COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)COMPANY D/B/A AMERICAN ELECTRIC POWER)FOR APPROVAL OF AN AMENDED COMPLIANCE)PLAN FOR PURPOSES OF RECOVERING THE)COSTS OF NEW AND ADDITIONAL POLLUTION)CONTROL FACILITIES AND TO AMEND ITS)ENVIRONMENTAL COST RECOVERY)SURCHARGE TARIFF)

CASE NO. 2002-00169

FIRST DATA REQUEST OF COMMISSION STAFF TO KENTUCKY POWER COMPANY

Kentucky Power Company (Kentucky Power), d/b/a American Electric Power (AEP), pursuant to Administrative Regulation 807 KAR 5:001, is requested 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 on or before November 20, 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 herein has been previously 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 the Direct Testimony of Errol K. Wagner (Wagner Direct Testimony), page 5. Provide the status of the Big Sandy Unit No. 2 (Unit 2) precipitator and indicate the in-service date, if applicable.

2. Refer to the Wagner Direct Testimony, pages 6 and 7. Mr. Wagner states that the cost of purchases of energy from the Associated Utilities does not include the fixed costs of the Associated Utilities environmental facilities.

a. Provide copies of the applicable Federal Energy Regulatory
Commission (FERC) approved rate schedule, with the sections supporting Mr.
Wagner's statement clearly marked.

b. Provide an analysis of the costs incorporated in the price Kentucky Power pays Associated Utilities for purchases of energy. This analysis should include all costs included in the price and the margin earned by the Associated Utilities.

c. Provide an analysis of the price Kentucky Power sells energy to the Associated Utilities. This analysis should include all costs recovered in the price and the margin earned on the sale to the Associated Utilities.

d. Mr. Wagner notes on page 7 that for 4 months during the installation of the Selective Catalytic Reduction (SCR) equipment at Unit 2, Kentucky Power will be purchasing energy from the AEP Pool. During that 4-month period, does Kentucky Power intend to make any sales to the Associated Utilities? Explain the response.

e. During the 4-month period during the Unit 2 SCR installation, does Kentucky Power intend to make any sales to the Non-Associated Utilities? Explain the response.

-2-

f. Under the current environmental cost allocation methodology approved by the Commission, if Kentucky Power makes no sales in a month to the Associated Utilities and the sales to the Non-Associated Utilities decrease, would Mr. Wagner agree that the environmental costs assigned in that month to the Kentucky Retail Jurisdiction and the FERC Wholesale would increase? Explain the response.

3. In its February 8, 2001 Order in Case No. 2000-00107,¹ the Commission

stated:

The Commission is not persuaded by Kentucky Power's arguments that the use of the revenue method creates an inconsistency with the costing provisions of the AEP Pool Agreement. Because of the requirements of the AEP Pool Agreement, the environmental surcharge mechanism does include costs associated with AEP's Rockport, Indiana and Gavin, Ohio generating units. However, the AEP Pool Agreement does not dictate how the Commission allocates the environmental costs to retail ratepayers under the surcharge mechanism. . . . This Commission has exclusive jurisdiction over Kentucky Power's retail rates, including its Kentucky Powers fixed and variable environmental surcharge. environmental costs must be allocated to the appropriate cost-causer. To the extent that Kentucky Power makes sales to other AEP affiliates, it is clearly inappropriate for the environmental costs associated with those sales to be recovered through a surcharge on Kentucky retail ratepayers, regardless of whether Kentucky Power is a surplus member of the AEP power pool.²

Refer to the Wagner Direct Testimony, pages 6 through 8, the argument that the portion

of Kentucky Power's environmental costs currently assigned by the surcharge

mechanism to Associated Utilities must be assigned to Kentucky retail ratepayers.

¹ Case No. 2000-00107, An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Power Company d/b/a American Electric Power for the Six-Month Billing Periods Ending December 31, 1998 and December 31, 1999, and for the Two-Year Billing Period Ending June 30, 1999.

² Case No. 2000-00107, February 8, 2001 Order, at 13.

a. Does Kentucky Power agree that the Commission considered and rejected similar cost allocation arguments by Kentucky Power in the Commission's Orders in Case No. 1996-00489³ and reaffirmed that decision in the February 8, 2001 Order in Case No. 2000-00107?

b. Does Kentucky Power agree that in Kentucky Power's appeal of the Commission's decisions in Case No. 1996-00489 to the Franklin Circuit Court, that Court upheld the Commission's environmental cost allocation methodology?

c. Provide a detailed discussion of the circumstances that have changed since February 8, 2001 that warrant the Commission to consider a change in the environmental cost allocation methodology.

