COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR THE TWO-YEAR BILLING PERIOD ENDING APRIL 30, 2017	**))))))**	**CASE NO. 2017-00267**

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO
APPENDIX B OF COMMISSION'S ORDER
DATED JULY 27, 2017

FILED: AUGUST 21, 2017

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 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.

Christopher M. Garrett

Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 21st day of August 2017.

Judy Schooler (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, **Heather D. Metts**, being duly sworn, deposes and says that she is Director – Regulatory Accounting & Reporting for 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.

Heather D. Metts

Heather D. Metts

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 1st day of August 2017.

Judy Schooler
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, **Derek A. Rahn**, being duly sworn, deposes and says that he is Manager - Revenue Requirement for 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.

Derek A. Rahn

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 21st day of August 2017.

Judy Schooler (SEAL)
Notary Public

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
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LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
Dated July 27, 2017

Case No. 2017-00267

Question No. 1

Witness: Derek A. Rahn / Heather D. Metts

Q-1. Concerning the rate of return on the 2009, 2011, and 2016 amendments to the environmental compliance plan, for the period under review, calculate any true-up adjustment needed to recognize changes in LG&E's cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in LG&E's jurisdictional capital structure as of February 28, 2017. Include all assumptions and other supporting documentation used to make this calculation. Any true-up adjustment is to be included in the determination of the over- or under-recovery of the surcharge for the corresponding billing period under review. Provide all exhibits and schedules of your response in Excel spreadsheet format with formulas intact and unprotected and all rows and columns accessible.

A-1. See the attachment provided in Excel format.

LG&E calculated the true-up adjustment to recognize changes in the cost of debt and capital structure in two steps, shown on Pages 1 and 2 of the attachment to this response. Page 1 reflects the true-up required due to the changes between the Rate Base as filed and the Rate Base as Revised through the Monthly Filings. However, during the period under review, there were no revisions to reflect. Page 2 represents the true-up in the Rate of Return as filed compared to the actual Rate of Return calculations, which impacted the true-up adjustment for the last six months of the two-year period under review in this case. No further revisions to Rate Base were identified in preparation of this response.

Page 3 provides the adjusted weighted average cost of capital for the expense period ending February 28, 2017 to true-up the months in the review period utilizing the return on equity of 10.00% as agreed to for all pre-2016 ECR Plans and approved by the Commission in its October 25, 2016 Order in Case No. 2016-00215. LG&E calculated the short- and long-term debt rates using average daily balances and daily interest rates pursuant to the Commission's Order in Case No. 2011-00162.

Page 4 provides the adjusted weighted average cost of capital for the expense period ending February 28, 2017 to true-up the months in the review period utilizing the return on equity of 9.80% as agreed to for the 2016 ECR Plan and approved by the Commission in its August 8, 2016 Order in Case No. 2016-00027. LG&E calculated the short- and long-term debt rates using average daily balances and daily interest rates pursuant to the Commission's Order in Case No. 2011-00162.

Page 5 provides detail for short- and long-term debt for the expense period ending February 28, 2017.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
Dated July 27, 2017

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Question No. 2

Witness: Derek A. Rahn

Q-2. Prepare a summary schedule showing the calculation of Total E(m), Net Retail E(m), and the surcharge factor for the expense months covered by the applicable billing period. Include the two expense months subsequent to the billing period in order to show the over- and under-recovery adjustments for the months included for the billing period under review. The summary schedule is to incorporate all corrections and revisions to the monthly surcharge filings LG&E has submitted during the billing period under review. Include a calculation of any additional over- or under-recovery amount LG&E believes needs to be recognized for the two-year review. Include all supporting calculations and documentation for any such additional over- or under-recovery. Provide all exhibits and schedules of your response in Excel spreadsheet format with formulas intact and unprotected and all rows and columns accessible.

A-2. See the attachment provided in Excel format that includes the summary schedule and components, which make up the under-recovery for the two-year period.

For the six-month expense period under review, ending February 28, 2017, LG&E experienced an under-recovery of $3,995,561.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 3

Witness: Christopher M. Garrett

Q-3. Provide the calculations, assumptions, work papers, and other supporting documents used to determine the amounts LG&E has reported during each billing period under review for Pollution Control Deferred Income Taxes. Provide all exhibits and schedules of your response in Excel spreadsheet format with formulas intact and unprotected and all rows and columns accessible.

