



SULLIVAN, MOUNTJOY,
STAINBACK & MILLER, P.S.C.
Attorneys

RECEIVED

MAY 10 2016

PUBLIC SERVICE
COMMISSION

Tyson Kamuf
Attorney

tkamuf@smsmlaw.com

Skill. Integrity. Efficiency.

May 9, 2016

VIA FEDERAL EXPRESS

Aaron D. Greenwell
Acting Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

*In the Matter of: Joint Application of Kenergy Corp. and Big Rivers
Electric Corporation for Approval of Contracts,
PSC Case No. 2016-00117*

Dear Mr. Greenwell:

Enclosed for filing are (i) an original and eight (8) copies of Big Rivers Electric Corporation's responses to the Public Service Commission Staff's first request for information, and (ii) an original and ten (10) copies of a petition for confidential treatment. I certify that on this date, a copy of this letter, a copy of the responses, and a copy of the petition were served on each of the persons listed on the attached service list by first-class mail.

Sincerely,

Tyson Kamuf
Counsel for Big Rivers Electric Corporation

TK/lm
Enclosures

Service List

Hon. J. Christopher Hopgood
Dorsey, Gray, Norment & Hopgood
318 Second Street
Henderson, Kentucky 42420
Counsel for Kenergy Corp.


Hon. Cory Skolnick
Frost Brown Todd LLC
400 West Market Street
32nd Floor
Louisville, KY 40202-3363
Counsel for Aleris Rolled Products, Inc.

Michael L. Kurtz, Esq.
Boehm, Kurtz & Lowry
36 E. Seventh St., Suite 1510
Cincinnati, Ohio 45202
Counsel for Kentucky Industrial Utility Customers

Hon. Kent Chandler
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KY 40601-8204

ORIGINAL



Your Touchstone Energy® Cooperative 

RECEIVED

MAY 10 2016

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

**JOINT APPLICATION OF KENERGY CORP.)
AND BIG RIVERS ELECTRIC CORPORATION)
FOR APPROVAL OF CONTRACTS)**

**Case No.
2016-00117**

**Responses to Commission Staff's Request for Information
dated
April 29, 2016**

FILED: May 10, 2016

ORIGINAL

BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP.
AND BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117

VERIFICATION

I, Michael W. (Mike) Chambliss, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Michael W. (Mike) Chambliss

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Michael W. (Mike) Chambliss
on this the 6th day of May, 2016.



Notary Public, Kentucky State at Large

My Commission Expires 1-12-17

BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP.
AND BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117

VERIFICATION


I, John Wolfram, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



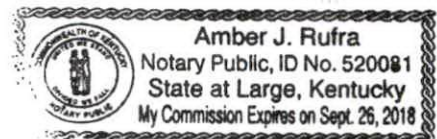
John Wolfram

COMMONWEALTH OF KENTUCKY)
COUNTY OF JEFFERSON)

3rd SUBSCRIBED AND SWORN TO before me by John Wolfram on this the
day of May, 2016.



Notary Public, Kentucky State at Large
My Commission Expires 9-26-2018



**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Item 1) Refer to the Testimony of Michael W. Chambliss ("Chambliss**
2 **Testimony"), Exhibit Chambliss_C, page 1 of 1.**

- 3 **a. It appears that the "Net Rate (\$/MWh)" on line 9, the "Economic**
4 **Development Rate (EDR) Discount (\$/MWh)" on line 18, and the**
5 **"Effective Rate (\$/MWh)" on line 32 were calculated by adding 12**
6 **months of capacity revenues to one month of energy revenues and**
7 **dividing that total by one month of kW billing determinants. State**
8 **whether this was intentional or whether the Joint Applicants intended**
9 **to use 12 months of energy revenues and 12 months of kW billing**
10 **determinants in the calculations. If the former, explain why it would**
11 **not be more accurate to include all 12 months of energy revenues (and**
12 **dividing the total by annual kW billing determinants), rather than the**
13 **method used in this exhibit. If the latter, provide an updated Exhibit**
14 **Chambliss_C.**
- 15 **b. Provide supporting calculations for the Rider amounts shown on lines**
16 **12, 13, and 14.**
- 17 **c. Provide the origin of the "Energy Market Prices (\$/MWh)" shown on line**
18 **26 and the "Capacity (\$/MW-day)" amounts shown on line 29.**
- 19 **d. Explain the impact on the "Capacity (\$/MW-day)" amounts shown on**
20 **line 29 due to the increase in the Midcontinent Independent System**
21 **operator Planning Resource Auction Results from \$3.48 MW-day in**
22 **2015/2016 to \$72.00 MW-day in 2016/2017.**
- 23 **e. Provide Exhibit Chambliss_C in Excel spreadsheet format with the**
24 **formulas intact and unprotected.**
- 25

