## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

## 2009 INTEGRATED RESOURCE PLAN OF EAST)CASE NO.KENTUCKY POWER COOPERATIVE, INC.)2009-00106

## SECOND DATA REQUEST OF COMMISSION STAFF TO EAST KENTUCKY POWER COOPERATIVE, INC.

East Kentucky Power Cooperative, Inc. ("EKPC"), pursuant to 807 KAR 5:001, is to file with the Commission the original and 10 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before August 7, 2009. 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 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.

EKPC 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 EKPC 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. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations.

1. Refer to page 5-1 of EKPC's Integrated Resource Plan ("IRP") which indicates that EKPC's peak load in 2008 was 3,051 MW.

a. Confirm whether the 2008 peak load was a summer or winter peak.

b. Provide EKPC's peak load for the 2008-2009 winter.

2. Refer to page 5-10 of the IRP, specifically, the reference to Case No. 2008-00472.<sup>1</sup> Provide the timetable, showing the specific steps involved, for completing the Cooper environmental project approved in that case.

3. Refer to page 5-11 of the IRP, specifically, the discussion of EKPC's key forecast assumptions.

a. Appliance efficiency improvements are expected to reduce residential sales by roughly 500,000 MWh over the forecast period. Explain whether a decrease in peak demand is also expected due to these improvements.

b. EKPC's forecast load growth reflects normal weather as defined by the National Oceanic and Atmospheric Administration ("NOAA"). Confirm whether this

<sup>&</sup>lt;sup>1</sup> Case No. 2008-00472, The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of an Air Quality Control System at Cooper Power Station (Ky. PSC May 1, 2009).

is based on the traditional 30-year "normals" developed by NOAA and identify the specific period on which it is based.

4. Refer to Table 5(4)-1 on page 5-16 of the IRP. Explain why the amount of existing resources is shown decreasing from 3,130 MW in 2009 to 2,720 MW in 2010.

5. Refer to page 5-19 of the IRP, specifically, the reference to rate design changes EKPC plans over the forecast period. As part of the settlement in Case No. 2008-00409,<sup>2</sup> EKPC agreed not to make the rate design changes it had proposed in its application.

a. In general, when does EKPC expect to file its next base rate case?

b. Explain whether EKPC expects to propose rate design changes in its next base rate case similar to those it proposed in Case No. 2008-00409.

6. Refer to page 5-19 of the IRP, specifically, the discussion of natural gas prices during 2008. Provide, for calendar year 2008 and the first six months of 2009, EKPC's average monthly price incurred for natural gas purchases.

7. Refer to page 6-3 of the IRP. Identify the environmental stewards and other parties from whom EKPC received feedback regarding proposed Demand-Side Management ("DSM") measures.

8. Refer to the table on page 7-1 of the IRP. Generally, the most significant impacts of the weakened economy have been experienced in 2008 and 2009. In light of that experience, describe:

a. What accounts for the loss of 400 commercial customers on the EKPC system from 2005 to 2006; and

<sup>&</sup>lt;sup>2</sup> Case No. 2008-00409, General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc. (Ky. PSC Apr. 1, 2009).

b. What accounts for the loss of 13, or approximately 10 percent, of the industrial customers on the EKPC system from 2006 to 2007.

9. Refer to page 7-17 of the IRP. For each of the four customer groups listed at the bottom of the page provide the following information:

a. The number of customers on the EKPC system that fall within each of the groups as of the most recent date for which such information is available; and

b. An explanation of how the number of load profile meters installed was determined for each customer group.

10. Refer to page 7-18 of the IRP. Provide the anticipated timetable for the education and training of member cooperative personnel and the eventual rollout of the Real Time Pricing pilot program.

11. Refer to page 8-3 of the IRP. The section on "Carbon Capture Research" indicates that EKPC is a member of the Carbon Management Research Group ("CMRG") along with the four jurisdictional investor-owned electric utilities ("IOUs"). However, EKPC was not a co-applicant in Case No. 2008-00308<sup>3</sup> in which the Commission authorized the IOUs to establish regulatory assets in which to record and defer the amounts they were contributing to the CMRG. Identify when EKPC became a member of the CMRG and provide the amount of its contribution thereto.

<sup>&</sup>lt;sup>3</sup> Case No. 2008-00308, Joint Application of Duke Energy Kentucky, Inc., Kentucky Power Company, Kentucky Utilities Company and Louisville Gas and Electric Company for an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities Related to Certain Payments Made to the Carbon Management Research Group and the Kentucky Consortium for Carbon Storage (Ky. PSC Oct. 30, 2008).

12. Refer to page 8-4 of the IRP. Provide a description of the Cooperative Research Network ("CRN"), and state whether EKPC is a member thereof. If so, provide the amount of the membership dues or fees it pays CRN.

13. Refer to page 8-5 of the IRP. Provide the Southeast Electric Reliability Corporation's report on its recent audit of EKPC's compliance with the reliability standards of the North American Reliability Corporation.

14. Refer to page 8-13 of the IRP. Provide a description of the National Renewables Cooperative Organization ("NRCO"), and state whether EKPC is a member thereof. If so, provide the amount of the membership dues or fees it pays NRCO.

15. Refer to page 8-14 of the IRP where Table 8(2)(c)-1 identifies the resource alternatives included in the optimization model for this IRP. The paragraph immediately following the table lists other resources that, apparently, were not included in the optimization model. Explain why supercritical pulverized coal units, hydropower, wind power and landfill gas projects were not included in the optimization model.

