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**Also Licensed in Indiana
and New York

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MAR 28 2016

PUBLIC SERVICE
COMMISSION

March 28, 2016

Via Hand Delivery

Hon. James W. Gardner
Acting Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: *In the Matter of: An Examination of the Application of the
Fuel Adjustment Clause of Big Rivers Electric Corporation
from May 1, 2015 through October 31, 2015*
Case No. 2016-00006

Dear Chairman Gardner:

Enclosed for filing on behalf of Big Rivers Electric Corporation are: (i) an original and seven (7) copies of Big Rivers' responses to the Public Service Commission Staff's third request for information in the above-referenced matter, 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 all parties of record by first-class mail.

Sincerely,



Tyson Kamuf
Counsel for Big Rivers Electric Corporation

TAK/lm
Enclosures

Telephone (270) 926-4000
Telecopier (270) 683-6694

cc. DeAnna Speed

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PO Box 727
Owensboro, Kentucky
42302-0727

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ORIGINAL

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MAR 28 2016

PUBLIC SERVICE
COMMISSION



Your Touchstone Energy® Cooperative 

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

AN EXAMINATION OF THE APPLICATION)
 OF THE FUEL ADJUSTMENT CLAUSE)
 OF BIG RIVERS ELECTRIC CORPORATION)
 FROM)
 MAY 1, 2015 THROUGH OCTOBER 31, 2015)

Case No.
2016-00006

Responses to Commission Staff's
 Third Request for Information
 dated
 March 18, 2016

FILED: March 28, 2016

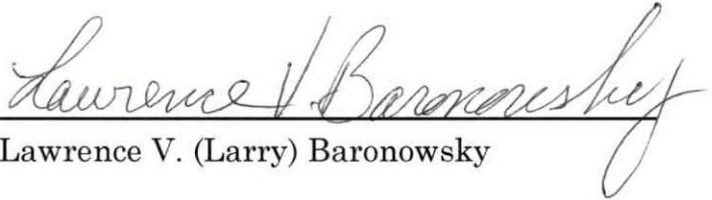
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BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT
CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM MAY 1, 2015 THROUGH OCTOBER 31, 2015
CASE NO. 2016-00006**

VERIFICATION

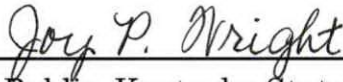
I, Lawrence V. (Larry) Baronowsky, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Lawrence V. (Larry) Baronowsky

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Lawrence V. (Larry) Baronowsky on this the 28th day of March, 2016.



Notary Public, Kentucky State at Large
My Commission Expires _____

Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2018
ID 513528



BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT
CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM MAY 1, 2015 THROUGH OCTOBER 31, 2015
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VERIFICATION

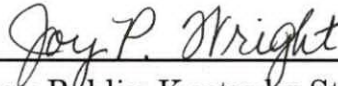
I, Nicholas R. (Nick) Castlen, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Nicholas R. (Nick) Castlen

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Nicholas R. (Nick) Castlen on this the 26th day of March, 2016.



Notary Public, Kentucky State at Large

My Commission Expires _____

Notary Public, Kentucky **State-At-Large**
My Commission Expires: **July 3, 2018**
ID 513528



BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT
CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM MAY 1, 2015 THROUGH OCTOBER 31, 2015
CASE NO. 2016-00006**

VERIFICATION

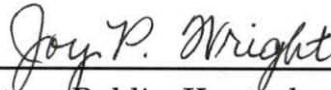
I, Mark W. McAdams, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Mark W. McAdams

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

2016 SUBSCRIBED AND SWORN TO before me by Mark W. McAdams on this the
day of March, 2016.



Notary Public, Kentucky State at Large

My Commission Expires _____

Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2018
ID 513528

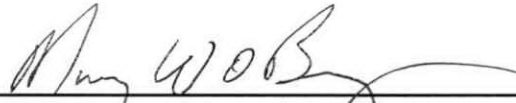


BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT
CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM MAY 1, 2015 THROUGH OCTOBER 31, 2015
CASE NO. 2016-00006**

VERIFICATION

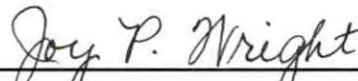
I, Murray W. (Wayne) O'Bryan, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Murray W. (Wayne) O'Bryan

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Murray W. (Wayne) O'Bryan
on this the 28th day of March, 2016.



