COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE ENVIRONMENTAL)
SURCHARGE MECHANISM OF LOUISVILLE GAS) CASE NO.
AND ELECTRIC COMPANY FOR THE SIX-MONTH) 2015-00412
BILLING PERIOD ENDING OCTOBER 31, 2015)

DIRECT TESTIMONY OF

DEREK A. RAHN MANAGER – REVENUE REQUIREMENT LG&E AND KU SERVICES COMPANY

Filed: January 15, 2016

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Q. Please state your name, title, and business address.

A. My name is Derek A. Rahn. I am the Manager – Revenue Requirement for LG&E and
KU Services Company, which provides services to Kentucky Utilities Company ("KU"
or "Company") and Louisville Gas and Electric Company ("LG&E") (collectively "the
Companies"). My business address is 220 West Main Street, Louisville, Kentucky,
40202. A complete statement of my education and work experience is attached to this
testimony as Appendix A.

8 Q. Have you previously testified before this Commission?

- 9 A. While I have not previously submitted testimony, I am familiar with the regulatory
 10 process and have assisted with preparing responses to interrogatories and reports to
 11 state regulatory agencies.
- 12 Q. Are you sponsoring any exhibits?
- 13 A. No.

14 **Q.** What is the purpose of this proceeding?

A. The purpose of this proceeding is to review the past operation of LG&E's
 environmental surcharge during the six-month billing period ending October 31, 2015
 and determine whether the surcharge amounts collected during the period are just and
 reasonable.

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

A. The purpose of my testimony is to summarize the operation of LG&E's environmental surcharge during the billing period under review, demonstrate that the amount collected during the period was just and reasonable, present and discuss LG&E's proposed adjustment to the Environmental Surcharge Revenue Requirement based on the operation of the surcharge during the period and explain how the environmental
 surcharge factors were calculated during the period under review.

Q. Please summarize the operation of the environmental surcharge for the billing period included in this review.

5 A. LG&E billed an environmental surcharge to its customers from May 1, 2015 through 6 October 31, 2015. For purposes of the Commission's examination (in this case), the monthly LG&E environmental surcharges are considered as of the six-month billing 7 period ending October 31, 2015. In each month of the six-month period under review 8 9 in this proceeding, LG&E calculated the environmental surcharge factors in accordance with its ECR Tariff and the requirements of the Commission's previous orders 10 concerning LG&E's environmental surcharge. The calculations were made in 11 accordance with the Commission-approved monthly forms and filed with the 12 Commission ten days before the new monthly charge was billed by the Company. 13

Q. What costs were included in the calculation of the environmental surcharge factors for the billing period under review?

A. The capital and operating costs included in the calculation of the environmental surcharge factors for the six-month billing period under review were the costs incurred each month by LG&E from March 2015 through August 2015, as detailed in the attachment in response to Question No. 2 of the Commission Staff's Request for Information, incorporating all required revisions.

The monthly environmental surcharge factors applied during the billing period under review were calculated consistent with the Commission's Orders in LG&E's previous applications to assess or amend its environmental surcharge mechanism and

plan, as well as, Orders issued in previous review cases. The monthly environmental
 surcharge reports filed with the Commission during this time reflect the various
 changes to the reporting forms ordered by the Commission from time to time.

4 Q. Please describe the most recently approved changes to LG&E's ECR Compliance 5 Plan.

6 A. In Case No. 2011-00162, the Commission approved LG&E's 2011 ECR Compliance Plan that included two new projects and associated operation and maintenance costs 7 and approved the reporting of operation and maintenance costs associated with sorbent 8 9 injection approved with the 2006 Plan for Mill Creek Units 3 and 4 and Trimble County Unit 1 as part of the 2011 Plan. Pursuant to the Commission's December 15, 2011 10 Order approving the Settlement Agreement in Case No. 2011-00162, LG&E began 11 including the approved projects in the monthly filing for the December 2011 expense 12 month that was billed in February 2012 with separate authorized rates of return for the 13 Pre-2011 and 2011 ECR Plans. In addition, the Commission approved the use of net 14 (non-fuel) revenues to calculate the jurisdictional revenue requirement for non-15 residential customers defined as Group 2 in the ECR Tariff. The use of net revenues 16 17 for Group 2 customers was implemented in Case No. 2011-00232 as discussed below.

