COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY TO)	CASE NO.
PERFORM UPGRADE, REPLACEMENT, AND)	2019-00154
INSTALLATION WORK AT ITS EXISTING)	
SUBSTATION FACILITIES IN PERRY AND LESLIE)	
COUNTIES, KENTUCKY)	

COMMISSION STAFF'S SECOND 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 an electronic version of the following information. The information requested herein is due on October 28, 2019. Responses to requests for information in paper medium shall be appropriately bound, tabbed, and indexed. Electronic documents shall be in portable document format (PDF), shall be searchable and shall be appropriately bookmarked.

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 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.

Kentucky Power shall make timely amendment to any prior response if Kentucky Power 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 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. When filing a paper containing personal information, Kentucky Power shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

- 1. Refer to the application, paragraph 9. Explain whether PJM Interconnection LLC (PJM) has made any changes in the definitions, etc., in the manner it classifies baseline and supplemental projects since the filing of Case No. 2017-00328.¹ If so, identify and explain the changes and provide a copy of the relevant provisions.
- 2. Refer to the application, paragraph 10, regarding the statement that the proposed improvements to the Hazard Substation will be contained within the existing substation footprint. Explain whether Kentucky Power would have any options to acquire

¹ Case No 2017-00328, Electronic Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission line in Perry and Leslie Counties, Kentucky and Associated Facilities (Ky. PSC Nov. 14, 2018).

additional property other than the existing development if the proposed Hazard Substation improvements create an unexpected issue requiring additional space greater than the existing substation footprint.

- 3. Refer to the application, paragraph 25. Identify the PJM minimum design standards with which the Hazard and Wooten substations do not comply.
- 4. Refer to the application, paragraph 28. Identify the current safety, clearance, or structural standards in which the Hazard and Wooten substations do not comply with the applicable NESC requirements.
- 5. Refer to the application, paragraphs 11 and 56, regarding the load in the Hazard area. Paragraph 11 lists the load at 30 MW; paragraph 56 lists the load at 300 MW. Provide the correct amount of load.
- 6. Refer to the application, paragraph 44. Identify any projected operating and maintenance cost savings expected at the Hazard and Wooten substations if the Commission approves the proposed project.
- 7. Refer to Kentucky Power's response to Commission Staff's First Request for Information (Staff's First Request), Item 1.
- a. Identify where in the Ali Testimony that discusses the need for a spare three-phase 161/138 kV transformer during planned outages or routine forced outages.
- b. Provide an example of when a planned outage would include maintenance of an existing transformer that would require that transformer to be taken offline and state how often this type of maintenance would occur.

- c. Explain what is meant by "routine forced outages" and state whether it is industry standard or typical for an electric utility to carry a spare transformer for reliability purposes resulting from routine forced outages.
- d. State whether Kentucky Power conducted a cost-benefit analysis to evaluate whether the investment in the three-phase 161/138 kV spare transformer is economical in terms of improving reliability during planned outages and more routine forced outage situations.
- e. State whether Kentucky Power has a mobile substation that would address the reliability needs during planned outages or routine forced outages at the Hazard Substation.
- 8. Refer to Kentucky Power's response to Staff's First Request, Item 4. Given that all of the proposed transmission elements were identified within the last ten years as needing to be addressed, explain in more detail which of the factors identified in this response and in the Direct Testimony of Kamran Ali, Exhibit KA-1, page 15 of 16, prompted Kentucky Power to delay replacing or upgrading those project elements that were determined to have significant deterioration until now.
 - 9. Refer to Kentucky Power's response to Staff's First Request, Item 5.a.
- a. Provide a brief description of an electrical discharge of high energy, thermal faults, stray gassing, and overheating due to system conditions and explain what causes these events.
- b. Explain the cause of the Transformer #4 failure in May 2017 and provide the life expectancy of that transformer at the time of its failure.
 - 10. Refer to Kentucky Power's response to Staff's First Request, Item 6.

- a. Provide the SAIDI and SAIFI for the Hazard and Wooten substations for the three calendar years ended December 31, 2018.
- b. Identify and explain the reason(s) for all outages at the Hazard and Wooten Substations for the three years ended December 31, 2018.
- 11. Refer to Kentucky Power's response to the Attorney General's Initial Data Requests, Item 2, regarding the two alternatives that were presented at the PJM stakeholder process for the Hazard Substation. Identify those two alternatives, provide the cost estimates associated with each alternative, and explain why the one alternative was considered not practicable.

Gwen R. Pinson Executive Director

Public Service Commission

went. Puesson

P.O. Box 615

Frankfort, KY 40602

DATED _____OCT 10 2019

cc: Parties of Record

*Christen M Blend American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216 *Honorable Mark R Overstreet Attorney at Law Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

*John W. Pollom Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634 *Rebecca W Goodman
Assistant Attorney General
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Justin M. McNeil Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Kent Chandler Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Kentucky Power Company 855 Central Avenue, Suite 200 Ashland, KY 41101

*Katie M Glass Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

*Larry Cook Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204