Notary Public, Kentucky State at Large
My Commission Expires _____

Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2018
ID 513528



BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM MAY 1, 2015 THROUGH OCTOBER 31, 2015
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**Response to Commission Staff's
Third Request for Information
dated March 18, 2016**

March 28, 2016

- 1 **Item 1)** *In its monthly fuel adjustment clause ("FAC") backup files, Big*
2 *Rivers provides an analysis of coal purchases that includes a state and*
3 *coal district number for the source of the coal.*
4
5 *a. Confirm that Big Rivers is using District No. 9 (for*
6 *western Kentucky) when identifying Kentucky coal*
7 *districts in its FAC backup filings.*
8 *b. State whether the state and coal district numbers are*
9 *those utilized by the Mine Safety and Health*
10 *Administration. If not, state the entity that designates the*
11 *coal district numbers utilized by Big Rivers in its FAC*
12 *backup filings.*
13 *c. For the entity identified in part b. above, provide a map*
14 *showing the current coal districts.*
15 *d. Provide the date of the last change made by the entity*
16 *identified in part b. above to the coal district numbering.*
17 *If Big Rivers did not begin using the new coal district*
18 *numbering when the change was made, explain why.*
19 *e. Explain the input and review process for the state and*
20 *coal district numbers provided in the monthly analysis of*
21 *coal purchase schedule and how Big Rivers ensures that*
22 *the information is accurate.*
23
24

BIG RIVERS ELECTRIC CORPORATION

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1 **Response)**

- 2 a. Big Rivers has been using District No. 9 for western Kentucky,
3 District 10 for Illinois and District 11 for Indiana. These are the
4 district numbers Big Rivers has used since 2009; Big Rivers
5 utilized the Mine Safety and Health Administration ("MSHA")
6 Data Retrieval System to obtain the district numbers in 2009.
7 Based upon further review following the Commission's
8 information request, Big Rivers has discovered that (i) western
9 Kentucky should be denoted as District 10, and (ii) Illinois and
10 Indiana should be denoted as District 8.
- 11 b. Please see Big Rivers' response to sub-item 1a.
- 12 c. Big Rivers cannot locate its prior map; however, Big Rivers
13 attaches the most recent map for the coal districts. An
14 electronic copy of this map may be found at:
15 <http://arlweb.msha.gov/DISTRICT/COALHOME.HTM>
- 16 d. Big Rivers was not aware that a change had occurred nor does
17 Big Rivers recollect any notice that any redistricting had
18 occurred. Please see Big Rivers' response to sub-item 1a.
- 19 e. Big Rivers utilizes the monthly Big Rivers Fuel Purchases
20 Internal Report to verify for each generating station the source
21 of coal purchased, including the mine and state of the coal
22 origin. FAC Backup files are reviewed internally. Big Rivers
23 will review its process to assure filings going forward reflect

BIG RIVERS ELECTRIC CORPORATION

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1 information from the MSHA Data Retrieval System for each coal
2 purchase.