A-3. LG&E calculates Deferred Income Taxes as the taxable portion of the difference between book depreciation, using straight line depreciation, and tax depreciation, generally using 20 year MACRS accelerated depreciation, bonus depreciation, or 5 or 7 year rapid amortization. Accelerated depreciation results in a temporary tax savings to the Company and the Accumulated Deferred Tax balance reflects the value of those temporary savings as a reduction to environmental rate base.

See the attachment provided in Excel format for the calculation of Deferred Income Taxes and the balance of Accumulated Deferred Income Taxes reported each month of the review period.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
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Question No. 4

Witness: Heather D. Metts

Q-4. Refer to ES Form 2.50, Pollution Control - Operations & Maintenance Expenses, for the expense months covered by the review period. For each expense account number listed on this schedule, explain the reason(s) for any change in the expense levels from month to month if that change is greater than plus or minus 10 percent.

A-4. See the attached schedule showing the changes in the operations and maintenance expense accounts for March 2015 through February 2017 expense months. The changes in the expense levels are reasonable and generally occurred as a part of routine plant operations and maintenance.

2011 Plan

The variances in scrubber operations expenses, account 502056, are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. Effective July 2015, these expenses were included in base rates resulting in their removal from the ECR mechanism.

Fluctuations in scrubber maintenance expenses, account 512055, are the result of normal system maintenance of the scrubbers at Mill Creek Units 1, 2, 3 (MC1, MC2, MC3) and Mill Creek Unit 4 (MC4). MC1 and MC2 were placed in service in July 2015. The increase in April 2016 was due to corrective maintenance performed to repair a clearwell pump, underflow tank agitator gearbox and a hydrocyclone feed pump. The increase in August 2016 was due to corrective maintenance to rebuild mechanical seals on the reaction tank agitator. The increase in October 2016 was due to increased repair costs during MC4 planned maintenance outages.

Fluctuations in sorbent injection operations expenses, account 506159, are the result of on-going operation of Trimble County Unit 1 (TC1).

Fluctuations in sorbent injection reactant (hydrated lime) expenses, account 506152, are the result of on-going operation of TC1 and the operation of the hydrated lime system at Mill Creek. The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. TC1 was offline for a maintenance outage for most of October and all of November 2015. MC3 was offline for 10 weeks beginning in April 2016, returning to service in June 2016 and MC2 had increased generation beginning in July 2016. The decrease in October 2016 was due to a planned maintenance outage at MC4.

Fluctuations in sorbent injection maintenance expenses, account 512152, are the result of normal system maintenance. The increase in October 2015 was the result of the replacement of valve liners and blow through rotaries on TC1. The increase in March 2016 was the result of lanceless hydrated lime injection testing and drop-through feeder replacement on TC1 and leak repair and hose replacement on MC1 and MC2. The increase in October 2016 was due to increased repair costs during a MC4 planned maintenance outage.

Fluctuations in baghouse operations, account 506156, are the result of accounting corrections. This account had no activity.

Fluctuations in baghouse maintenance expense, account 512156, are the result of normal system maintenance on baghouses for MC1, MC2, MC3 and MC4. The increase in December 2015 was due to replacing a precipitator valve on MC2. The increase in March 2016 was due to induced draft (ID) fan inspection on MC1 and MC2. Preventative maintenance was done on MC4 systems in September 2016 and during the planned outage in November 2016.

Fluctuation in activated carbon expenses, account 506151, during May and July 2015, were the result of accounting corrections. Fluctuation in February 2016 was the result of initially filling the tank at Mill Creek. Mill Creek began using activated carbon in order to meet compliance standards which took effect in February 2016. Fluctuations during March to August 2016 were driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. MC3 was offline for 10 weeks beginning April 2016. Mill Creek began using a different mercury mitigation product "Mercontrol" in August 2016. Mercontrol is a liquid injection material that is booked to account 506153 (2016 Plan).

<u>2016 Plan</u>

Fluctuation in liquid injection reagent (Mercury) expenses, account 506153, was the result of initially filling the tank at Mill Creek in August 2016 with Mercontrol, in order to meet compliance standards. Fluctuations during September 2016 to February 2017 were driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
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Question No. 5

Witness: Derek A. Rahn

Q-5. KRS 278.183(3) provides that during the two-year review, the Commission shall, to the extent appropriate, incorporate surcharge amounts found just and reasonable into the existing base rates of the utility.

a. Provide the surcharge amount that LG&E believes should be incorporated into its existing base rates. Include all supporting calculations, work papers, and assumptions.

b. The surcharge factor reflects a percentage of revenue approach, rather than a per-kWh approach. Taking this into consideration, explain how the surcharge amount should be incorporated into LG&E's base rates. Include any analysis that LG&E believes supports its position.

c. Does LG&E believe that modifications will need to be made to either the surcharge mechanism or the monthly surcharge reports as a result of incorporating additional environmental surcharge amounts into LG&E's existing base rates? If so, provide a detailed explanation of the modifications and provide updated monthly surcharge reports.

