

Mr. Jeff DeRouen Executive Director Kentucky Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

RECEIVED

JAN 30 2013

PUBLIC SERVICE COMMISSION

Louisville Gas and Electric Company

State Regulation and Rates 220 West Main Street PO Box 32010 Louisville, Kentucky 40232 www.lge-ku.com

Robert M. Conroy Director - Rates T 502-627-3324 F 502-627-3213 robert.conroy@lge-ku.com

January 30, 2013

RE: AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR THE SIX-MONTH BILLING PERIOD ENDING OCTOBER 31, 2012 CASE NO. 2012-00547

Dear Mr. DeRouen:

Please find enclosed and accept for filing the original and seven (7) copies of the Direct Testimony of Robert M. Conroy and the Response of Louisville Gas and Electric Company to the First Request for Information in Appendix B of the Commission's Order dated January 2, 2013, in the above-referenced matter.

Should you have any questions concerning the enclosed, please contact me at your convenience.

Sincerely,

Robert M. Conroy

**Enclosures** 

#### 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	)	2012-00547
<b>BILLING PERIOD ENDING OCTOBER 31, 2012</b>	)	

#### **DIRECT TESTIMONY OF**

ROBERT M. CONROY
DIRECTOR - RATES
LG&E AND KU SERVICES COMPANY

Filed: January 30, 2013

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

1

12

17

18

19

20

21

22

23

My name is Robert M. Conroy. I am the Director – Rates for LG&E and KU
Services Company, which provides services to Louisville Gas and Electric Company
("LG&E" or "Company") and Kentucky Utilities Company ("KU") (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. Yes. I have previously testified before this Commission in proceedings concerning
10 the Companies' most recent rate cases, fuel adjustment clauses, and environmental
11 cost recovery ("ECR") surcharge mechanisms.

#### Q. What is the purpose of this proceeding?

13 A. The purpose of this proceeding is to review the past operation of LG&E's
14 environmental surcharge during the six-month billing period ending October 31, 2012
15 (expense months of March 2012 through August 2012), and to determine whether the
16 surcharge amount collected during the period is just and reasonable.

#### 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.
- LG&E billed an environmental surcharge to its customers from May 1, 2012 through A. 3 October 31, 2012. For purposes of the Commission's examination in this case, the 4 5 monthly LG&E environmental surcharges are considered as of the six-month billing period ending October 31, 2012. In the six-month period under review in this 6 proceeding, LG&E calculated the environmental surcharge factors in accordance with 7 its tariff ECR, and the requirements of the Commission's previous orders concerning 8 LG&E's environmental surcharge. The calculations were made in accordance with the Commission-approved monthly forms and filed with the Commission ten days 10 before the new monthly charge was billed by the Company. 11
- Q. What costs were included in the calculation of the environmental surcharge factors for the billing period under review?

14

15

16

17

18

19

20

21

22

A.

The capital and operating costs included in the calculation of the environmental surcharge factors for the billing period under review were the costs incurred each month by LG&E from March 2012 through August 2012, 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.

# Q. Has the Commission recently approved changes to LG&E's ECR CompliancePlan?

Yes. In Case No. 2011-00162, the Commission approved LG&E's 2011 ECR 5 A. Compliance Plan that included two new projects and associated operation and 6 maintenance costs, and approved the reporting of operation and maintenance costs 7 associated with sorbent 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 9 Commission's December 15, 2011 Order approving the Settlement Agreement in 10 11 Case No. 2011-00162, LG&E began including the approved projects in the monthly filing for the December 2011 expense month that was billed in February 2012 with 12 13 separate authorized rates of return for the Pre-2011 and 2011 ECR Plans. In addition, the Commission approved the use of net (non-fuel) revenues to calculate the 14 jurisdictional revenue requirement for non-residential customers defined as Group 2 15 in the ECR tariff. The use of net revenues for Group 2 customers was implemented 16 in Case No. 2011-00232 as discussed below. 17

# Q. Has the Commission recently approved changes to the environmental surcharge mechanism and the monthly ES Forms?

18

19

20

21

22

23

A. Yes. In Case No. 2011-00232, LG&E's most recent ECR two-year review, the Commission implemented the use of net revenues to calculate the jurisdictional revenue requirement for non-residential customers defined as Group 2 in the ECR tariff in conjunction with the ECR Roll-in, and revisions to the 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 were implemented with the January 2012 expense month that was billed in March 2012.
- 4 Q. Has the Commission recently approved changes to LG&E's ECR Compliance
  5 Plan that are not included in the billing period under review?
- Yes. In Case No. 2012-00222, LG&E's most recent rate case, the Commission 6 A. 7 approved the elimination of LG&E's 2005 and 2006 ECR Compliance Plans (with the exception of Project 17 related to Emission Allowances) from the monthly environmental surcharge filings and reset the return on equity to be used in the 9 10 monthly environmental surcharge filings. Pursuant to the Commission's December 20, 2012 Order in that case, the changes will be implemented with the January 2013 11 12 expense month that will be included in the next ECR six-month review. The approved return on equity is used in this proceeding to establish the overall rate of 13 return on capital to be used to calculate the environmental surcharge as discussed 14 15 later in this testimony.
- Q. Are there any changes or adjustments in Rate Base from the originally filed expense months?
- 18 A. No. During the period under review, there were no changes to Rate Base from the
  19 originally filed billing months as summarized in LG&E's response to the
  20 Commission Staff's Request for Information, Question No. 1. In addition, there were
  21 no changes identified as a result of preparing responses to the requests for
  22 information in this review.

- Q. Are there any changes necessary to the jurisdictional revenue requirement (E(m))?
- Yes. Adjustments to E(m) are necessary for compliance with the Commission's A. 4 Order in Case No. 2000-00386, to reflect the actual changes in the overall rate of return on capitalization that is used in the determination of the return on 5 environmental rate base. Pursuant to the terms of the Settlement Agreement 6 approving the 2011 ECR Plan, LG&E calculated the short- and long-term debt rate 7 using average daily balances and daily interest rates in the calculation of the overall 8 rate of return true-up adjustment for the six-month billing period ending October 31, 9 2012. The details of and support for this calculation are shown in LG&E's response 10 to Question No. 1 of the Commission Staff's Request for Information. 11
- Q. Are there corrections to information provided in the monthly filings during the billing period under review?
- 14 A. No.
- 15 Q. As a result of the operation of the environmental surcharge during the billing 16 period under review, is an adjustment to the revenue requirement necessary?
- 17 A. Yes. LG&E experienced a cumulative over-recovery of \$146,937 for the billing
  18 period ending October 31, 2012. LG&E's response to Question No. 2 of the
  19 Commission Staff's Request for Information shows the calculation of the cumulative
  20 over-recovery. An adjustment to the revenue requirement is necessary to reconcile
  21 the collection of past surcharge revenues with actual costs for the billing period under
  22 review.

- Q. Has LG&E identified the causes of the net over-recovery during the billing period under review?
- Yes. LG&E has identified the components that make up the net 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 net over-recovery 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.
- 9 Q. Please explain how the function of the ECR mechanism contributes to the net 10 over-recovery in the billing period under review.
  - 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.

Expense Month	12-Month Average Revenues	Billing Month	Actual Revenues Subject to ECR Billing Factors
March 2012	\$ 60,162,728	May 2012	\$ 55,885,732
April 2012	60,309,429	June 2012	69,317,978
May 2012	60,596,825	July 2012	84,825,062
June 2012	60,611,056	August 2012	80,039,652
July 2012	61,382,454	September 2012	69,288,500
August 2012	60,889,595	October 2012	52,173,253

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

11

12

13

14

15

16

A.

