

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY	)	
POWER COOPERATIVE, INC. FOR	)	
A CERTIFICATE OF PUBLIC	)	
CONVENIENCE AND NECESSITY FOR	)	CASE NO. 2005-00458
THE CONSTRUCTION OF A	)	
138 KV ELECTRIC TRANSMISSION LINE	)	
IN ROWAN COUNTY, KENTUCKY	)	

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

Pursuant to 807 KAR 5:001, Commission Staff requests that East Kentucky Power Cooperative, Inc. ("East Kentucky") file the original and 8 copies of the following information with the Commission on or before January 27, 2005, with a copy to all parties of record. 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 witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure its legibility. 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 page 2 of the Prepared Testimony of Mark Brewer ("Brewer Testimony"). When utility services affect land under its jurisdiction, explain whether it is

the United States Forest Service's ("USFS") usual practice to conduct environmental assessments ("EA") rather than having an outside third party conduct the EA.

2. Refer to page 2 of the Brewer Testimony. Explain whether the six alternate routes examined by the USFS in its EA included East Kentucky's Option 1 through Option 3.

3. Refer to page 2 of the Brewer Testimony. Provide a list and discussion of the materials that East Kentucky provided to the USFS that enabled the USFS to conduct its EA.

4. Refer to page 2 of the Brewer Testimony. Discuss whether East Kentucky expressed a ranked preference of its routes to the USFS when the materials were provided to the USFS.

5. Refer to page 2 of the Brewer Testimony. Of the route(s) that did not cross the Daniel Boone National Forest ("Forest") that were evaluated by the USFS, discuss and provide documentation as to the nature of each route that rendered it unacceptable to the USFS when compared to the preferred route through the Forest.

6. Refer to page 3 of the Brewer Testimony. Discuss whether it is common for the USFS to seek outside assistance in performing EAs.

7. Refer to page 3 of the Brewer Testimony. Describe the materials and expertise the USFS required of East Kentucky in order to complete the EA of East Kentucky's proposed route.

8. Refer to page 3 of the Brewer Testimony. Describe the specific assistance East Kentucky provided to the USFS to refine the routes within the specific corridors that had been identified by the USFS.

9. Refer to page 3 of the Brewer Testimony. Explain whether East Kentucky used its new Electric Power Research Institute model for route selection as presented and discussed in Case No. 2005-00207<sup>1</sup> to assist the USFS in selecting potential route corridors or in evaluating potential routes within selected corridors.

10. Refer to page 3 of the Brewer Testimony. Provide a copy of the USFS EA report.

11. Refer to page 4 of the Brewer Testimony. Provide the Internet address for the Permits Policy Manual of the Kentucky Transportation Cabinet, Department of Highways.

12. Refer to page 5 of the Brewer Testimony. Provide a copy of the Appeal to the USFS's Finding of No Significant Impact and a copy of the document rejecting the Appeal.

13. Refer to the Prepared Testimony of Mary Jane Warner ("Warner Testimony").

a. Provide a copy of the transmission study that was performed for the Gilbert Unit No. 3 at the Spurlock Station.

b. Explain why the proposed transmission line was assumed to be in place at the time the study was performed.

14. Refer to page 3 of the Warner Testimony.

a. Provide the transmission study that was conducted for Spurlock Unit No. 4 that is currently under construction.

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<sup>1</sup> Case No. 2005-00207, Application of East Kentucky Power Cooperative, Inc. For a Certificate of Public Convenience and Necessity For the Construction of a 161 kV Electric Transmission Line in Barren, Warren, Butler, and Ohio Counties, Kentucky.

b. Provide a list of all construction projects in the Spurlock Unit No. 4 transmission study that will require a CPCN and for which East Kentucky has yet to request Commission approval.

15. Refer to page 3 of the Warner Testimony.

a. When did East Kentucky first become aware of the need to upgrade its facilities in the Rowan County area?

b. After East Kentucky became aware of the need to upgrade its facilities, describe the process, including a timeline, used by the Transmission Planning Group to track the need for and implementation of the necessary upgrades.

16. Refer to page 3 of the Warner Testimony.

a. Explain whether East Kentucky has had to reduce generation at Spurlock Station or require the dispatch of combustion turbines (“CTs”) at the J. K. Smith Station (“Smith Station”) since bringing Gilbert Unit No. 3 on line, to alleviate overloading problems.

b. If generation at Spurlock Station has been reduced or the dispatch of CTs at Smith Station has been necessary to alleviate overloading problems, provide a list of actions taken and the additional costs incurred, by month, since Gilbert Unit No. 3 came on line in March 2005.

17. Refer to page 6 of the Warner Testimony. Explain how East Kentucky and USFS personnel jointly developed possible corridors for East Kentucky’s transmission line project.

18. Refer to page 7 of the Warner Testimony. On page 2 of the Brewer Testimony, six alternative routes are mentioned as being evaluated by the USFS. The

Warner Testimony mentions seven alternatives. Provide a description of the seventh route.

19. Refer to page 7 of the Warner Testimony. Describe the USFS EA process and explain why it took so long to complete.

20. Describe when the danger of a blackout in the Rowan County area, as described by East Kentucky in Case No. 2005-00089,<sup>2</sup> was first realized and, in accordance with the transmission power flow studies, thermal overload studies, and short circuit studies, describe the various scenarios under which such an event could occur.

21. Refer to page 7 of the Warner Testimony. Provide all correspondence between East Kentucky and the USFS beginning with East Kentucky's informing the USFS of its need to cross the Forest and continuing through the issuance of the EA on January 28, 2005.

