



a PPL company

Jeff D. Cline, Manager – Annual Report Branch  
Public Service Commission of Kentucky  
Filings Division  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, Kentucky 40602-0615

March 31, 2011

***Re: Annual Report Form No. 1, Kentucky Public Service Commission  
Annual Report for Major Natural Gas Companies, and  
Annual Resource Assessment for Louisville Gas and Electric  
Company Pursuant to Administrative Case No. 387***

Dear Mr. Cline:

Enclosed are one completed signed copy of Annual Report Form No. 1 for Electric Utilities and one completed signed copy of Kentucky Public Service Commission Annual Report for Major Natural Gas Companies for Natural Gas Companies covering the operations of Louisville Gas and Electric Company (“LG&E”).

Please note that by an order dated July 12, 2007 in Docket No. CP07-232-000, LG&E was granted a Section (7) exemption by the FERC under the Natural Gas Act, and as part of that exemption LG&E was granted “a waiver of reporting and accounting requirements”, which includes the filing of Form 2 with FERC. In addition, on February 15, 2008 the Commission issued an order in Case No. 2008-00007 granting LG&E’s request to cease the annual filing of the FERC Form 2. In lieu of filing a FERC Form 2 with the Commission, LG&E was ordered to file a paper copy of the annual report information that it files with the Commission electronically and include with such copy a paper copy of the notes to its financial statements that LG&E had previously filed as part of its FERC Form 2.

RECEIVED

MAR 31 2011

PUBLIC SERVICE  
COMMISSION

Louisville Gas and  
Electric Company  
State Regulation and Rates  
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PO Box 32010  
Louisville, Kentucky 40232  
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Also enclosed, in accordance with Ordering Paragraph (2) of the Commission's Order in Administrative Case 387, dated October 7, 2005, are an original and five (5) copies of the 2010 Annual Resource Assessment Filing for LG&E, along with a Petition for Confidential Protection regarding certain information provided in response to Item Nos. 11 and 14.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Conroy". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Robert M. Conroy

Enclosures

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

A REVIEW OF THE ADEQUACY OF	)	
KENTUCKY'S GENERATION CAPACITY	)	ADMINISTRATIVE
AND TRANSMISSION SYSTEM	)	CASE NO. 387

2010 ANNUAL RESOURCE ASSESSMENT FILING  
OF  
LOUISVILLE GAS AND ELECTRIC COMPANY  
PURSUANT TO APPENDIX G  
OF THE COMMISSION'S ORDER  
DATED DECEMBER 20, 2001  
AS AMENDED BY THE  
COMMISSION'S ORDER  
DATED MARCH 29, 2004

FILED: MARCH 2011

**LOUISVILLE GAS AND ELECTRIC COMPANY**

**2010 ANNUAL RESOURCE ASSESSMENT FILING  
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FILED MARCH 2011**

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**ITEM NO. 1**

The information originally requested in Item 1 of Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387, is no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

**LOUISVILLE GAS AND ELECTRIC COMPANY**

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**ITEM NO. 2**

The information originally requested in Item 2 of Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387, is no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

**LOUISVILLE GAS AND ELECTRIC COMPANY**  
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**ITEM NO. 3**

**RESPONDENT: Stuart Wilson/Greg Lawson**

3. Actual and weather-normalized monthly coincident peak demands for the just completed calendar year. Demands should be disaggregated into (a) native load demand (firm and non-firm) and (b) off-system demand (firm and non-firm).

Response:

Please refer to the attached Table LGE-3, which shows the actual and weather-normalized native LGE peak demands. The normalized native LGE stand alone peak demands are available only on a seasonal (summer/winter) basis.

**TABLE LGE-3  
NATIVE AND OFF-SYSTEM DEMANDS BY MONTH FOR 2010**

Louisville Gas & Electric Co.

Time of Month	Actual			Normal Weather (Seasonal)			Off-System (1)		
	Native Peak	Non-Firm	Firm	Native Peak	Non-Firm (2)	Firm	Firm (2)	Non-Firm (2)	Total
1/7/2010 20:00	1,877	55	1,822			0	0	0	0
2/9/2010 20:00	1,758	59	1,699			164	0	0	164
3/3/2010 20:00	1,583	37	1,546			63	0	0	63
4/15/2010 17:00	1,774	64	1,710			0	0	0	0
5/27/2010 15:00	2,297	58	2,239			0	0	0	0
6/23/2010 16:00	2,639	55	2,584			0	0	0	0
7/19/2010 16:00	2,587	63	2,524			0	0	0	0
8/4/2010 15:00	2,852	52	2,800		2,705	3	0	0	3
9/1/2010 16:00	2,519	57	2,462			0	0	0	0
10/11/2010 16:00	1,732	58	1,674			0	0	0	0
11/24/2010 13:00	1,582	66	1,516			0	0	0	0
12/13/2010 19:00	1,900	66	1,834		1,880	3	0	0	3

**Notes**

- (1) The allocation of off-system sales split between LG&E and KU is handled in the After-the-Fact Billing process in accordance with the Power Supply System Agreement between LG&E and KU. The individual company sales will include an allocation of the sales sourced with purchased power and allocated to the individual company based on each company's contribution to off-system sales.
- (2) The allocation of off-system sales between firm and non-firm is not available from the hourly data in AFB. The breakout is based on the monthly totals for LG&E and KU sales for firm and non-firm sales.

