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MAR 31 2010

PUBLIC SERVICE
COMMISSION

**Louisville Gas and
Electric Company**
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March 31, 2010

***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.

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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 2009 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 "R M Conroy". The signature is fluid and cursive, with the first name "R" and "M" being more distinct than the last name "Conroy".

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

**2009 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 2010

LOUISVILLE GAS AND ELECTRIC COMPANY

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FILED MARCH 2010**

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.

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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.

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ITEM NO. 3

RESPONDENT: Scott Cooke/Stuart Wilson

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 2009**

Louisville Gas & Electric Co.

Time of Monthly Native Peak	Actual			Normal Weather (Seasonal)		Off-System (1)			Total
	Native Peak	Non-Firm	Firm	Native Peak		Firm (2)	Non-Firm (2)		
1/16/2009 8:00	1,923	30	1,893	1,893		29	0	29	
2/3/2009 20:00	1,872	14	1,858			0	0	0	
3/3/2009 8:00	1,722	39	1,683			0	0	0	
4/27/2009 16:00	1,850	54	1,797			0	0	0	
5/26/2009 16:00	2,003	2	2,001			0	0	0	
6/25/2009 15:00	2,524	32	2,492	2,552		0	0	0	
7/10/2009 14:00	2,307	33	2,274			0	0	0	
8/10/2009 16:00	2,479	29	2,450			0	0	0	
9/22/2009 16:00	2,078	45	2,033			0	0	0	
10/14/2009 19:00	1,413	45	1,368			50	0	50	
11/30/2009 19:00	1,536	29	1,507			0	0	0	
12/10/2009 19:00	1,764	27	1,737			0	0	0	

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

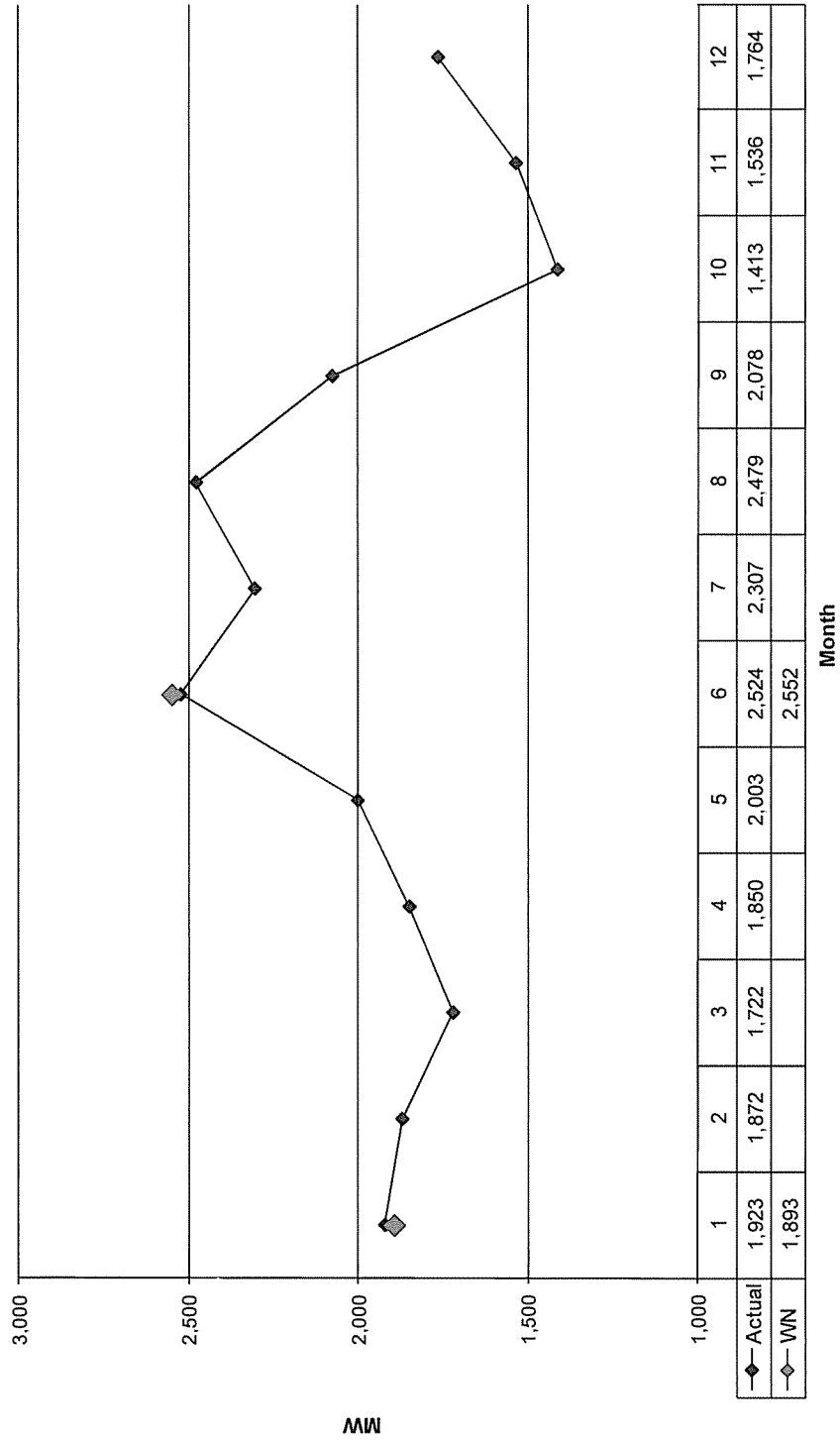
RESPONDENT: Scott Cooke

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 2009
Actual and Weather Normalized Seasonal Peak



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ITEM NO. 5

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ITEM NO. 6

RESPONDENT: Scott Cooke/Stuart Wilson

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) Please see the attached Table LGE-6a.
- b) Off-system sales ("OSS") projections for 2010-2014 contained in Table LGE-6b are based on the combined Companies' current plan. For OSS, only base case total sales energy projections exist for 2010-2014. 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-6a

	2010	2011	2012	2013	2014
Louisville Gas & Electric					
Base Case Energy Sales (GWh)	11,683	11,932	12,182	12,398	12,545
High Case Energy Sales (GWh)	12,047	12,416	12,758	13,046	13,214
Base Case Energy Requirements (GWh)	12,361	12,622	12,889	13,119	13,274
High Case Energy Requirements (GWh)	12,746	13,134	13,498	13,805	13,982
Base Case Native Peak Demand (MW)	2,647	2,654	2,665	2,666	2,731
High Case Native Peak Demand (MW)	2,729	2,762	2,791	2,805	2,877

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

	2010	2011	2012	2013	2014
Existing OSS (GWH)	0	0	0	0	0
Wholesale OSS (GWH)	1,380	2,593	2,284	1,937	1,111
Total OSS (GWH)	1,380	2,593	2,284	1,937	1,111

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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 Companies established an optimal reserve margin range of 13% to 15%, with 14% recommended for planning purposes. The range provides an optimum level of reliability through various system operating conditions. The reserve margin analysis was performed as part of the 2008 Integrated Resource Plan ("2008 IRP"), filed with the Commission in April 2008.

The Companies utilized a planning reserve margin target of 12% in 2001 and 14% in 2002 based on a reserve margin range of 11%-14% established in the Companies' 1999 IRP. A detailed explanation of the current target reserve margin is documented in the report titled "2008 Analysis of Reserve Margin Planning Criterion" included in Volume III of the Companies' 2008 IRP. The Companies have utilized a 14% planning reserve margin target since 2002.

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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:

Please see the attached Table LGE-8.

Table LGE-8
Combined Company
Reserve Margin Needs (MW)

<u>Current Values</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Peak Load	7,014	7,194	7,326	7,366	7,540
CSR/Interrupt	-105	-105	-105	-105	-105
DSM	-225	-296	-365	-391	-463
Net Load	6,685	6,794	6,856	6,871	6,972
Existing Capability	7,464	7,463	7,460	7,462	7,464
New Capacity	549	549	549	549	549
OVEC	179	179	179	179	179
Total Supply	8,192	8,191	8,188	8,190	8,192
MW Margin	1,507	1,397	1,332	1,319	1,220
Reserve Margin %	22.6%	20.6%	19.4%	19.2%	17.5%
Capacity Need for 14%	(572)	(446)	(372)	(357)	(244)

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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.

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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 2010 through 2014 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:

Please see the attached Table LGE-12.

Table LGE-12
 Planned Capacity Additions (2010-2019)

In Service Date	Type	Future Site	Summer Net Capacity (MW)	Winter Net Capacity (MW)
July 2010	Supercritical Pulverized Coal	Trimble County Plant	549	571
June 2017	2x1 Combined Cycle Combustion Turbine	Undecided	533	559

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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 2009. The Company does not forecast this type of data; therefore no forecast exists for 2010-2013.

- 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)	16,265,346
Net Generation-LG&E (MWH)	16,292,269
Net Generation-KU (MWH)	14,576,445
Net Received from OMU (MWH)	1,576,445
Net Generation-IPPs (MWH)	<u>841,520</u>
Total Sources (MWH)	49,729,182

- 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 16,097,632 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 E.ON 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 6598 MW for the peak hour of 8/10/2009 at 4PM.

The maximum winter peak transmission load for the combined LG&E/KU transmission system was 6720 for the peak hour of 1/16/2009 at 9 AM.

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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.