## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

## In the Matter of:

APPLICATION OF KENTUCKY POWER	)
COMPANY FOR AN APPROVAL OF ITS 2011	) CASE NO.
ENVIRONMENTAL COMPLIANCE PLAN, FOR	) 2011-00401
APPROVAL OF ITS AMENDED	)
ENVIRONMENTAL COST RECOVERY	)
SURCHARGE TARIFF, AND FOR THE GRANT	)
OF A CERTIFICATE OF PUBLIC	)
CONVENIENCE AND NECESSITY FOR THE	)
CONSTRUCTION AND ACQUISITION OF	)
RELATED FACILITIES	)

## COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION TO KENTUCKY POWER COMPANY

Kentucky Power Company ("Kentucky Power"), pursuant to 807 KAR 5:001, is to file with the Commission the original and 12 copies of the following information, with a copy to all parties of record, and three copies to the Commission's consultant. The information requested herein is due on or before February 20, 2012. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

Kentucky Power shall make timely amendment to any prior response if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which Kentucky Power fails or refuses to furnish all or part of the requested information, it shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request.

- 1. Refer to Kentucky Power's Response to Commission Staff's First Request for Information ("Staff's First Request"), Item 1.
- a. Explain the basis of the decision reflected in Kentucky Power's December 17, 2010 notice to terminate the East Pool Agreement effective January 1, 2014 without knowing the financial impacts to Kentucky Power or its ratepayers as of the effective date of the notice.
- b. Provide all studies and/or analyses relied upon and used to support Kentucky Power's decision to terminate the East Pool Agreement effective January 1, 2014.
- c. Provide a list of all agreements that would be affected by the termination of the East Pool Agreement among American Electric Power's ("AEP") east subsidiaries, with an explanation by agreement of the financial impact to Kentucky Power and its ratepayers.

- d. If the present East Pool Agreement had been effectively terminated on January 1, 2011, provide the monthly change in revenue requirement for the environmental surcharge reports during the 12 expense months of 2011. Show the monthly amount from ES FORM 1.00 LINE 1 CRR from ES FORM 3.00 less the monthly costs applicable to the surplus companies' plants.
- e. Explain how the Commission can make an informed decision as to Kentucky Power's application ("Application") for the approval of its 2011 Environmental Compliance Plan and Certificate of Public Convenience and Necessity to construct a dry flue gas desulfurization ("DFGD"), without knowing the complete financial impact to Kentucky Power and its ratepayers, if the current East Pool Agreement is effectively terminated on January 1, 2014.
- f. Explain whether the deregulation of electric generation in Ohio had any influence on the decision to terminate the East Pool Agreement effective January 1, 2014 and why terminating the agreement is beneficial to Kentucky Power and its ratepayers.
- 2. Refer to Kentucky Power's response to Staff's First Request, Item 1. Article 8 of the AEP System Interim Allowance Agreement states, "[t]his Agreement shall continue in effect from the effective date until the effective date of any subsequent agreement." Have either Kentucky Power or AEP contemplated a subsequent Interim Allowance Agreement and, if so, what form will it take.
- 3. Refer to Kentucky Power's response to Staff's First Request, Item 4, which states that "[t]he overall scope and cost of the [Big Sandy Unit 1] environmental retrofit was deemed uneconomic due to the high cost and small capacity of the unit." Provide the type of environmental retrofit technology that Kentucky Power considered

for Big Sandy Unit 1 and the estimated cost of that environmental retrofit on a total basis and on a per kW basis.

