## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC	)	CASE NO.
CORPORATION FOR A GENERAL ADJUSTMENT	)	2011-00036
IN RATES	j	

## COMMISSION STAFF'S INITIAL INFORMATION REQUEST TO KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

Kentucky Industrial Utility Customers, Inc. ("KIUC"), 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 June 22, 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 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.

KIUC 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 KIUC fails or

refuses to furnish all or part of the requested information, it 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.

- 1. Refer to page 9, lines 1-5, of the Direct Testimony and Exhibits of Henry W. Fayne ("Fayne Testimony"). Mr. Fayne states that there were 34 smelters in the U.S. in 1978 producing 31 percent of the world supply of aluminum. Today, there are ten smelters producing only 4.2 percent of the world's supply.
- a. Explain where the production has moved and whether the price of electricity is the only reason smelters have left the U.S.
- b. Considering the estimated cost impacts of new and amended federal environmental regulations, explain whether Mr. Fayne believes that the aluminum industry in the United States can survive the impact of complying with the new regulations.
- 2. Refer to page 9, line 18, of the Fayne Testimony and Exhibit HWF-1. Both refer to the average global price of electricity for smelters, excluding China, of approximately \$27 per MWh. Explain why the "global price" does not include the price of electricity for smelters operating in China. If the price in China is available, provide it.
- 3. Refer to pages 18-19 of the Fayne Testimony. Provide copies of the following commission orders referenced by Mr. Fayne, which included decisions that specifically addressed cost-of-service issues for aluminum smelters:

- a. Missouri commission Case No. ER-2010-0036;
- b. Ohio commission Case No. 09-119-E1-AEC; and
- c. West Virginia Case No. 05-1278-E-PC-PW-42T.
- 4. Refer to pages 23-24 of the Fayne Testimony concerning a "statewide solution" to address the issue of the price of electricity for the Sebree and Hawesville smelters.
- a. Describe the extent to which KIUC believes solutions of the type referenced by Mr. Fayne, i.e. a statewide economic development fund, tax credits, redistribution of the smelter load among multiple utilities, etc., will require legislative involvement.
- b. Describe the extent to which KIUC believes solutions of the type referenced by Mr. Fayne are within the authority of the Commission.
- 5. Provide a schedule that shows the annual production capacity at the Sebree smelter in both metric tonnes and in pounds, and show the total annual revenues that would be generated from selling that annual capacity at each of the following prices per metric tonne of aluminum: \$1,300; \$1,800; \$2,300; \$2,800; and \$3,000. Include all workpapers that support the calculations.
- 6. Provide a schedule that shows the annual production capacity at the Hawesville smelter in metric tonnes and in pounds, and show the total annual revenues that would be generated from selling that annual capacity at each of the following prices per metric tonne of aluminum: \$1,300; \$1,800; \$2,300; \$2,800; and \$3,000. Include all workpapers that support the calculations.

- 7. Refer to the Direct Testimony of Paul A. Coomes at page 3. The table on that page, at line 9, lists "Corporate income and license taxes, State of Kentucky \$350,000."
- a. Was this amount provided to Dr. Coomes by the smelters or was it estimated by Dr. Coomes? If it was estimated, provide a detailed explanation of how the amount was determined and include all work papers that support the estimate.
- b. Describe in detail the specific type of license taxes paid by each of the smelters to the State of Kentucky.
- 8. Refer to page 5 of the Direct Testimony of Dr. Matthew J. Morey ("Morey Testimony"). Dr. Morey states that the sale of energy to the smelters over the three years 2011-2013 will contribute an average net margin of approximately \$83 million per year more than can be obtained through Big Rivers' sale of energy to the wholesale market. Explain whether Dr. Morey believes that the smelters could achieve savings of this magnitude by purchasing energy directly from the wholesale market.
- 9. Refer to the Morey Testimony at page 6, line 11. Dr. Morey states that Big Rivers would only be able to sell an average of about 4,200 GWh per year in the wholesale market and, further, that Big Rivers' generating units are frequently "out of the market." Provide all supporting documentation and the calculations performed to support this claim and explain the meaning of the phrase "out of the market" as used in the testimony.
- 10. Refer to the Morey Testimony at page 15, lines 1-9. Dr. Morey discusses why he did not extend his analysis beyond 2014. With new federal environmental requirements going into effect in 2014 and 2015 and their potential impact on the cost of

electricity, explain whether the impact of these changes should be considered and what that impact might be to Big Rivers' opportunities in the wholesale market.

- 11. Refer to the Morey Testimony, Exhibit MJM-3, which shows that during the period 2011-2013, the smelters will pay Big Rivers a total of \$1,115,513,000. Based on Dr. Morey's analysis of prices in the wholesale energy market, how much would the smelters pay over this same time period if their energy purchases were from the wholesale market rather than from Big Rivers?
- 12. Refer to the Morey Testimony. State any impact the Vectren transmission line approved by the Kentucky State Board on Generating and Transmission Siting in Case No. 2010-00223<sup>1</sup> would have on Big Rivers' position in the wholesale market and whether that impact was taken into consideration in Dr. Morey's analysis.
- 13. Refer to page 11 of the Direct Testimony of Charles W. King and Schedule 1 of Exhibit (CWK-1). Both the testimony and exhibit indicate that Mr. King's determination of KIUC's recommended depreciation rates pertains only to Big Rivers' production plant. However, there is no discussion of why his analysis was limited to production plant. Clarify whether the lack of discussion of depreciation on transmission or general plant should be interpreted to mean that KIUC takes no exception to Big Rivers' proposed depreciation rates for transmission and general plant.

<sup>&</sup>lt;sup>1</sup> Case No. 2010-00223, Application of Southern Indiana Gas and Electric Co. D/B/A Vectren Energy Delivery of Indiana, Inc. for a Certificate to Construct an Electric Transmission Line from its A.B. Brown Plant to the Big Rivers Reid EHV Station (Ky. PSC Dec. 21, 2010).

- 14. Refer to pages 10-11 of the Direct Testimony and Exhibits of Lane Kollen ("Kollen Testimony"), specifically, the discussion of Big Rivers' proposal for the current recovery of interest of Construction Work in Progress ("CWIP").
- a. Explain whether Mr. Kollen is aware that the current recovery of interest on CWIP has been authorized by the Commission for East Kentucky Power Cooperative, Inc. ("EKPC") and, for Louisville Gas and Electric Company and Kentucky Utilities Company, the Commission has authorized a current return on CWIP in lieu of accruing an Allowance for Funds Used During Construction ("AFUDC").
- b. Mr. Kollen offers three reasons for opposing Big Rivers' proposal. Explain whether Mr. Kollen agrees that:
- (1) Current recovery of, or expensing, interest on CWIP results in the final installed cost of a construction project being lower than if recovery were deferred through the capitalizing of interest on CWIP.
- (2) Not capitalizing interest on CWIP, or not accruing AFUDC, results in a lower revenue requirement associated with a given construction project, or item of utility plant, over the life of the item of utility plant.
- 15. Refer to pages 14-16 of the Kollen Testimony, which address the inflation portion of Big Rivers' proposed adjustment to non-outage related maintenance expense. Mr. Kollen's recommendation allows for the recognition of the 2011 inflation calculated by Big Rivers. On page 16, beginning on line 3, Mr. Kollen states, "At most, such an adjustment should be limited to the year immediately following the test year...." On the same page, on line 9, Mr. Kollen states that Big Rivers' "[e]stimate of inflation during 2012-2014 is not known and measurable...." Explain how Mr. Kollen determined that

Big Rivers' 2011 estimate of inflation was known and measurable and why it should be reflected in the adjustment to non-outage related maintenance expense.