16. Refer to page 8-16 of the IRP, specifically, the discussion of the project to study the use of switchgrass as fuel in EKPC's power plants. The text refers to the December 2008 mix of 70 tons of switchgrass into the coal feedstock of the Gilbert Unit ("Gilbert") and that the proposed Smith Unit 1 is also planned to feature the same technology as Gilbert. Clarify whether Spurlock 4, which became commercial in the spring of 2009, also features that same technology.

17. Refer to pages DSM-8 through DSM-10 in the DSM Technical Appendix. Provide the individual qualitative screening results of each of the DSM measures listed.

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18. Refer to pages DSM-5 and DSM-10 in the DSM Technical Appendix of the IRP, specifically, EKPC's qualitative screening criteria.

a. Explain whether the criteria were developed by EKPC independent
of any reliance on similar criteria developed by other utilities, energy service providers,
DSM specialists, etc.

b. Describe how EKPC determined that 15 out of a possible 20 was the score required in order for a measure to pass the qualitative screening.

c. Identify the individuals at EKPC who conduct the qualitative screening, provide the relevant portions of their backgrounds that make them qualified to conduct the screening, and provide a general description of the steps and/or procedures that constitute the qualitative screening process.

19. Refer to pages 1 of 26 through 26 of 26 of Exhibit DSM-3. For each new DSM program, provide a detailed explanation of how the projected participation levels were determined.

20. Refer to pages 1 of 23 through 9 of 23 in Exhibit DSM-7. Explain why the number of participants and the energy and demand impacts of all the existing DSM programs are reflected at levels that remain fixed for the entire 15-year forecast period ending in 2024.

21. Refer to pages 12 of 23 through 23 of 23 of Exhibit DSM-7. Explain why, for several of the new DSM programs, the number of participants and/or the energy and demand impacts reach a plateau within a few years and either remain at that level or decline over the remainder of the 15-year forecast period. Provide individual responses addressing each of the new programs.

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22. Refer to the Load Forecast Technical Appendix, Table 1-4, page 9.

a. Define Office Use (MWh) shown in column 3.

b. Define % Loss in column 4 and explain how it is calculated.

c. Explain how EKPC Sales to Members in column 5 is calculated.

d. Summing columns 5 and 6 and adding in the transmission losses percentage in column 7 does not equal the amount for Total System Requirements in column 8. Explain how Total System Requirements is calculated.

23. Refer to the Load Forecast Technical Appendix, Section 3.0, at page 19. Over the forecast period, explain whether all new households with electric heat are assumed to install the most efficient HVAC equipment and whether this efficiency improvement is included in the estimated 500,000 MWh decrease in residential sales.

24. Refer to the Load Forecast Technical Appendix, Section 3, Figure 3-5 on page 23. The annual system load factor appears to be much less variable from 2003 – 2007 than in previous years. Provide an explanation for the apparent decrease in load factor variability.

25. Refer to the Load Forecast Technical Appendix, Section 3.0 and the IRP Section 7(2)(g) at page 7-4 and Section 8(3)(e) at pages 8-17 through 8-43. Aside from the direct load control program's winter and summer peak reductions referenced on page 28 in the Technical Appendix, there is no discussion of how DSM programs have been included in either the Total System Requirements or peak Demand Forecasts or how the programs may affect the forecasts. Provide a detailed explanation of how the results of EKPC's DSM programs have been modeled and included in the total system requirements and peak demand forecasts at each stage of the forecasting process.

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26. Refer to the Load Forecast Technical Appendix, Sections 4.0 and 5.0. It does not appear that greenhouse gas emission (GHG) constraints have been included in any of the forecasts.

a. Explain how GHG constraints have been included in any of the base case forecasts.

b. Provide a general discussion of the sensitivity of the regional economic model results to an increase in the price of electricity that might occur if GHG constraints were to be implemented.

c. Provide a specific discussion of the sensitivity of commercial and industrial customers as employers in the region to increases in the price of electricity.

27. Refer to the Load Forecast Technical Appendix, Section 8.0, and the IRP at pages 7-11 and 7-12. It does not appear that GHG constraints have been included in any of the peak demand or scenario forecasts.

a. Explain how GHG constraints have been included or, if not, could be included in any of these forecasts or analyzed separately in another scenario.

b. Provide a discussion of the sensitivity of the peak demand forecasts and the scenario forecasts to an increase in the price of electricity due to GHG constraints.

28. Refer to the Load Forecast Technical Appendix, Section 8.3, pages 76-77 and page 7-12 of the IRP. Clarify whether Case 2 should refer to "mild weather" and "lower loads."

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29. Explain how EKPC has factored current and future technology improvements into its long-term plan to provide electric service more economically, efficiently and reliably, with better environmental performance.

30. Describe EKPC's efforts to establish a fuel mix diversification policy.

31. Refer to page 8-13 of EKPC's IRP. What is the actual or estimated capacity associated with the 14 potential renewable energy projects to be located in Kentucky.

32. Refer to pages 8-2 and 8-3 of EKPC's IRP regarding the Maintaining Electrical and Generating Equipment Reliability ("MEAGER") program utilized to assess and analyze the fitness of EKPC's generating facilities and equipment and the most cost-effective means of maintaining and operating those facilities. Explain if the MEAGER program is also used by other utilities in Kentucky.

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DATED JUL 2 4 2009

cc: All Parties

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