4. Refer to the Wagner Direct Testimony, pages 8 and 9, concerning the pending AEP Corporate Separation proceedings.

a. Indicate when the current five-member AEP Pool agreement was implemented.

b. Explain how the five-member AEP Pool agreement deals with environmental costs the member utilities incur. Include copies of excerpts from the agreement that discuss how environmental costs are to be handled.

c. For each member of the current five-member AEP Pool agreement, describe how the environmental costs associated with the Clean Air Act and other

-4-

³ Case No. 1996-00489, Application of Kentucky Power Company d/b/a American Electric Power to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with the Clean Air Act and Those Environmental Requirements Which Apply to Coal Combustion Waste and By-Products, final Order dated May 27, 1997; rehearing Order dated July 8, 1997.

environmental requirements associated with the production of electricity by burning coal are recovered from the respective retail jurisdictional customers.

d. On page 9 Mr. Wagner states that Kentucky Power will not be able to recover those costs allocated to the Associated Utilities under the pending threemember AEP Pool agreement, just as under the current five-member AEP Pool agreement. Given the importance Kentucky Power has given this issue, explain in detail why Kentucky Power did not secure a provision in the pending three-member AEP Pool agreement to address Kentucky Power's perceived lack of cost recovery of these environmental costs.

5. Refer to the Wagner Direct Testimony, pages 9 and 10. Provide a schedule listing all the impacts on Kentucky Power's current environmental surcharge mechanism resulting from the AEP Corporate Separation proceeding.

6. Refer to the Wagner Direct Testimony, page 9, concerning Kentucky Powers inventory of SO₂ emission allowances (SO₂ allowances).

a. Provide a schedule detailing the composition of Kentucky Power's SO₂ allowance inventory. The schedule should be presented in two parts. Part One deals with the currently usable SO₂ allowance inventory. This part of the schedule should show by vintage year the number of allowances received from the Environmental Protection Agency (EPA), the number of allowances allocated or purchased under the terms of the AEP Interim Allowance Agreement (IAA), and the number of allowances secured from other sources. Separate the IAA allowances between those assigned from the Gavin generating unit and those actually purchased. Part Two deals with allowances with vintage years of 2003 and beyond. This part of the schedule should

-5-

show by vintage year the number of allowances received from the EPA, any allowances allocated or purchased under the terms of the IAA, and any allowances secured from other sources.

b. Provide a schedule showing the actual usage of SO₂ allowances by year from 1995 through 2001. Also provide the number of allowances used to date for 2002.

c. Mr. Wagner indicates that Kentucky Power will no longer be responsible for costs associated with the IAA under the pending AEP Corporate Separation proposal. Has Kentucky Power developed an SO₂ allowance inventory management strategy, since the requirements of the IAA will no longer be applicable? If yes, provide a copy of the strategy. If no, explain when such a formal strategy will be developed by Kentucky Power.

7. Concerning nitrogen oxide emission allowances (NOx allowances):

a. Will the dollar value of NOx allowances initially assigned to Kentucky Power carry a zero cost, similar to the approach applied to the SO₂ allowances? Explain the response.

b. Will the dollar value of any NOx early reduction credits (NOx ERC) awarded to Kentucky Power carry a zero cost? Explain the response.

c. Has the FERC prescribed any accounting guidance on how to account for NOx allowances? If yes, provide the FERC instructions. If no, indicate when FERC is expected to issue instructions on accounting for NOx allowances.

-6-

d. Provide the account numbers and titles Kentucky Power intends to utilize to record the NOx allowance inventory, the use of NOx allowances, and the sale or purchase of NOx allowances.

e. Has Kentucky Power developed a NOx allowance management strategy? If yes, provide a copy of the strategy. If no, explain when such a formal strategy will be developed by Kentucky Power.

8. Refer to pages 11-12 of the Wagner Direct Testimony and Exhibit EKW-3, which contains Kentucky Power's weighted cost of capital calculations.

a. The testimony indicates that the annual interest cost shown on Exhibit EKW-3 includes the amortization of loss on reacquired debt and the amortization of debt discount, premium, and expense. Provide a breakdown of the \$27,255,706 annual interest cost between interest expense, amortization of loss on reacquired debt, and the amortization of debt discount, premium, and expense.

b. In Case No. 2002-00324⁴ the Commission approved Kentucky Power's request to issue up to \$250 million in debt. Kentucky Power's application and motion for expedited approval indicated that it wanted to benefit from the low interest rate environment and that notes issued to Australian investors could result in an approximate one percent savings compared to issuing the notes in the United States market. Describe what has occurred regarding this financing and identify the interest rate levels that have resulted to date.

-7-

⁴ Case No. 2002-00324, Application of Kentucky Power Company d/b/a American Electric Power Company for Authority to Issue and Sell Secured or Unsecured Promissory Notes of One or More New Series, Order dated October 11, 2002.

9. Refer to page 12 of the Wagner Direct Testimony and Exhibit EKW-2.

a. Provide a detailed explanation of what is meant by the company s utility plant depreciation rate of 3.78 percent, as referenced in the testimony, which was applied to the net utility plant to derive the depreciation expense shown on the exhibit.

b. Provide the workpapers that show the derivation of the 3.78 percent depreciation rate.

10. Refer to the Application Exhibit 1, and page 15 of the Wagner Direct Testimony. Describe in detail the degree to which Kentucky Power expects to rely on the purchase of NOx allowances to comply with the reduced emissions limits that take effect in May 2004.

11. Refer to the Wagner Direct Testimony, Exhibit EKW-1. Provide a schedule of the \$1,771,100 in non-fuel operation and maintenance expenses shown in column 8. The schedule should identify the expenses by account number and title. Include an explanation of how the particular level of expense was determined.

12. Refer to the Wagner Direct Testimony, Exhibit EKW-2.

a. Column 4, line 9 of the exhibit includes one half of the non-fuel operation and maintenance expense for the Big Sandy Unit No. 1 (Unit 1) boiler tubes overlay. Explain why the amount in column 4, line 9 did not include one half of the non-fuel operation and maintenance expense for the Unit 2 SCR.

b. Line 12 of the exhibit uses an average revenue allocation factor in presenting Kentucky Power's estimate of the annual impact of the new environmental compliance plan proposed in this case. Assume for purposes of this question the Commission does not adopt the change in the jurisdictional allocation of the

-8-

environmental surcharge revenue requirement as proposed by Kentucky Power. Should the allocation factor used in the monthly surcharge mechanism be changed to a 12-month average revenue allocation factor, rather than the current expense month revenue allocation factor currently in use? Explain the response.

c. Explain in detail why the allocation factor shown in column 4, line 14 was not based on the sum of Kentucky Retail Jurisdictional, FERC Wholesale, and Non-Associated Utilities revenues.

13. Refer to the Wagner Direct Testimony, Exhibit EKW-3.

a. Describe the sources of Kentucky Power's short-term financing.

b. Does Kentucky Power borrow funds from any AEP money pool arrangements? If yes, describe Kentucky Power's participation in the AEP money pool.

c. Does Kentucky Power utilize accounts receivable financing? If yes, describe how this financing is structured.

d. Provide Kentucky Power's weighted cost of capital calculations as of October 31, 2002. If applicable, show any financing utilizing money pool borrowings and accounts receivable financing separately.

e. Provide by January 30, 2003 Kentucky Power's weighted cost of capital calculations as of December 31, 2002. If applicable, show any financing utilizing money pool borrowings and accounts receivable financing separately.

14. Refer to the Direct Testimony of John M. McManus (McManus Direct Testimony), page 11, lines 8 through 11. Given the initial performance of the over-fire air technology on Unit 1, has Kentucky Power considered scaling back or eliminating entirely the addition of the water injection technology? Explain the response.

-9-

15. Refer to the McManus Direct Testimony, pages 18 through 20. Concerning Kentucky Power's eligibility to apply for NOx ERCs:

a. Indicate when Kentucky Power can file its application for these credits.

b. Does one NOx ERC represent the same value to Kentucky Power as one NOx allowance? Explain the response.

c. Provide the results of any estimate Kentucky Power has performed of the value of the ERCs it may acquire if it controls NOx emissions prior to the compliance deadline. Include all supporting workpapers and assumptions. If no estimate has been performed, explain why.

d. Provide any present value analysis Kentucky Power has performed of the costs to ratepayers of its plan to control NOx emissions prior to the compliance date, netted against the value of acquired ERCs, compared to installing the NOx technologies and charging ratepayers for their costs based solely on meeting the compliance deadline. Include all supporting workpapers and assumptions.