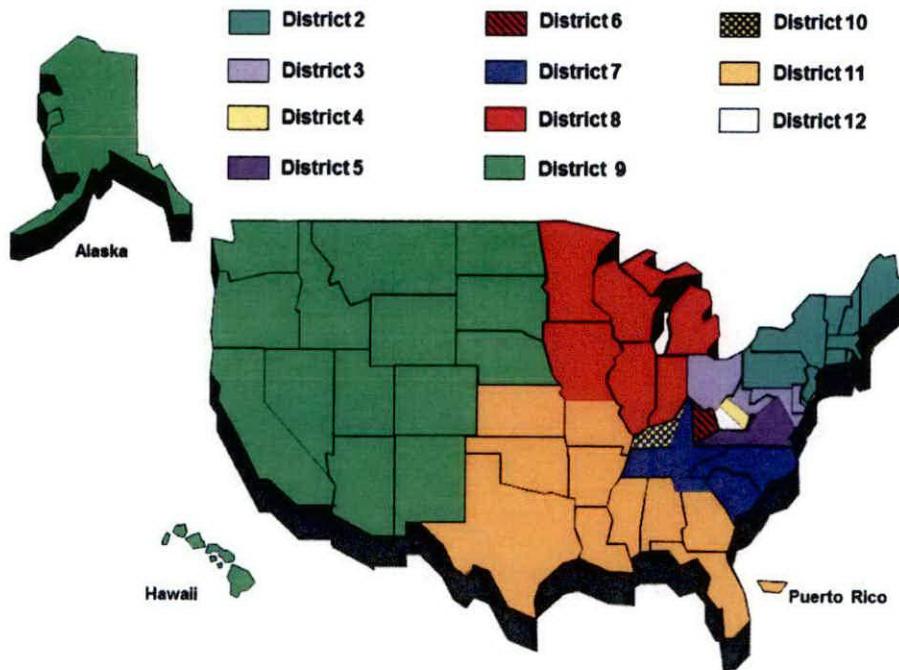
3

4

5 **Witness)** Mark W. McAdams

6

MINE SAFETY AND HEALTH ADMINISTRATION Coal Mine Safety and Health Districts



Immediately Reportable Accidents

All mine operators are required to immediately call MSHA's toll free number at 1-800-746-1553 to report an [immediately reportable accident or emergency](#) to MSHA. Mine operators must call immediately when an accident has occurred or has been determined to have occurred, but no later than 15 minutes from the time of the occurrence or determination of the occurrence.

Hazardous Condition Complaint

To report a hazardous condition at a mine you may call your District Office, the MSHA hotline number 1-800-746-1553, or [submit your complaint online](#). Additional information can be obtained using [this link](#).

- [Maps to District and Field Offices](#)

Text Version of Districts Map Above

- [District 2](#) Pennsylvania
- [District 3](#) Maryland, Ohio, and Northern West Virginia
- [District 4](#) Southern West Virginia to include the following counties - Boone, Braxton, Clay, Fayette, Greenbrier, Kanawha, Monroe, Nicholas, Pocahontas, Putnam, Raleigh, Summers, Webster
- [District 5](#) Virginia
- [District 6](#) Eastern Kentucky
- [District 7](#) Central Kentucky, North Carolina, South Carolina, and Tennessee
- [District 8](#) Illinois, Indiana, Iowa, Michigan, Minnesota, Northern Missouri and Wisconsin
- [District 9](#)

Case No. 2016-00006

Attachment for Response to Third Staff Item 1c.

Witness: Mark W. McAdams

Page 1 of 2

Oregon, Washington, Oregon, Idaho, Montana, North Dakota, South Dakota, Nebraska, California, Nevada, Utah, Colorado, Arizona and New Mexico

[District 10](#) Western Kentucky

[District 11](#) Alabama, Georgia, Florida, Mississippi, Kansas, Oklahoma, Texas, Southern Missouri, Arkansas, Louisiana, Puerto Rico, and the Virgin Islands

[District 12](#) Southern West Virginia to include the following counties - Cabell, Lincoln, Logan, McDowell, Mercer, Mingo, Wayne, Wyoming

Note: Some of these states, while within a district's coverage, may not be currently mining coal.

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 2)** *Refer to Big Rivers' response to the Commission's February 5,*
2 *2016 Request for Information ("Commission's First Request"), Item 24.*
3 *Explain why the heat rates provided in the response for the months of July*
4 *2015 and October 2015 do not reconcile with the heat rates shown for the*
5 *Wilson unit in the FAC backup files submitted for those two months.*

6
7 **Response)** The heat rates published in the monthly Form B filings to the
8 Commission do not match the heat rates quoted in Big Rivers' response to Item 24
9 of the Commission's First Request in this case because the two heat rates are
10 calculated for different purposes. The heat rates published in the monthly Form B
11 filings are calculated using the total BTUs of fuel burned by the unit for the
12 month, including start-up fuel, divided by the total net kWh's generated by the
13 unit for the month. The BTUs per pound of fuel in this method are calculated
14 using the "as received" fuel analysis for all the fuel that was received for the
15 month. For discussion purposes, Big Rivers will call this the "accounting heat
16 rate."

