COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES COMPANY AND) LOUISVILLE GAS AND ELECTRIC COMPANY FOR A) CERTIFICATE OF CONVENIENCE AND NECESSITY TO) CONSTRUCT SELECTIVE CATALYTIC REDUCTION) (SRC) NOX CONTROL TECHNOLOGIES)

CASE NO. 2000-112

<u>ORDER</u>

IT IS ORDERED that Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") shall file an original and 8 copies of the following information with the Commission with a copy to all parties of record. 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 witness 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 along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. The information requested herein is due no later than April 28, 2000.

Do any KU or LG&E generating units currently have an emission rate of
0.15lb/mmBtu or less? If yes, provide the names of the units and their emission rates.

2. Refer to pages 10 and 11 of the application. Provide a brief explanation of the reasons for the differences in the capital costs for the Selective Catalytic Reduction ("SCR") retrofits among the proposed generating units.

3. Page 12 of the application states that facilities associated with the storage and handling of ammonia for the SCR equipment will require construction permits from the Kentucky Department of Housing, Building and Construction and from the State Fire Marshal's office. Have KU and LG&E obtained these permits? If no, when is it expected these permits will be obtained?

4. Refer to the Testimony of Lonnie E. Bellar at pages 7 and 8, which describes the removal of Selective Non Catalytic Reduction ("SNCR") technology as a current alternative from the companies' analysis because of the lack of successful demonstrations of SNCRs on large boilers with fluctuating combustion processes or cycling loads such as those within the KU and LG&E systems.

a. Are there successful demonstrations of SCRs on large boilers with fluctuating combustion processes or cycling loads? If yes, identify those demonstrations, including the name of the utility, the name of the unit, a description of the unit, the achieved emission rate(s), and the length of time the project has been in operation. If no, explain why SCRs were not removed for the same reason as SNCRs.

b. Capital costs of SCRs greatly exceed the capital costs of SNCRs. Describe any operational advantages or efficiencies of SCRs compared to SNCRs.

5. Refer to LEB Exhibit 2, page 10. The table titled "Based on 0.15lb./mmBtu" shows the Sargent & Lundy ("S & L") report's recommendations and the KU and LG&E recommendations in comparative form.

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a. Explain why Green River 3 requires low Nox burner modifications under the KU/LG&E plan when it is not impacted by the EPA Nox reduction.

b. The S & L report recommends the "LNB + SCR" technology for Ghent 2 and the "NN" technology for Brown 3. KU and LG&E recommend "NN + SCR" for Brown 3 and "LNB" for Ghent 2 based on the "key changes in assumptions" used in the utilities' analysis listed on pages 7 and 8 of Mr. Bellar's testimony.

(1) Prior to the construction of the "SCR" at Brown 3 will KU and LG&E be able to determine the accuracy of these "key changes in assumptions"? If yes, by what date will a final decision need to be made as to whether the "SCR" will be installed at Brown 3 or Ghent 2?

(2) Are there any O & M savings expected to be realized from the construction of the SCR at Ghent 2 instead of Brown 3? Explain the answer. If yes, identify the savings.

6. Refer to LEB Appendix A, pages 1 and 2. Explain the difference in the capital cost for Ghent 1 of \$51.4 million under the S & L recommendation and \$55.51 million under the KU and LG&E recommendation. Provide all supporting calculations.

7. Have KU and LG&E issued a Request for Proposals ("RFP") for the construction of the seven proposed SCR units?

a. If yes, provide the RFP and a list of vendors to whom it was sent.

(1) Provide the responses to the RFP.

(2) Explain how the successful bidder, or bidders, were chosen.

b. If no, explain why an RFP is not considered necessary.

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8. Refer to LEB Appendix C, Table 1, entitled "Capital Expenditure Recovery Assumptions." The cost rate on common equity included in the assumptions is 12.5 percent. KU and LG&E were both recently awarded equity returns of 11.5 percent by the Commission. Describe the impact that a 1.0 percent change in the cost rate on common equity would have on the "Present Value Revenue Requirements" analysis performed by KU and LG&E for the different compliance scenarios that were considered.

9. Refer to LEB-Appendix E. Explain why the base case shown on page 1 of 10 shows the 15-year PVRR of \$5,912,534,000, but the base case on pages 2, 3, 5 and 8 shows the 15-year PVRR of \$5,416,395,000. Also LEB exhibit 2 page 14 shows the 15-year PVRR of \$5,416,395,000.

Done at Frankfort, Kentucky, this 14th day of April, 2000.

By the Commission

ATTEST:

Deputy Executive Director