A-5.

a. See the attachment being provided in Excel format. LG&E is proposing to roll-in $52,893,140 of incremental environmental surcharge revenues into base rates resulting in total environmental surcharge revenues in base rates of $126,556,149.

b. The Commission previously approved LG&E's proposed roll-in methodology in Case Nos. 2011-00232, 2013-00243, and most recently in 2015-00222. LG&E uses a two-step roll-in methodology as shown below:

Step #1 – Customer Group Allocation: Allocate the roll-in between Group 1 and Group 2 customers based on the percentage of each group's total base revenue to KU's total base revenue (excluding base environmental surcharge revenue).

Step #2 - Group Rate Class Allocation:

- Group 1 amount from Step 1 is allocated to the Group 1 rate classes based on total base revenues excluding base environmental surcharge revenues.
- Group 2 amount from Step 1 is allocated to Group 2 rate classes based on non-fuel base revenues excluding base environmental surcharge revenues.

Furthermore, for Group 1 and Group 2, the amount of the roll-in will be spread to the energy portion of rates (without a demand charge) and to the demand portion of rates (with a separately metered and billed demand component). Lastly, lighting rates will continue to be billed on a per-light basis.

LG&E recommends that this method continue to be used to accomplish this roll-in to base rates.

c. No. The incorporation of additional environmental surcharge revenues into existing base rates does not require modifications to the surcharge mechanism or monthly ES Forms.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
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Question No. 6

Witness: Derek A. Rahn

Q-6. Provide the actual average residential customer's usage. Based on this usage amount, provide the dollar impact the over/under recovery will have on the average residential customer's bill for the requested recovery period. Provide all supporting calculations.

A-6. See the attachment provided in Excel format.

The actual average residential customer's usage for the 12-months ending June 30, 2017 is 959 kWh per month. Actual average monthly usage for residential customers will vary from month to month depending upon the time period of the year.

Based upon collecting the cumulative under-recovered position of $3,995,561 over four months at $799,112 per month and for one month at $799,113, the ECR billing factor will be increased by approximately 0.93% for each month. For a residential customer using 959 kWh per month the impact of the adjusted ECR billing factor would be an increase of approximately $0.94 on each month's bill, using rates effective July 1, 2017 and adjustment clause factors in effect for the June 2017 billing month.

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

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Commission Staff's First Request for Information
Dated July 27, 2017

Case No. 2017-00267

Question No. 7

Witness: Heather D. Metts / Christopher M. Garrett

Q-7. In Case No. 2000-00386,[6] the Commission ordered that LG&E's cost of debt and preferred stock would be reviewed and re-established during six-month surcharge review cases. Provide the following information as of February 28, 2017:

a. The outstanding balances for long-term debt, short-term debt, preferred stock, and common equity. Provide this information on total company and Kentucky jurisdictional bases.

b. The blended interest rates for long-term debt, short-term debt, and preferred stock. Include all supporting calculations showing how these blended interest rates were determined. If applicable, provide the blended interest rates on total company and Kentucky jurisdictional bases. For each outstanding debt listed, indicate whether the interest rate is fixed or variable.

c. LG&E's calculation of its weighted average cost of capital for environmental surcharge purposes.

A-7.

a. There was no preferred stock outstanding as of February 28, 2017; therefore, it is not listed in the attached schedules.

b. For re-establishing the rate of return to be used in future monthly filings, LG&E utilized a return on equity of 9.70% as approved by the Commission in its June 23, 2017 Order in Case No. 2016-00438. See the attachment provided in Excel format for the period ended February 28, 2017 under review, utilizing a return on equity of 9.70%.

c. LG&E recommends the continued use of an effective tax rate of 38.6660% in the gross-up revenue factor used in the rate of return calculation for the period ended February 28, 2017. LG&E expects to have taxable income in 2017 that will be offset by a net operating loss carry forward and will be unable to take the Internal Revenue Code §199 manufacturing tax deduction.

[6] Case No. 2000-00386, Louisville Gas and Electric Company (Ky. PSC Apr. 18, 2001).

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