

Louisville Gas and Electric Company 220 West Main Street PO Box 32010 Louisville, Kentucky 40232

July 1, 2003

RECEIVED

JUL 0 1 2003

Mr. Thomas Dorman, Executive Director Public Service Commission 211 Sower Boulevard P. O. Box 615 Frankfort, Kentucky 40601

PUBLIC SERVICE COMMISSION

Re: A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM - ADM. CASE NO. 387

Dear Mr. Dorman:

Pursuant to Appendix G of the Commission's Order dated December 20, 2001 in the above styled case, enclosed are an original and five (5) copies of the Update of the 2002 Annual Resource Assessment Filing of Louisville Gas and Electric Company.

Very truly yours,

John Wolfram

Manager, Regulatory Policy and Strategy

**Enclosures** 

# COMMONWEALTH OF KENTUCKY

# BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

		RECEIVED		
In the Matter of:		JUL 0 1 2003		
		PUBLIC SERVICE COMMISSION		
A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM	) ) )	ADMINISTRATIVE CASE NO. 387		

UPDATE OF
2002 ANNUAL RESOURCE ASSESSMENT FILING
OF
LOUISVILLE GAS AND ELECTRIC COMPANY
PURSUANT TO APPENDIX G
OF THE COMMISSION'S ORDER
DATED DECEMBER 20, 2001

**FILED: JULY 1, 2003** 

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 1

**RESPONDENT: Bruce Sauer** 

1. Actual and weather-normalized energy sales for the just completed calendar year. Sales should be disaggregated into native load sales and off-system sales. Off-system sales should be further disaggregated into full requirements sales, firm capacity sales, and non-firm or economy energy sales. Off-system sales should be further disaggregated to identify separately all sales where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

## Response:

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## ITEM NO. 2

**RESPONDENT: Kristi Speer** 

2. A summary of monthly power purchases for the just completed calendar year. Purchases should be disaggregated into firm capacity purchases required to serve native load, economy energy purchases, and purchases where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

## Response:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 3

**RESPONDENT: Bruce Sauer/Robert Conroy** 

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:

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## ITEM NO. 4

**RESPONDENT: Bruce Sauer** 

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:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 5

**RESPONDENT: Robert Conroy** 

5. Load shape curves showing the number of hours that native load demand exceeded these levels during the just completed calendar year: (1) 70% of the sum of installed generating capacity plus firm capacity purchases; (2) 80% of the sum of installed generating capacity plus firm capacity purchases; (3) 90% of the sum of installed generating capacity plus firm capacity purchases.

## Response:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 6

**RESPONDENT: Bruce Sauer/Robert Conroy** 

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:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 7

**RESPONDENT: Robert Conroy** 

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:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 8

**RESPONDENT: Robert Conroy** 

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:

There are no changes to Table LGE-8 attached to the response filed February 28, 2003.

The Companies were granted a Certificate of Public Convenience and Necessity for the Acquisition of the Four Combustion Turbines on March 18, 2003 (Case No. 2002-00381). The CTs are expected to be in-service by June 2004 and will meet native load requirements through 2006.

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 9

**RESPONDENT: Robert Conroy** 

9. By date and hour, identify all incidents during the just completed calendar year when reserve margin was less than the East Central Area Reliability Council's ("ECAR") 1.5% spinning reserve requirement. Include the amount of capacity resources that were available, the actual demand on the system, and the reserve margin, stated in megawatts and as a percentage of demand. Also identify system conditions at the time.

## Response:

The Spinning Reserve reports from ECAR are not available for the 2002 period.

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

## ITEM NO. 10

**RESPONDENT: Robert Conroy** 

10. A list identifying and describing all forced outages in excess of 2 hours in duration during the just completed calendar year.

# Response:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

#### ITEM NO. 11

**RESPONDENT: Robert Conroy** 

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

## Response:

The expected maintenance outage schedule for the years 2003 through 2007 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 in meeting environmental compliance regulations, fluctuations in wholesale prices, and other unforeseen events.

The Companies expect to surrender the license for the Lock 7 project and decommission the facility. Such action will not impact the capacity plans of the Companies, as Lock 7 is not considered a firm capacity resource. The table below contains units that were identified as potential candidates for retirement in the 2002 IRP. A detailed analysis is currently underway for Green River Units 1 and 2, the first of the units below to be further evaluated. Subsequent evaluations will be performed for the other units listed below. Further discussions are contained on page 5-44 of Volume I of the 2002 IRP.

Type of Unit	Plant Name	Tinn	Summer Capacity	In Service Year	Age (2002)
Steam	Tyrone	1	27	1947	55
Steam	Tyrone	2	31	1948	54
Steam	Green River	Ī	22	1950	52
Steam	Green River	2	22	1950	52
CT	Waterside	7	11	1964	38
CT	Waterside	8	11	1964	38
CT	Cane Run	11	14	1968	34
CT	Paddy's Run	11	12	1968	34
CT	Paddy's Run	12	23	1968	34
CT	Zorn	1	14	1969	33
CT	Haefling	1,2,3	36	1970	32

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

## ITEM NO. 12

**RESPONDENT: Robert Conroy** 

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:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

## **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:

# 2002 ANNUAL RESOURCE ASSESSMENT FILING PURSUANT TO APPENDIX G OF THE COMMISSION'S ORDER DATED DECEMBER 20, 2001 IN ADMINISTRATIVE CASE NO. 387 FILED FEBRUARY 28, 2003

## 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: