COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT TWO 161 KV TRANSMISSION LINES IN HANCOCK COUNTY, KENTUCKY

CASE NO. 2015-00051

COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION TO BIG RIVERS ELECTRIC CORPORATION

Big Rivers Electric Corporation ("Big Rivers"), pursuant to 807 KAR 5:001, is to file with the Commission the original and seven copies of the following information, with a copy to all parties of record. The information requested herein is due on or before May 27, 2015. 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.

Big Rivers 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 Big Rivers fails or refuses to furnish all or part of the requested information, Big Rivers 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 filing a document containing personal information, Big Rivers shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the document so that personal information cannot be read.

1. Refer to the application, paragraph 8, the initial portion. Provide the number of jobs that the expansion of the Aleris Rolled Products, Inc. ("Aleris") facility is expected to provide.

2. Refer to the application, paragraph 8, the second portion, which provides a list of projects associated with the proposed transmission lines that do not require a certificate of public convenience and necessity ("CPCN"), but which will enable Big Rives to serve the expansion of the Aleris mill.

a. One of these projects is the construction of a 0.7-mile, 161-kilovolt ("kV") transmission line out of Big Rivers' Hancock County substation. Which Aleris substation will this transmission line connect to?

b. If the transmission lines proposed in this case were not constructed, explain whether it would be necessary for any of the identified projects to be undertaken and why.

Case No. 2015-00051

-2-

c. Provide the cost of each of the non-CPCN projects identified in paragraph 8.

3. Refer to the application, paragraph 12, which references the cost of the project and states, "The project does not involve sufficient capital outlay to materially affect the existing financial condition of Big Rivers."

a. Explain whether Big Rivers will be seeking any reimbursement from Aleris for a portion or all of the capital cost of the project. If not, explain why.

b. Provide a detailed cost breakdown of the items that are included in the annual operating costs of \$27,000.

c. The total project cost is estimated to be \$1.4 million. On page 96 of the application, Exhibit C, Table 17 shows that the combined project cost for the preferred routes B and D totals \$2,217,732. Explain and reconcile this discrepancy.

4. Refer to the application, paragraph 20, which provides the estimated total cost of the proposed transmission lines, including the costs associated with the necessary easements. Provide a detailed, tabulated cost estimate for the proposed transmission facilities.

5. Refer to the application, Exhibit B, Aleris Transmission Service Plan, page 1, Introduction and Executive Summary. Given that Big Rivers currently serves the existing 28-megawatt ("MW") Aleris load through its existing 161-kV system, explain why it is necessary to construct a new 1.7-mile, 161-kV circuit to serve the existing load.

6. The titles of the various analyses in Exhibit B refer to Coleman In-Service and Coleman Out-of-Service. Explain whether the "Coleman" reference is the currently idled Coleman generating unit or the Coleman EHV substation.

-3-

7. Refer to the application, Exhibit C, the Electric Transmission Line Route Selection Technical Report, in which the proposed routes are designated as Lewisport Aluminum Mill ("LAM") 1 and 2. At pages 105-106, the Alternate Route Analysis results show Route E as having a better score for LAM 1 than Routes C or D, and Route B as having a better score for LAM 2 than Route A. The Expert Judgment analysis (pages 111-119) results in Route D's having the best score for LAM 1, rather than Route E, and concludes that Route B has the best score for LAM 2, matching the results of the Alternate Route Analysis.

a. Under "Project Management" on page 112, the first bullet refers to Route E as having an extra transmission line crossing that contributes to a higher cost. The cost calculations on page 96 show Route E's cost at \$972,000, which is roughly \$164,000 less than the cost of Route D. Explain whether the higher cost associated with the transmission line crossing is built into the \$972,000 amount and provide an estimate of the amount of this cost.

b. Refer to page 113, under "Reliability." The last bullet reflects that Route C received a value of 2 and states that it is worse that Route D. Explain what distinguishes Routes C and D from a reliability perspective.

c. Refer to page 113, under "Maintenance Cost" and "Double Circuit Opportunity." The second bullet under "Maintenance Cost" indicates that Route E has a double circuit opportunity, while the first bullet under "Double Circuit Opportunity" states that Route E has no such opportunities. Explain the apparent discrepancy.

d. Refer to page 116, under "Maintenance Cost" and "Double Circuit Opportunity." The first bullet under "Maintenance Cost" indicates that Route A has a

-4-

double circuit opportunity, while the first bullet under "Double Circuit Opportunity" states that Route A no double circuit opportunity. Explain the apparent discrepancy.

8. Refer to the map of the proposed routes attached to the application. On the map labeled "Transmission Lines 1 & 2 Selected Routes" there is one gray line going to the area that is the location of the new northern substation (the end of Line 1), and then two gray lines appear to go from the new northern substation into the Aleris plant. The gray lines are labeled "Future 69" in the legend. The legend also has a "Future 161" line, but there does not appear to be such a line on the map. How does this information on the map pertain to paragraph 8 of the application, which describes the need for construction of a 0.7-mile, 161-kV transmission line out of the Big Rivers' Hancock Substation?

9. On the map that is attached to the application and labeled "Transmission Lines 1 & 2 Selected Routes" are the parcels labelled as "Tract 20, 4, 5, 13, 1, 12, 10, and 3" all owned by Commonwealth Aluminum Lewisport, LLC?

10. Refer to the map that is attached to the application with the cover sheet titled "Map of Alternative Routes Considered for Proposed Transmission Lines" and labeled "Alternative Routes Not Selected" in the lower right corner of the map. Route A (*see* application, Exhibit C, page 87 of 121, Figure 39), which was one of the routes not selected is not on this map. In addition, the routes that were selected, Routes B and D (*see* Exhibit C, page 119 of 121), are on the map. File a revised version of the "Alternative Routes Not Selected" map by changing the title in the lower right corner of the map, and identifying the substations.

Case No. 2015-00051

-5-

11. What is the relationship of Commonwealth Aluminum Lewisport, LLC to Aleris?

12. How many years does Big Rivers expect both the existing and the proposed 161-kV transmission facilities to be able to continue providing reliable service to Aleris?

13. What is the forecasted annual percentage load growth for the next 10 years for the Lewisport, Kentucky, study area?

14. Provide the time estimate required to complete the construction of the proposed transmission lines.

15. When does Big Rivers anticipate the need to increase the capacity of the Coleman Extra High Voltage Substation 161/13.8-kV transformer beyond its 2025 summer MVA rating?

16. Would the 100-foot easement provide adequate clearances to potential obstruction at the edge of the easement even under extreme wind conditions?

17. Provide the one-line system diagrams for Big Rivers' transmission and sub-transmission power systems in the LAM1 and LAM2 study areas. These diagrams should show configurations of transmission facilities including conductor and transformer sizes and their normal and emergency summer and winter thermal ratings.

18. Do the proposed routes for the new transmission lines intersect or run parallel with any known gas transmission or gas distribution pipelines?

19. Provide a more detailed map or maps showing pole placement and type of pole, including identification of the substations, parcel lines, parcel owner name(s) and

-6-

PVA identifier from Exhibit G, and easement along the selected routes Line 1 and Line 2.

20. Provide the status of Big Rivers' acquisition of the necessary easements for the proposed transmission line routes.

Caron D. Grunwell

Jeff Derouen Executive Director Public Service Commission P.O. Box 615 Frankfort, KY 40602

DATED MAY 1 5 2015

cc: Parties of Record

*Thomas K Baird 1092 Howards Mill Rd Calhoun, KENTUCKY 42327

*Big Rivers Electric Corporation 201 Third Street P. O. Box 24 Henderson, KY 42420

*Honorable Tyson A Kamuf Attorney at Law Sullivan, Mountjoy, Stainback & Miller, PSC 100 St. Ann Street P.O. Box 727 Owensboro, KENTUCKY 42302-0727

*Honorable James M Miller Attorney at Law Sullivan, Mountjoy, Stainback & Miller, PSC 100 St. Ann Street P.O. Box 727 Owensboro, KENTUCKY 42302-0727