy costs are adjusted via the FAC pro forma adjustment to ensure they are fully offset by base fuel revenues.

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Question No. 27

Responding Witness: William S. Seelye

- Q-27. State the amount of fuel costs included in Test-Year base rate revenues by rate schedule and provide the supporting calculations.
- A-27. See the Att_KU_PSC_1-53_ElecScheduleM_Forecasted.xlsx file provided as a separate Excel attachment to the response to PSC 1-53. Filter Column B in the KY Detail Electric Revenues 2 tab to "Total Base Fuel Revenue" to see the base fuel revenues forecasted by revenue class and rate schedule for the test year. Revenue amounts shown are in thousands.

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Question No. 28

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

- Q-28. Regarding KU's answer to the PSC's 1st and 2nd data request, state how much money was, or will be, transmitted between KU and LKE during:
 - a. The period beginning January 1, 2012 and concluding December 31, 2016;
 - b. The Base Period, as defined for purposes of this case;
 - c. The Forecasted Test Year, as defined for purposes of this case; and
 - d. The forecasted period from January 1, 2017 to December 31, 2020.
- A-28.
- a. Payments transmitted to KU from LKE between January 1, 2012 and December 31, 2016 consist of capital contributions and total \$268,000,000. Payments transmitted to LKE from KU between January 1, 2012 and December 31, 2016 consist of dividends and total \$772,500,000.
- b. The Base Period, as defined for purposes of this case: Forecasted capital contributions total \$89,896,555 and forecasted dividends for the period total \$294,699,105.
- c. The Forecasted Test Year, as defined for purposes of this case: Forecasted capital contributions total \$99,478,174 and forecasted dividends for the period total \$220,441,300.

KU	Year 2017	Year 2018	Year 2019	Year 2020
Capital Contributions				
from LKE	\$91,428,772	\$101,180,906	\$113,240,934	\$84,534,513
Dividends from KU to				
LKE	\$269,777,103	\$178,785,281	\$223,012,021	\$202,731,557

d. The forecasted period from January 1, 2017 to December 31, 2020: