

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 KENTUCKY)
UTILITIES COMPANY FOR THE SIX-MONTH)
BILLING PERIOD ENDING OCTOBER 31, 2015)**

**CASE NO.
2015-00411**

DIRECT TESTIMONY OF

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

Filed: January 15, 2016

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

2 A. My name is Derek A. Rahn. I am the Manager – Revenue Requirement for LG&E and
3 KU Services Company, which provides services to Kentucky Utilities Company (“KU”
4 or “Company”) and Louisville Gas and Electric Company (“LG&E”) (collectively “the
5 Companies”). My business address is 220 West Main Street, Louisville, Kentucky,
6 40202. A complete statement of my education and work experience is attached to this
7 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?**

15 A. The purpose of this proceeding is to review the past operation of KU’s environmental
16 surcharge during the six-month billing period ending October 31, 2015 and determine
17 whether the surcharge amounts collected during the period are just and reasonable.

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

19 A. The purpose of my testimony is to summarize the operation of KU’s environmental
20 surcharge during the billing period under review, demonstrate that the amount collected
21 during the period was just and reasonable, present and discuss KU’s proposed
22 adjustment to the Environmental Surcharge Revenue Requirement based on the

1 operation of the surcharge during the period and explain how the environmental
2 surcharge factors were calculated during the period under review.

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

5 A. KU 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
7 monthly KU environmental surcharges are considered as of the six-month billing
8 period ending October 31, 2015. In each month of the six-month period under review
9 in this proceeding, KU calculated the environmental surcharge factors in accordance
10 with its ECR Tariff and the requirements of the Commission's previous orders
11 concerning KU's environmental surcharge. The calculations were made in accordance
12 with the Commission-approved monthly forms and filed with the Commission ten days
13 before the new monthly charge was billed by the Company.

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

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

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

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

4 **Q. Please describe the most recently approved changes to KU's ECR Compliance**
5 **Plan.**

6 A. In Case No. 2011-00161, the Commission approved KU's 2011 ECR Compliance Plan
7 that included two new projects and associated operation and maintenance costs,
8 amended Project 29 (2009 Plan) to convert the Brown Main Ash Pond to a Landfill,
9 and approved the reporting of operation and maintenance costs associated with sorbent
10 injection approved with the 2006 Plan for Ghent Units 1, 3, and 4 as part of the 2011
11 Plan. Pursuant to the Commission's December 15, 2011 Order approving the
12 Settlement Agreement in Case No. 2011-00161, KU began including the approved
13 projects in the monthly filing for the December 2011 expense month that was billed in
14 February 2012 with separate authorized rates of return for the Pre-2011 and 2011 ECR
15 Plans. In addition, the Commission approved the use of net (non-fuel) revenues to
16 calculate the jurisdictional revenue requirement for non-residential customers defined
17 as Group 2 in the ECR Tariff. The use of net revenues for Group 2 customers was
18 implemented in Case No. 2011-00231 as discussed below.

19 In Case No. 2014-00371, KU's most recently approved rate case, the
20 Commission reset the return on equity to be used in the monthly environmental
21 surcharge filings. Pursuant to the Commission's June 30, 2015 Order in that case, the
22 changes were implemented with the July 2015 expense month. The approved return

1 on equity is used in this proceeding to establish the overall rate of return on capital to
2 be used to calculate the environmental surcharge as discussed later in this testimony.

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

5 A. In Case No. 2011-00231, the Commission implemented the use of net revenues to
6 calculate the jurisdictional revenue requirement for non-residential customers defined
7 as Group 2 in the ECR Tariff in conjunction with the ECR Roll-in and revisions to the
8 monthly reporting forms to reflect the implementation of Group 1 and Group 2 billing
9 factors. Pursuant to the Commission's January 31, 2012 Order in that case, the changes
10 were implemented with the January 2012 expense month that was billed in March 2012.

11 In Case No. 2015-00221, KU's most recent ECR two-year review, the
12 Commission approved the ECR Roll-in. Pursuant to the Commission's December 7,
13 2015 Order in that case, the change was implemented with the December 2015 expense
14 month to be billed in February 2016.

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

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

22 **Q. Are there any changes necessary to the jurisdictional revenue requirement**
23 **(E(m))?**

1 A. Yes. Adjustments to E(m) are necessary for compliance with the Commission’s Order
2 in Case No. 2000-00439 to reflect the actual changes in the overall rate of return on
3 capitalization that is used in the determination of the return on environmental rate base.
4 Pursuant to the terms of the Settlement Agreement approving the 2011 ECR Plan, KU
5 calculated the short- and long-term debt rate using average daily balances and daily
6 interest rates in the calculation of the overall rate of return true-up adjustment for the
7 six-month period ending August 31, 2015. For the expense months of March through
8 June 2015, the weighted average cost of capital was based on the balances as of June
9 30, 2015 and the 10.25% return on equity. For the expense months of July and August
10 2015, the weighted average cost of capital was based on the balances as of August 31,
11 2015 and the 10.00% return on equity. The details of and support for this calculation
12 are shown in KU’s response to Question No. 1 of the Commission Staff’s Request for
13 Information.