- 4. Refer to Kentucky Power's response to Staff's First Request, Item 7. Explain how Kentucky Power's 2011 Environmental Compliance Plan would differ if Kentucky Power had begun the installation of a scrubber at Big Sandy Unit 2 in 2004 or 2005 and whether the scrubber technology at that time would have allowed Kentucky Power to meet the then newly established Clean Air Interstate Rule and/or Clean Air Mercury Rule requirements.
- 5. Refer to Kentucky Power's response to Staff's First Request, Item 15. Provide the estimated annual cost of the four environmental projects at other AEP facilities that are expected to be incorporated into Kentucky Power's environmental compliance recovery mechanism along with the Capital Improvement Requisitions ("CI") approved by the respective AEP Subcompany Board for each of the four environmental projects.
  - 6. Refer to Kentucky Power's response to Staff's First Request, Item 18.
- a. Provide a detailed description of the materials purchased in the amount of \$5,966,590 for the wet flue gas desulfurization ("WFGD") associated with the 2004-2006 Preliminary Scrubber Analysis.
  - b. Explain whether this material will be used on the proposed DFGD.
- c. Provide copies of all journal entries that support the \$15,212,425 along with accompanying journal entry explanations of the charges.
- 7. Refer to Kentucky Power's response to Staff's First Request, Item 23.

  Attachment 1 summarizes the 2004-2011 scrubber projects at various AEP plants. The \$/kW column for the 800 MW units appears to have a range between \$385 per kW at

Amos to \$755 per kW at Big Sandy Unit 2, as referenced in Staff's First Request, Item 17, among the different 800 MW units. Explain the reasons for the wide range of \$/kW cost.

- 8. Refer to Kentucky Power's response to Staff's First Request, Item 25. Explain whether or not Kentucky Power used a bid process in the selection of the architect/engineer engaged for the Big Sandy Unit 2 project.
- 9. Refer to Kentucky Power's response to Staff's First Request, Item 26. On page 5, lines 20-23, of the direct Testimony of Robert L. Walton, it states, "[t]he formal process begins with the preparation and approval of a Capital Improvement Requisition (CI)." Kentucky Power's response to Staff's First Request, Item 26.b. states, "[t]he CI was approved by the AEP Subcompany Board on January 26, 2012."
- Explain whether the formal process of the Big Sandy DFGD began a. on January 26, 2012.
- b. If the response to part a. of this request is yes, explain whether the formal process of the Big Sandy DFGD began as a result of Staff's First Request.
- Provide a description of an "AEP Subcompany Board." Who are C. the board members and what are the board's functions within the AEP corporate framework?
  - Refer to Staff's First Request, Item 26, Attachment 1. 10.
- The CI states that "The WFGD scope of work was suspended in a. Explain how Kentucky Power planned to satisfy its capacity and energy 2006...." requirements at the time it entered into the 2007 New Source Review Consent Decree.
- Explain whether or not it is required that the AEP Subcompany b. Board approve CIs that exceed \$900 million in total capital expenditures. If so, has the Case No. 2011-00401

AEP Subcompany Board approved the CI for the construction of the Big Sandy Unit 2 DFGD?

- c. Provide the approval limits of the AEP Subcompany Board and the AEP Board.
- d. Provide the amount and type of expenditures on the Big Sandy DFGD project prior to the AEP Subcompany Board approval on January 26, 2012.
- 11. Refer to Staff's First Request, Item 30. Explain whether the technical requirement of a 0.09lb/mmBtu SO<sub>2</sub> emission rate (98% removal efficiency) is necessary to comply with the requirements of the 2007 New Source Review Consent Decree or whether the higher removal efficiency is required to meet the Cross-State Air Pollution Rule, Mercury and Air Toxics Standards, and National Ambient Air Quality Standard limits.
- 12. Refer to Kentucky Power's response to Staff's First Request, Item 32. Explain when the requested information will be made available.
- 13. Refer to Kentucky Power's response to Staff's First Request, Item 45. The response states, "KPCo does not plan to use the ESPs with the NID technology, resulting in an approximate 2 MW savings in auxiliary at full load."
- a. Explain whether the Electro-Static Precipitators ("ESPs"), will be retired.
- b. If the answer to part a. this request is yes, provide the amount of original cost and associated accumulated depreciation of the ESPs as of September 30, 2009.
  - 14. Refer to the response to Staff's First Request, Item 49.

