## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

GENERAL ADJUSTMENTS IN ELECTRIC RATES ) CASE NO. OF KENTUCKY POWER COMPANY ) 8734

## ORDER

IT IS ORDERED that Kentucky Power Company ("Kentucky Power") shall file an original and 12 copies of the following information with the Commission by no later than seven weeks after its application is filed. Each copy of the data requested should be placed in a bound volume with each item tabbed and each volume should include an index of the contents therein. 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 insure 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. If neither the requested information nor a motion for an extension of time is filed by the stated date, the case may be dismissed.

1. Item 18c of the response to the Commission's first request for information shows \$16,047,000 in salaries and wages charged to expense during the test year. Provide, in a format similar to lines 1 through 11 of 18c, Kentucky Power's annualized salaries and wages at December 31, 1982.

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2. Provide a detailed description of the employee savings plan to which the company contributed \$329,000 during the test year. Provide the company's test year contributions on a monthly basis and explain the test year increase.

3. The number of residential customers served for each month of the test year. Explain why no revenue or expense adjustments were proposed to reflect the number of residential customers served at the end of the test year.

4. For Tariff 015 RS, provide complete details of the employee discount shown in Section III, pages 16 and 24, of the application.

5. Provide on a monthly basis the amortization of excess deferred federal income taxes and the amount of the adjustment necessary to reflect a full year's amortization.

6. Under Kentucky Power's mortgage indenture, how much in first mortgage bonds could it issue with first mortgage bond interest coverages of (a) 2.5, (b) 2.75, (c) 3.0, (d) 3.25, and (e) 3.57

7. Explain the derivation of the \$151,814 charged to Account No. 630 for the relocation of the AEP Service Corporation to Columbus. Indicate the period of time for which this level of expense will be incurred.

8. During the test year Kentucky Power wrote off \$12,000 to nuclear power plant costs. Explain the nature of these costs and provide the amounts of similar write-offs made during the 5 calendar years immediately preceding the test year.

9. A comparison of the additional revenue requirement of \$33,083,588 proposed in the application, and the additional revenue requirement that would be proposed if Kentucky Power's capitalization did not include JDIC. Provide all workpapers.

10. Provide any studies relief upon to show that Kentucky Power's consumers will be benefitted by the proposed phase-in of CWIP into the rate base during the construction of Rockport Unit No. 1.

11. Provide the following data for each utility subsidiary of the American Electric Power Company ("AEP"):

a. Regulatory treatment of CWIP.

b. Current bond ratings (S & P and Moody's).

c. 1982 Pre-tax interest coverages.

d. 1982 AFUDC as a percent of earnings.

12. Provide the following information regarding the EHV 765 KV transmission line:

a. The date construction commenced.

b. Beneficiaries other than Kentucky Power.

c. Cost-bearers other than Kentucky Power.

d. AFUDC accrued as of December 31, 1982.

13a. Provide a complete description of the relationship between Kentucky Power and AEP including services provided,

shared costs, allocations of costs and the basis of cost allocations.

b. Provide the amounts and a description of all expenses incurred during the test year for payments to AEP.

c. Provide the amount of the tax loss incurred by AEP for calendar years 1978 through 1982 and the amount of the losses allocated to Kentucky Power in each of those 5 years.

14. Provide complete details of the proposed normalization of the book/tax timing differences for Clearing Accounts and Uncollectible Accounts.

15. Explain why the \$501,000 of unamortized debt premium, included in the amount outstanding in item 2a, sheet 2, of the first staff request, was not included in the amount outstanding in workpaper S-1, page 5, section V.

16. Reconcile the difference between the 10.3 percent annual cost of debt listed on workpaper S-1, page 5, section V and the 10.185 percent annualized cost of debt listed on item 2a, sheet 2, of the first staff request.

17. Update item 1, sheet 4, of the first staff request, for the first quarter of 1983.

18. Update item 4b, pages 2 and 3, of the first staff request, to include data for the first quarter of 1983.

19. How did Mr. Benore develop his 11 percent estimate of the future long-term government bond rate on line 9, page 18, of his prefiled testimony?

20. When will Kentucky Power begin the interim financing program referred to on lines 17 through 19 of Mr. Maloney's prefiled testimony?

21a. Submit updates of Kentucky Power's financing, when available, to reflect new issues of common stock, preferred stock and long- and short-term debt. For common stock, submit updates as shown on format 4a, item 4a of the first staff request. For preferred stock, submit updates as shown on format 3, schedule 2, item 3 of the first staff request. For long-term debt, submit updates as shown on format 2a, schedule 2, item 2a of the first staff request. For short-term debt, submit updates as shown on format 2b, item 2b of the first staff request.

b. Update embedded cost rates to reflect the issuance of new securities or the retirement of old securities, since the end of the test year.

22. Provide a schedule showing, by month for the test year, the unused balance of the \$150,000,000 line of credit referenced on lines 14 and 15, page 30, of Mr. Boyle's prefiled testimony.

23. Provide workpapers showing how the \$90,000,000 unused balance, referenced on line 16, page 30, of Mr. Boyle's prefiled testimony, was determined.

24a. In reference to Exhibit LRJ-1, page 2 of 2, describe how the demand cost per KWH is calculated.

b. Perform at least two calculations to demonstrate the calculation and identify all sources of information used.

