

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF LOUISVILLE )  
GAS AND ELECTRIC COMPANY AND )  
KENTUCKY UTILITIES COMPANY )  
FOR A CERTIFICATE OF PUBLIC ) CASE NO. 2004-00507  
CONVENIENCE AND NECESSITY, AND )  
A SITE COMPATIBILITY CERTIFICATE, )  
FOR THE EXPANSION OF THE TRIMBLE )  
COUNTY GENERATING STATION )

COMMISSION STAFF'S FIRST DATA REQUEST TO  
LOUISVILLE GAS AND ELECTRIC COMPANY AND  
KENTUCKY UTILITIES COMPANY

Pursuant to 807 KAR 5:001, Commission Staff requests that Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") file the original and 8 copies of the following information with the Commission on or before February 25, 2005, with a copy to all parties of record. Each copy of the information requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure its legibility. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request.

1. Refer to the Direct Testimony of John P. Malloy, Exhibit JPM-1 – Resource Assessment, Appendix F – Production Cost Output Summary.

a. For each scenario presented in Appendix F, provide all assumptions, calculations, and workpapers supporting the Net Present Value (“NPV”) revenue requirement amounts shown for the Capital Cost, Variable Cost, and Fixed Cost.

b. Did LG&E and KU consider conducting sensitivity analyses to reflect the impact of fluctuations in the price for coal or natural gas? Explain the response.

2. Refer to page 2 of the Malloy Testimony and the Resource Assessment, which refer to the 13 to 15 percent reserve margin range. That range was the result of a study included in the 2002 Integrated Resource Plan (“IRP”), which reflected a change from the 11 to 14 percent range used in the 1999 IRP. Explain whether any consideration was given to performing a new reserve margin study in conjunction with the present application. If no consideration was given, explain.

3. Refer to the Malloy Testimony, page 7, and the reference to the retirement of Green River 1 and 2 on December 31, 2003. There have been public notices regarding KU’s planned retirement of its Kentucky River Lock No. 7 hydro unit.

a. What is the current status of KU’s retirement plans for this generating station?

b. Describe the extent to which the retirement of the Lock No. 7 generating station affects LG&E’s and KU’s overall resource needs.

4. Refer to the Malloy Testimony, pages 7-8, where he states: “More than 650 MW of the Companies capacity is from coal units that have been in operation for more than forty years. These aging units are more prone to catastrophic failures.”

a. Due to the age of LG&E’s and KU’s units, explain in detail why the reserve margin should not be higher than 15 percent.

b. What would the reserve margin be if LG&E and KU did not sell 25 percent of Trimble County Unit 2 (“TC2”)?

5. Provide a NPV revenue requirements analysis as shown in table 2 of the Malloy Testimony for the following cases and provide all supporting calculations:

a. TC2 is 100 percent owned by LG&E and KU in 2010.

b. TC2 is 100 percent owned by LG&E and KU in 2010 and Marketer F’s PPA in 2013.

6. Provide a copy of each response to your Request For Proposals (“RFP”).

7. What is the total estimated cost for TC2 if constructed at a Greenfield site? Explain how that cost was derived.

8. Refer to page 9 of the Resource Assessment filed as Exhibit JPM-1. The RFP Screening Analysis text states that NPVs were determined for 15-, 20-, and 25-year periods and that the 20-year NPV was used to rank proposals received in response to the RFP. Explain why three different NPVs were determined and why a 20-year NPV was used to rank the proposals.

9. Refer to page 15 of Exhibit JPM-1. The description of the Final Detailed Analysis indicates that the NPV at this stage was determined for “the full 30-year study period.”

a. Explain why a 30-year NPV was used in the Final Detailed Analysis rather than a 20-year NPV as was used in the Screening Analysis.

b. Explain why it is appropriate to use different numbers of years for the NPV determination in the Screening Analysis and the Final Detail Analysis.

10. Refer to page 9 of the Malloy Testimony regarding Ohio Falls Units 9 and 10. The text, at lines 9 and 10, states, "The expansion has not proven to be financially justified as a least-cost resource." Provide the summary results of any analysis that has been performed that supports this statement.

11. Refer to the Direct Testimony of Kent W. Blake, Exhibit KWB-1, the February 9, 2004, Participation Agreement ("2004 Agreement").

a. Page 3 of the 2004 Agreement, the definition of "Commission Approvals," references various licenses, certificates, approvals, consents, permits, or other permissions required from several agencies and commissions. For each agency and commission identified, provide a listing of the various approvals required. In addition, provide the status of any applications seeking the various approvals as of the date of this data request.

b. Article 6.2.2 of the 2004 Agreement, page 20, prescribes the sale and conveyance to the Indiana Municipal Power Agency and the Illinois Municipal Electric Agency of an undivided ownership interest in the portion of the real estate constituting the TC2 site to be held as tenants in common and the sale and conveyance to KU of an undivided ownership interest in KU's percentage of the TC2 site.