- 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 over-recovery will occur when actual revenues for the billing month are greater than the 12-month average revenues used for the expense month.
- 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 net over-recovery be distributed in one month 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 \$146,937 for one month, in the second full billing month following
  the Commission's Order in this proceeding. This method is consistent with the
  method of implementing previous over- or under-recovery positions in prior ECR
  review cases.
- Q. What is the bill impact on a residential customer for the proposed distribution of the over-recovery?
- 16 A. The inclusion of the distribution reflecting the over-recovery position in the
  17 determination of the ECR billing factor will decrease the billing factor by
  18 approximately 0.19%. For a residential customer using 1,026 kWh the impact of the
  19 adjusted ECR billing factor would be a decrease of approximately \$0.19 for one
  20 month (using rates and adjustment clause factors in effect for the January 2013 billing
  21 month).
- Q. What rate of return is LG&E proposing to use for all ECR Plans upon the Commission's Order in this proceeding?

A. LG&E is recommending an overall rate of return on capital of 10.61%, including the currently approved 10.25% return on equity and adjusted capitalization, to be used to calculate the environmental surcharge. This is based on capitalization as of August 31, 2012 and the Commission's Order of December 20, 2012 in Case No. 2012-00222. Please see the response and attachment to Commission Staff's Request for Information Question No. 5 following this testimony.

#### 7 Q. What is your recommendation to the Commission in this case?

- 8 A. LG&E makes the following recommendations to the Commission in this case:
- The Commission should approve the proposed decrease to the Environmental

  Surcharge Revenue Requirement of \$146,937 for one month in the second full

  billing month following the Commission's Order in this proceeding;
  - b) The Commission should determine the environmental surcharge amount for the six-month billing period ending October 31, 2012 to be just and reasonable;
  - c) The Commission should approve the use of an overall rate of return on capital of 10.61%, using a return on equity of 10.25%, beginning in the second full billing month following the Commission's Order in this proceeding.

#### 18 Q. Does this conclude your testimony?

19 A. Yes.

12

13

14

15

16

17

#### VERIFICATION

COMMONWEALTH OF KENTUCKY	)	SS
COUNTY OF JEFFERSON	)	

The undersigned, **Robert M. Conroy**, 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 foregoing testimony, and that 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 30 th day of 2013.

Notary Public

(SEAL

My Commission Expires:

7/21/2015

#### APPENDIX A

#### Robert M. Conroy

Director - Rates LG&E and LG&E Services Company 220 West Main Street Louisville, Kentucky 40202 (502) 627-3324

#### Education

Masters of Business Administration

Indiana University (Southeast campus), December 1998. GPA: 3.9.

Bachelor of Science in Electrical Engineering;

Rose Hulman Institute of Technology, May 1987. GPA: 3.3

Essentials of Leadership, London Business School, 2004.

Center for Creative Leadership, Foundations in Leadership program, 1998.

Registered Professional Engineer in Kentucky, 1995.

#### **Previous Positions**

Manager, Rates	April 2004 – Feb. 2008
Manager, Generation Systems Planning	Feb. 2001 – April 2004
Group Leader, Generation Systems Planning	Feb. 2000 – Feb. 2001
Lead Planning Engineer	Oct. 1999 – Feb. 2000
Consulting System Planning Analyst	April 1996 – Oct. 1999
System Planning Analyst III & IV	Oct. 1992 - April 1996
System Planning Analyst II	Jan. 1991 - Oct. 1992
Electrical Engineer II	Jun. 1990 - Jan. 1991
Electrical Engineer I	Jun. 1987 - Jun. 1990

#### Professional/Trade Memberships

Registered Professional Engineer in Kentucky, 1995.

#### 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	)	2012-00547
BILLING PERIOD ENDING OCTOBER 31, 2012	)	

# RESPONSE OF LOUISVILLE GAS AND ELECTRIC COMPANY TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION IN APPENDIX B OF COMMISSION'S ORDER DATED JANUARY 2, 2013

FILED: January 30, 2013

#### **VERIFICATION**

COMMONWEALTH OF KENTUCKY	)	
	)	SS
COUNTY OF JEFFERSON	)	

The undersigned, Robert M. Conroy, 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.

Robert M. Conroy

Notary Public

(SEAL

My Commission Expires:

7/21/2015

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

#### **Question No. 1**

Witness: Robert M. Conroy

Q-1. Concerning the rate of return on the four 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. 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,

#### A-1. Please see the attachment.

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. No further revisions to Rate Base were identified in preparation of this response.

Pages 3 and 4 provide the weighted average cost of capital for the Pre-2011 and 2011 Plans, respectively, for the period ending October 31, 2012. 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. The Pre-2011 and 2011 Plans are also shown separately to reflect the different rates of returns approved by the Commission in Case No. 2011-00162.

LG&E did not engage in accounts receivable financing or have any preferred stock outstanding during the period under review.

#### Louisville Gas & Electric Company Overall Rate of Return True-up Adjustment - Revised Rate Base Impact on Calculated E(m)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Billing Expen Month Mont		Rate of Return as Filed	Rate Base as Filed	Rate Base As Revised	Change in Rate Base	True-up Adjustment	Jurisdictional Allocation, ES Form 1.10	Jurisdictional True up Adjustment
w1					(5) - (4)	(3) * (6) / 12		(7) * (8)
				Pre-2011 Plans			7	
May-12	Mar-12	10.82%	\$ 76,523,810	\$76,523,810	\$ -	\$ -	89.22%	\$ -
Jun-12	Apr-12	10 82%	76,563,034	76,563,034	-	-	86.27%	-
Jul-12	May-12	10.82%	76,671,169	76,671,169	-	-	92.09%	-
Aug-12	Jun-12	10.82%	77,154,218	77,154,218	-	-	97.04%	-
Sep-12	Jul-12	10.82%	77.628,085	77,628,085	-	-	96.37%	-
Oct-12	Aug-12	10.82%	77,775,220	77,775,220	-		96.86%	
						\$ -		\$ -
				2011 Plan				
May-12	Mar-12	10.37%	\$ 1,968,363	1,968,363	-	-	89.22%	-
Jun-12	Apr-12	10.37%	2,399,970	2,399,970	-	-	86.27%	-
Jul-12	May-12	10.37%	5,268.700	5,268,700	-	-	92.09%	-
Aug-12	Jun-12	10.37%	8,761,465	8,761,465	-	-	97.04%	-
Sep-12	Jul-12	10.37%	24,869,986	24,869,986	-	-	96.37%	-
Oct-12	Aug-12	10.37%	28,786,440	28,786,440	-		96.86%	
						\$ -		\$ -
				Cumulative Impact of C	1 D-1 D-1	. «		•

Pursuant to the Commission's Order dated December 15, 2011 approving the Settlement Agreement in Case No. 2011-00162, LG&E calculated the short- and long-term debt using average daily balances and daily interest rates in connection with the ECR true-up calculation shown above and used a separate rate of return for the Pre-2011 and 2011 ECR Plans beginning with the December 2011 expense month.

#### Louisville Gas & Electric Company Overall Rate of Return True-up Adjustment - Revised Rate of Return Impact on Calculated E(m)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
Billing Month	Expense Month	Rate of Return as Filed	Rate of Return as Revised	Change in Rate of Return	Rate Base as Revised	True-up Adjustment	Jurisdictional Allocation, ES Form 1.10	Jurisdictional True up Adjustment		
				(4) - (3)		(5) * (6) / 12		(7) * (8)		
	Pre-2011 Plans									
May-12	Mar-12	10.82%	10.94%	0.12%	\$ 76,523,810	7,652	89.22%	6,82		
Jun-12	Apr-12	10.82%	10.94%	0.12%	76,563,034	7,656	86.27%	6,60		
Jul-12	May-12	10.82%	10.94%	0.12%	76,671,169	7,667	92.09%	7,06		
Aug-12	Jun-12	10.82%	10.94%	0.12%	77,154,218	7,715	97.04%	7,48		
Sep-12	Jul-12	10.82%	10.94%	0.12%	77,628,085	7,763	96.37%	7,48		
Oct-12	ct-12 Aug-12 l		10.94%	0.12%	77,775,220	7,778	96.86%	7,53		
						46,232		42,99		
				2011 Plan						
May-12	Mar-12	10.37%	10.48%	0.11%	1,968,363	180	89.22%	16		
Jun-12	Apr-12	10.37%	10.48%	0.11%	2,399,970	220	86.27%	19		
Jul-12	May-12	10,37%	10.48%	0.11%	5,268,700	483	92.09%	44		
Aug-12	Jun-12	10.37%	10.48%	0.11%	8,761,465	803	97.04%	77		
Sep-12	Jul-12	10.37%	10.48%	0.11%	24,869,986	2,280	96.37%	2,19		
Oct-12	Aug-12	10.37%	10.48%	0.11%	28,786,440	2,639	96.86%	2,55		
						6,605		6,32		
			Cum	ulative Impact of Ch.	anges in Rate of Return	\$ 52,837		\$ 49,32		

Pursuant to the Commission's Order dated December 15, 2011 approving the Settlement Agreement in Case No. 2011-00162, LG&E calculated the short- and long-term debt using average daily balances and daily interest rates in connection with the ECR true-up calculation shown above and used a separate rate of return for the Pre-2011 and 2011 ECR Plans beginning with the December 2011 expense month.

### Adjusted Electric Rate of Return on Common Equity - 2005-2010 ECR Plans As of October 31, 2012

		Per Books 10-31-12 (1)	Capital Structure (2)	Electric Rate Base Percentage (3)	Electric Capitalization (Col 1 x Col 3) (4)	Adjustments to Capitalization (Col 18) (5)	Adjusted Electric Capitalization (Col.4 + Col.5) (G)	Adjusted Capital Structure (7)	Annual Cost Rate (8)	Cost of Capital (Col 8 x Col 7) (9)
ELI	CCTRIC									
1.	Short Term Debt	\$ - (c)	0.00%	78.980%	s -	s	s -	0.00%	0.00%	0.00%
2.	Long Term Debt	1.105,810.455 (c)	43.64%	78.980%	873,369,097	(36,252,777)	837,116,320	43.64%	3.73%	1.63%
3.	Common Equity	1,427,896,912	56.36%	78.980%	1,127,752,981	(46,819,582)	1,080,933,399	56.36%	10.63%	5.99%
4.	Total Capitalization	\$ 2,533,707,367	100,000%		\$ 2,001,122,078	\$ (83,072,359)	\$ 1,918,049,719	100,000%		7,62%
5.	Weighted Cost of Capital Grossed u	p for Income Tax Effect {RC	)R + (ROR - DR) x	[TR / (1 - TR)]}						10.94%
ELI	ECTRIC	Electric Capitalization (Col.4) (10)	Capital Structure (11)	Trimble County Inventories (a) (Col 11 x Col 12 Line 4) (12)	Investments in OVEC & Other (Col 11 x Col 13 Line 4) (13)	JDIC (Col 11 x Col 14 Line 4) (14)	Environmental Compliance Rate Base (Col 11 x Col 15 Line 4) (15)	DSM Rate Base (Col 11 x Col 16 Lmc 2) (16)	Advanced Coal Investment Tax Credit (b) (Col 11 x Col 17 Line 4) (17)	Total Adjustments To Capital (Sum of Col 12 - Col 17) (18)
1.	Short Term Debt	s -	0.00%	s -	s -	\$ -	s -	s -	s -	s -
	Long Term Debt	873,369,097	43,64%	(1,991,927)	(490,083)	7,606,745	(51,136,245)	(105,254)	9,863,987	(36,252,777)
2.	· ·	• •								(46,819,582)
3.	Common Equity	1,127,752,981	56,36%	(2,572,525)	(632,930)	9,823,926	(66,041,219)	(135,933)	12,739,099	
4.	Total Capitalization	\$ 2,001,122,078	100.000%	\$ (4,564,452)	\$ (1,123,013)	\$ 17,430,671	\$ (117,177,464)	\$ (241,187)	\$ 22,603,086	\$ (83,072,359)
(a)	Trimble County Inventories Materials and Supplies Stores Expense Coal Limestone Fuel Oil Emission Allowances Total Trimble County Inventories Multiplied by Disallowed Portion Trimble County Inv. Disallowed	As of October 31, 2012	\$ 6,824,248 1.274,132 9,788,400 208,079 162,022 925 \$ 18,257,806 25,00% \$ 4,564,452							

<sup>(</sup>b) Reflects Investment Tax Credit treatment per Case No. 2007-00179.

<sup>(</sup>c) Average daily balance.

### Adjusted Electric Rate of Return on Common Equity - 2011 ECR Plan As of October 31, 2012

ELE	ECTRIC	Per Books 10-31-12 (1)	Capital Structure (2)	Electric Rate Base Percentage (3)	Electric Capitalization (Col 1 x Col 3) (4)	Adjustments to Capitalization (Col 18) (5)	Adjusted Electric Capitalization (Col 4 - Col 5) (6)	Adjusted Capital Structure (7)	Annual Cost Rate (8)	Cost of Capital (Col8xCol7) (9)
1.	Short Term Debt	\$ - (c)	0.00%	78.980%	s -	\$ -	s -	0.00%	0.00%	0.00%
2.	Long Term Debt	1,105,810,455 (c)	43.64%	78.980%	873,369,097	(36,252,777)	837.116.320	43.64%	3,73%	1.63%
3.	Common Equity	1,427,896,912	56.36%	78.980%	1,127.752,981	(46,819,582)	1,080,933,399	56.36%	10.10%	5.69%
4.	Total Capitalization	\$ 2,533,707,367	100,000%		\$ 2,001,122,078	\$ (83,072,359)	\$ 1,918,049,719	100,000%		7.32%
5.	Weighted Cost of Capital Grossed u	p for Income Tax Effect {RG	DR + (ROR - DR) x	[TR/(1-TR)]}						10.48%
ELI	<u>ectric</u>	Electric Capitalization (Col.4) (10)	Capital Structure (11)	Trimble County Inventones (a) (Col 11 x Col 12 Line 4) (12)	Investments in OVEC & Other (Col 11 x Col 13 Line 4) (13)	JDIC (Col 11 x Col 14 Lmc 4) (14)	Environmental Compliance Rate Base (Col 11 x Col 15 Line 4) (15)	DSM Rate Base (Col 11 x Col 16 Lmc 4) (16)	Advanced Coal Investment Tax Credit (b) (Col 11 x Col 17 Line 4) (17)	Total Adjustments To Capital (Sum of Col 12-Col 17) (18)
1,	Short Term Debt	s -	0.00%	s -	s -	s -	s -	s -	<b>s</b> -	s -
2.	Long Term Debt	873,369,097	43.64%	(1,991,927)	(490,083)	7,606,745	(51,136,245)	(105,254)	9,863,987	(36,252,777)
3.	Common Equity	1,127,752,981	56,36%	(2,572,525)	(632,930)	9,823,926	(66,041,219)	(135,933)	12,739,099	(46,819,582)
4.	Total Capitalization	\$ 2,001,122,078	100.000%	\$ (4,564,452)	\$ (1,123,013)	\$ 17,430,671	\$ (117,177,464)	\$ (241,187)	\$ 22,603,086	\$ (83,072,359)
(a)	Trimble County Inventories Materials and Supplies Stores Expense Coal Limestone Fuel Oil Emission Allowances Total Trimble County Inventories Multiplied by Disallowed Portion Trimble County Inv. Disallowed	As of October 31, 2012	\$ 6,824,248 1,274,132 9,788,400 208,079 162,022 925 \$ 18,257,806 25,00% \$ 4,564,452							

<sup>(</sup>b) Reflects Investment Tax Credit treatment per Case No. 2007-00179.