16. Refer to the McManus Direct Testimony, page 22. Mr. McManus indicates that if Kentucky Power's NOx control systems perform better than expected and larger numbers of NOx allowances remain after each compliance period, consideration may be given to transferring some allowances to other AEP units or selling the allowances in the market.

a. Will Kentucky Power always have the option of transferring or selling excess NOx allowances?

-10-

b. Does either the current five-member AEP Power Pool agreement or the proposed three-member AEP Power Pool agreement place restrictions on what Kentucky Power can do with excess NOx allowances? Explain the response.

c. If Kentucky Power were to transfer NOx allowances to other AEP companies, describe how the transaction would be recorded and priced.

17. Refer to the McManus Direct Testimony, Exhibit JMM-1, page 8 of 9, Table 4. For each project listed on the table, explain in detail what items are included in the cost estimate that have been identified as Other.

18. Refer to the McManus Direct Testimony, Exhibit JMM-2, the Cantor Fitzgerald Environmental Brokerage Services Emission Trading Bulletin NOx and SO₂ Allowance Markets. Kentucky Power should provide updates of this bulletin throughout the processing of this case. On November 20, 2002, December 18, 2002, and January 30, 2003, Kentucky Power should provide the most recent version of the Emission Trading Bulletin.

19. Refer to the Direct Testimony of Dennis A. Lantzy (Lantzy Direct Testimony), page 4.

a. Provide a thorough explanation of the purpose and function of the new water treatment system being constructed along with the Unit 2 SCR. The explanation is to focus on the total purpose and function, and not only the portion associated with the SCR.

b. Explain why Kentucky Power is proposing to only include half of the costs of the new water treatment system in its amendment to its environmental compliance plan.

-11-

20. Refer to page 4 of the Lantzy Direct Testimony, specifically to the reference to the 90 percent NOx removal rate that has been achieved by the 1,300 megawatt (MW) units installed on the entire AEP system.

a. Big Sandy Unit 2 is an 800 MW unit. What, if any, has been the removal rate achieved at other 800 MW units on the AEP system?

b. What has been the removal rate achieved by other AEP-system units, such as the 600 MW units mentioned on pages 6-7 of the Lantzy Direct Testimony?

21. Refer to the Lantzy Direct Testimony, page 9. If Kentucky Power has been experiencing curtailments attributed to poor electrostatic precipitator performance for 30 months, explain why this situation had not been addressed and corrected prior to the time Kentucky Power was to install an SCR on Unit 2.

22. Refer to the Lantzy Direct Testimony, Exhibit DAL-1, which lists the estimated capital costs for the Unit 2 SCR project.

a. Provide a detailed description of the items that make up the Other category of capital costs in the amount of \$16,159,993.

b. Provide workpapers with the detailed calculations of the four cost components included in the Capital Cost Estimate shown at the top of the exhibit.

c. Provide workpapers with the detailed calculations of the three cost components in the O & M Expense Estimate shown at the bottom of the exhibit.

23. Refer to the Lantzy Direct Testimony, Exhibit DAL-2, which includes Kentucky Power's project approval information for the Unit 2 SCR project.

-12-

a. Provide a detailed explanation and breakdown of the \$2.8 million in removal costs shown on page 1 of the exhibit.

b. The summary of revised costs on page 2 of the exhibit includes a column headed Re-estimate. Provide an analysis, for each amount in this column that shows how much of the cost consists of materials, labor, engineering and design, or other, the same four categories shown in the capital cost estimate in Exhibit DAL-1.

c. The narrative at the top of page 2 states that there was a schedule change making Unit 2 the first 800 MW unit to install an SCR rather than Amos Unit #2. Explain in detail why this change was made.

24. Refer to the Lantzy Direct Testimony, Exhibit DAL-3, which lists the estimated capital costs for the Unit 2 electrostatic precipitator upgrade project.

a. Provide a detailed description of the items that make up the Other category of capital costs in the amount of \$3,124,344.

b. Provide workpapers containing detailed calculations of the four cost components included in the Capital Cost Estimate shown on the exhibit.