- a. The response at c. describes the source of the natural gas price as "a combination of the AEP-Fundamental Analysis group's commodity pricing forecast and AEP-FEL's indicative estimates for the cost of gas <u>delivered to</u> the Big Sandy facility." Provide a description of the information that the AEP groups relied on to make their projections and the method they used to develop the natural gas price projections.
  - b. Describe how these forecasts were combined.
- c. It appears that the Fleet Transmission-CSAPR "Base" Fleet natural gas forecast used in the Strategist Model for the base case is 33 to 35 percent above the EIA Annual Energy Outlook 2011 forecast. In addition, the Energy Information Administration Annual Energy Outlook 2012 Early Release indicates that natural gas price forecasts will remain below \$5.00 per thousand cubic feet through 2023. Explain the difference and impact this has on the resultant analysis.
  - 15. Refer to the response to Staff's First Request, Item 50.
- a. Part a. of the response indicates that Kentucky Power is "under the notion that this Commission would ultimately desire such a regional/local 'metal-in-the-ground' solution." Provide support for this comment.
- b. Describe in more detail the reference in part a. to "PJM-RPM market pricing vagaries."
- c. For initial modeling runs, it may be reasonable to assume proxies for market purchases. However, without soliciting capacity and power purchases from the market (PJM or otherwise) and all neighboring generators, explain how Kentucky Power has performed its proper due diligence in seeking a best and least-cost option.
- d. To the extent possible, provide the results of recent short and medium term power purchase/auctions on the PJM system.

- 16. Refer to the response to Staff's First Request, Item 65. Part a. of the response states that Kentucky Power management had a "going-in desire that any long-term solution should maintain generation presence in eastern Kentucky."
  - a. Explain the basis for this comment.
  - b. Describe how this "desire" was incorporated into the analysis.
- 17. Refer to Staff's First Request, Item 72.c. The response refers to Kentucky Power's response to the Attorney General's ("AG") Initial Data Request, Items 22 and 23. It is not clear in those responses that the Commission's question was addressed. Also, it is not clear the responses address why AEP and/or Kentucky Power chose not to go forward with negotiations. Explain where in the responses these questions are addressed.
- 18. Refer to Kentucky Power's response to Staff's First Request, Item 81. On page 8 of the Direct Testimony of Ranie K. Wohnhas, lines 15-17, it states, "[i]n addition, the Company calculated that the gas option would have reduced payroll and property taxes respectively by \$3.2 million and \$461,000 annually." Provide Kentucky Power's estimated amount of payroll and property taxes if it had converted to the gas option.
- 19. Refer to Kentucky Power's response to Staff's First Request, Item 84. Provide the date this analysis was performed.
  - 20. Refer to Kentucky Power's response to Staff's First Request, Item 88.
- a. Using Exhibit LPM-2, page 1, column 3, provide the change in the annual revenue requirement using the 3.78 percent depreciation rate versus the 6.67 percent depreciation rate used in this proceeding.

- b. Using Exhibit LPM-2, page 1, column 3, provide the change in the annual revenue requirement assuming that the current AEP East Pool is terminated January 1, 2014 and also assuming a 3.78 percent depreciation rate.
- c. Explain why Scrubber assets at other AEP plants are depreciated over the remaining life of the plant and not 15 years.
- 21. Refer to Kentucky Power's response to Kentucky Industrial Utility Customer's First Set of Data Requests ("KIUC's First Request"), Item 9, concerning expected retirements of existing assets as a result of the proposed DFGD construction. The Commission has historically required the impact of any such retired assets be removed from base rates and operating expenses, disallowing future recovery of those retired assets.<sup>1</sup>
- a. Provide the original cost and accumulated depreciation at September 30, 2009 of any utility plant equipment which is going to be retired as a result of installing new facilities proposed in this proceeding to comply with environmental requirements.
- b. Provide, by year and plant, the associated retirements for all facilities included in the monthly environmental surcharge reports for the expense months for years 2009, 2010, and 2011.

<sup>&</sup>lt;sup>1</sup> Case No. 96-489, 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 (Ky. PSC Jul. 8, 1997).