<sup>(</sup>c) Average daily balance.

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

#### **Ouestion No. 2**

Witness: Robert M. Conroy

- 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 expense months for 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 six-month review or the two-year review. Include all supporting calculations and documentation for any such additional over- or under-recovery.
- A-2. Please see the attachment to this response for the summary schedule and cumulative components which make up the net over-recovery.

For the period under review, LG&E experienced a net over-recovery of \$146,937.

#### Louisville Gas & Electric Company Calculation of E(m) and Jurisdictional Surcharge Billing Factor Summary Schedule for Expense Months March 2012 through August 2012

(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	
Expense Month	Rate Base as Revised	Monthly Rate Base as Revised	Rate of Return as Revised	(net o	ing Expenses of allowance roceeds)	Total E(m)	Jurisdictional Allocation Ratio	Retail E(m)	Comments: As Revised in This Review
	ES Form 2.00	(2) / 12		ES	Form 2.00	(3) * (4) + (5)	ES Form 1.10	(6) * (7)	
Г		Pre	e-2011 Plans						
Mar-12	\$ 76,523,810	6,376,984	10.94%	S	568,926	1,266,568	89.22%	1,130,032	
Apr-12	76,563,034	6,380,253	10.94%		325,222	1,023,222	86.27%	882,733	
May-12	76,671,169	6,389,264	10.94%		382,863	1,081,849	92.09%	996,274	
Jun-12	77,154,218	6,429,518	10.94%		376,266	1,079,655	97.04%	1,047,697	
Jul-12	77,628,085	6,469,007	10.94%		425,746	1,133,455	96.37%	1,092,311	
Aug-12	77.775,220	6,481,268	10.94%		612,263	1,321,314	96.86%	1,279,825	
Г			2011 Plan						
Mar-12	\$ 1,968,363	164,030	10.48%	\$	52,077	69,267	89.22%	61,800	
Apr-12	2,399,970	199,998	10.48%		105,079	126,039	86.27%	108,734	
May-12	5,268,700	439,058	10.48%		146,819	192,832	92.09%	177,579	
Jun-12	8,761.465	730,122	10.48%		82,005	158,522	97.04%	153,830	
Jul-12	24,869,986	2,072,499	10.48%		72.340	289,538	96.37%	279,028	
Aug-12	28,786,440	2,398,870	10.48%		103,011	354,413	96.86%	343,284	

Notes: In Case No. 2011-00162, the Commission approved the 2011 ECR Plan and the use of separate rates of return for the Pre-2011 and 2011 ECR Plans beginning with the December 2011 expense month.

Attachment to Response to Question No. 2
Page 2 of 3
Conroy

#### Louisville Gas & Electric Company Calculation of E(m) and Jurisdictional Surcharge Billing Factor Summary Schedule for Expense Months March 2012 through August 2012

Note:

(1) Expense Month		(2) ail E(m) for ECR Plans	(3) Adjustment to Ret E(m) for Over/Under- Collection			(4) Retail E(m) Including all djustments to be billed as ECR	(5)  Monthly Billing Factor (Group 1)	(6)  Monthly Billing Factor (Group 2)	Reco	(7) CR Revenue vered Through Base Rates	(8) Billing Period		(9) Billing Factor nues (Group 1)		(10)  R Billing Factor renues (Group 2)		(11) Combined Total er/(Under) Recovery
······································	Pa	ge 1 Col (8)				(2) + (3)	As Filed	As Filed		As Filed			As Filed		As Filed	(7	)+(9)+(10)-(4)
Mar-12	ę.	1,191,832	ç	_	\$	1,191,832	0.61%	0.93%	S	724,414	May-12	S	174,319	S	253,839	\$	(39,260)
Apr-12	Þ	991,467	φ	-	Ψ	991,467	0.37%	0.57%	•	704,561	Jun-12		135,410		201,644	\$	50,148
May-12		1,173,854		-		1,173,854	0.58%	0.89%		727.258	Jul-12		285,991		306,547	\$	145,942
Jun-12		1,201,527		-		1,201,527	0.40%	0.62%		888,647	Aug-12		182,511		220,802		90,433
Jul-12		1,371,339		-		1,371,339	0.37%	0.58%		1,073,324	Sep-12		140,160		171,589		13,736
Aug-12		1,623,109		-		1,623,109	0.76%	1.19%		1,027,408	Oct-12		187,221		294.418		(114,062)
					\$	7,553,128			\$	5,145,612		\$	1,105,613	\$	1,448,840	\$	146,937
	Net	Over-Recov	ery 1	to be returned to	cust	tomers for the 6-r	nonth billing pe	riod ending Oc	tober	31, 2012:						<u>s</u>	146,937

In Case No. 2011-00162, the Commission approved the 2011 ECR Plan and the use of separate rates of return for the Pre-2011 and 2011 ECR Plans beginning with the December 2011 expense month.

#### Louisville Gas & Electric Company Reconciliation of Combined Over/(Under) Recovery Summary Schedule for Expense Months March 2012 through August 2012

	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8) Jurisdictional	(9)
	Billing Month	Expense Month	Rate of Return as Filed	Rate of Return as Revised	Change in Rate of Return (4) - (3)	Rate I	Base as Revised	Impact of change in Rate of Return (5) * (6) / 12	Allocation, ES Form 1.10	Jursidictional Impact (7) * (8)
Pre-20	11 Plans (Note 1	)								
-	May-12	Mar-12	10 82%	10 94%	0 12%	\$	76.523,810	7,652	89.22%	6,827
	Jun-12	Apr-12	10.82%	10.94%	0 12%		76,563,034	7,656	86 27%	6,605
	Jul-12	May-12	10.82%	10 94%	0 12%		76,671.169	7,667	92 09%	7,061
	Aug-12	Jun-12	10 82%	10 94%	0 12%		77,154,218	7,715	97 04%	7,487
	Sep-12	Jul-12	10.83%	10.94%	0 12%		77.628.085	7,763	96 37%	7,481
	Oct-12	Aug-12	10.82%	10.94%	0 12%		77,775.220	7,778	96 86%	7,533
								46,232		42,995
2011 I	lan (Note 1)									
-	May-12	Mar-12	10 37%	10 48%	011%	\$	1.968,363	180	89 22%	161
	Jun-12	Apr-12	10 37%	10.48%	0 11%		2,399,970	220	86 27%	190
	Jul-12	May-12	10.37%	10 48%	0 11%		5,268,700	483	92 ()9%	445
	Aug-12	Jun-12	10 37%	10 48%	011%		8.761.465	803	97 04%	779
	Sep-12	Jul-12	10.37%	10 48%	011%		24,869,986	2,280	96 37%	2,197
	Oct-12	Aug-12	10.37%	10.48%	011%		28,786,440	2,639	96 86%	2,556
		-						6,605		6,328
				Cumul	ative Impact of Cha	nges in	Rate of Return	\$ 52,837		\$ 49,322