22. Who owns the pipelines that enter and exit the Cranston Compressor Station? Describe the number of pipes, the diameter of the pipes, and the pressure under which they operate.

23. Do the pipeline companies have written guidelines for paralleling (collocating) in their right-of-way with electric lines? Have you had any correspondence with the pipeline companies concerning this matter? If yes, provide copies.

24. At some point you have to cross the pipelines to reach your Cranston Electric Substation. Have you reviewed the crossing point with the pipeline companies

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<sup>2</sup> Case No. 2005-00089, Application of East Kentucky Power Cooperative, Inc. For a Certificate of Public Convenience and Necessity For the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky.

involved? Provide any correspondence, and describe any discussions related to the safety of placing an electric transmission line in close proximity to a natural gas compressor station.

25. Have the gas transmission companies been notified regarding the crossing of their right-of-way? Do they need notification legally?

26. Who would actually pay for the re-dispatch costs (\$58 million to \$194 million annually as estimated by Mr. Adams) associated with the north-to-south transfer of 4,000 MW across Kentucky?

27. Mr. Bosta assumes that East Kentucky's customers would pay the entire cost of re-dispatch even though the 4,000 MW transfer is for the benefit of companies other than East Kentucky. What evidence supports the assumption that East Kentucky's customers will bear the entire cost?

28. When was the re-conductoring of the Avon-Boonesboro North Tap 138 kV line completed? If it has not been completed, state the expected completion date.

29. When does East Kentucky expect to increase the capacity of the Avon 345-138 kV transformer beyond its 434 MVA summer rating?

30. Identify the limiting facilities, together with the percentage overload and the outaged facility, that would necessitate re-dispatching Smith Station and Spurlock Station, after the Avon-Boonesboro North Tap upgrade is completed, for the following conditions in each of the summers of 2006, 2007, and 2008:

- a. Normal conditions without north-south transfers.
- b. Normal conditions with north-south transfers.
- c. Single contingency outage without north-south transfers.

- d. Single contingency outage with north-south transfers.
- e. Single contingency plus unit outage without north-south transfers.
- f. Single contingency plus unit outage with north-south transfers.

31. Identify the limiting facilities, together with the percentage overload and the outaged facility, that would necessitate re-dispatching Smith Station and Spurlock Station, after the Avon-Boonesboro North Tap upgrade is completed, for the following conditions in each of the winters of 2005-2006, 2006-2007, and 2007-2008:

- a. Winter normal conditions without north-south transfers.
- b. Winter normal conditions with north-south transfers.
- c. Winter single contingency outage without north-south transfers.
- d. Winter single contingency outage with north-south transfers.
- e. Winter single contingency plus unit outage without north-south transfers.
- f. Winter single contingency plus unit outage with north-south transfers.

32. Provide a copy of the ECAR Winter 2005-2006 Assessment.

33. Explain the circumstances under which Kentucky Utilities Company's ("KU") Goddard-Rodburn 138 kV line was taken out of service for maintenance on September 6, 2005. Was the line forced out of service?

34. Provide the assumptions, calculations, and the National Electrical Code citations used to derive Brewer Exhibit F and Brewer Exhibit G.

35. Brewer Exhibit G is based on a 1,790 foot span length. Because the amount of blowout would be considerably less (and thus less required right-of-way) for a

shorter span length, describe the span lengths East Kentucky would anticipate to be used in the Post-Hearing Parallel route. The average span length for East Kentucky's proposed line when crossing the Forest appears to be about 1,000 feet. Compare and contrast the average span length for the Post-Hearing Parallel route to the average span length for East Kentucky's proposed line.

36. What would be the blowout and resulting right-of-way requirement for the Post-Hearing Parallel route under more typical span lengths?

37. Brewer Exhibit G indicates matched pole placement on the KU and East Kentucky easements. It follows that the KU conductors would experience a similar amount of blowout as East Kentucky's; yet the diagram illustrating the minimum phase separation assumes that there is no blowout of the KU conductor at the same time East Kentucky is experiencing severe blowout under extreme wind conditions. Clarify Exhibit G.

38. Brewer Exhibit G appears to indicate that the conductor (under blowout conditions) can extend significantly beyond the easement (88.5 feet). Would the 100-foot easement provide adequate clearances from potential obstructions at the edge of the easement? Would the same answer apply to East Kentucky's proposed line? Explain in detail.

39. Did East Kentucky have any communications with the Kentucky Department of Transportation regarding the I-64 alternative route other than the letter dated November 27, 2005 (Brewer Exhibit D) and the response dated November 28, 2005 (Brewer Exhibit E)? If yes, describe the nature of those communications and



provide copies of any correspondence or documents that were sent or received by East Kentucky.

40. Did East Kentucky consider the possibility of routing just outside the I-64 right-of-way and not requiring access from I-64? Did the Kentucky Department of Transportation reject that alternative? If East Kentucky considered this alternative, explain why it was rejected.

41. Explain why East Kentucky assumes that USFS will require 3 years to review additional alternatives, especially in view of the fact that the area in question has already been analyzed by the USFS.

42. Describe all communications between East Kentucky and the USFS regarding the Cranston-Rowan transmission project since July 17, 2005. Provide copies of correspondence and documents exchanged between East Kentucky and the USFS since July 17, 2005.

43. Provide a copy of the July 20, 2005 post-hearing inquiries from the Commission's Staff to the USFS and the state and federal highway officials and a copy of the August 3, 2005 response from the USFS and any other responses that may have been received since August 19, 2005.



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DATED: January 20, 2006

cc: Parties of Record