LG&E ENERGY

LG&E Energy LLC
220 West Main Street (40202)
P O Box 32030
Louisville, Kentucky 40232

RECEIVED
APR 10 2006
PUBLIC SERVICE COMMISSION

April 10, 2006

Bill Feldman, Assistant Director
Public Service Commission of Kentucky
Filings Division
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

Dear Mr. Feldman:

We are enclosing one completed signed copy of Annual Report Form No. 1 for Electric Utilities and Form No. 2 for Natural Gas Companies covering the operations of Louisville Gas and Electric Company ("LG&E"), and Annual Report Form 1 for Electric Utilities covering Kentucky Utilities Company ("KU") for the year 2005.

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 each of the 2005 Annual Resource Assessment Filings for LG&E and KU, along with Petitions for Confidential Protection regarding certain information provided in response to Item Nos. 11 and 14 for both companies.

Yours truly,

Robert M. Conroy
Manager, Rates

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

2005 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 10, 2006

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004 FILED APRIL 10, 2006

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

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

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

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

ITEM NO. 3

RESPONDENT: Robert Thomson/Keith Yocum

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

TABLE LGE-3
NATIVE AND OFF-SYSTEM PEAK DEMANDS BY MONTH FOR 2005

Louisville Gas & Electric Co.

Time of Monthly Native Peak	Actual Native Peak	Non-Firm	Firm	Weather Normalized (Seasonal) Native Peak	Off-System (1) Firm (2)	Off-System (1) Non-Firm (2)	Off-System (1) Total
2005-01-18-09:00	1,764	40	1,724	1,762	66	217	283
2005-02-10-20:00	1,666	61	1,605		106	192	298
2005-03-01-20:00	1,643	41	1,602		74	111	185
2005-04-11-15:00	1,680	58	1,622		39	0	39
2005-05-11-16:00	2,090	61	2,029		0	0	0
2005-06-30-16:00	2,601	19	2,582		0	0	0
2005-07-25-16:00	2,754	50	2,704	2,685	0	0	0
2005-08-11-16:00	2,676	16	2,660		0	0	0
2005-09-23-16:00	2,397	56	2,341		38	0	38
2005-10-03-15:00	2,142	58	2,084		0	0	0
2005-11-29-19:00	1,657	58	1,599		835	0	835
2005-12-08-19:00	1,817	54	1,763		610	0	610

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.

LOUISVILLE GAS AND ELECTRIC COMPANY

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

ITEM NO. 4

RESPONDENT: *Robert Thomson*

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.

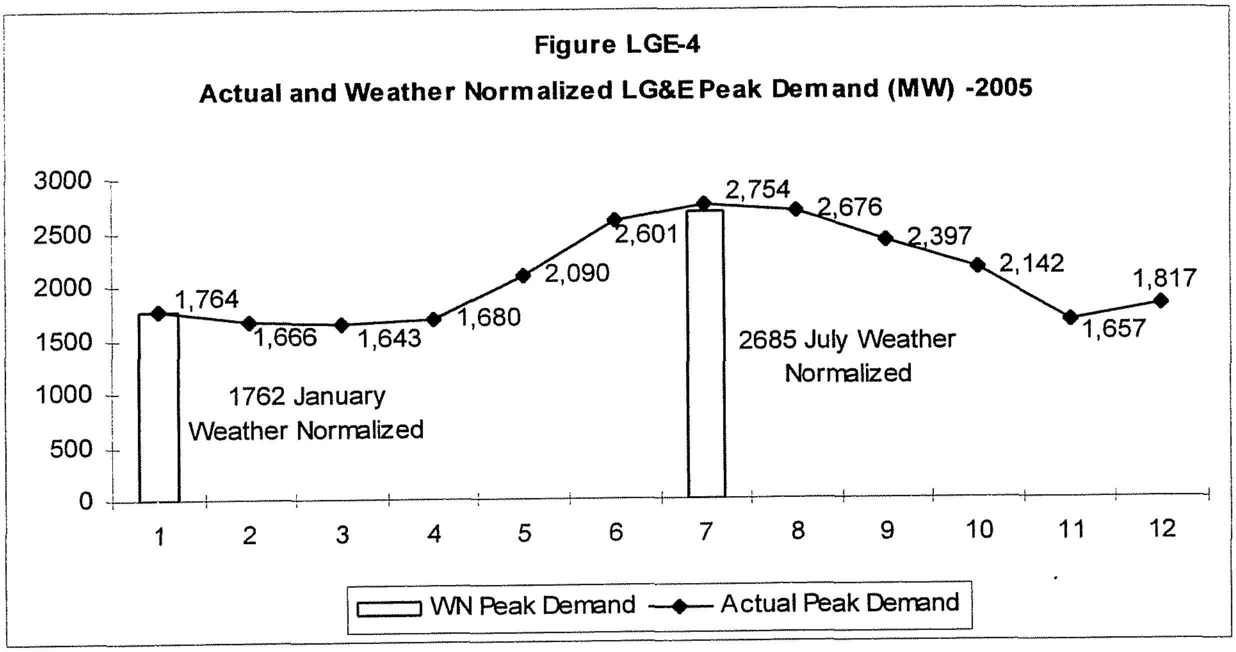
Figure LGE-4
Actual and Weather Normalized LG&E Peak Demand (MW) -2005
3000
2500
2000
1500
1000
500
0
1
2
3
4
5
6
7
8
9
10
11
12
1,764
1,666
1,643
1,680
2,090
2,601
2,754
2,676
2,397
2,142
1,657
1,817
1762 January Weather Normalized
2685 July Weather Normalized
WN Peak Demand
Actual Peak Demand