(1)	(2)		(3)		(4)		(5)		(6)
			Rec	overy l	Position Expla	anat	ion - Over/(Unde	er)	
		Comb	ined Total						
Billing	Expense	Ove	/(Under)	ROR	Trueup (Pre-	1	ROR Trueup	Us	e of 12 Month
Month	Month	Re	covery	20	11 Plans)		(2011 Plan)	Ave	erage Revenues
		(Q2, p	3 2, Col 11)						-
May-12	Mar-12	\$	(39,260)	\$	(6,827)	\$	(161)	s	(32,272)
Jun-12	Apr-12		50,148		(6,605)		(190)		56,943
Jul-12	May-12		145,942		(7,061)		(445)		153,448
Aug-12	Jun-12		90.433		(7,487)		(779)		98,699
Sep-12	Jul-12		13,736		(7,481)		(2,197)		23,414
Oct-12	Aug-12		(114,062)		(7,533)		(2,556)		(103,973)
Total Over-I	Recovery for								
6-month bi	lling period		146,937		(42,995)		(6,328)		196,259

OVER/(UNDER) RECONCILIA	TION	
Combined Over/(Under) Recovery		146,937
Due to Change in ROR (Pre-2011 Plans)	(42,995)	
Due to Change in ROR (2011 Plan)	(6,328)	
Use of 12 Month Average Revenues	196,259	
Subtotal		146,937
Unreconciled Difference		-

NOTE 1: Pursuant to the KPSC's Order dated December 15, 2011 approving the Settlement Agreement in Case No 2011-00162, the 2011 ECR Plan, LG&E calculated the short- and long-term debt rates using average daily balances and daily interest rates in connection with the ECR true-up calculation shown above and used a separate rate of return for the Pre-2011 and 2011 Plans beginning with the December 2011 expense month

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

**Question No. 3** 

Witness: Robert M. Conroy

- Q-3 Provide the calculations, assumptions, workpapers, 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.
- 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 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 for the calculation of Deferred Income Taxes and the balance of Accumulated Deferred Income Taxes reported each month of the period under review.

2005 - Plan
Project 11 -- Special Waste Landfill Expansion - MC

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							638,511	
Mar-12	4.818.430	10,067	16,995	6,928	38.9000%	2,695	641,206	275,368
Apr-12	4,818,430	10,067	16,995	6,928	38.9000%	2,695	643,900	275,368
May-12	4.818.430	10,067	16,995	6,928	38.9000%	2,695	646,595	275,368
Jun-12	4.818.430	10,067	16,995	6,928	38.9000%	2,695	649,290	275,368
Jul-12	4,818,430	10.067	16,995	6,928	38.9000%	2,695	651,985	275,368
Aug-12	4,818,430	10,067	16,995	6,928	38.9000%	2,695	654,679	275,368

Due to Bonus Depreciation for tax purposes, taken on certain components of Project 11, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets placed in service in 2011 received 50% bonus depreciation, which reduces the Federal tax basis to 50% of the plant balance. A sample calculation of deferred taxes for March 2012 is shown below:

Federal Basis	Book Depr.	Federal Tax Do	Fed. Difference	Fed Tax Rate	Fed Def Tax
2,285,981	6,158	8,603	2,445	35.0000%	856
1,267,725	3,909	7,626	3,717	35.0000%	1,301
1,267,725		-	-	35.0000%	-
State Basis	Book Depr.	State Tax Dep	St. Difference	State Tax Rate	St Def Tax
2,282,981	6,158	8,603	2,445	6.0000%	147
2 535 449	3.909	15.253	11.344	6.0000%	681

St. Offset for Fed Taxes not Owed (290)

Total Deferred Tax 2,695

2005 - Plan
Project 12 — Special Waste Landfill Expansion - CR

		Book	Tax	Temporary	Income Tax	Defermed Tour	Accumulated Deferred	Taxes on
Month	Plant Balance	Depreciation	Depreciation	Difference	Rate	Deferred Tax	Taxes	Retirements
Beg Balance							357,292	
Mar-12	5,595,065	9,348	24,631	15,283	38.9000%	5,945	363,237	536
Apr-12	5,595,065	10,300	24,631	14,331	38.9000%	5,575	368,813	536
May-12	5,595,065	10,300	24,636	14,336	38.9000%	5,577	374,390	536
Jun-12	5,595,065	10,300	24,636	14,336	38.9000%	5,577	379,968	536
Jul-12	5,595,065	10,300	24,475	14,175	38.9000%	5,514	385,482	536
Aug-12	5,595,065	10,300	24,603	14,303	38.9000%	5,564	391,046	536

2005 - Plan

Project 13 – Scrubber Refurbishment - TC1

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deterred Taxes on Retirements
Beg Balance							111,568	
Mar-12	850.100	2.564	7,591	5,027	38.9000%	1,956	113,524	73,550
Apr-12	850,100	2.564	7,591	5,027	38.9000%	1,956	115,480	73,550
May-12	850.100	2.564	7.591	5,027	38.9000%	1,956	117,435	73,550
Jun-12	850.100	2.564	7.591	5.027	38.9000%	1,956	119,391	73,550
Jul-12	850.100	2.564	7.591	5,027	38.9000%	1,956	121,346	73,550
Aug-12	850,100	2,564	7,591	5,027	38.9000%	1,956	123,302	73,550

2005 - Plan

Project 14 -- Scrubber Refurbishment - CR6

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Taxes on Retirements
Beg Balance		*					20,461	
Mar-12	308,507	1,147	1,384	237	38.9000%	92	20,553	9,075
Apr-12	308.507	1,147	1,384	237	38.9000%	92	20,646	9,075
May-12	308,507	1,147	1,384	237	38.9000%	92	20,738	9,075
Jun-12	308,507	1,147	1,384	237	38.9000%	92	20,830	9,075
Jul-12	308,507	1,147	1,384	237	38.9000%	92	20,923	9,075
Aug-12	308,507	1,147	1,384	237	38.9000%	92	21,015	9,075

#### 2005 - Plan

Project 15 – Scrubber Refurbishment - CR5

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							-	
Mar-12	_	-	-	-	38.9000%	-	-	-
Apr-12	-	_	-	-	38.9000%	-	-	-
May-12	_	_	-	-	38.9000%	-	-	-
Jun-12	-	_	-	-	38.9000%	-	-	•••
Jul-12	-	-	-	-	38.9000%	-	_	-
Aug-12	-	-	-	-	38.9000%	-	-	-

2005 - Plan

Project 16 -- Scrubber Improvements - TC1

		5	<b></b>	T	T		Accumulated Deferred	Deterred Taxes on
		Book	Tax	Temporary	Income Tax			
Month	Plant Balance	Depreciation	Depreciation	Difference	Rate	Deferred Tax	Taxes	Retirements
Beg Balance							1,316,239	
Mar-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,332,517	26,166
Apr-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,348,794	26,166
May-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,365,072	26,166
Jun-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,381,350	26,166
Jul-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,397,627	26,166
Aug-12	7,361,077	22,206	64,051	41,845	38.9000%	16,278	1,413,905	26,166

<u> 2006 - Plan</u>

Project 18 -- Trimble County 2 AQCS

<b>84</b> 4h	Diaut Dalamas	Book	Tax	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
<u>Month</u>	Plant Balance	Depreciation	Depreciation	Dillerence	Rate	Deterred Tax		Kentements
Beg Balance							862,387	
Mar-12	44,236,424	153,863	344,626	190,763	38.9000%	74,207	936,594	-
Apr-12	44,236,424	155,174	345,511	190,337	38.9000%	74,041	1,010,635	-
May-12	44,236,424	155,174	345,511	190,337	38.9000%	74,041	1,084,676	-
Jun-12	44,236,424	155,174	345,511	190,337	38.9000%	74,041	1,158,717	-
Jul-12	44,236,424	155,174	345,511	190,337	38.9000%	74,041	1,232,759	-
Aug-12	44,236,424	155,174	345,511	190,337	38.9000%	74,041	1,306,800	-