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Response)**

- 2 a. Please refer to the CONFIDENTIAL Excel spreadsheet provided per part (e)
3 of this response. The "Net Rate (\$/MWh)" on line 9, the "Economic
4 Development Rate (EDR) Discount (\$/MWh)" on line 18, and the "Effective
5 Rate (\$/MWh)" on line 32 are calculated using 12 months of energy (in MWh's)
6 at a 60% load factor. Additionally, annual demand was used in the calculations
7 for line 9 and line 18.
- 8 b. The riders for the Large Industrial class are derived from information in Big
9 Rivers' long-term financial forecast and are calculated per the tariff. On page
10 1 of the CONFIDENTIAL attachment to this response, the Fuel Adjustment
11 Clause (FAC) and Non-Fuel Adjustment Clause Purchased Power Adjustment
12 (Non-FAC PPA) calculations are provided. The FAC uses eligible fuel costs for
13 recovery less the \$20.932/MWh in base rates to arrive at the \$/MWh to be
14 recovered through the rider. The Non-FAC PPA amount is derived from
15 dividing the eligible purchased power recoverable expenses by the member
16 load. On page 2 of the CONFIDENTIAL attachment to this response, the
17 calculation for the Environmental Surcharge is provided. The Environmental
18 Surcharge allocates eligible fixed and variable expenses to the rate classes
19 based on adjusted revenue, which is revenue by class less the amount
20 recovered through the Environmental Surcharge.
- 21 c. Please refer to the CONFIDENTIAL Excel spreadsheet provided per part (e)
22 of this response. The origin of the "Energy Market Prices (\$/MWh)" shown on
23 line 26 is derived from the ACES¹ Price Forecast as of 10/5/2015. The origin of

¹ Big Rivers is a member of ACES, a nationwide energy management company.

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 the "Capacity (\$/MW-day)" amounts shown on line 29 is derived from ACES
2 capacity pricing as of 4/22/2015.

3 d. Please refer to the CONFIDENTIAL Excel spreadsheet provided per part (e)
4 of this response. Big Rivers' assumption for 2017 average capacity price per
5 \$/MW-day was [REDACTED] (please refer to row 29 of the exhibit). If the average
6 price was changed to \$72.00 per MW-day, the impact would be an [REDACTED]
7 [REDACTED] in benefits in 2017 (please refer to row 37 of the exhibit).

8 e. Please find the CONFIDENTIAL Excel spreadsheet in the folder *PSC 1-1(e)*
9 *CONF* on the CONFIDENTIAL electronic medium accompanying these
10 responses.

11
12 **Witness)** Michael W. Chambliss

Big Rivers Electric Corporation
Case No. 2016-00117
Response to PSC 1-1(b)

<u>Row</u>								
1								
2								
3	Total Sales (TWh)							
4	Member Sales (TWh)	3.452	3.469	3.486	3.496	3.514	3.536	3.560
5	Generation (TWh)	7.820	7.345	7.601	7.403	7.452	7.510	7.758
6								
7								
8								
9	Fuel Adjustment Clause							
10	Fuel Costs (\$M)							
11								
12	Total Costs for Passthrough (\$/MWh) [Row 10 / Row 5]							
13	Total Costs for Passthrough (\$/MWh) Adjusted for Economic Purchases							
14	Fuel Cost Base (\$/MWh)	\$ (20.93)	\$ (20.93)	\$ (20.93)	\$ (20.93)	\$ (20.93)	\$ (20.93)	\$ (20.93)
15								
16	FAC (\$/MWh) [Row 13 + Row 14]							
17								
18	Non-FAC PPA							
19	Purchased Power Costs Recoverable through Non-FAC PPA (\$M)							
20	Member Sales Prior Year (TWh)	3.452	3.452	3.469	3.486	3.496	3.514	3.536
21								
22	Non-FAC PPA (\$/MWh) [Row 19 / Row 20]							

Big Rivers Electric Corporation

Case No. 2016-00117

Response to PSC 1-1(b)

<u>Row</u>							
1							
2							
3	Total Cost Eligible for Environmental Surcharge (\$M)						
4							
5	Large Industrial (TWh)	1.12	1.11	1.11	1.11	1.11	1.11
6							
7	<u>Total Adjusted Revenue (\$M)</u>						
8	Rural						
9	Large Industrial						
10	Nebraska						
11	Market/Non-Member Sales						
12	Total						
13							
14	<u>Cost Allocation by Class (\$M)</u>						
15	Rural						
16	<u>Large Industrial (Row 3 / Row 12 X Row 9)</u>						
17	Nebraska						
18	Market/Non-Member Sales						
19	Total						
20							
21	<u>Environmental Surcharge Rate (\$/MWh)</u>						
22	Rural						
23	<u>Large Industrial (Row 16 / Row 5)</u>						
24	Nebraska						
25	Market/Non-Member Sales						

