COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY POWER COMPANY FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A 138 KV TRANSMISSION LINE AND ASSOCIATED FACILITIES IN BREATHITT, KNOTT AND PERRY COUNTIES, KENTUCKY (BONNYMAN-SOFT SHELL LINE)	)))))))	CASE NO. 2011-00295

COMMISSION STAFF'S FIRST 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 10 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before November 29, 2011. 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.

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, Kentucky Power 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 2, paragraph 4, of the application where it states, "A 100-foot right of way will be required for the transmission line, with 50 feet of right of way on each side of the centerline."

a. Explain whether the entire 100-foot right-of-way will be cleared of vegetation for construction.

b. Explain the right-of-way maintenance clearing cycle proposed after construction to ensure reliability.

2. Refer to page 5, paragraph 11, of the application where it states, "To ensure the flexibility necessary to address last-minute or unanticipated issues regarding the construction of a transmission line, Kentucky Power requests authority to move the approved centerline 250 feet in either direction (i.e., within a 500-foot corridor) so long as: (1) the property owner onto whose property the line is moved was notified of this

proceeding in accordance with 807 KAR 5:120, Section 3(2); and (2) the property owner who is subject to the move agrees in writing to the requested move."

a. Explain whether this request will increase the amount of right-of-way costs. If yes, does this change the total cost of the proposed $62.5 million project cost?

b. Explain whether Kentucky Power has discussed this request with property owners.

3. Refer to page 9 of the Direct Testimony of Ranie K. Wohnhas ("Wohnhas Testimony"), Section VI., Financial Aspects of the Proposed Construction, where it states, "The line and related facilities are expected to cost $62.5 million."

a. Provide, by electric plant account, how the $62.5 million is anticipated to be capitalized.

b. Provide, by electric plant account, any associated retirement of plant property and equipment.

c. Explain whether there will be any associated operation and maintenance costs during construction.

4. Refer to page 9 of the Wohnhas Testimony where it states, "The Company previously estimated a cost of approximately $40 million for the project." Since the cost is now estimated to be $62.5 million, will Kentucky Power keep the Commission informed as to any significant changes in construction costs, including an increase or decrease of 10 percent or more, before and/or during construction?

5. The Electric Power Research Institute/Georgia Transmission Corporation's ("EPRI") "Overhead Electric Transmission Line Siting Methodology" and

the "Kentucky Transmission Line Siting Methodology" have been adopted for use in Kentucky and used previously before the Commission.[1] The following questions concern the Kentucky EPRI Methodology and the one employed by Kentucky Power in Exhibit 13 of the application referred to as the GAI/KPC Methodology as presented by GAI Consultants, Inc.

a. Why did Kentucky Power use the GAI/KPC Methodology instead of the Kentucky EPRI Methodology?

b. How is the geographic information system ("GIS") methodology that GAI/KPC employed different from the Kentucky EPRI Methodology?

c. How is future land use defined and used in the Kentucky EPRI Methodology and in the GAI/KPC Methodology?

d. If Kentucky Power maintains that the GAI/KPC Methodology is better than the Kentucky EPRI Methodology, explain why.

6. Refer to Exhibit 13 of the application regarding slope. Slope was not a quantified parameter in Table 1, 2, or 4 of Exhibit 13.

a. How is a GIS layer for slope defined and used in the Kentucky EPRI Methodology?

b. How did Kentucky Power use GIS data to determine severe slopes and to minimize the impact to severe slopes?

7. Refer to Exhibit 13 of the application regarding mining activity.

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[1] Case No. 2007-00177, The Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line in Ohio County, Kentucky (Ky. PSC Oct. 30, 2007.)

a. How was the coal outcrop data used as an analysis parameter (see Table 1)?

b. How were the statistics for the previously mined areas in Table 2 determined? Describe the GIS layers that were used.

c. How were the statistics for current and future mining in Table 2 determined? Describe the GIS layers that were used.

d. What other maps, beyond the active permit maps available from the Kentucky Mine Mapping System, were used in the GIS analysis for future mining? If other maps were used, provide a copy of those maps.

e. Provide a map for the area of all of the study segments showing the following additional features derived from active permit maps available from the Kentucky Mine Mapping System:

(1) Active mining area;

(2) Proposed mining areas by year;

(3) The boundary of the permit areas;

(4) Mining method; and

(5) 1000-foot blasting boundary, if applicable.