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**ITEM NO. 4**

**RESPONDENT: Greg Lawson**

4. Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

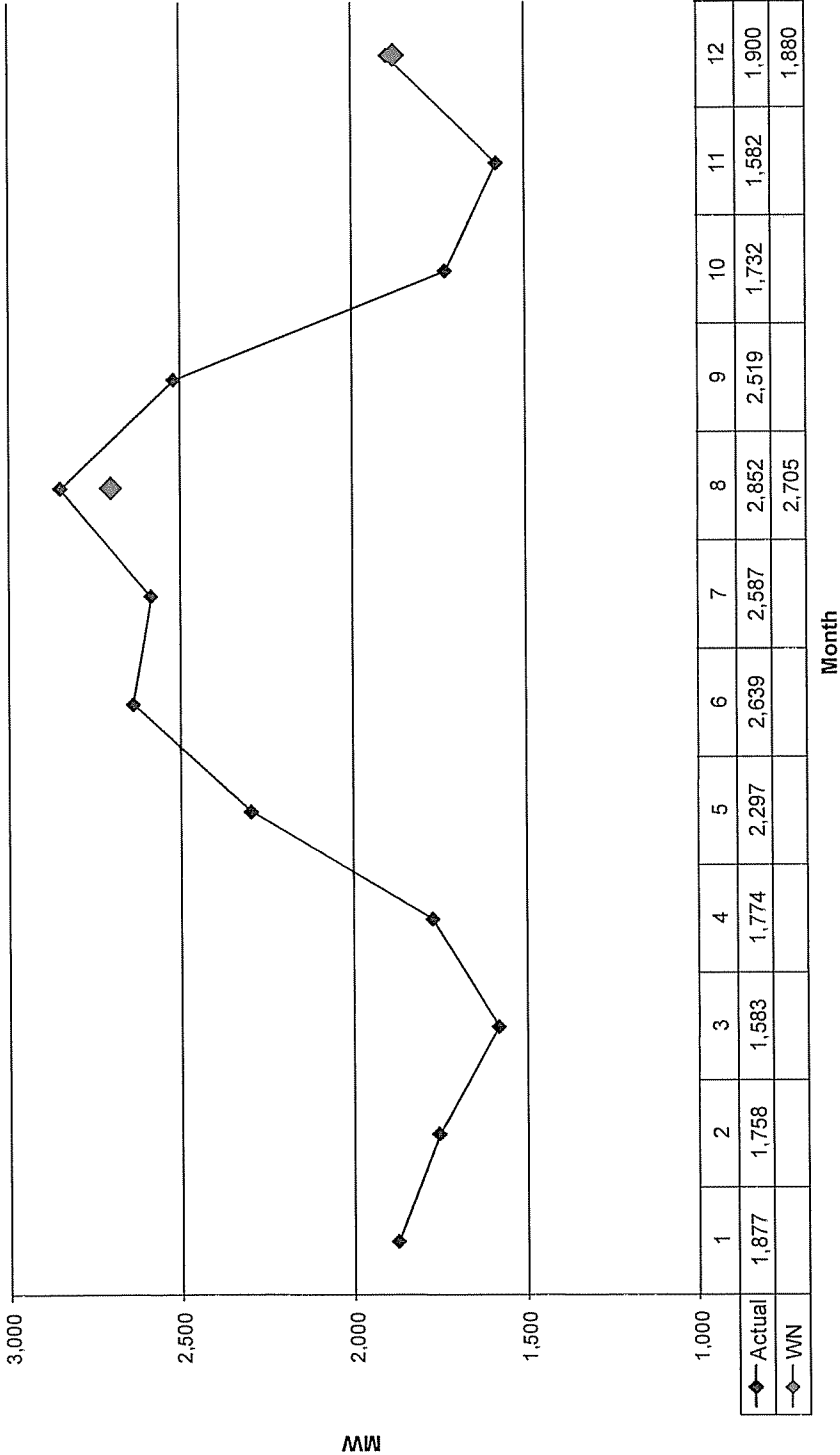
Response:

Please refer to the attached Figure LGE-4.



Figure LGE-4

LG&E 2010  
 Actual and Weather Normalized Seasonal Peak



**LOUISVILLE GAS AND ELECTRIC COMPANY**

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**ITEM NO. 5**

The information originally requested in Item 5 of Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387, is no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

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**ITEM NO. 6**

**RESPONDENT: *Stuart Wilson/Greg Lawson***

6. Based on the most recent demand forecast, the base case demand and energy forecasts and high case demand and energy forecasts for the current year and the following four years. The information should be disaggregated into (a) native load (firm and non-firm demand) and (b) off-system load (both firm and non-firm demand).