25a. With regard to the models specified on page 13 of Jahn's prefiled testimony, provide all other statistical results associ-

ated with the models. Include the statistical errors of the coefficients in the models, the tests for significance of the regression coefficients, Durbin-Watson statistics, and any other relevant statistics for each of the regression equations.

b. Identify the source of all data used in the regression equations and provide a narrative description of how the data was developed and/or converted for use in the regression equations.

c. Specify any alternative models considered and provide the relevant statistical results from these models and an explanation of why they were not used for this analysis.

26. Provide workpapers to support the cost per unit of CP demand of 6.5470/kw, cost per unit of NCP demand of 1.9526/kw, and cost per unit of NCP demand of 4.4296/kw as listed on pages 15 and 16 of Jahn's testimony.

27. Provide copies of any interruptible tariffs filed by other AEP subsidiaries in any other jurisdiction.

28. What is the cost of the signal system which an interruptible customer is required to purchase?

29. How many customers does Kentucky Power currently have with monthly demands of 5,000 kw or greater?

30. Since the price elasticity study used data for the time period 1970 through 1979, why was additional more current data not used?

31. With respect to Exhibit LRJ-3, provide:

a. A description of the variables used in the regression models and an explanation of why they were used;



b. All data used to estimate the models, the source of all such data and any workpapers that were used to develop the data;

c. A list and narrative description of all other independent variables considered for use in each of the models;

d. All alternative model specifications considered by the company, and a narrative description and relevant statistical results indicating why the model was not used by the Company;

e. For the models used, the correlation matrix for each; and

f. For the models used, the correlogram and/or the autocorrelation function of the residuals.

32. On Exhibit LRJ-4, page 9 of 17, explain why the average energy expenditure per kwh was used to calculate the energy cost reduction for each class. Explain why an estimate of marginal energy cost was not used.

33. Did Kentucky Power ever include a price elasticity adjustment in designing its rats in a prior rate application. If yes, provide the case numbers. If not, explain why.

34. Describe the pole and conductor survey identified on page6, line 10-13, of Bethel's prefiled testimony.

35. Provide a copy of all applicable workpapers and documentation used to develop the allocation factors for the class cost of service study for the test year ending December 31, 1982.

36. In reference to Bethel prefiled testimony, page 7, lines17 to 11, describe and provide details of the minimum system

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37. Page 18 of Bethel's testimony identifies three categories of the literature investigation concerning interclass business risk differences.

a. Provide a bibliography of all published articles reviewed in category one.

b. Provide the reports of two research projects conducted by well known consulting firms.

c. Provide a list of commission proceedings reviewed in category three of the literature review. If available, provide a summary of these proceedings.

38. Provide a list of the 29 electric operating subsidiaries mentioned on page 21, line 18, of Bethel's testimony.

39a. Is the analysis presented in Exhibit DWB-2, page 3 of 6, a cross-sectional analysis?

b. Is Kentucky Power included in the analysis?

c. For the four equations presented in this Exhibit provide  $R^2$  values, the standard errors of the coefficients in the equations, the test for significance of the regression coefficients, Durbin-Watson statistics, and any other relevant statistics for each of the regression equations.

40. Provide documentation for the statement on page 22, line 22-24, of Bethel's testimony that "capital market analysts give little or no consideration to customer mix in judging credit worthiness."



41. For each of the six time-differential cost of service studies sponsored in Berndt's testimony provide a list of all assumptions used to perform each study.

42. On page 26 of Berndt's testimony there is a discussion of how the average demand and standard deviation for a particular hour of a February 1981 weekday can be calculated and the probability of the occurance determined by use of the 7 statistic. How is this calculation performed for a typical weekend hour in February 1981? Is the 7 statistic still appropriate for so few observations?

43a. In proposing to adjust plant maintenance expense for the Big Sandy generating station, Kentucky Power has calculated a normalized level of expense based on expense data for the last 13 years. How and why was this time period selected?

b. Provide for each of the last 5 calendar years, an analysis of Kentucky Power's plant maintenance expense showing the actual amounts incurred for contract labor, materials, and in-house labor.

c. Provide, in general terms, descriptions and schedules for cyclical maintenance performed at the Big Sandy Power Station.

d. Provide detailed explanations and descriptions of the plant maintenance performed during the years 1973 and 1979. Provide any data necessary to explain the greater than normal levels of expense incurred in those years.

44a. What is Kentucky Power's target coal supply in tons and in days's supply?

b. What factors were considered in determining the target coal supply?

c. Provide a description of any analysis of these factors that was performed in determining or to support the target coal supply.

45. Of the total operating revenue of \$178,740,348, per Case No. 8429 rates, schedule 1, Section V of the filed notice, show separately the total amounts attributable to (a) application of the monthly fuel adjustment clause factor and (b) recovery of \$.01433/KWH fuel in the base rates. Provide supporting workpapers.

46. Of the total operation and maintenance expense of \$111,417,623, per column 3, schedule 1, Section V of the filed notice, show separately for coal, oil and other fuels the total amount attributable to fuel expenses from Account 151, excluding Account 152, transferred to Account 501. Provide supporting workpapers.

Done at Frankfort, Kentucky, this 5th day of May, 1983.

PUBLIC SERVICE COMMISSION

Vice Chairman Commissioner

ATTEST:

Secretary