2006 - Plan
Project 19 - Sorbent Injection, Mill Creek & Trimble 1

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance	2111,000						363,878	
Mar-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	372,202	-
Apr-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	380,526	-
May-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	388,850	-
Jun-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	397,174	-
Jul-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	405,498	_
Aug-12	3,440,076	9,777	31,175	21,398	38.9000%	8,324	413,822	-

2006 - Plan

Project 20 - Mercury Monitors, all plants

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							68,643	
Mar-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	69,692	-
Apr-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	70,741	-
May-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	71,790	-
Jun-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	72,839	-
Jul-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	73,888	-
Aug-12	2,050,346	8,867	11,563	2,696	38.9000%	1,049	74,937	-

<u> 2006 - Plan</u>

Project 21 -- Particulate Monitors, Mill Creek

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deterred Taxes on Retirements
Beg Balance	, latte Balation						79,952	
Mar-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,911	-
Apr-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,870	-
May-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,829	-
Jun-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,788	-
Jul-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,747	-
Aug-12	397,151	1,361	1,255	(106)	38.9000%	(41)	79,706	-

2009 - Plan

Project 23 - Trimble County Ash Treatment Basis (BAP/GSP)

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							164,986	
Mar-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	179,488	-
Apr-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	193,990	-
May-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	208,492	-
Jun-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	222,994	-
Jul-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	237,495	-
Aug-12	9,594,347	20,438	57,718	37,280	38.9000%	14,502	251,997	-

2011 - Plan
Project 26 - Mill Creek Station Air Compliance

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							-	
Mar-12	-	-	-	-	38.9000%	-	-	-
Apr-12	-	-	_	-	38.9000%	_	-	-
May-12	-	-	_	-	38.9000%	-	-	-
Jun-12	-	_	-	-	38.9000%	-	-	-
Jul-12	1,965,028	3,152	154,417	151,265	38.9000%	58,842	58,842	-
Aug-12	1,965,028	6,304	154,417	148,113	38.9000%	57,616	116,458	-

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

#### Question No. 4

Witness: Robert M. Conroy

- Q-4. Refer to ES Form 2.50, Pollution Control Operations & Maintenance Expenses, for the March 2012 through August 2012 expense months. 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. Attached please find a schedule showing the changes in the operations and maintenance expense accounts for March 2012 through August 2012 expense months. The changes in the expense levels are reasonable and generally occurred as a part of routine plant operations and maintenance or normal annual testing expenses.

#### 2005 Plan

Fluctuations in the scrubber operation expenses, accounts 502006 and 502056, are the result of regular operation of the Trimble County Unit 1 ("TC1") FGD. These are variable production expenses and will fluctuate with generation, coal quality and the SO<sub>2</sub> removal rate. The significant variance in August is due to the correction of a billing error that occurred March-July 2012; \$108K.

#### 2006 Plan

Fluctuations in sorbent injection operation expenses, accounts 506109 and 506159, are the result of on-going system operation of the Trimble County Unit 2 ("TC2") sorbent injection system.

Fluctuations in sorbent injection reactant are the result of normal operation of the TC2 sorbent injection system. The variable material, hydrated lime, will fluctuate with stack opacity. In general, warmer temperatures and increased sunlight exacerbates the issue remediated by the hydrated lime.

Fluctuations in sorbent injection system maintenance expenses, accounts 512102 and 512152, are the result of normal system maintenance.

Fluctuations in mercury monitor operation expenses, accounts 506110 and 506150, are the result of normal system operation.

Fluctuations in the scrubber maintenance expenses, accounts 512005 and 512055, are the result of normal system maintenance on TC2. The increases in April and June 2012 reflect maintenance performed during a maintenance outage.

Monthly variances in the NOx operation expenses, accounts 506104, 506154, 506105 and 506155, reflect normal and expected SCR operations of TC2. The variances for accounts 506104 and 506154 are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. TC2 was offline April-May 2012 for a maintenance outage.

Fluctuations in the precipitator operation expenses, accounts 506001 and 506051, are the result of normal system operation of TC2.

Expenses for activated carbon, accounts 506111 and 506151, are the result of regular operation of the TC2 baghouse for the removal of mercury. This is a variable production expense and will fluctuate with generation, coal quality and flue gas chemistry. The unit was offline April-May 2012 for a maintenance outage.

Fluctuations in the precipitator maintenance expenses, accounts 512011 and 512051, are the result of normal system maintenance on TC2.

Please note that the sorbent injections O&M from the 2006 plan, beginning December 2011, is now reflected in the 2011 Plan for all units except TC2, which will continue to be recovered through the 2006 plan.

#### 2011 Plan

Fluctuations in sorbent injection operation expenses, account 506159, are the result of ongoing system operation of the TC1 sorbent injection system.

Fluctuations in sorbent injection reactant are the result of normal operation of the TC1 sorbent injection system. The variable material, hydrated lime, will fluctuate with stack opacity. In general, warmer temperatures and increased sunlight exacerbates the issue remediated by the hydrated lime.

Fluctuations in sorbent infection system maintenance expenses, accounts 512102 and 512152, are the result of normal maintenance of the TC1 sorbent injection system.

### LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT

Pollution Control - Operations & Maintenance Expenses

				% Change from Prior		% Change from Prior		% Change from Prior		% Change from Prior		% Change from Prior
	O&M Expense Account	Mar-12	Apr-12	Period	May-12	Period	Jun-12	Period	Jul-12	Period	Aug-12	Period
2005 Plan					1			-20	50.155.54	50/	205 202 41	2450/
502006/502056		34,405.60	44,731.58	30%	86,331.01	93%	62,025.50	-28%	59,177.74	-5%	205,303.41	247%
512005/512055			-	0%		0%	<u> </u>	0%	-	0%	-	0%
501201	Ashpond Dredging Expense	•	-	0%	-	0%	-	0%		0%	-	0%
	Total 2005 Plan O&M Expenses	34,405.60	44,731.58	30%	86,331.01	93%	62,025.50	-28%	59,177.74	-5%	205,303.41	247%
2006 Plan												
506109/506159	Sorbent Injection Operation	1,916.85	1,386.63	-28%	1,947.22	40%	2,076.84	7%	4,150.21	100%	2,946.52	-29%
506152	Sorbent Reactant - Reagent Only	7,857.61	-	-100%	-	0%	14,811.05	100%	12,971.16	-12%	20,221.79	56%
512102/512152	Sorbent Injection Maintenance	189.49	1,719.06	100%	988.07	-43%	561.44	-43%	191.30	-66%	709.34	271%
506110/506150	Mercury Monitors Operation	4,932.12	1,306.13	-74%	1,212.96	-7%	5,146.45	324%	(1,840.33)	-136%	1,227.18	167%
512103/512153	Mercury Monitors Maintenance	-	•	0%	-	0%	-	0%	-	0%		0%
502006/502056	Scrubber Operations	10,360.07	-	-100%	-	0%	15,130.07	100%	20,948.60	38%	45,520.68	117%
512005/512055		(905.47)	28,024.99	3195%	8,522.54	-70%	10,279.18	21%	6,330.17	-38%	7,151.62	13%
506104/506154	NOx Operation — Consumables	12,647.38	-	-100%	-	0%	14,870.94	100%	28,827.04	94%	39,560.86	37%
506105/506155	NOx Operation Labor and Other	847.93	1,061.51	25%	830.25	-22%	1,265.46	52%	1,033.42	-18%	1,212.67	17%
512101/512151		910.19	892.94	-2%	1,966.72	120%	621.04	-68%	486.97	-22%	437.01	-10%
506001/506051		2,567.54	1,760.46	-31%	1,786.49	1%	1,405.05	-21%	1,946.88	39%	2,212.64	14%
506111/506151	Activated Carbon	26,475.36	-	-100%	5,163.34	100%	-	-100%	36,117.48	100%	35,831.73	-1%
512011/512051	Precipitator Maintenance	6,540.78	10,997.17	68%	40,148.55	265%	8,745.80	-78%	2,142.70	-76%	3,132.62	46%
	Total 2006 Plan O&M Expenses	74,339.85	47,148.89	-37%	62,566.14	33%	74,913.32	20%	113,305.60	51%	160,164.66	41%
2009 Plan												
502013	Landfill Operations	_	-	0%	-	0%	-	0%	<u> </u>	0%		0%
512105	Landfill Maintenance	_		0%	-	0%	-	0%	-	0%		0%
Adjustme	ent for CCP Disposal in Base Rates (ES Form 2.51)	-		0%	-	0%	-	0%		0%		0%
	Total 2009 Plan O&M Expenses	-	-	0%		0%	-	0%		0%		0%
2011 Plan												
502056	Scrubber Operations	-	-	0%	-	0%		0%	-	0%		0%
512055	Scrubber Maintenance	-	-	0%	-	0%	-	0%	-	0%		0%
506159	Sorbent Injection Operation	8,748.21	6,431.85	-26%	10,245.57	59%	7,858.43	-23%	18,522.42	136%	13,178.09	-29%
506152	Sorbent Reactant - Reagent Only	41,895.43	98,178.80	134%	136,130.17	39%	73,659.62	-46%	45,217.87	-39%	79,015.89	75%
512152	Sorbent Injection Maintenance	1,298.71	333.44	-74%	307.94	-8%	351.92	14%	260.48	-26%	702.73	170%
506156	Baghouse Operations	-	-	0%	-	0%	-	0%	_	0%	-	0%
512156	Baghouse Maintenance	-		0%	_	0%	-	0%	_	0%	-	0%
506151	Activated Carbon	_	_	0%	-	0%	-	0%	-	0%		0%
	ent for Base Rates Baseline Amounts	_	-	0%	-	0%	_	0%	-	0%	_	0%
	Total 2011 Plan O&M Expenses	51,942.35	104,944.09	-102%	146,683.68	40%	81,869.97	-44%	64,000.77	-22%	92,896.71	45%

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

#### **Question No. 5**

Witness: Robert M. Conroy

- Q-5. In Case No. 2000-00386, the Commission ordered that LG&E's cost of debt and preferred stock would be reviewed and re-established during the six-month review case. Provide the following information as of August 31, 2012:
  - 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-5. a. Please see the attachment. There was no preferred stock outstanding as of August 31, 2012, therefore it is not listed in the attached schedule.
  - b. Please see the attachment. There was no preferred stock outstanding as of August 31, 2012, therefore it is not listed in the attached schedule.
  - c. Please see the attachment. LG&E is utilizing a return on equity of 10.25% as agreed to for the Pre-2011 and 2011 ECR Plans and approved by the Commission in its December 20, 2012 Order in Case No. 2012-00222.

### Adjusted Electric Rate of Return on Common Equity As of August 31, 2012

EL	<u>ectric</u>	Per Books 08-31-12 (1)	Capital Structure (2)	Electric Rate Base Percentage (3)	Electric Capitalization (Col 1 x Col 3) (4)	Adjustments to Capitalization (°c 17) (5)	Adjusted Electric Capitalization (Col 4 - Col 5) (G)	Adjusted Capital Structure (7)	Annual Cost Rate (8)	Cost of Capital (Cal 8 x Col 7) (9)
1.	Short Term Debt	s -	0.00%	78.980%	s -	s -	s -	0.00%	0.00%	0.00%
2.	Long Term Debt	1,105,822,116	43.90%	78.980%	873,378,307	(31,592,587)	841,785.720	43.90%	3.80%	1.67%
3.	Common Equity	1,413,367,430	56.10%	78.980%	1,116,277,596	(40,372,303)	1,075,905,293	56.10%	10.25%	5.75%
4.	Total Capitalization	\$ 2,519,189,546	100,000%		\$ 1,989,655,903	\$ (71,964,890)	\$ 1,917,691,013	100,000%		7.42%
5.	Weighted Cost of Capital Grossed u	p for Income Tax Effect (P	OR + (ROR - DR) x	[TR/(1-TR)]}						10,61%
FI	ECTRIC	Electric Capitalization (Col 4) (10)	Capital Structure (11)	Trimble County Inventories (a) (Col 11 x Col 12 Line 4) (12)	Investments in OVEC & Other (Col 11 x Col 13 Lmc 4) (13)	JDIC (Col 11 x Col 14 Lmc 4) (14)	Environmental Compliance Ratebase (Cal 11 x Cal 15 Line 4) (15)	Advanced Coal Investment Tax Credit (b) (Col 11 x Col 16 Line 4) (16)	Total Adjustments To Capital (Sum of Col 12 - Col 16) (17)	
1.	Short Term Debt	\$ -	0.00%	s -	s -	s -	s -	s -	s -	
2.	Long Term Debt	873,378,307	43.90%	(2,098,006)	(475,747)	7,792,144	(46,780,569)	9,969,591	(31,592,587)	
3.	Common Equity	1,116,277,596	56.10%	(2,681,051)	(607,959)	9,957,614	(59,781,091)	12,740,184	(40,372,303)	
4.	Total Capitalization	\$ 1,989,655,903	100,000%	\$ (4,779,057)	\$ (1,083,706)	\$ 17,749,758	\$ (106,561,660)	\$ 22,709,775	\$ (71,964,890)	
(a)	Trimble County Inventories Materials and Supplies Stores Expense Coal Limestone Fuel Oil Emission Allowances Total Trimble County Inventories Multiplied by Disallowed Portion Trimble County Inv. Disallowed	As of August 31, 2012	\$ 6,765,952 1,281,762 10,632,173 216,386 219,617 338 \$ 19,116,228 25,00% \$ 4,779,057							