LOUISVILLE GAS AND ELECTRIC COMPANY

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

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.

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

ITEM NO. 6

RESPONDENT: Robert Thomson/Keith Yocum

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 2006-2010 are contained in Table LGE-6b. For Off-System Sales, only base case total sales energy projections exist for 2006-2010. The projections consist of "Existing OSS", which includes existing long-term sales agreements, and the expected market sales, dubbed "Wholesale OSS". Currently, there are no existing long-term sales agreements. In the long-range model, wholesale financially Firm and Non-firm sales are not distinguished but are combined into an overall expected sales energy.

   The projection is developed in-house using the Global Energy's PROSYM hourly production cost model, with market prices based on data provided to the E.On U.S. Energy Marketing group from several external parties including utilities, energy marketing entities, and/or brokers.

Table LG&E-6a

LOUISVILLE GAS & ELECTRIC

BASE CASE

	2006	**2007**	**2008**	**2009**	**2010**
Energy Sales (GWh)	12,234	12,500	12,764	12,972	13,164
Energy Requirements (GWh)	12,945	13,226	13,504	13,725	13,928
Native Peak Demand (MW)					
Firm	2,688	2,746	2,804	2,850	2,892
Non-firm*					

* Non-firm sales are not forecasted separately.

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

	2006	2007	2008	2009	2010
Existing OSS (GWH)	0	0	0	0	0
Wholesale OSS (GWH)	2,824	2,096	1,783	1,380	2,636
Total OSS (GWH)	2,824	2,096	1,783	1,380	2,636

LOUISVILLE GAS AND ELECTRIC COMPANY

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

ITEM NO. 7

RESPONDENT: Keith Yocum

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 12% to 14%, 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 2005 Integrated Resource Plan, filed with the Commission in April 2005 (Case No. 2005-00162).

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 "2005 Analysis of Reserve Margin Planning Criterion" contained in Volume III of the Companies' 2005 IRP. The Companies have utilized a 14% planning reserve margin target since 2002.

LOUISVILLE GAS AND ELECTRIC COMPANY

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

ITEM NO. 8

RESPONDENT: Keith Yocum

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 requested data related to the reserve margin is specified in the attached table LGE-8. The capacity required to meet the reserve margin targets of 12% and 14% are specified in the table. These values represent reserve margins prior to any future resource acquisition.

The Companies are projected to have a reserve margin shortfall in 2008 and 2009 and are evaluating resources to meet the established 14% reserve margin target in a least cost manner. The shortfall is due in part to the loss of the EEI power purchase contract (200 MW) that expired at the end of 2005. Also, as described in the response to Item No. 12, the Companies plan to add capacity to the existing system by constructing another coal-fired base load unit that is scheduled for completion by early 2010.

