COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE FOR A)
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY FOR THE) CASE NO. 2006-00463
CONSTRUCTION OF A 345 kV ELECTRIC)
TRANSMISSION PROJECT IN CLARK,)
MADISON, AND GARRARD COUNTIES,)
KENTUCKY)

COMMISSION STAFF'S FIRST DATA REQUEST TO EAST KENTUCKY POWER COOPERATIVE

East Kentucky Power Cooperative ("EKPC"), pursuant to 807 KAR 5:001, is to file with the Commission the original and 5 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before July 16, 2007. 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.

EKPC shall make timely amendment to any prior responses 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 requests to which EKPC fails or refuses to furnish all or part of the requested information, EKPC 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. Provide a transmission map of the EKPC and surrounding power systems, depicting transmission system facilities by voltage level.
 - 2. Provide the Kentucky Transmission Line Siting Project Report.
- 3. Provide a transmission map of the East Central Area Reliability ("ECAR") region.
- 4. Provide one-line breaker diagrams for the Avon, North Clark, and West Garrard 345kV Substations.
- 5. Supply a list of generating stations with over 100 MW of capability within an approximate 100 mile radius of the J. K. Smith Generating Station. Identify each unit at the station by number, summer and winter net capability, fuel source, and type (i.e., base, cycling, etc.).

- 6. Provide one-line breaker diagrams of 138kV and 345kV substations that border the EKPC system at J. K. Smith Generating Station.
- 7. Provide EKPC's current thermal, voltage, stability, and short circuit design criterion.
- 8. Provide the current SERC thermal, voltage, stability, and short circuit design criterion.
- 9. Provide EKPC's summer and winter coincident peak load forecast projections for an approximate 10-year period for the EKPC system, in total and by appropriate sub-areas.
- 10. Describe in detail EKPC load forecasting methodology, including inputs and weather normalization.
- 11. a. Provide the parameters used to rate EKPC transmission components; (i.e., input to the rating programs).
- b. Provide transmission line rating sheets showing the ratings of the various transmission line components and limiting component.
- 12. Refer to the minutes of the July 12, 2005 meeting of EKPC's Board of Directors in which the proposed project was approved.
- a. Explain why the North Clark terminal was substituted for the Sideview terminal.
- b. Explain the West Garrard terminal was substituted for the Stanford terminal.
- c. State whether these substitutions are different projects. If they are different projects, explain why the approved dollar amount does not change.

- d. Explain why the Board approved the project almost one year before the SIS studies were completed in May 2006.
- 13. Refer to Filing Exhibit 3, page 5. Describe the involvement of Photo Science Geospatial Solutions and EKPC in the route selection process.
- 14. Refer to Filing Exhibit 3, page 16 at which the Kentucky Siting Model is described. Recognizing that the model's parameters and their relative weights were developed on a state-wide basis, how did EKPC include more localized considerations in its route selection process for these parameters?
- 15. At Filing Exhibit 3, page 18, the weightings and importance of the various parameters in the Kentucky Siting Model are depicted. Under the "Built Environment" parameter, the "Proximity to Eligible Historic and Archeological Sites" importance factors appear to state that these sites are more suitable when within 300 feet of a new line than when 300 to 600 feet distant.
- a. State whether this interpretation of the importance factors is correct. Explain.
- b. State whether the values used in the Kentucky Siting Model for the "Built Environment" parameter are correct. If not correct, provide the correct values and state the effect of the correct values on the siting analysis. If correct, explain why a route is more desirable when closer to a historic or archeological site.
- 16 At Filing Exhibit 3, page 31, the transmission lines that represent bad rebuilding opportunities are listed. For each listed transmission line, explain why it is a bad rebuilding opportunity.

- 17. Refer to Filing Exhibit 4, page 7. Explain why the decision of Warren Rural Electric Cooperative Corporation to continue to purchase its total power requirements from the Tennessee Valley Authority does not alter the need for the J. K. Smith to West Garrard 345kV line.
- 18. Provide the power factors of each EKPC system member at the time of its 2006 summer and winter peaks.
- 19. Provide the screening analysis that was performed to determine the July 2005 transmission recommendations to the EKPC Board of Directors.
- 20. Provide all documents that were presented or made available to EKPC's Board of Directors for its July 2005 meeting regarding transmission construction recommendations of 345kV facilities.
- 21 Breakout the count data information in the lower table in Filing Exhibit-10 into greenfield, rebuild, and collation data.
- 22. Provide all documents, including manufacturer guaranteed timing, that support a 345kV 1.75 cycle relay time.
- 23. For both the 9.75 cycle 345kV breaker failure time and the 12.75 cycle 138kV breaker failure time, show by diagram the timing of all components of the schemes and break out all margins separately. Provide similar information for the 3.75 cycle 345kV normal clearing time and the 5.00 cycle 138kV normal clearing time.
 - 24. Provide EKPC's 10-year transmission expansion plan.
- 25. Show how future capacity, on-peak energy, and off-peak energy values are calculated.

26. Revise the present value economic analysis for Alternatives 1, 2, and 3 to include energy and capacity loss analyses considering both peak and off-peak

conditions through the time when CFB-3 is installed. Show the timing of major system

additions and how the loss evaluation was calculated.

Beth O'Donnell

Executive Director

Public Service Commission

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DATED: July 6, 2007

cc: Parties of Record