### LOUISVILLE GAS AND ELECTRIC COMPANY ANALYSIS OF THE EMBEDDED COST OF CAPITAL AT August 31, 2012

	·····		LON	G-TERM DEBT					
						Annualized Cost			
	Due	Rate	Principal	Interest/(Income)	Amortized Debt Issuance Exp/Discount	Amortized Loss- Reacquired Debt	Letter of Credit	Total	Embedde Cost
Pollution Control Bonds -		Section 1			_		_		4.000
Jefferson Co. 2000 Series A	05/01/27	0 841% *	\$ 25,000.000	4 \$ 210,131	\$ -	\$ 135,301	\$	\$ 345,432	1 382
Trimble Co 2000 Series A	08/01/30	0.240% *	83,335.000	200.004	38,707	143,700	305,898 d		0 826
Jefferson Co 2001 Series A	09/01/27	0 160% *	10,104,000	16.166	20.393	*	35,546 d		0 714
Jefferson Co 2001 Series A	09/01/26	0 340% *	22,500.000	76,500	9,924	77,424	22,500 в		0 828
Trimble Co 2001 Series A	09/01/26	0 350% *	27,500,000	96,250	10.790	65.400	27,500 в		0 727
Jefferson Co 2001 Series B	11/01/27	0 400% *	35,000,000	140,000	10.995	49,056	35,000 в		0.672
Trimble Co 2001 Series B	11/01/27	0 400% *	35.000,000	140,000	10,997	48,864	35,000 ь	234.861	0 671
Trimble Co 2002 Series A	10/01/32	0 242% •	41,665,000	100,829	37.221	55,812	176,268 d	370.130	0.888
Louisville Metro 2003 Series A	10/01/33	1 650%	128.000.000	3 2,112.000	53.192	313,727	- a	2.478.919	1.9379
Louisville Metro 2005 Series A	02/01/35	5 750%	40.000.000	4 2,300,000		96,444	-	2.396,444	5 9919
Trimble Co 2007 Series A	06/01/33	4 600%	60,000,000	2,760,000	47,534	6.615	18,270 s	2,832,419	4 7219
Louisville Metro 2007 Series A	06/01/33	5 625%	31.000,000	4 1.743.750		41,718		1,785,468	5 760
Louisville Metro 2007 Series A	06/01/33	1 600%	35,200,000	3 563,200	20,459	27.526	- a		1 736
Called Bonds	00/01/33	1 000 %	-	, , ,	-	167,868		167.868	. ,
First Mortgage Bonds -									
2010 due 2015	11/15/15	1 625%	250,000.000	4,062,500	522,243 *	• .	•	4,584,743	1.834
Debt discount on FMB	11/15/15	1 625%	(566 271)		176,500 *	•		176.500	-31 169
2010 due 2020	11/15/40	5 125%	285,000.000	14,606,250	119,249 *	• .	-	14,725,499	5 167
Debt discount on FMB	11/15/40	5 125%	(2 915 613)		103,360	•		103,360	-3 545
S-3 SEC Shelf Registration	03/27/15				2,292			2.292	
Revolving Credit Facility	10/19/16				782,880 68	7	500,000	1,282.880	
Total External Debt			\$ 1,105,822,116	\$ 29,127,580	\$ 1,966,736	\$ 1,229,455	\$ 1,155,982	\$ 33,479,754	3.028
Interest Rate Swaps:					_	_	_	\$ 4.906,579	
JP Morgan Chase Bank 5 495%	11/01/20	1		\$ 4,906,579	\$ -	\$ ·	\$ -		
Morgan Stanley Capital Services 3 657%	10/01/33	1		1.226,671	•	•	•	1,226,671	
Morgan Stanley Capital Services 3 645%	10/01/33	1		1,222,447	•	•	•	1,222.447	
Bank of America	10/01/33	1		1,240,047		<u> </u>		1,240,047	
Interest Rate Swaps External Debt				\$ 8,595,744	\$ -	\$ -	\$ -	\$ 8,595,744	0.777
Notes Payable to PPL		5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Internal Debt			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.000
		Total	\$ 1,105,822,116	\$ 37,723,324	\$ 1,966,736	\$ 1,229,455	\$ 1,155,982	\$ 42,075,498	3.805

				SHOF	T-TERM I	EBT								
									Annualized Co	ost				
	Maturity	Rate	Prir	cipal	Inte	rest	Expens	se_	Loss	L	Premiu	m	Total	Embedde <u>Cost</u>
Notes Payable to Associated Company	NA	0 430% *	\$		\$		\$	-	\$		\$	•	\$	- 0 0009
Revolving Credit Facility Payable Commercial Paper Program	Varies	0 410%						-						- 0.0009
		Total	<u>\$</u>		\$		<u> </u>		\$		\$		\$	- 0.000
Embedded Cost of Total Debt			\$ 1,10	5,822,116	\$ 37,	723,324	\$ 1,966,	736	\$ 1,22	9,455	\$ 1,155,	,982	\$ 42,075,49	3.805
•• Debt discount shown on separate line														
1 Additional interest due to Swap Agreem	nents:						Expiration Swap		Fixed LG&E S	wap	Fixed LG&E Sv	wap	Variable Counterpar	
	Underlying Debt I Series Z - PCB	Being Hedged			Notional 83,	Amount 335,000	Agreeme 11/01/2		Position 5 495		Positio 5 495%		Swap Positi IMA Index	on_
	Series CC, DD & Series CC, DD &					000.000	10/01/3 10/01/3		3 657 <sup>1</sup> 3 645 <sup>1</sup>		3 6579 3 6459		8% of 1 mo l	
	Series CC, DD &				32,	335,000	10/01/3		3 695		3 695%		8% of 1 mo l	

- Call premium and debt expense is being amortized over the remaining life of bonds due 6/1/15, 7/1/13 and 8/1/17
  Reacquired bonds were reissued 1/13/11
  Remarketed bonds. Issued at long term fixed rate
  Fidelia Notes Payable were paid off on 11/1/2010 with PPL Notes Payable that were paid off with the new FMB issues on 11/16/2010
  Included setup fees for the Wachovia Credit Facility in Long-term Debt due to 4 year credit arrangement
  Credit Facility amended effective October 19. 2011 New term of 5 years at lower interest rate

- a Insurance premiums annualized based on actual invoices b Remarketing fee = 10 basis points c Remarketing fee = 25 basis points d Combination of a and c

# ECR - Gross-up Revenue Factor & Composite Income Tax Calculation 2012

(1)	Assume pre-tax income of	Feder Produc W/ 6% <u>Tax Ra</u> \$		
(2)	State income tax (see below)		5.6400	(40)
(4)		***************************************		(10)
(5)	Taxable income for Federal income tax		0.4.3.600	
(6)	before production credit		94.3600	(1)-(3)
(7)	a. Production Rate		9%	
(8)	b. Allocation to Production Income		100%	
(9)	c. Allocated Production Rate (a x b)		9.00%	
(10) (11)	Less: Production tax credit	· · · · · · · · · · · · · · · · · · ·	8.4924	(6)*(9)
(12)			07.077	
(13)	Taxable income for Federal income tax		85.8676	(6)-(11)
(14) (15)	Federal income tax		30.0537	(13) * 35%
(16)				(13) 33%
(17)				
(18)	Total State and Federal income taxes	\$	35.6937	(3)+(15)
(19)				
(20)	Gross-up Revenue Factor	<del></del>	64.3063	100-(18)
(21)				
(22)	Therefore, the composite rate is:			
(23)	Federal		30.0537%	(15)/100
(24)	State	*******	5.6400%	(3)/100
(25)	Total		35.6937%	(23)+(24)
(26)				
(27)				
(28)				
(29)				
(30)	State Income Ton Calculation			
(31)	State Income Tax Calculation	φ	100 0000	
(32)	Assume pre-tax income of	\$	100.0000	
(33)	Production credit @ 6%		6.0000	
(34)	1 Toda Catoli Crount (co 070		0.0000	
(36)	Taxable income for State income tax		94.0000	(32) - (34)
(37)				(32) (31)
(38)	State Tax Rate		6.0000%	
(39)				
(40)	State Income Tax	<del>2007 20 20 20 20 20 20 20 20 20 20 20 20 20 </del>	5.6400	(36) * (38)

### Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated January 2, 2013

Case No. 2012-00547

#### Question No. 6

Witness: Robert M. Conroy

- 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.
- A-6. The actual average residential customer's usage for the 12-months ending November 30, 2012 is 1,026 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 distributing the net over-recovered position of \$146,937 in one month, the ECR billing factor will be lower by approximately .19% for that month. For a residential customer using 1,026 kWh per month the impact of the adjusted ECR billing factor would be a decrease of approximately \$0.19 on that month's bill, using rates and adjustment clause factors in effect for the January 2013 billing month.