17 Big Rivers also calculates a unit performance heat rate that reflects
18 the performance of its units each month for benchmarking and key performance
19 indicator comparisons. This heat rate is calculated using the BTU's of fuel burned
20 by the unit for the month, excluding start-up fuel, divided by the net "online"
21 kWhs generated by the unit for the month. For performance calculations, online
22 kWhs exclude generation from a unit that does not have twenty-four (24) service
23 hours in that day. The BTU's per pound of fuel burned are calculated using the
24 "as fired" fuel analysis, because this method reflects the quality of fuel that was

BIG RIVERS ELECTRIC CORPORATION

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1 actually sent to the furnace to make kWh's during the month. Please see the
2 attachment to this response, which Big Rivers files with a Petition for
3 Confidential Treatment, and which shows the different calculation methods and
4 explains more fully why the two heat rate numbers cannot be compared.

5

6

7 **Witness)** Lawrence V. Baronowsky

8

**Big Rivers Electric Corporation
Case No. 2016-00006
Heat Rate Calculations**

				July					
Accounting Heat Rate As Reported on Form B				Performance Heat Rate w/o Start Up Fuel or kWh					
		Net Kwh w/start-up				Net Kwh w/o start-up			
		As Received				As Fired			
Coal	106,801.27	11,491	2,454,506,787,140.00	Coal	103,198.00				
Oil	57,999.72	138,000	8,003,961,360.00	Oil	29,652.00	138,000			
Pet Coke	15,353.00	14,142	434,244,252,000.00	Pet Coke	14,901.00				
		Total BTU	2,896,755,000,500.00			Total BTU			
		Net BTU/kwh	10,694			Net BTU/kwh			
Solid fuel BTU/lb	11,824			Solid fuel BTU/lb					

				October					
Accounting Heat Rate As Reported on Form B				Performance Heat Rate w/o Start Up Fuel or kWh					
		Net Kwh w/start-up				Net Kwh w/o start-up			
		As Received				As Fired			
Coal	115,487.53	11,529	2,662,911,466,740.00	Coal	115,487.53				
Oil	9,508.13	138,000	1,312,121,940.00	Oil	9,508.13	138,000			
Pet Coke	13,663.00	14,144	386,498,944,000.00	Pet Coke	13,663.00				
		Total BTU	3,050,722,532,680.00			Total BTU			
		Net BTU/kwh	10,316			Net BTU/kwh			
Solid fuel BTU/lb	11,806			Solid fuel BTU/lb					

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 3) Refer to Big Rivers' response to the Commission's First**
2 **Request, Item 25. The question should have asked whether all fuel**
3 **contracts related to commodity and/or transportation had been filed with**
4 **the Commission instead of specifying long-term contracts. State whether**
5 **all contracts have been filed.**

6
7 **Response) No.** Big Rivers has filed with the Commission all long-term fuel
8 contracts (those contracts being greater than one year in duration or term) related
9 to coal, petroleum coke, transportation of coal or petroleum coke, and natural gas.
10 Big Rivers has not filed short-term or spot duration purchase agreements (those
11 agreements being less than one-year in term) related to coal, petroleum coke,
12 transportation of coal or petroleum coke, and/or natural gas. However, typically,
13 Items 1 and 2 of the Commission's Staff's First Request for Information in each
14 fuel adjustment clause review ask Big Rivers to identify all spot duration
15 purchases, and Big Rivers does identify all spot duration purchases in its
16 responses to those requests.

17 Big Rivers is unaware of any prior Commission request to file all
18 short-term spot fuel agreements. However, Big Rivers archives all agreements
19 and can provide such spot agreements for any period of time the Commission
20 desires.

21 Finally, Big Rivers has filed all of its natural gas contracts with the
22 Commission as stated in Big Rivers' response, filed February 19, 2016, to Item 2 of
23 the Commission Staff's Request for Information dated February 5, 2016.