Include a list of the active permit maps with the permit number and name of the permittee.

f. Describe, for each type of mining, how a transmission line and its towers/poles, and access to them, would interfere with the mining process.

g. How much of the underground area is available for deep mining in the area surrounding a transmission tower?

h. How much of the surface area of the right-of-way of the proposed electric transmission line is available for surface mining?

i. Are the owners or lessees of mineral rights reimbursed for those mineral rights along an electric transmission right-of-way?

j. If the answer to 7.i. above is yes, how is that amount calculated?

8. How did Kentucky Power identify areas for future land use for industrial/commercial development in Table 1, Exhibit 13?

a. Why did those areas not appear as a parameter in Table 2 or Table 4?

b. If any areas for future land use for industrial/commercial development are in the study area, provide a map showing their locations.

9. One of the "Constructability Issues" identified in Table 1 of Exhibit 13 of the application is Relocation Risk.

a. What is Relocation Risk and how was that risk quantified in Table 4?

b. Refer to page 7 of the testimony of George T. Reese ("Reese Testimony.") Has Kentucky Power or American Electric Power ever relocated an electric transmission line of 138 kV or above in Kentucky?

c. If yes, what was the reason for the relocation and who bore the cost of that relocation?

d. Provide data for Potential Relocation Risk for Table 2.

10. Provide a new series of maps, similar to those provided in Exhibit 3, that includes:

a. The 2010 imagery in the background (instead of the United States Geological Survey topographic maps).

b. Roads.

c. All Property Valuation Administrator ("PVA") parcel boundaries for all of the alternative routes, and in particular the PVA parcel boundaries for the preferred route. "Additionally Notified Landowners" may be excluded. The parcels along the preferred route must be labeled with the Parcel Reference for Map.

d. The location of the towers for each route on the map, classified by type (see Exhibits 4, 5, and 6).

11. Refer to Exhibit 13 of the application. Provide the number of towers and type of tower for each segment in Table 2 and each route in Table 4.

12. Refer to page 7 of the Reese Testimony. Were any maps with tower/pole locations shown to the public or used in the discussion of right-of-way issues with property owners or lessees?

13. Refer to Exhibit 13, page 14, of the application. One of the issues concerning construction identified in Table 1 of Exhibit 13 is cost. "The estimated costs to construct Alternative 3 are the lowest as compared to the other alternatives (approximately 10 percent less); this is a factor of line length, number of line angles, terrain and forest clearing." Table 4 has a note that "Cost approximation includes right-of-way, structure material, wire, installation, access roads and clearing." No cost figures are provided in Table 4.

a. How was cost calculated as a parameter?

b. Provide cost figures for each of the segments in Table 2 and each of the routes in Table 4.

14. Refer to Exhibit 13, page 10, of the application. Provide a map showing the three general potential corridors that were initially identified along with a straight line between the Bonnyman Station and the Soft Shell Station.

15. Refer to Exhibit 13, Figure 2, of the application. Explain why there was no route through the area defined by Segments O, G1, H1, J1, K1, S, and Q?

16. Kentucky Power's preferred route crosses Route 80 five times. At other times it parallels the ridge top along Route 80.

a. Provide a map which shows where the transmission line is visible along Route 80. Include the TransAmerica Bike Trail on this map.

b. Has Kentucky Power considered the potential for landslides along Route 80 as a result of construction or maintenance of the right-of-way along the preferred route?

c. Did Kentucky Power consult with the Kentucky Department of Transportation regarding the preferred route?