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

Current Values	2006	2007	2008	2009	2010
Peak Load	7,011	7,194	7,375	7,519	7,617
CSR/Interrupt	-137	-137	-137	-137	-137
Existing DSM	-95	-114	-122	-122	-122
New DSM (from '05 IRP)	-5	-9	-13	-19	-24
Net Load	6,774	6,934	7,102	7,241	7,334
Existing Capability	7,609	7,596	7,582	7,547	7,549
EEI	0	0	0	0	0
OMU	186	186	187	188	188
OVEC	179	179	179	179	179
Total Supply	7,974	7,961	7,948	7,914	7,916
MW Margin	1,199	1,027	846	673	582
Reserve Margin %	17.7%	14.8%	11.9%	9.3%	7.9%
Capacity Need for 12%	(387)	(195)	7	196	298
Capacity Need for 14%	(251)	(56)	149	341	445
New Capacity	0	0	0	0	549
Total Supply	7,974	7,961	7,948	7,914	8,465
Reserve Margin, MW	1,199	1,027	846	673	1,131
Reserve Margin %	17.7%	14.8%	11.9%	9.3%	15.4%

Based on 2005 Load forecast.

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

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

**2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006**

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.

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

ITEM NO. 11

RESPONDENT: Keith Yocum

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 2006 through 2010 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.

None of the Companies' units were retired in 2005. However, the Companies did transfer ownership of Lock 7 to a third party. The two combustion turbines located at the Waterside facility will be retired in the future if the proposed arena is constructed at that location. Additionally, the Companies will continue to evaluate the economic operability of the units contained in the table below. Further discussions on the economic review are included in the Companies' most recent IRP.

Type of Unit	Plant Name	Unit	Summer Capacity	In Service Year	Age (2005)
Steam	Tyrone	1	27	1947	58
Steam	Tyrone	2	31	1948	57
CT	Waterside	7	11	1964	41
CT	Waterside	8	11	1964	41
CT	Cane Run	11	14	1968	37
CT	Paddy's Run	11	12	1968	37
CT	Paddy's Run	12	23	1968	37
CT	Zorn	1	14	1969	36
CT	Haefling	1,2,3	36	1970	35

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004 FILED APRIL 10, 2006

ITEM NO. 12

RESPONDENT: Keith Yocum

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 Companies are currently evaluating additional capacity required to satisfy the increasing load growth identified in the Companies' most recent IRP. The table below contains MW needs to maintain a 14% reserve margin through 2015 based on the most recent load forecast.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
MW Need	(251)	(56)	149	341	445	621	719	920	1,044	1,204

The expansion plan identified below is exactly as provided in the Companies' most recent IRP and consists of the following: construction a base load coal-fired unit in 2010 at the Trimble County Station (TC2) as approved by the Commission in Case No. 2004-00507; construction of a 148 MW combustion turbine at an undetermined site in 2013; 181 MW of purchase power from WV Hydro in 2014; construction of two combustion turbines in 2015 at an undetermined site.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
New Capacity	0	0	0	0	549	0	0	148	181	296

Two changes have occurred since the filing of the Companies' 2005 IRP that will affect the expansion plan identified above: the EEI purchase power contract (200 MW) expired on 12/31/2005; the 181 MW of purchase power from WV Hydro is no longer a least cost resource due to continually increasing costs. The Companies' are evaluating resources to meet the needs identified in 2008 and beyond and plan to have an updated expansion plan by the end of 2006.

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

ITEM NO. 13

RESPONDENT: Mark Johnson

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 2005. No forecasts exist for 2005-2010.

a. LG&E and KU are operated as one NERC Control Area, statistics below are total sources for the single Control Area:

Tie Lines Received (GWH)	14,913,099
Net Generation LG&E (GWH)	18,231,716
Net Generation KU (GWH)	17,392,379
Total Sources (GWH)	50,537,194

b. LG&E and KU are operated as one NERC Control Area, the amount of energy delivered at the interconnections of the single Control Area was 16,213,125 GWH(s).

c. There is no set number for peak load capacity for the transmission system. The system is built to support native load under first contingency conditions. Actual transmission capacity available for native load, import, export or thru-flow will vary depending on which facilities in the interconnected transmission system of the eastern interconnect are in service.

d. The maximum summer peak transmission load for the common Control Area was 6968 MW on July 26, 2005 at 4:00 PM.

   The maximum winter peak transmission load for the common Control Area was 6221 MW for the peak hour of January 18, 2005 at 8:00 AM.

LOUISVILLE GAS AND ELECTRIC COMPANY

2005 ANNUAL RESOURCE ASSESSMENT FILING
PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387
AS AMENDED BY THE COMMISSION'S ORDER DATED MARCH 29, 2004
FILED APRIL 10, 2006

ITEM NO. 14

RESPONDENT: Mark Johnson

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.