BIG RIVERS ELECTRIC CORPORATION

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March 28, 2016

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**Witnesses) Mark W. McAdams (*Coal*) and
Wayne O'Bryan (*Natural Gas*)**

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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March 28, 2016

1 *Item 4) Refer to Big Rivers' response to Commission Staffs Second*
2 *Request for Information ("Staffs Second Request"), Item 1.a. Explain how*
3 *the existence of the barge charter and tugboat charter impact the analysis*
4 *of coal bids received by Big Rivers (i.e., do the agreements make*
5 *transportation costs cheaper from certain coal suppliers?).*

6

7 **Response)**

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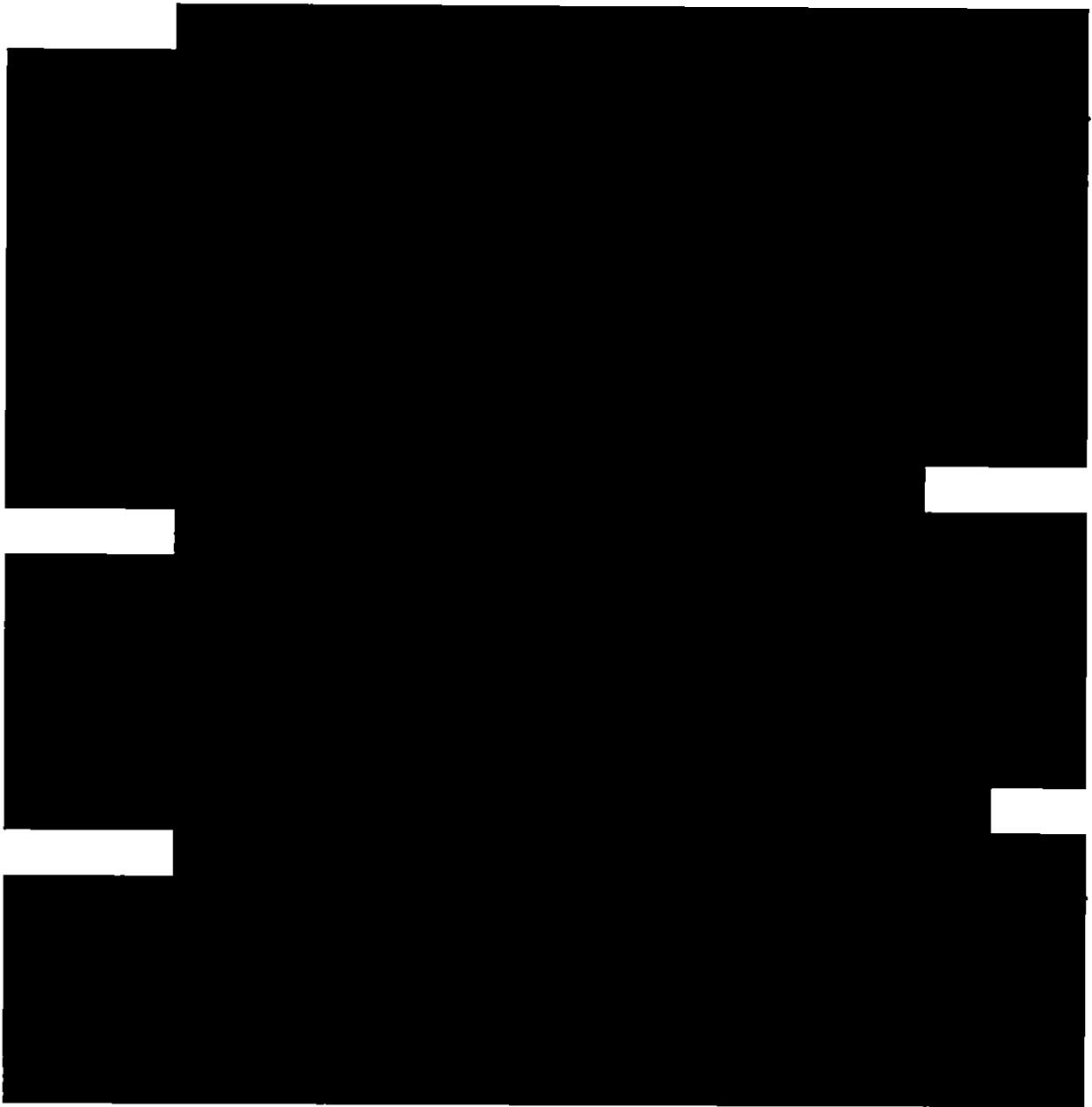
BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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March 28, 2016

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BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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March 28, 2016

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Witness) Mark W. McAdams

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
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1 **Item 5)** *Refer to Big Rivers' response to Staffs Second Request, Item*
2 *l.b., the attachment filed under petition for confidential treatment, pages*
3 *2-4 of 31. State whether the amounts in the "Current" column represent*
4 *the barge transportation rates Big Rivers is currently paying absent a*
5 *lease or charter agreement. If not, explain what the amounts represent.*
6