- 16. Refer to pages 17-19 of the Kollen Testimony regarding Big Rivers' proposal to include depreciation on CWIP in its proforma depreciation expense and his recommendation to exclude depreciation on post test-year plant retirements from the proforma depreciation expense. Refer also to pages 20-21 of the Kollen Testimony where he discusses KIUC's proposed adjustment to Big Rivers' depreciation expense.
- a. Given the nature of Big Rivers' proposal, explain why Mr. Kollen chose to link depreciation on retirements with depreciation on CWIP rather than recommend that the proposal to include depreciation on CWIP be rejected.
- b. Provide the calculation of Big Rivers' pro forma depreciation expense based on KIUC's proposed depreciation rates being applied to Big Rivers' test year-end plant in service without including the year-end CWIP balance.
- 17. Refer to pages 19-20 of the Kollen Testimony regarding his recommended reduction to Big Rivers' Transmission of Electricity by Others Expense and to Exhibit LK-11.
- a. The testimony states that, since Big Rivers has proposed post-test year adjustments that increase its revenue requirement, the Commission should consider Mr. Kollen's proposed post-test year adjustment because it decreases Big Rivers' revenue requirement. Explain whether there are other reasons which support the Commission's consideration of this adjustment.
- b. The exhibit, a response to a KIUC data request, indicates that in addition to costs incurred for transmission service provided in the test year by the

Tennessee Valley Authority ("TVA"), Big Rivers also incurred costs for transmission service provided by the Midwest ISO. However, the budgeted amount upon which Mr. Kollen bases his proposed adjustment reflects only TVA transmission service. Explain whether or not Mr. Kollen has made an independent determination that Big Rivers will not incur costs in the future for transmission service provided by entities other than TVA.

- 18. Refer to pages 30-33 of the Kollen Testimony which cover KIUC's proposal that Big Rivers be required to retire patronage capital on an annual basis equal to 25 percent of its prior year's margin. Explain, specifically, how 25 percent was chosen as compared to some other percentage.
- 19. Refer to the Direct Testimony of Stephen J. Baron ("Baron Testimony") at page 14. Mr. Baron recommends using a 6 Coincident Peak ("CP") demand methodology to allocate production demand related costs, such as that used by Mr. Seelye for EKPC in Case No. 2008-00409.<sup>2</sup>
- a. Explain why the 6 CP methodology is not less appropriate for Big Rivers than for EKPC given the share of Big Rivers' total load for which the smelters are responsible and the relative uniformity of the average demand of the smelters.
- b. Provide a side-by-side comparison of the resultant wholesale rates for each Big Rivers rate class under the 6 CP and 12 CP methodologies, absent any other adjustments.
- 20. Refer to the Baron Testimony at page 20. Starting at line 14, Mr. Baron states that the smelter rates will automatically increase on January 1, 2012 by \$.30 per

<sup>&</sup>lt;sup>2</sup> Case No. 2008-00409, General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc. (Ky. PSC Mar. 31, 2009).

MWh, or approximately \$2.2 million, and that the \$2.2 million "increase will flow directly to the Rural and Large Industrial customer classes." Explain the reason for the automatic increase and how the increase will flow to the non-smelter classes.

- 21. Refer to page 29 of the Baron Testimony, lines 3-19. KIUC recommends that the Rural Economic Reserve ("RER") be used annually to partially offset the rate increase proposed by KIUC in this case.
- a. Mr. Baron states that the Commission Order in Case No. 2007-00455<sup>3</sup> "intended that the fund be used to mitigate the impact of future FAC and Environmental Surcharge increases." Provide the citation of the Order wherein this intention was stated.
- b. Mr. Baron proposes to withdraw approximately \$4.2 million annually from the RER fund to mitigate the Rural revenue increase proposed by KIUC, while stating that the Commission's intent for the RER fund is to mitigate future FAC and Environmental Surcharges. With environmental compliance costs accelerating due to federal environmental requirements, explain why those concerns should not be even greater given KIUC's interpretation of the Commission's intent in Case No. 2007-00455.
- c. KIUC intends that this recommendation replace the method set out in Big River's current tariff for depletion of the RER or that the RER be depleted by both methods simultaneously (note that the tariff method would not begin until the Economic

<sup>&</sup>lt;sup>3</sup> Case No. 2007-00455, The Applications of Big Rivers Electric Corporation for: (1) Approval of Wholesale Tariff Additions for Big Rivers Electric Corporation, (2) Approval of Transactions, (3) Approval to Issue Evidences of Indebtedness, and (4) Approval of Amendments to Contracts; and of E.ON U.S., LLC, Western Kentucky Energy Corp., and LG&E Energy Marketing, Inc. for Approval of Transactions (Ky. PSC Mar. 6, 2009).