17. Refer to Exhibit 13, Table 1, of the application. At Table 1, trails are classified as a parameter for "Recreation and Aesthetic Resources."

a. How is a trail defined?

b. Are there any trails that a truck could traverse?

c. Can any of the trails in this study be used as access to a right-of-way?

18. Refer to Exhibits 7 and 8 of the application. The brown building in the photograph at page 1 of Exhibit 7 appears to be close to the proposed expansion of the Bonnyman Substation.

a. Who is the owner of that building?

b. How is the building being used currently?

19. Refer to Exhibit 8 of the application. Provide a map at 1:2,000 that shows the parcels with their identification numbers, background imagery, proposed expansion features, and the preferred route of the new transmission line with towers/poles. Include proposed right-of-way and tagged vector contours. Include all parcels adjacent to the existing and proposed substation, and proposed transmission line, up to and including the intersection with Kentucky-267 (Harveyton Road).

20. Refer to page 7 of the Reese Testimony. There is reference to a "stream buffer conservation easement."

a. What is a stream buffer conservation easement?

b. Where is it located in the study area?

21. Was the proposed 50 megawatt biomass-fired electric generating facility,[2] to be located in Perry County, Kentucky, a factor in Kentucky Power's expansion of its transmission facilities?

22. Refer to paragraph 8 of the application. Will the replacement of the 65-foot towers with 100-foot towers require any federal, state, or local regulatory approval? If yes, has that approval been granted?

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[2] Certificate to Construct and Operate a Merchant Electric Generating Facility and a 69 kV Transmission Line in Perry County, Kentucky" (Ky. State Board on Electric Generation and Transmission Siting May 18, 2010).

23. Refer to paragraphs 10 and 12 of the application and Exhibit 12, pages 14-17, of the application.

a. Provide a detailed explanation as to why the total project cost increased from $38.5 million in the original April 2009 estimate to the $62.5 million estimate in September 2011.

b. Explain why the 2011 transmission line and right-of-way costs increased so dramatically from the 2009-2010 estimates to the 2011 estimates.

c. Provide a comparison of the total estimated current cost for each of the four alternative routes that were not chosen as the preferred route.

d. Provide a schedule comparing the cost estimate for each parcel on the right-of-way in the original 2009-2010 estimates to the 2011 estimates, including the percentage of change for each parcel for each of the five alternatives.

e. Provide a schedule comparing the operating costs and annual ad valorem taxes for each of the five alternatives.

24. Refer to paragraph 12 of the application. Provide an update regarding the acquisition of the necessary rights-of-way for the preferred alternative.

25. Refer to paragraph 18 of the application. Provide the 2009 and current cost of the other alternatives considered with an explanation as to why each alternative was rejected.

26. Provide the construction timeline for the proposed project.

27. Refer to Exhibit 12 of the application. Further, refer to page 3 under Hazard Area Improvement Plan and page 4, Transmission System Performance before Improvements. Provide the load-flow result for winter load conditions for years 2011-

2018 using the most recent base case and showing various single- or double-contingency outages as indicated in the application and that would cause problems such as overloads and low voltage affecting the Hazard (approximately 300 MW) area load. Provide a color-coded flow plot diagram showing the overloads and low voltage problems.

28. Provide a load-flow analysis plot showing results of how the proposed second shell station to Bonnyman Station 138 kV line and the 130 MVA 138/69 kV transformer at the Bonnyman Station source addition for the Hazard region would alleviate thermal overload and low voltage issues for the 138 kV and 69 kV systems in this area during the study period of 2011 to 2018.

29. Provide a table showing all 161 kV, 138 kV, and 69 kV transmission line thermal ratings for the normal and emergency loading conditions, and indicating all transmission facilities, components, and equipment in the substation that would be a limiting factor during contingency outage conditions in the Hazard area.

30. Does any generation unit exist in the Perry County study area? If yes, does Kentucky Power perform transient stability studies to insure that generators remain synchronized to the system during faulted conditions in Hazard area?

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cc: Parties of Record

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