7 **Response)** The column labeled "Current" was the then current rate from [REDACTED]
8 [REDACTED], for barge transportation services that were
9 to expire April 30, 2014. The bid for transportation services to be provided beyond
10 the term of the expiring [REDACTED] contract included four competing firms –
11 [REDACTED] – as noted on
12 the bid evaluation sheet. [REDACTED] sold its business to [REDACTED]. Including the then
13 current [REDACTED] rate (albeit, the rate was destined to soon expire) was to provide an
14 indicative marker from past pricing versus the current-bid market pricing for
15 anyone reviewing the bid analysis.
16
17

18 **Witness)** Mark W. McAdams
19

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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1 **Item 6) Refer to Big Rivers' response to Staffs Second Request, Item 2,**
2 **Attachment, page 1 of 1.**

- 3
- 4 **a. Explain how Big Rivers decided on the methodology used**
5 **for calculating its highest-cost unit.**
- 6 **b. Confirm this attachment indicates that when the highest-**
7 **cost unit operates during the month, Big Rivers calculates**
8 **the \$/MWh based on the actual operation of the unit. If**
9 **this cannot be confirmed, explain how the \$/MWh is**
10 **calculated.**
- 11 **c. Confirm that this attachment indicates that when the**
12 **highest-cost unit is available but does not operate during**
13 **the month. Big Rivers calculates the \$/MWh using the**
14 **maximum (or most efficient) level at which the unit can**
15 **operate. If this can be confirmed, provide the heat rate**
16 **used in the calculation. If this cannot be confirmed,**
17 **explain how the \$/MWh is calculated.**
- 18 **d. Provide the origin of the natural gas price used in parts b.**
19 **and c. above.**
- 20 **e. Explain why the heat rates for June, July, and September**
21 **are higher than for the other months of the review period.**
- 22 **f. For each month of the review period, provide the natural**
23 **gas price used in the calculation of the highest-cost unit.**

Case No. 2016-00006

Response to Third Staff Item 6

Witnesses: Nicholas R. Castlen (a., b., c., d., and f. only) and
Lawrence V. Baronowsky (e. only)

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**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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1 **Response)**

- 2 a. Big Rivers' methodology for calculating its highest-cost unit, for
3 purposes of calculating its monthly FAC factor, was developed
4 based on the requirements of 807 KAR 5:056 and discussions
5 with members of the Commission Staff.

6 The current methodology for calculating the fuel cost per
7 MWh of generation for Big Rivers' Reid Combustion Turbine
8 ("CT"), for purposes of determining the highest cost unit during
9 a month, was based on discussions among members of the
10 Commission Staff, Ralph Ashworth (Big Rivers' former Director
11 Accounting/Finance), and David Ashby (Big Rivers' Power and
12 Fuels Accounting Supervisor) during an informal conference call
13 in early 2012. Based on Big Rivers' notes from this call, if the
14 Reid CT operated during the month, its actual fuel cost of
15 generation per net MWh of generation (calculated by dividing its
16 total fuel cost by its net MWh generation during the month)
17 should be used for purposes of determining Big Rivers' highest
18 cost unit during the month. If the Reid CT was available but did
19 not operate during the month, Big Rivers should calculate a
20 hypothetical cost of fuel per MWh that the unit could have
21 generated power, using the lowest daily natural gas price during
22 the month (based on the daily natural gas prices provided by

