



a PPL company

Jeff D. Cline, Manager – Annual Report Branch
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RECEIVED

APR 25 2012

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
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April 25, 2012

***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:

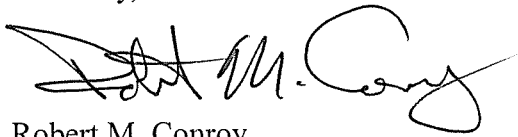
Enclosed are one completed, signed original and two copies of Annual Report Form No. 1 for Electric Utilities, and one completed, signed original and two copies of Kentucky Public Service Commission Annual Report for Major Natural Gas Companies covering the operations of Louisville Gas and Electric Company (“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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April 25, 2012

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 2011 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 initial "R" and "C".

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

2011 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: APRIL 2012

LOUISVILLE GAS AND ELECTRIC COMPANY

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FILED APRIL 2012**

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.

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ITEM NO. 3

RESPONDENT: Greg Lawson/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 2011**

Louisville Gas & Electric Co.

Time of Monthly Native Peak	Actual			Normal Weather (Seasonal)		Off-System (1)		
	Native Peak	Non-Firm	Firm	Native Peak		Firm (2)	Non-Firm (2)	Total
1/12/2011 19:00	1,811	37	1,774	1,854		0	0	0
2/10/2011 8:00	1,804	43	1,761			0	0	0
3/10/2011 20:00	1,574	47	1,527			0	0	0
4/10/2011 20:00	1,591	28	1,563			0	0	0
5/31/2011 17:00	2,457	29	2,428			0	0	0
6/9/2011 15:00	2,499	15	2,484			50	0	50
7/12/2011 14:00	2,704	27	2,677	2,672		0	0	0
8/2/2011 16:00	2,623	27	2,596			0	0	0
9/2/2011 15:00	2,593	24	2,569			0	0	0
10/7/2011 17:00	1,612	24	1,588			151	0	151
11/29/2011 19:00	1,577	26	1,551			300	0	300
12/7/2011 19:00	1,588	23	1,565			312	0	312

Notes

- (1) The allocation of off-system sales split between LG&E and KU is handled in the After-the-Fact Billing (AFB) 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