(1) Is the TC2 site recorded on LG&E's books? If yes, when was it so recorded?

(2) Is the TC2 site included in LG&E's rate base? If yes, when was it added?

(3) Provide LG&E's estimate of the original cost and the fair market value of the TC2 site. Include any assumptions utilized to determine these amounts.

c. In Case No. 2002-00029,<sup>1</sup> LG&E was ordered to seek Commission approval prior to entering into a sale or lease of land located on any existing generating site.

(1) Has LG&E sought the Commission's approval for the land sale described in Article 6.2.2?

(2) If no, when does LG&E plan to seek the Commission's approval of the land sale described in Article 6.2.2 of the 2004 Agreement? Explain the response.

d. Have copies of all appendices attached to the 2004 Agreement been filed with the Commission? If yes, describe where they may be found. If no, provide copies in response to this data request.

12. Assume that the 25 percent of TC2, Indiana Municipal Power's and the Illinois Municipal Electric's share, is not granted a siting certificate. Will LG&E and KU nevertheless build the proposed plant? If no, explain in detail how LG&E and KU will meet their load requirements.

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<sup>1</sup> Case No. 2002-00029, Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Acquisition of Two Combustion Turbines, final Order dated June 11, 2002.

13. Refer to page 3 of the Blake Testimony, specifically the statement beginning on line 8, which refers to the sales agreements for 25 percent of Trimble County Unit 1 (“TC1”) being filed in the record of the 2002 IRP case.<sup>2</sup> Were those agreements formally filed with the Commission at any time prior to that case?

14. Refer to the Direct Testimony of Sharon L. Dodson. Did LG&E and KU conduct a risk assessment related to possible changes in environmental laws and regulations governing coal-fired plants, especially possible regulations on carbon dioxide?

- a. If yes, provide a copy of the assessment.
- b. If no, explain why such an assessment is not necessary.

15. Refer to page 3, paragraph 6, of the application, which states that “with respect to NOx and SO<sub>2</sub> combined, TC2 will be the cleanest coal-fired unit per MWh in Kentucky.” Explain whether this statement is based on the emissions comparison reflected in Exhibit SLD-1 to the Direct Testimony of Sharon L. Dodson.

16. Refer to the first answer on page 3 of the Dodson Testimony, specifically, the last sentence, which refers to the insignificant increase in emission levels for NOx and SO<sub>2</sub> as a result of the addition of TC2, due to its low emissions, and decreases at TC1.

- a. Provide the actual NOx and SO<sub>2</sub> emission levels for TC1 for each year from 2000 through 2004.

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<sup>2</sup> Case No. 2002-00367, The Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company.

b. Provide the estimated future decreases in TC1's NO<sub>x</sub> and SO<sub>2</sub> emission levels referred to in the testimony.

17. Refer to page 5 of the Direct Testimony of David S. Sinclair and Exhibit DSS-2 to the Sinclair Testimony.

a. Exhibit DSS-3 reflects, among other things, actual peak demand for the years 1990 through 2004 for the combined companies. Provide the combined companies' weather-normalized summer peak demand for this same period. Include the actual cooling degree days for each year.

b. The growth rates of the actual summer peak demands in the years 1993, 1995, 1997, 1999, and 2002 were higher than those of the other years covered by the exhibit, and ranged from 4.7 to 9.1 percent. With the exception of 1999, each of these 5 years followed a year in which the growth rate was negative (1998's growth rate was 1.5 percent). For each of these 5 years, provide a description of the factors that caused the growth rates to be above average.

18. Refer to page 7 of the Sinclair Testimony, specifically, the discussion of the use-per-customer forecasts. Provide a detailed explanation of why commercial employment is a variable used to forecast monthly use-per-customer.

19. Refer to Exhibit DSS-5, which includes a flowchart of the load forecasting process. Under "Weather Data" a line reads "20-year record."

a. What 20-year period was used in developing the load forecasts?

b. Explain why a 20-year period was used rather than the 30-year period published by the National Oceanographic and Atmospheric Administration.

20. Refer to page 4 of the application, the last sentence in paragraph 8, which states, "The projected annual O & M costs for the Companies' collective share of TC2 is \$11.3 million non-fuel fixed and variable O & M in 2004 dollars." Provide a breakdown of the \$11.3 million along with a narrative description of the costs and any applicable supporting workpapers.

21. Provide any and all workpapers associated with an analysis of the cost of coal to be used in TC2.



Beth O'Donnell  
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DATED: February 10, 2005

cc: Parties of Record