Case No. 2016-00006

Response to Third Staff Item 6

**Witnesses: Nicholas R. Castlen (a., b., c., d., and f. only) and
Lawrence V. Baronowsky (e. only)**

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BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
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- 1 ACES Power Marketing) and assuming the unit operated at
2 maximum capacity (or its most efficient level).
- 3 b. Confirmed.
- 4 c. Confirmed. If the Reid CT was available, but did not operate
5 during the month, Big Rivers calculates a hypothetical cost of
6 fuel per MWh that the unit could have generated power, using
7 the lowest daily natural gas price during the month (based on
8 the daily natural gas prices provided by ACES Power
9 Marketing) and assuming the unit operated at maximum
10 capacity (or its most efficient level).
- 11 During the review period, the heat rate used for
12 calculating the Reid CT's cost of fuel per MWh, when it was
13 available but did not operate during the month, was 12,091.66
14 BTU/kWh.
- 15 d. The natural gas prices used in sub-parts 6b. and 6c. are
16 provided to Big Rivers daily by email from ACES Power
17 Marketing.
- 18 e. The Reid CT heat rates for June, July, and September 2015,
19 shown in the attachment to Big Rivers' March 11, 2016,
20 response to Item 2 of Commission Staff's Second Request for
21 Information dated March 1, 2016, are higher than the other
22 months during the review period because the unit was online
23 generating for some period during the month and the actual

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1 BTUs of gas consumed are divided by the net generation to
2 provide the actual BTU/kWh. Using the hours-in-service and
3 the net megawatts generated, one can calculate that the unit
4 was being operated at very low load. When the Midcontinent
5 Independent System Operator ("MISO") dispatches the unit for
6 system reliability instead of generation, MISO wants it on line
7 at minimum load for spinning reserve. According to the
8 calculated heat rate curve published by the manufacturer for
9 this unit, the expected gross heat rate at 10 MW is 30,636
10 BTUs/kWh, and at 20 MW the expected gross heat rate is 19,458
11 BTUs/kWh. The heat rate curve confirms that the heat rates on
12 the aforementioned attachment for June, July, and September
13 are in line with the expected heat rates. During the months of
14 May and August the unit did not run. During the months the
15 unit does not run, Big Rivers uses the average full load heat rate
16 that was calculated during times that the unit was operating at
17 full load, making the heat rate and the unit cost in \$/MWh much
18 lower than if it were being operated at low load for system
19 reliability. The expected heat rate chart below reflects values
20 taken from the equipment manufacturers calculated heat rate
21 curve.
22

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Response to Third Staff Item 6

**Witnesses: Nicholas R. Castlen (*a., b., c., d., and f. only*) and
Lawrence V. Baronowsky (*e. only*)**

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Big Rivers Electric Corporation Reid CT – Expected Heat Rate			
Gross MWs	Estimated Natural Gas Burn (CFM)	BTUs per Hour	Gross Heat Rate (BTUs / kWhs)
10	37	306,360,000	30,636
15	42	347,760,000	23,184
20	47	389,160,000	19,458
25	52	430,560,000	17,222
30	57	471,960,000	15,732
35	62	513,360,000	14,667
40	67	554,760,000	13,869
45	72	596,160,000	13,248
50	77	637,560,000	12,751
55	82	678,960,000	12,345
60	87	720,360,000	12,006
65	92	761,760,000	11,719
70	97	803,160,000	11,474

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- f. The table below includes the natural gas prices used to calculate the Reid CT's fuel cost of generation (on \$/MWh basis), for purposes of determining Big Rivers' highest cost unit for each month during the review period.

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1

Big Rivers Electric Corporation Natural Gas Prices for Calculating Reid CT Fuel Cost of Generation	
Expense Month	Natural Gas Price (\$/MCF) ⁽¹⁾
May-15	\$3.06 ⁽²⁾
Jun-15	\$3.41 ⁽³⁾
Jul-15	\$3.34 ⁽³⁾
Aug-15	\$3.08 ⁽²⁾
Sep-15	\$3.19 ⁽³⁾
Oct-15	See Note ⁽⁴⁾

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Note(s):

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(1) Includes delivery costs.

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(2) The Reid CT was available, but did not operate during May and August 2015. Accordingly, the amounts included above for these months represent the lowest daily natural gas price during each month (provided by ACES Power Marketing) which was used to calculate the hypothetical fuel cost per MWh that the Reid CT could have generated power during the month if it had operated at its maximum (or most efficient) level of generation.

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(3) The Reid CT operated during June, July, and September 2015. Accordingly, the amounts included above for these

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1 months represent the actual price paid for natural gas used
2 for generation by the Reid CT.
3 (4) Because the Reid CT did not operate and was not available
4 during October 2015, no natural gas price was used in the
5 calculation of the highest-cost unit.
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8 **Witnesses)** Nicholas R. Castlen (*a., b., c., d., and f. only*) and
9 Lawrence V. Baronowsky (*e. only*)
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