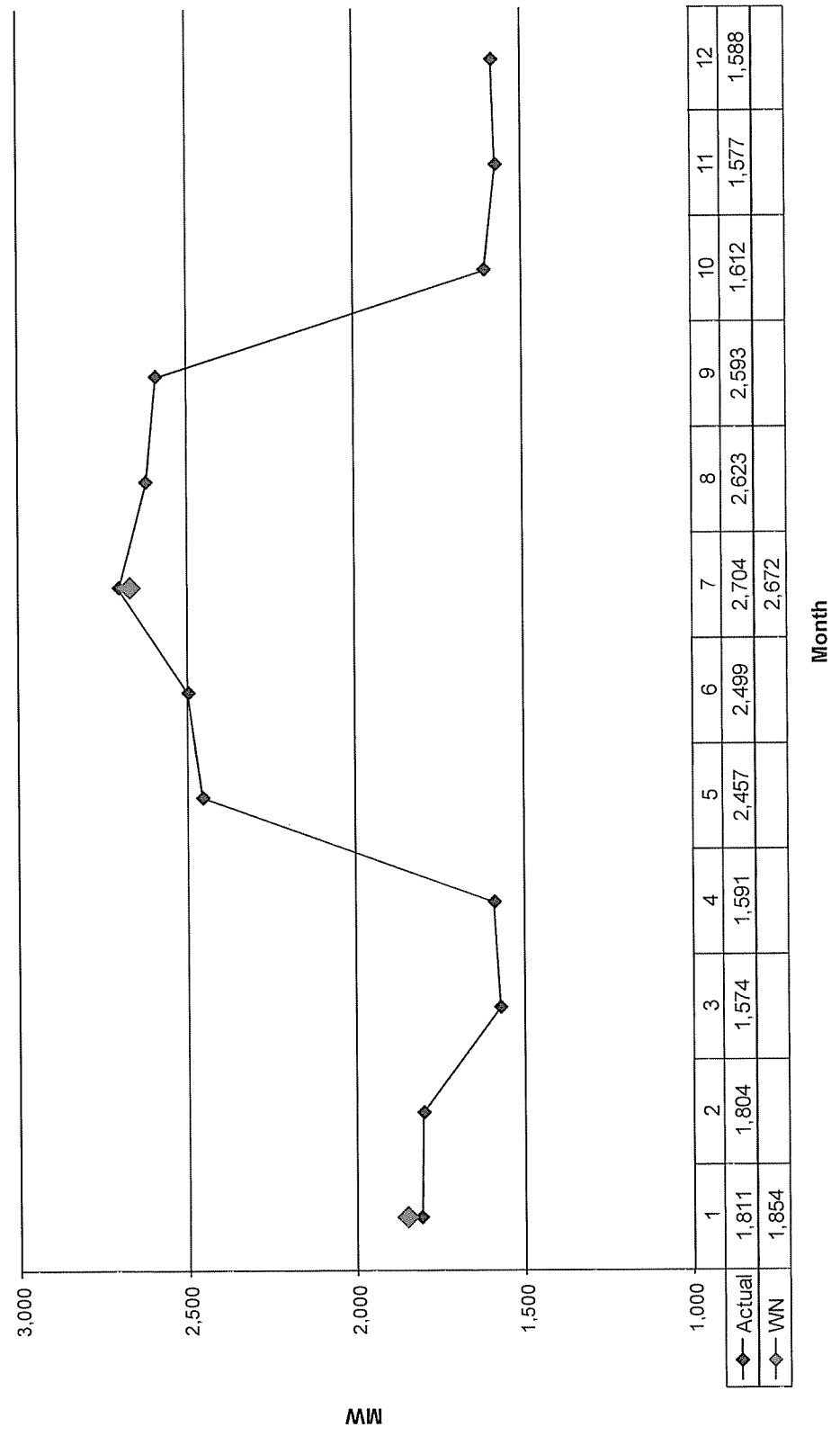
RESPONDENT: Greg Lawson

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 2011
 Actual and Weather Normalized Seasonal Peak



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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: Greg Lawson/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. The values in Table LGE-6a reflect the impact of the Companies' Energy Efficiency programs.
- b) Off-system sales ("OSS") projections for 2012-2016 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 2012-2016. 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

	2012	2013	2014	2015	2016
Louisville Gas & Electric					
Base Case Energy Sales (GWh)	11,814	11,903	11,911	12,000	12,109
High Case Energy Sales (GWh)	12,193	12,298	12,311	12,403	12,517
Base Case Energy Requirements (GWh)	12,496	12,585	12,590	12,674	12,778
High Case Energy Requirements (GWh)	12,946	13,048	13,058	13,148	13,261
Base Case Native Peak Demand (MW)	2,770	2,777	2,718	2,727	2,820
High Case Native Peak Demand (MW)	2,873	2,879	2,819	2,829	2,926

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

	2012	2013	2014	2015	2016
Existing OSS (GWH)	0	0	0	0	0
Wholesale OSS (GWH)	628	632	310	196	195
Total OSS (GWH)	628	632	310	196	195

**LOUISVILLE GAS AND ELECTRIC COMPANY
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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:

As part of the 2011 Integrated Resource Plan ("2011 IRP"), the Companies established an optimal reserve margin range of 15% to 17%, with 16% recommended for planning purposes. The range provides an optimum level of reliability through various system operating conditions. The 2011 IRP was filed with the Commission in April 2011.

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 "LG&E and KU 2011 Reserve Margin Study" included in Volume III of the Companies' 2011 IRP.

LOUISVILLE GAS AND ELECTRIC COMPANY

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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 refer to the attached Table LGE-8.

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

<u>Current Values</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Peak Load	7,272	7,359	7,449	7,524	7,629
DSM	-225	-270	-323	-359	-382
CSR/Interrupt	-105	-110	-112	-114	-114
Net Load	6,942	6,979	7,015	7,051	7,132
Existing Capability	8,009	8,001	7,973	7,975	7,153
New Capacity	495	495	495	495	1,135
OVEC	151	152	152	152	152
Total Supply	8,655	8,648	8,620	8,622	8,440
MW Margin	1,713	1,669	1,605	1,571	1,308
Reserve Margin %	24.7%	23.9%	22.9%	22.3%	18.3%
Capacity Need for 16%	(602)	(552)	(482)	(443)	(167)

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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 2012 through 2016 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.

The following LG&E coal units are scheduled to be retired by the end of 2015: Cane Run 4, Cane Run 5, and Cane Run 6.

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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 refer to the attached Table LGE-12.

**Table LGE-12
Planned Capacity Additions (2012-2021)**

In Service/ Acquisition Date	Type	Site	Summer Net Capacity (MW)	Winter Net Capacity (MW)
June 2012	3 - Simple Cycle Combustion Turbines	Bluegrass (Oldham Co, KY)	495	576
January 2016	2x1 Combined Cycle Combustion Turbine	Cane Run (Jefferson Co, KY)	640	693
June 2021	2x1 Combined Cycle Combustion Turbine	Undecided	605	673

LOUISVILLE GAS AND ELECTRIC COMPANY

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ITEM NO. 13

RESPONDENT: Derek Rahn

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 2011. 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)	15,710,980
Net Generation-LG&E (MWH)	16,758,476
Net Generation-KU (MWH)	19,957,224
Net Received from OMU (MWH)	2,827,322
Net Generation-IPPs (MWH)	<u>34,118</u>
Total Sources (MWH)	55,285,120

- 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 18,959,101 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 7085 MW for the peak hour of 7/11/11 at 4PM.

The maximum winter peak transmission load for the combined LG&E/KU transmission system was 6242 MW for the peak hour of 2/11/11 at 8AM.

LOUISVILLE GAS AND ELECTRIC COMPANY

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ITEM NO. 14

RESPONDENT: Delyn Kilpack

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.