Response:

- a) The base case and high case demand and energy forecasts for native load are being provided as part of the 2011 Integrated Resource Plan ("2011 IRP"), to be filed with the Commission in April 2011. Please refer to this document for this information when it becomes available.
- b) Off-system sales ("OSS") projections for 2011-2015 contained in the attached Table LGE-6b are based on the combined Companies' current plan. For OSS, only base case total sales energy projections exist for 2011-2015. The projections consist of the expected market sales, dubbed "Wholesale OSS". In the long-range model, wholesale financially Firm and Non-firm sales are not distinguished but are combined into an overall expected sales energy.

**Table LGE-6b**  
**Total Base Case Off-System Sales Energy Projection**

	2011	2012	2013	2014	2015
Existing OSS (GWH)	0	0	0	0	0
Wholesale OSS (GWH)	1,689	1,532	1,612	826	652
Total OSS (GWH)	1,689	1,532	1,612	826	652

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**ITEM NO. 7**

**RESPONDENT: Stuart Wilson**

7. The target reserve margin currently used for planning purposes, stated as a percentage of demand. If changed from what was in use in 2001, include a detailed explanation for the change.

Response:

The reserve margin analysis is being performed as part of the 2011 Integrated Resource Plan ("2011 IRP"), to be filed with the Commission in April 2011. Please refer to this document for this information when it becomes available.

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**ITEM NO. 8**

**RESPONDENT: Stuart Wilson**

8. Projected reserve margins stated in megawatts and as a percentage of demand for the current year and the following 4 years. Identify projected deficits and current plans for addressing these. For each year identify the level of firm capacity purchases projected to meet native load demand.

Response:

The reserve margin analysis is being performed as part of the 2011 Integrated Resource Plan ("2011 IRP"), to be filed with the Commission in April 2011. Please refer to this document for this information when it becomes available.

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**ITEM NO. 9**

The information originally requested in Item 9 of Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387, is no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

**LOUISVILLE GAS AND ELECTRIC COMPANY**

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**ITEM NO. 10**

The information originally requested in Item 10 of Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387, is no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.



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**ITEM NO. 11**

**RESPONDENT: Stuart Wilson**

11. A list that identifies scheduled outages or retirements of generating capacity during the current year and the following four years.

Response:

The planned maintenance outage schedule for 2011 through 2015 is being provided pursuant to a Petition for Confidential Protection. The schedule is regularly modified based on actual operating conditions, forced outages, changes in the schedule required to meet environmental compliance regulations, fluctuations in wholesale prices, and other unforeseen events.

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**ITEM NO. 12**

**RESPONDENT: Stuart Wilson**

12. Identify all planned base load or peaking capacity additions to meet native load requirements over the next 10 years. Show the expected in-service date, size and site for all planned additions. Include additions planned by the utility, as well as those by affiliates, if constructed in Kentucky or intended to meet load in Kentucky.

Response:

The expansion plan analysis is being performed as part of the 2011 Integrated Resource Plan ("2011 IRP"), to be filed with the Commission in April 2011. Please refer to this document for this information when it becomes available.

LOUISVILLE GAS AND ELECTRIC COMPANY

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ITEM NO. 13

RESPONDENT: Keith Yocum

13. The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years:
- a. Total energy received from all interconnections and generation sources connected to the transmission system.
  - b. Total energy delivered to all interconnections on the transmission system.
  - c. Peak load capacity of the transmission system.
  - d. Peak demand for summer and winter seasons on the transmission system.

Response:

Data exists for 2010. The Company does not forecast this type of data; therefore no forecast exists for 2011-2014.

- a. LG&E and KU operate as a single NERC Control area that contains several generators not owned by LG&E and KU; the non-Company owned facilities are also included as sources below:

Tie Lines Received (MWH)	16,931,432
Net Generation-LG&E (MWH)	17,853,720
Net Generation-KU (MWH)	17,582,575
Net Received from OMU (MWH)	2,661,361
Net Generation-IPPs (MWH)	<u>95,383</u>
Total Sources (MWH)	55,124,471

- b. LG&E and KU operate as a single Control Area, the amount of energy delivered at the interconnections of the single Control area were 16,914,886 MWH(s).
- c. There is no set number for peak load capacity for the transmission system. The system is built to support Network Service and firm PTP customers as tested under the LGE/KU Transmission Planning Guidelines. Actual transmission capacity available for Network customers, import, export or thru-flow will vary depending on which facilities (generation, load or transmission) in the interconnected transmission system of the eastern interconnect are connected and operated at any given time.
- d. The maximum summer peak transmission load for the combined LG&E/KU transmission system was 7524 MW for the peak hour of 8/4/2010 at 3PM.

The maximum winter peak transmission load for the combined LG&E/KU transmission system was 6560 for the peak hour of 12/15/2010 at 9 AM.

**LOUISVILLE GAS AND ELECTRIC COMPANY**

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**ITEM NO. 14**

**RESPONDENT: Keith Yocum**

14. Identify all planned transmission capacity additions for the next 10 years. Include the expected in-service date, size and site for all planned additions and identify the transmission need each addition is intended to address.

Response:

The response to this item is being provided pursuant to a Petition for Confidential Protection.