Reserve is depleted). If KIUC intends that both methods be used, state whether Mr. Baron believes that customers will experience rate shock when the RER is depleted.

- d. Mr. Baron states that, if the Commission adopts the KIUC proposal, the fund would be fully utilized by late 2016 or early 2017. Provide the calculations supporting this projection.
- 22. Refer to pages 34-37 of the Baron Testimony regarding Big Rivers' proposal to include \$1 million in its revenue requirement for the cost of Demand-Side Management ("DSM") programs. Mr. Baron's testimony emphasizes the distinctions between Big Rivers' proposal to recover these costs through its base rates and recovery pursuant to an alternative cost recovery mechanism pursuant to KRS 278.285. Explain, from a cost of service and revenue allocation perspective, whether KIUC would be opposed to an allocation of revenues which recognizes that none of Big Rivers' DSM costs are for programs that serve the aluminum smelters and which assigns them none of those costs.
- 23. Refer to the Baron Testimony at page 38. Mr. Baron proposes to expand the Rate LICX tariff to include existing large industrial customers that may want to expand their usage rather than be required to take power at market prices. Explain whether this proposal conflicts with the Morey Testimony wherein it is stated that Big Rivers' generation is frequently "out of the market." Include in the explanation whether Mr. Baron believes Big Rivers' standard cost-based tariffed rates are economically competitive with those rates of other utilities in the region.
- 24. Provide an electronic copy of Exhibits SJB-3, SJB-4, SJB-5, and SJB-6 with the formulas intact and unprotected.

25. Refer to pages 4-5 of the Direct Testimony of Stephane Leblanc ("Leblanc Testimony"), and Mr. Fayne's Exhibits HWF-1 and HWF-2. Mr. Lablanc states at page 4, lines 16-18, that due to the current relatively high market price for aluminum, "the Sebree smelter has positive margins from operations." Mr. Leblanc also states at page 5, lines 18-20, that, "during the last wave of U.S. smelter closures in 2009, most closed

a. What was the average price for electricity paid by the Sebree smelter in 2009?

indefinitely because they were not in line with world average power costs.

b. Did the Sebree smelter have positive margins from operations in 2009 when aluminum prices were just over \$1,300 per metric tonne?

c. Provide a schedule, similar to Exhibit HWF-1, that includes the name, owner, production, and cost of electricity as of time of closure for each of U.S. smelters that closed in 2009.

26. Refer to the Leblanc Testimony at page 8, lines 17-20.

a. Describe in detail each of the governmental or other actions that resulted in the recently announced U.S. smelter restarts.

b. Explain why Century Aluminum restarted its fifth potline without needing any governmental or other actions.

c. What was the approximate cost to Century Aluminum to restart its

fifth potline?

DATED: JUN 0 9 2011

cc: Parties of Record

xecutive Director

Public Service Commission

P.O. Box 615

Frankfort, KY 40602

Mark A Bailey President CEO Big Rivers Electric Corporation 201 Third Street Henderson, KY 42419-0024 Sanford Novick President and CEO Kenergy Corp. P. O. Box 18 Henderson, KY 42419

Douglas L Beresford Hogan Lovells US LLP Columbia Square 555 Thirteenth Street, NW Washington, DISTRICT OF COLUMBIA 20004 Melissa D Yates Attorney Denton & Keuler, LLP 555 Jefferson Street P. O. Box 929 Paducah, KENTUCKY 42002-0929

David Brown Stites & Harbison, PLLC 1800 Providian Center 400 West Market Street Louisville, KENTUCKY 40202 Albert Yockey
Vice President Government Relations
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42419-0024

J. Christopher Hopgood Dorsey, King, Gray, Norment & Hopgood 318 Second Street Henderson, KENTUCKY 42420

Mr. Dennis Howard Assistant Attorney General 1024 Capital Center Drive Frankfort, KENTUCKY 40601

Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

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