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Item 2)** *Refer to the Chambliss Testimony, page 8, regarding a provision*
2 *in the 2016 Retail Agreement in which Aleris would not receive any EDR*
3 *credit in any month in which its load factor is less than 50 percent. Explain*
4 *why Joint Applicants agreed to the monthly threshold load factor of 50*
5 *percent.*

6
7 **Response)** When developing the EDR guidelines, Big Rivers considered several
8 factors. Most of Big Rivers' existing customers taking service under Big Rivers' LIC
9 tariff maintained a load factor greater than 50%. Because Big Rivers' EDR is a
10 significant discount on the LIC tariff demand rate, Big Rivers believed it to be
11 appropriate to assure that a minimum level of energy was used by customers
12 benefiting from the EDR discount. A 50% load factor also assures more efficient use
13 of the Big Rivers system. For the foregoing reasons, Big Rivers believes the floor of a
14 50% load factor is reasonable. Additionally, the use of a monthly load factor threshold
15 in the Big Rivers EDR is consistent in principle with the use of a load factor threshold
16 approved by the Commission for the East Kentucky Power Cooperative EDR in Case
17 No. 2014-00034.

18

19 **Witness)** Michael W. Chambliss

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Item 3)** *Refer to the Testimony of John Wolfram, Exhibit Wolfram-2,*
2 *Appendix A, page 13 of 14. The line labelled Total Energy (kWh) indicates an*
3 *amount of 8,418,926. Explain what this amount represents and provide the*
4 *calculations showing its derivation.*

5
6 **Response)** The Total Energy amount of 8,418,926 kWh in Exhibit Wolfram-2,
7 Appendix A, page 13 of 14, represents the total forecasted energy sales for Big Rivers
8 for 2016. Note first that the amount is in MWh but was inadvertently labeled kWh.
9 This amount was included in Big Rivers' budget and financial plan, along with the
10 other cost data provided in Appendix A. The budget and financial plan was approved
11 by Big Rivers' Board of Directors on November 20, 2015, and was provided to Catalyst
12 Consulting by Big Rivers for the purpose of developing the marginal cost of service
13 study. The 8,418,926 MWh is an output of the production cost models provided to Big
14 Rivers by ACES and incorporated into Big Rivers' financial model, consistent with
15 the annual budgeting and forecasting process described by Big Rivers in its last rate
16 case. (Please see the Direct Testimony of Jeffrey R. Williams, dated June 28, 2013,
17 in Case No. 2013-00199.)

18

19 **Witness)** John Wolfram

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Item 4)** *Provide the current status of the project to construct the*
2 *transmission lines and associated substation equipment at Aleris, i.e.,*
3 *percentage of completion and estimated completion date(s).*
4

5 **Response)** The Lewisport Aluminum Mill Substation 2 (LAM-2) is in service with
6 one 40 MVA¹ transformer now serving the Aleris expansion switchgear. It is served
7 by one 161 kV² transmission line (6-D)³ which is energized. Big Rivers will construct
8 another 161 kV transmission line (3-L)³ from Coleman EHV Substation (CEHV) to
9 provide a second source to LAM-2. Big Rivers will construct a third 161 kV
10 transmission line (3-K)³ from CEHV to Lewisport Aluminum Mill Substation 1 (LAM-
11 1), the existing substation. Big Rivers has acquired all land and right-of-way.
12 Transmission lines 3-K and 3-L have been surveyed and designed, and right-of-way
13 clearing is 50 percent complete. General construction will begin this summer and the
14 two lines should be ready to energize in November 2016. The CEHV expansion design
15 work is 80 percent complete, with general construction to begin this summer. These
16 two line terminals will be ready to energize on or before November 2016. With the
17 necessary outages, LAM-1 can be completed in November 2016. LAM-2 will be fully
18 complete in June 2016, followed by its second source (3-L) energization in November
19 2016.
20

21 **Witness)** Michael W. Chambliss

¹ MVA=megavolt ampere.

² kV=kilovolt.

³ Line identification number consistent with the drawings Big Rivers provided in its Application in Case No. 2015-00051 filed on April 7, 2015.

**BIG RIVERS ELECTRIC CORPORATION
JOINT APPLICATION OF KENERGY CORP. AND
BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF CONTRACTS
CASE NO. 2016-00117**

**Response to Commission Staff's First Request for Information
dated April 29, 2016**

May 10, 2016

1 **Item 5)** *Refer to the confidential handout provided at the Informal*
2 *Conference held on April 21, 2016. Provide the handout in Excel spreadsheet*
3 *format with the formulas intact and unprotected.*

4

5 **Response)** Please see the confidential handout from the April 21, 2016, Informal
6 Conference provided in Excel spreadsheet format, with the formulas intact and
7 unprotected, in the folder *PSC 1-5 CONF* on the CONFIDENTIAL electronic medium
8 accompanying these responses.

9

10 **Witness)** Michael W. Chambliss

11