COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR A)
CERTIFICATE OF PUBLIC CONVENIENCE) CASE NO. 2008-00472
AND NECESSITY FOR THE CONSTRUCTION)
OF AN AIR QUALITY CONTROL SYSTEM)
AT COOPER POWER STATION)

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

Pursuant to 807 KAR 5:001, East Kentucky Power Cooperative, Inc. ("East Kentucky") is to file with the Commission the original and 7 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before February 13, 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 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 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.

East Kentucky 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 East Kentucky fails or refuses to furnish all or part of the requested information, East Kentucky shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention should 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 3 of the Direct Testimony of Robert M. Marshall at lines 9-11. Provide detailed descriptions of the "[e]conomic hardships on the EKPC members" and "[t]ransmission and voltage operational issues on the Central Kentucky transmission system" which Mr. Marshall states will occur if Dale 3 and 4 are shut down.
- 2. Refer to page 4 of the Direct Testimony of Julia J. Tucker ("Tucker Testimony") at lines 2-4, which refers to the retirement of Dale Station as exacerbating East Kentucky's problem of being in need of additional baseload capacity.
- a. The consent decree which East Kentucky entered into with the United States Environmental Protection Agency provides, as one option, that Dale Units 3 and 4 be retired. Explain why Ms. Tucker refers to retiring the entire Dale Station.
 - b. Provide the net generating capacity of each of the Dale units.

- 3. Refer to page 4 of the Tucker Testimony at lines 7-10, which indicates that East Kentucky is convinced that "[a]dditional environmental requirements, such as Best Available Retrofit Technology ("BART")" will apply to its Cooper Generating Station at some point in the future. Provide a detailed explanation for why East Kentucky is convinced of this. Include any analyses East Kentucky have performed, or have been performed for East Kentucky, which support this conviction.
- 4. Refer to page 18 of the Direct Testimony of John R. Twitchell at lines 13-16. Recognizing that fuel was not a limiting factor in the selection of pollution control equipment, explain why the fuel cost analysis to which Mr. Twitchell refers covers only 10 years when East Kentucky's overall cost analysis covers a period of 20 years.
- 5. Refer to Exhibit 3 of East Kentucky's application, the October 31, 2008, Cooper/Dale Study Report ("Cooper/Dale Report"), at pages 3-4, which refers to the December 2007 Power Plant Assessment Study prepared for East Kentucky by Burns and McDonnell Engineering Company, Inc. ("Burns & McDonnell Study"). The text at the top of page 4 refers to "[a] simplified busbar analysis" in the Burns & McDonnell Study that was used "[f]or simple screening only." Describe in detail how this analysis and East Kentucky's analysis, documented in the Cooper/Dale Report, differ.
- 6. Refer to the Cooper/Dale Report, at page 19, Section 4.0, and the Burns & McDonnell Study at pages 2-10, Sections 2.2 and 2.2.1. The Burns & McDonnell Study identifies specific economic assumptions included in its analysis, while the Cooper/Dale Report states that it used the RTSim production cost model, which is capable of taking a range of values for each input parameter and running multiple iterations based on the

input ranges. Identify all the input parameters and the ranges of values included in East Kentucky's analysis.

- 7. Refer to the Cooper/Dale Report, at page 41. The paragraph at the top of the page summarizes the 20-year Net Present Value ("NPV") results for Cases B, E, F1, and H1 and states that there is no clear winner from the results of the financial analysis (based on less than a 10 percent difference in the total 20-year NPV cost of two most extreme cases).
- a. Explain whether East Kentucky established an NPV cost difference of less than 10 percent as a criterion for determining there to be a clear winner from the results of its financial analysis, prior to, or after, it had performed that analysis.
- b. Explain how an NPV cost range of 10 percent, as opposed to a smaller or larger range, was determined to be appropriate.
- 8. Refer to Table 1-2 in the Burns & McDonnell Study at pages 1-3, which shows Case H (repower Dale w/CFB) to be the lowest-cost case. However, page 41 of the Cooper/Dale Report shows the 20-year NPV for Case H to be greater than the NPVs of Cases B, E and F. Explain why the two analyses arrived at different results.
- 9. Refer to the Cooper/Dale Report, which shows that Case E (retire Dale) has the lowest 20-year NPV, \$7.6 billion, compared to Case B (scrub Cooper) with a \$7.93 billion NPV.
- a. If East Kentucky were to choose Case E, identify the transmission system upgrades that would need to be implemented.
 - b. Provide the estimated cost of the needed transmission upgrades.

c. Explain whether these upgrades will be needed at some point in the

future if East Kentucky proceeds with Case B. If yes, indicate when they will be needed

and explain whether the estimated cost of these transmission upgrades was included in

the 20-year NPV for Case B.

10. Refer to the Cooper/Dale Report at pages 13-14 and 41. Under Case F1,

Dale 3 and 4 would be repowered with General Electric's 7FA combustion turbines

operating in combined cycle mode. Explain how the 330 megawatt increase in

generating capacity under this scenario is reflected in the RTSim analysis

11. Refer to the Cooper/Dale Report at page 42. Provide the assessment of

East Kentucky's alternatives to meet Best Available Retrofit Technology ("BART"),

which was filed with the Kentucky Division of Air Quality on July 24, 2007. Include, if

necessary, a narrative explanation of how this assessment causes East Kentucky to be

convinced that it "[w]ill need to scrub Cooper Station in the near future to meet the

BART regulation."

Executive Director

Public Service Commission

P.O. Box 615

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DATED JANUARY 30, 2009

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