14 **Q. Are there corrections to information provided in the monthly filings during the**
15 **billing period under review?**

16 A. No.

17 **Q. As a result of the operation of the environmental surcharge during the billing**
18 **period under review, is an adjustment to the revenue requirement necessary?**

19 A. Yes. KU experienced an under-recovery of \$1,309,732 for the billing period ending
20 October 31, 2015. KU’s response to Question No. 2 of the Commission Staff’s Request
21 for Information shows the calculation of the under-recovery. An adjustment to the
22 revenue requirement is necessary to reconcile the collection of past surcharge revenues
23 with actual costs for the billing period under review.

1 **Q. Has KU identified the causes of the under-recovery during the billing period**
2 **under review?**

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

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

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

Expense Month	12-Month Average Revenues	Billing Month	Actual Revenues Subject to ECR Billing Factors
March 2015	\$ 92,045,617	May 2015	\$ 73,076,551
April 2015	91,713,214	June 2015	85,741,213
May 2015	91,295,971	July 2015	99,102,068
June 2015	91,047,072	August 2015	99,712,675
July 2015	91,239,055	September 2015	97,181,489
August 2015	92,376,947	October 2015	83,973,302

*The 12-month average revenues and the Actual Revenues subject to ECR Billing Factors reflect net revenues for Group 2.

17

1 Generally, an under-recovery will occur when actual revenues for the billing month are
2 less than the 12-month average revenues used for the expense month. Likewise, an
3 over-recovery will usually occur when actual revenues for the billing month are greater
4 than the 12-month average revenues used for the expense month.

5 **Q. What kind of adjustment is KU proposing in this case as a result of the operation**
6 **of the environmental surcharge during the billing period?**

7 A. KU is proposing that the under-recovery be collected over two months following the
8 Commission's Order in this proceeding. Specifically, KU recommends that the
9 Commission approve an increase to the Environmental Surcharge Revenue
10 Requirement of \$654,866 per month for two months, beginning in the second full
11 billing month following the Commission's Order in this proceeding. This method is
12 consistent with the method of implementing previous over- or under- recovery
13 positions in prior ECR review cases.

14 **Q. What is the bill impact on a residential customer for the proposed collection of the**
15 **under-recovery?**

16 A. The inclusion of the collection reflecting the under-recovery position in the
17 determination of the ECR billing factor will increase the billing factor by
18 approximately 0.54% per month for two months. For a residential customer using an
19 average of 1,146 kWh per month, the impact of the adjusted ECR billing factor would
20 be an increase of approximately \$0.58 per month for two months (using rates and
21 adjustment clause factors in effect for the November 2015 billing month).

22 **Q. What rate of return is KU proposing to use for all ECR Plans upon the**
23 **Commission's Order in this proceeding?**

1 A. KU is recommending an overall rate of return on capital of 10.31%, including the
2 currently approved 10.00% return on equity and adjusted capitalization, to be used to
3 calculate the environmental surcharge. This is based on capitalization as of August 31,
4 2015 and the Commission's Order of June 30, 2015 in Case No. 2014-00371 and use
5 of the 2015 gross-up revenue factor that excludes the §199 manufacturing tax
6 deduction. Please see the response and attachment to Commission Staff's Request for
7 Information Question No. 5 following this testimony.

8 **Q. What is your recommendation to the Commission in this case?**

9 A. KU makes the following recommendations to the Commission in this case:

- 10 a) The Commission should approve the proposed increase to the Environmental
11 Surcharge Revenue Requirement of \$654,866 per month for two months
12 beginning in the second full billing month following the Commission's Order
13 in this proceeding;
- 14 b) The Commission should determine the environmental surcharge amount for the
15 six-month billing period ending October 31, 2015 to be just and reasonable;
- 16 c) The Commission should approve the use of an overall rate of return on capital
17 of 10.31%, using a return on equity of 10.00%, beginning in the second full
18 billing month following the Commission's Order in this proceeding.

19 **Q. Does this conclude your testimony?**

20 A. Yes.

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 2010 – Oct 2015
Group Leader, Transmission Operations Engineering	Dec 2008 – Sep 2010
Supervisor, Operations (Ghent Power Station)	Dec 2007 – Dec 2008
Electrical Engineer II (Ghent Power Station)	Jul 2005 – Dec 2007
Project Engineer (TubeMaster, Inc)	Dec 2003 – Jul 2005