## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY UTILITIES

COMPANY FOR A CERTIFICATE OF CONVENIENCE

AND NECESSITY AND A CERTIFICATE OF

ENVIRONMENTAL COMPATIBILITY TO CONSTRUCT

FOUR 75 MEGAWATT COMBUSTION TURBINE

PEAKING UNITS AND ASSOCIATED FACILITIES

SCHEDULED FOR COMPLETION IN 1994 AND

1995, RESPECTIVELY, TO BE LOCATED AT

THE COMPANY'S E.W. BROWN GENERATING

STATION IN MERCER COUNTY, KENTUCKY

## ORDER

shall file an original and 15 copies of the following information with this 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 copies 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. When applicable, the information requested herein should be provided for total company

operations and jurisdictional operations, separately. The information requested herein is due no later than July 26, 1991. If the information cannot be provided by this date, you should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission.

- 1. Referring to KU's response to Item 1 of the Commission's June 26, 1991 Order, provide all supporting calculations which show that the purchase power proposal received from Central Illinois Public Service Company was uneconomical and would result in greater cost than the construction of the four combustion turbines.
- 2. Referring to KU's response to Item 1 of the Commission's June 26, 1991 Order, provide copies of all follow-up correspondence KU has had with Public Service Indiana regarding its "peaking park" proposal, Louisville Gas and Electric Company and East Kentucky Power Cooperative regarding their failure to respond to KU's RFP, and Union Electric, Illinois Power Company and Central Illinois Power Company regarding their respective proposals.
- 3. Referring to KU's response to Item 2b of the Commission's June 26, 1991 Order:
- a. Provide a copy (paper or microfiche) of the PROSCREEN II output for each plan from Sets A, B, and C. This should include printouts of input data and the computation of annual revenue requirements. If PROSCREEN II does not provide this, provide an explanation as to why not. Also, provide a

complete narrative explanation of how these amounts are determined by PROSCREEN II.

- b. Provide a present value table for the 11.63 percent return factor.
- c. Provide an explanation of why the discount rate is based on a targeted capital structure instead of an actual capital structure, the current costs of debt, return on preferred stock, and the last approved return on common equity.
- 4. Referring to KU's response to Item 4 of the Commission's June 26, 1991 Order, provide the entire PROSCREEN II printout (paper or microfiche) for pages 8-41 through 8-44.
- 5. Referring to KU's response to Item 6 of the Commission's June 26, 1991 Order, provide narrative descriptions for columns 2, 3, 5, 8, 9, and 10 for equipment and labor, and columns 1 through 7 for incentives and marketing.
- 6. Referring to KU's response to Item 5 of the Commission's June 26, 1991 Order, provide workpapers used to derive the amounts shown on pages 2, 3, and 4 of 34. Provide detailed explanations of the calculations.
- 7. Referring to KU's response to Item 7 of the Commission's June 26, 1991 Order, explain how the numbers in Appendix D, page 12, combined with the amounts in Item 7, Sheet 2 of 2, arrive at the amounts in Appendix C.
- 8. Referring to KU's response to Item 7 of the Commission's June 26, 1991 Order, provide an explanation of how 6 percent was determined to be the escalation rate and how many years it is applied to.

- 9. In response to Item 7 of the Commission's June 26, 1991 Order, KU stated that an escalation rate of 6 percent per year was used in calculating the values in Appendix C of the DSM Task Force Report. Provide an explanation as to why an escalation rate of 6 percent was used instead of 5.3 percent as stated on page 9-1 of the financial information.
- 10. Referring to KU's response to Item 11 of the Commission's June 26, 1991 Order, did EPRI explain in its literature why no program costs were provided for commercial technology alternatives such as HVAC and efficient lighting systems and industrial technology alternatives such as efficient electric motors? When does KU expect such DSM program costs to be available?
- 11. Is EPRI the only source of DSM technology costs? If not, identify the alternative sources of such information. Why did KU choose not to obtain DSM program cost estimates from these other sources?
- 12. Provide EPRI publications "Demand-Side Management Volumes 1-5" (EA/EM-3597) and "DSM Technology Alternatives" (EM-5457). If providing these publications is not feasible, make them available for inspection at KU's offices on a mutually convenient date and time.
- 13. Referring to KU's response to Item 31 of the Commission's June 26, 1991 Order, what modifications could be made to Rate IS to make interruptible service more attractive to customers?

- 14. Referring to KU's response to Item 33 of the Commission's June 26, 1991 Order, explain how the estimated impact of existing DSM programs as shown in Section 7.(3)(g) on page 7-4 was determined.
- 15. Referring to KU's response to Items 34 and 36 of the Commission's June 26, 1991 Order, since no projected costs or cost savings are calculated for existing DSM programs, explain how the cost effectiveness of such continuing DSM programs is monitored and assessed.
- 16. Referring to KU's response to Item 46 of the Commission's June 26, 1991 Order, what is the installed cost per KW of a 75 to 100 MW simple cycle combustion turbine unit which was used in the DSM program screening analysis?
- 17. Provide separate and detailed calculations of the total cost differential associated with fueling each of the four proposed combustion turbines with natural gas rather than oil for each year of the expected life of each unit.
- 18. Provide an estimation of annual non-fuel related variable and fixed OaM costs over the life of each of the proposed combustion turbines.
- 19. Provide an estimation of the number of individuals that will be required to operate each of the proposed combustion turbines. Provide a similar estimation of the number of individuals that will be required to maintain each of the proposed units.

- 20. Referring to KU's response to Item 25 of the Attorney General's June 26, 1991 information request, provide a photocopy of Sheet 2 of 29 which includes the words along the left margin.
- 21. According to Sheet 2 of 29 of KU's response to Item 25 of the Attorney General's information request, construction of the proposed units at the E.W. Brown site will result in total investment and annual costs which are significantly higher than alternative sites. Explain why KU chose the E.W. Brown site instead of one of the lower cost sites.

Done at Frankfort, Kentucky, this 19th day of July, 1991.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director