In Case No. 2014-00372, LG&E's most recently approved rate case, the Commission reset the return on equity to be used in the monthly environmental surcharge filings. Pursuant to the Commission's June 30, 2015 Order in that case, the changes were implemented with the July 2015 expense month. The approved return on equity is used in this proceeding to establish the overall rate of return on capital to be used to calculate the environmental surcharge as discussed later in this testimony.

1 2

Q. Please describe the most recently approved changes to the environmental surcharge mechanism and the monthly ES forms.

A. In Case No. 2011-00232, the Commission implemented the use of net revenues to 3 calculate the jurisdictional revenue requirement for non-residential customers defined 4 as Group 2 in the ECR Tariff in conjunction with the ECR Roll-in and revisions to the 5 6 monthly reporting forms to reflect the implementation of Group 1 and Group 2 billing factors. Pursuant to the Commission's January 31, 2012 Order in that case, the changes 7 were implemented with the January 2012 expense month that was billed in March 2012. 8 9 In Case No. 2015-00222, LG&E's most recent ECR two-year review, the Commission approved the ECR Roll-in. Pursuant to the Commission's December 7, 10 2015 Order in that case, the change was implemented with the December 2015 expense 11 month to be billed in February 2016. 12

Q. Are there any changes or adjustments in Rate Base from the originally filed expense months?

A. No. During the period under review, there were no changes to Rate Base from the
 originally filed billing months as summarized in LG&E's response to the Commission
 Staff's Request for Information, Question No. 1. In addition, there were no changes
 identified as a result of preparing responses to the requests for information in this
 review.

20 Q. Are there any changes necessary to the jurisdictional revenue requirement 21 (E(m))?

A. Yes. Adjustments to E(m) are necessary for compliance with the Commission's Order
 in Case No. 2000-00386, to reflect the actual changes in the overall rate of return on

1 capitalization that is used in the determination of the return on environmental rate base. Pursuant to the terms of the Settlement Agreement approving the 2011 ECR Plan, 2 LG&E calculated the short- and long-term debt rate using average daily balances and 3 daily interest rates in the calculation of the overall rate of return true-up adjustment for 4 the six-month period ending August 31, 2015. For the expense months of March 5 6 through June 2015, the weighted average cost of capital was based on the balances as of June 30, 2015 and the 10.25% return on equity. For the expense months of July and 7 August 2015, the weighted average cost of capital was based on the balances as of 8 9 August 31, 2015 and the 10.00% return on equity. The details of and support for this calculation are shown in LG&E's response to Question No. 1 of the Commission 10 Staff's Request for Information. 11 **Q**. Are there corrections to information provided in the monthly filings during the 12 billing period under review? 13 No. 14 A. As a result of the operation of the environmental surcharge during the billing 15 **O**. period under review, is an adjustment to the revenue requirement necessary? 16

A. Yes. LG&E experienced an over-recovery of \$1,702,207 for the billing period ending
October 31, 2015. LG&E's response to Question No. 2 of the Commission Staff's
Request for Information shows the calculation of the over-recovery. An adjustment to
the revenue requirement is necessary to reconcile the collection of past surcharge
revenues with actual costs for the billing period under review.

Q. Has LG&E identified the causes of the under-recovery during the billing period
 under review?

A. Yes. LG&E has identified the components that make up the over-recovery during the
billing period under review. The components are: (1) changes in overall rate of return
as previously discussed, and (2) the use of 12-month average revenues to determine the
billing factor. The details and support of the components that make up the overrecovery during the billing period under review are shown in LG&E's response to
Question No. 2 of the Commission Staff's Request for Information.

Q. Please explain how the function of the ECR mechanism contributes to the
 recovery position in the billing period under review.

A. The use of 12-month average revenues to calculate the monthly billing factors and then
applying those same billing factors to the actual monthly revenues will result in an
over- or under-collection of ECR revenues. The table below shows a comparison of
the 12-month average revenues used in the monthly filings to determine the ECR billing
factors and the actual revenues to which the ECR billing factors were applied in the
billing month.

	12-Month Average		Actual Revenues Subject to ECR
Expense Month	Revenues	Billing Month	Billing Factors
March 2015	\$ 66,530,394	May 2015	\$ 58,880,783
April 2015	66,591,807	June 2015	72,199,398
May 2015	66,516,812	July 2015	80,346,320
June 2015	66,416,966	August 2015	76,604,143
July 2015	66,389,693	September 2015	75,749,803
August 2015	66,704,842	October 2015	60,295,051
*The 12-month average revenues and the Actual Revenues subject to ECR Billing Factors reflect net revenues for Group 2.			

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Generally, an under-recovery will occur when actual revenues for the billing month are
 less than the 12-month average revenues used for the expense month. Likewise, an

1 2 over-recovery will usually occur when actual revenues for the billing month are greater than the 12-month average revenues used for the expense month.

Q. What kind of adjustment is LG&E proposing in this case as a result of the operation of the environmental surcharge during the billing period?

A. LG&E is proposing that the over-recovery be distributed over three months following
the Commission's Order in this proceeding. Specifically, LG&E recommends that the
Commission approve a decrease to the Environmental Surcharge Revenue
Requirement of \$567,402 per month for two months and \$567,403 for one month,
beginning in the second full billing month following the Commission's Order in this
proceeding. This method is consistent with the method of implementing previous overor under-recovery positions in prior ECR review cases.

Q. What is the bill impact on a residential customer for the proposed collection of the over-recovery?

A. The inclusion of the distribution reflecting the over-recovery position in the determination of the ECR billing factor will decrease the billing factor by approximately 0.67% per month for three months. For a residential customer using an average of 976 kWh per month, the impact of the adjusted ECR billing factor would be a decrease of approximately \$0.62 per month for three months (using rates and adjustment clause factors in effect for the November 2015 billing month).

20 Q. What rate of return is LG&E proposing to use for all ECR Plans upon the 21 Commission's Order in this proceeding?

A. LG&E is recommending an overall rate of return on capital of 10.11%, including the
 currently approved 10.00% return on equity and adjusted capitalization, to be used to

1 calculate the environmental surcharge. This is based on capitalization as of August 31, 2 2015 and the Commission's Order of June 30, 2015 in Case No. 2014-00372 and use of the 2015 gross-up revenue factor that excludes the §199 manufacturing tax 3 deduction. Please see the response and attachment to Commission Staff's Request for 4 Information Question No. 5 following this testimony. 5 **Q**. What is your recommendation to the Commission in this case? 6 7 A. LG&E makes the following recommendations to the Commission in this case: The Commission should approve the proposed decrease to the Environmental 8 a) 9 Surcharge Revenue Requirement of \$567,402 per month for two months and \$567,403 for one month beginning in the second full billing month following 10 the Commission's Order in this proceeding; 11 12 b) The Commission should determine the environmental surcharge amount for the six-month billing period ending October 31, 2015 to be just and reasonable; 13 The Commission should approve the use of an overall rate of return on capital 14 c) of 10.11%, using a return on equity of 10.00%, beginning in the second full 15 billing month following the Commission's Order in this proceeding. 16 Does this conclude your testimony? 17 **Q**. A. Yes. 18

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 foregoing testimony, and that 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 <u>15th</u> day of <u>January</u> 2016.

Verdy Schoole (SEAL) Notary Public

My Commission Expires: HOY SCHULLER Notary Public, Streep Lane, KY My commission exploses July 2013 Notary 10 a 6:022-1

APPENDIX A

Derek A. Rahn

Manager – Revenue Requirement LG&E and KU Services Company 220 West Main Street Louisville, Kentucky 40202 (502) 627-4127

Education

Masters of Business Administration, Bellarmine University, July 2010 Bachelor of Science in Electrical Engineering, University of Kentucky, December 2003

Training: Managing People & Processes (2014), IUS Leadership Program (2007-2008), Professional Development Program (2007-2008), Global Leadership Summit (2013 & 2015), Mentoring Program (2008, 2014, & 2015), Project Management (2006), Microsoft Project (2005), Advanced Operator (2008), Basic Shaft Alignment (2006)

Previous Positions

Manager, Transmission Policy & Tariffs Sep
Group Leader, Transmission Operations Engineering Dec
Supervisor, Operations (Ghent Power Station) Dec
Electrical Engineer II (Ghent Power Station) Jul
Project Engineer (TubeMaster, Inc) Dec

Sep 2010 – Oct 2015 Dec 2008 – Sep 2010 Dec 2007 – Dec 2008 Jul 2005 – Dec 2007 Dec 2003 – Jul 2005