## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE ACQUISITION OF FOUR COMBUSTION TURBINES AND A SITE COMPATIBILITY CERTIFICATE FOR THE FACILITY

CASE NO. 2002-00381

## FIRST DATA REQUEST OF COMMISSION STAFF TO LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company (KU) are requested, pursuant to Administrative Regulation 807 KAR 5:001, to file with the Commission the original and 8 copies of the following information, with a copy to all parties of record. The information requested herein is due no later than December 4, 2002. Each copy of the data 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 person who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. 1. Refer to page 5 of the Application, which shows Budgeted Construction Costs of \$227.392 million including \$6.915 million in Capitalized Interest.

a. Generally, LG&E and KU have not accrued allowance for funds used during construction or capitalized interest incurred during construction of generating units. Describe the nature of the capitalized interest and explain in detail the reasons for its presence in this instance.

b. Provide workpapers showing the calculation of the \$6.915 million in capitalized interest included in the estimated costs of the proposed combustion turbines (CTs ).

c. Historically, LG&E and KU have expensed interest costs for facilities constructed by LG&E and KU for jurisdictional use.<sup>1</sup> Since construction will not commence until after the Commission approves the application, explain in detail why the interest will be capitalized instead of expensed?

d. Assuming the Commission approves the application, when will ownership of the CTs be transferred?

2. Refer to page 6 of the Application, Item 10, Cost of Operating.

a. Provide workpapers, with all necessary narrative explanations, which show the derivation of the estimated operating cost of the CTs in 2004 and 2005.

b. Provide workpapers, with all necessary narrative explanations, which show the derivation of the estimated annual maintenance costs of the CTs.

<sup>&</sup>lt;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, Response to the Commission Staff's Second Data Request dated March 11, 2002, Items 2 and 3.

c. Provide workpapers, with all necessary narrative explanations, which show the derivation of the estimated fuel cost for operation of the CTs.

3. Refer to the Testimony of Lonnie E. Bellar (Bellar Testimony), Exhibit LEB-1, page 9.

a. The Companies requested a proposal from General Electric for the acquisition of four CTs for in-service in 2004-2006. Explain why LG&E and KU did not ask for a bid for four CTs to be installed in 2004.

b. Was any consideration given to issuing a Request for Proposal for four CTs to be installed in 2004? Explain the response.

c. How relevant is a comparison of the current contract supplying four CTs in 2004 to a new proposal of installing four CTs in 2004-2006?

4. Refer to the Application, Turbine Purchase Contract, Exhibit A, Sections 7 and 11.

a. Do LG&E and KU have the option to change certain terms of the contract? Explain the response.

b. If LG&E and KU are permitted to change the CT delivery dates, assume a staggered delivery date with two installed in 2004, one installed in 2005 and one installed in 2006. Provide the types of additional costs that would be incurred and the types of savings that would be achieved and all assumptions, narratives and supporting calculations.

c. Assume for the purposes of this question the turbine installation dates were changed to two in 2004, one in 2005, and one in 2006. Provide your best

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estimate of the net effect of the installed cost of the CTs. Provide all assumptions, narratives and supporting calculations.

d. Describe the risks to which LG&E and KU would be exposed if they were unable to take delivery in 2003?

5. Refer to page 7 of the Application. The ownership of the CTs will be based on the following ratio: KU - 63 percent, LG&E - 37 percent. Explain in detail how the ownership ratio was determined.

6. Refer to the Bellar Testimony at page 11, which refers to securing firm transportation service from Texas Gas Pipeline (Texas Gas) in order to ensure natural gas is available at the site when needed. Have any formal agreements been executed with Texas Gas? If yes, provide the agreements. If no, when are such agreements expected to be executed?

7. Refer to page 5 of the Application, Budgeted Construction Costs.

a. The list includes Miscellaneous costs of \$6.8 million. Explain the costs included in this category and provide the derivation of this amount.

b. The list includes Contingency costs of \$11 million. Explain the derivation of this amount.

8. Refer to page 8 of the Application and pages 11-12 of the Bellar Testimony. Provide an estimate of the expected construction time of the CT units.

9. Refer to Exhibit HBS-1 in the Testimony of H. Bruce Sauer. Explain further the derivation of the growth rate used to develop the Joint Company Sales and the Peak Demand.

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10. Explain why LG&E is buying these units from its affiliate rather than buying them directly from the vendor.

11. Refer to page 6 of the Application, fuel costs are estimated to be 4.12 cents/ MBtu. Provide documentation to support the estimated fuel costs.

12. Do LG&E and KU have an operation plan to avoid power failure in case there is an interruption in gas supply at the Trimble County CT site?

a. If yes, describe the plan in detail.

b. If no, explain why there is no such plan.

13. Provide a map for the pipeline from the tap on Texas Gas Transmission to the Trimble County Generating site.

14. Provide the pipe diameter, type of material, maximum operating pressure, minimum pressure at the tap-on, and the length of the pipeline.

15. Would it be reasonable to consider the acquisition of two CTs, instead of the proposed four CTs, and purchase two additional CTs from GE to be installed one in 2005 and the second in 2006?

a. If yes, for this scenario, provide the Net Present Value Revenue Requirement (NPVRR) analysis as shown in tables 5-a, 5-b, and 5-c on page 19 of Exhibit LEB-1.

b. If no, explain.

16. Can the CTs be modified prior to construction to operate on both natural gas and fuel oil?

a. If yes, provide the incremental cost and provide the revised NPVRR for case #1 of Exhibit LEB-1 reflecting the dual fuel capability.

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b. What would the cost be to retrofit each CT to have a dual fuel capability?

17. Refer to the Bellar Testimony, page 5 and Exhibit LEB-3. Mr. Bellar acknowledges that the acquisition of the four CTs in one year will increase LG&E s and KU s reserve margin above the 13-15 percent rate, but states that it is not unreasonable or excessive. Explain why it is not unreasonable or excessive for the reserve margin to increase to 20.4 percent in 2004 and provide the industry standards for reserve margins.

18. Refer to the Direct Testimony of Caryl M. Pfeiffer, page 6. Ms. Pfeiffer states that the next round of KYDAQ permit requirements for simple-cycle combustion turbines will mandate a more restrictive nitrogen oxides (NOx) emission rate than is now required. She states that absent improvements in combustor technology, the new permitting requirement will increase the cost of CTs for LG&E and KU in the future because of the additional cost of post-combustion NOx control equipment.

a. If the next round of KYDAQ permit requirements for simple-cycle CTs require a more restrictive NOx emission rate, is it Ms. Pfeiffer's opinion that the proposed four CTs proposed in this application will not be required to meet the more restrictive NOx requirements?

b. If the four CTs proposed are required to meet more restrictive NOx requirements in the future, explain the adjustment that will be required to bring these CTs into future compliance and provide the estimated costs.

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c. Is it Ms. Pfeiffer's opinion that it is appropriate to approve the proposed CTs now because the next round of KYDAQ permit requirements will have more restrictive NOx emission rates? Explain the response.

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DATED <u>NOVEMBER 22, 2002</u>

cc: All Parties