25. Refer to the Lantzy Direct Testimony, Exhibit DAL-4, which includes project approval information for the Unit 2 electrostatic precipitator rebuild project. Provide a detailed explanation and breakdown of the \$3.4 million in removal costs shown in the exhibit.

26. Refer to the Lantzy Direct Testimony, Exhibit DAL-5. For each of the three projects listed, provide a detailed description of the items that make up the Other category of capital costs.

-13-

27. Refer to the Lantzy Direct Testimony, Exhibit DAL-6, which includes project approval information for the Unit 1 over-fire air and water injection overlay project. Provide a detailed explanation and breakdown of the \$110,000 in removal costs shown in the exhibit.

28. Refer to the Direct Testimony of James J. Youmans, JJY Exhibit 1, pages 5 and 6, Tables 1-1, 1-2, and 1-3.

a. Refer to Table 1-1. Provide a detailed description of the \$9.910 million in costs included in the category Home Office.

b. Refer to Table 1-1. Provide a detailed description of the \$886,000 in costs included in the category Owners Cost.

c. Refer to Table 1-2. Separate the line item Owners & Contingency into its separate components and describe in detail what costs are included as Owners.

d. Refer to Table 1-3. For each project, separate the line item
Owners & Contingency into its separate components and describe in detail what costs
are included as Owners.

29. Refer to Exhibit PRM-1, page 5 of 28, Schedule 3 of the Direct Testimony of Paul R. Moul (Moul Direct Testimony).

a. Provide the *Value Line* information used in the analysis for the Barometer Group.

b. The Barometer Group presented in this schedule includes AEP. Explain the appropriateness of including AEP in the Barometer Group.

-14-

c. The Barometer Group also includes NiSource. According to *Value Line*, NiSource has 3.3 million gas customers and only 432,000 electric customers. Explain the appropriateness of including NiSource in the Barometer Group.

d. FirstEnergy Corp. has 32 percent of its electric generation from nuclear sources. Since Kentucky law restricts the development of nuclear generation and Kentucky Power's generation is coal-fired, explain the appropriateness of including FirstEnergy Corp. in the Barometer Group.

e. Wisconsin Energy has 24 percent of its electric generation from nuclear sources. Explain the appropriateness of including Wisconsin Energy in the Barometer Group.

30. Refer to page 4 of the Moul Direct Testimony. Explain why the Comparable Earnings cost of equity is substantially higher than the cost of equity under the other three methods used by Mr. Moul.

31. Refer to pages 8 and 9 of the Moul Direct Testimony and the discussion of the risks facing the electric industry in the future such as the pricing restraints of regulation and the effect of deregulation of certain segments.

a. Mr. Moul states that cost recovery issues could arise for a utility that no longer has its own electric generating facilities, or that acquires significant quantities of energy from other providers. Provide a description of Kentucky Power's lack of generating facilities and its reliance on energy acquired from other providers.

b. Explain whether regulated prices and cost-of-service regulation provide a measure of security for a utility during periods of volatile energy prices.

-15-

32. Refer to page 9 of the Moul Direct Testimony where he discusses the influence on risk of electricity sold and delivered to industrial customers, stating that sales to high volume customers are usually thought to be of higher risk than sales to other classes of customers. Identify all the other classes of customers considered lower risk than industrial customers.

33. Provide the return on equity awarded in Kentucky Power's last Environmental Surcharge (ESC) case.

34. Refer to page 10 of the Moul Direct Testimony where he states that Kentucky Power has a *Standard & Poor* business profile of 3 while the Barometer Group has an average business profile of 4. Explain in detail the reasons for the lower business profile of Kentucky Power.

35. Explain the effect of the ESC mechanism on Kentucky Power s risk.

36. Provide a list of other AEP companies that have mechanisms similar to Kentucky Power's ESC.

37. Provide a list of the Barometer Group companies that have ESC mechanisms.

38. Refer to page 25 of the Moul Direct Testimony where he discusses Professor Myron Gordon's position that the best measures of growth in the DCF model are forecasts of earnings per share growth. Provide documentation of Professor Gordon's position.

39. Refer to page 28 of the Moul Direct Testimony where he discusses an adjustment for the financial risk associated with the book value of the capitalization.

-16-

Provide copies of any state or federal commission orders demonstrating that this adjustment has been used in determining the awarded Return on Equity.

= H. Jowfer

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DATED: <u>11/06/2002</u>

cc: All Parties