- 22. Refer to Kentucky Power's response to KIUC's First Request, Item 17. Explain whether the FERC-approved annual rate is 16.49 percent, as stated in Kentucky Power's response, or 16.44 percent (1.37 percent X 12).
- 23. Refer to Kentucky Power's response to KIUC's First Request, Item 22. Provide, in electronic format with formulas intact and unprotected, the detail, by year, for the basis of the Jurisdictional Annual Revenue Increase, Percent Increase, Monthly Bill Effect with 1,000 kWh usage, and the average monthly usage for years 2012-2016.
- 24. Refer to Kentucky's Power's response to KIUC's First Request, Item 38. Kentucky Power collects its environmental surcharge monthly, which provides "current" cost recovery, with a two-month lag, on environmental projects previously approved as part of an environmental compliance plan. With such a timeframe for recovery of costs, identify and explain in detail all factors Kentucky Power has considered, and believes the Commission should consider, regarding the use of a cash return on the Construction Work in Progress approach for the costs of the proposed Big Sandy Unit 2 DFGD.
- 25. Refer to Kentucky Power's response to Sierra Club, et al.'s Initial Requests for Information ("Sierra Club's First Request"), Item 15.
- a. Explain whether there are retirements associated with the boiler modifications.
- b. If the answer to part a. of this request is yes, provide the total amount of associated retirement.
- c. Does Kentucky Power anticipate that it will remove the associated retirement amount from the environmental surcharge revenue requirement calculations? If no, explain why.

- 26. Refer to Kentucky Power's response to Sierra Club's First Request, Item 17.f., concerning Indiana & Michigan Power Company's ("I&M") Certificate of Public Convenience and Necessity filing in Indiana for a flue gas desulfurization ("FGD") on one of its Rockport Units. Explain whether the FGD is going to be placed on Rockport Unit 1, which is jointly owned by I&M and AEP Generating, or Rockport Unit 2, which is under lease.
- 27. Refer to Kentucky Power's response to Sierra Club's First Request, Item 18.
- a. Was a depreciation study filed in Kentucky Power's last base rate case?<sup>2</sup>
  - b. If the answer to part a. of this request is yes:
- (1) Explain whether a demolition study was prepared or updated for that depreciation study.
- (2) Provide the estimated salvage value by functional plant or plant account used in the depreciation study.
- 28. Refer to Kentucky Power's response to the AG's Initial Data Request ("AG's First Request"), Item 16.
- a. Explain whether Kentucky Power or AEP has had prior experience with Alstom on any major projects.
- b. If the answer to part a. of this request is yes, describe the results from having used Alstom and provide the expectations for the proposed project.

<sup>&</sup>lt;sup>2</sup> Case No. 2009-00459, Application of Kentucky Power Company for a General Adjustment of Electric Rates (Ky. PSC Jun. 28, 2010).

- c. If the Alstom Novel Integrated Desulphurisation technology had been used in Europe since 1995, explain whether this technology was a consideration in the 2004-2006 preliminary Scrubber analysis referenced in Exhibit LPM-1 of the Application.
- 29. Refer to Kentucky Power's response to the AG's First Request, Item 22, Attachment 8.
- a. If AEP or Kentucky Power had purchased the Riverside Generating ("RG") natural gas plant in Zelda, Kentucky at the initial non-binding offer made on March 09, 2010, provide and describe the financial impact on Off-System Sales ("OSS"), pool capacity costs, and PJM capacity costs to:
  - (1) Kentucky Power as a member of the East Pool Agreement;
  - (2) The other members of the East Pool Agreement;
  - (3) The members of the contemplated three member pool; and
- (4) The members of any other agreement between the AEP subsidiaries of the East Pool Agreement.
- b. Provide a further explanation of why AEP or Kentucky Power did not purchase the RG natural gas plant considering the capability of conversion to a 2X1 combined cycle ("CC") and 3X1 CC which would enhance the capacity of the facility.
- c. Prepare an analysis of the purchase of the RG natural gas plant as an option scenario and compare to Options 1 through 4, using the same modeling as used for those four options. Include revenues from OSS, pool capacity costs, PJM capacity costs, and the financial impact to the current East Pool Agreement and the proposed three member pool.

d. Explain whether AEP or Kentucky Power considered including other utilities in a possible purchase/conversion of the RG natural gas plant as a way to offset the excess capacity and mitigate costs.

Jeff Derouen

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**Public Service Commission** 

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