

ORIGINAL



Your Touchstone Energy® Cooperative 

RECEIVED

SEP 23 2014

PUBLIC SERVICE
COMMISSION

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) Case No. 2014-00230
FROM)
NOVEMBER 1, 2013 THROUGH APRIL 30, 2014**

**Responses to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

FILED: September 23, 2014

ORIGINAL

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 1)** *Please generally describe the process by which Big Rivers*
2 *allocates fuel costs between native load and off-system sales for Fuel*
3 *Adjustment Charge (FAC) purposes.*

4

5 **Response)** Big Rivers accounts for its fuel inventory using weighted average
6 inventory costing. The total cost of coal, pet coke, oil, gas, and propane burned for
7 generation by each of Big Rivers' units during the month is calculated by
8 multiplying the volumes (*i.e.*, tons, gallons, or MCF) used for generation by the
9 weighted average per unit cost of the respective fuel.

10 The total costs of coal, pet coke, oil, gas, and propane burned for
11 generation by all of Big Rivers' units during the month are included on page 2 of
12 Big Rivers' monthly Form A filings under Company Generation within the
13 respective line items for purposes of calculating the Fuel Adjustment Clause
14 (FAC).¹

15 An overall system average fuel cost per kWh is calculated each
16 month by dividing the total cost of fuel used for generation by the net kWh
17 generated (after accounting for line losses) during the current expense month.
18 Fuel costs are allocated to off-system sales by multiplying this overall system
19 average fuel cost per kWh by the off-system sales volumes (kWh).

20 The fuel costs allocated to off-system sales are subtracted from the
21 total recoverable fuel expense for purposes of calculating the FAC, and are

¹ Fuel costs related to generation at Big Rivers' Coleman units were excluded from the monthly Form A filings during the review period for purposes of calculating the FAC as these units were operating under an SSR agreement within MISO for reliability requirements associated with the Century Aluminum, Hawesville smelter load.

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 included in the Inter-System Sales Including Interchange-Out line item on page 2
2 of Big Rivers' monthly Form A filings.

3

4

5 **Witness)** Nicholas R. Castlen

6

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 2)** *Are Big Rivers' lowest fuel cost generation resources assigned*
2 *to native load in each hour in the FAC? Please explain.*

3

4 **Response)** No. Big Rivers' lowest fuel cost generation resources are not
5 assigned to native load in each hour in the FAC.

6 The total cost of fuel burned for generation during the month is
7 included in the respective line items under Company Generation on page 2 of Big
8 Rivers' monthly Form A filings. The analysis is performed for the entire month,
9 not for each hour. The cost of fuel assigned to native load is calculated for the
10 month by adjusting the total cost of fuel burned for generation as follows:

11

- 12 1. Subtracting the amount of MISO Make Whole Payments received
- 13 for startup fuel costs during the month;
- 14 2. Adding the cost of fuel which would have been used in plants
- 15 suffering forced outages;
- 16 3. Subtracting the cost of fuel related to substitute generation for
- 17 forced outages;
- 18 4. Subtracting the cost of fuel related to supplemental and back-up
- 19 energy sales of generation to the smelters;
- 20 5. Subtracting the cost of fuel related to back-up sales of generation
- 21 to Domtar; and
- 22 6. Subtracting the cost of fuel related to off-system sales of
- 23 generation.

24

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1

2 **Witness)** Nicholas R. Castlen

3

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 3)** *After serving native load with the lowest fuel cost resources,*
2 *are the higher fuel cost generation units assigned to off-system sales in the*
3 *FAC? Please explain.*

4

5 **Response)** Not applicable. Please see the response to Item 1 for detail regarding
6 the assignment of fuel costs to off-system sales and the response to Item 2 for
7 detail regarding the assignment of fuel costs to native load.

8

9

10 **Witness)** Nicholas R. Castlen

11

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 4)** *Is the allocation of fuel costs between native load and off-*
2 *system sales in the FAC done on an after-the-fact stacking process for each*
3 *hour? Please explain.*

4

5 **Response)** No. The allocation of fuel costs between native load and off-system
6 sales in the FAC is not done on an after-the-fact stacking process for each hour.
7 Please see the responses to Items 1 and 2 for explanations of how fuel costs are
8 allocated monthly to off-system sales and native load, respectively.

9

10

11 **Witness)** Nicholas R. Castlen

12

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 5)** *Are system average fuel costs assigned to off-system sales in*
2 *the FAC? Please explain.*

3

4 **Response)** Yes. Please see the response to Item 1 for an explanation of how
5 system average fuel costs are calculated and assigned to off-system sales for
6 purposes of calculating the monthly FAC factor.

7

8

9 **Witness)** Nicholas R. Castlen

10

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 6)** *Are system average fuel costs assigned to native load in the*
2 *FAC? Please explain.*

3

4 **Response)** The cost of fuel assigned to native load for purposes of calculating the
5 monthly FAC factor is calculated on page 2, Fuel Cost Schedule, of the monthly
6 Form A filing. Refer to the response to Item 2 for a detailed description of the
7 calculation used to determine fuel costs assigned to native load for calculating the
8 FAC factor.

9 Because the calculation of fuel costs recoverable through the FAC
10 (*i.e.*, assigned to native load) includes adjustments for MISO Make Whole
11 Payments received for startup fuel costs during the month, the cost of fuel which
12 would have been used in plants suffering forced outages, and the cost of fuel
13 related to substitute generation during forced outages, the actual fuel costs
14 assigned to native load generally will not equal the system average fuel costs.

15

16

17 **Witness)** Nicholas R. Castlen

18

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 7)** *Please describe how purchase power costs are allocated*
2 *between native load and off-system sales in the FAC process.*

3

4 **Response)** When calculating the FAC purchases, purchased power is allocated to
5 off-system sales only when the purchases are made to specifically support sales.
6 Those purchases are designated as Back-to-Back and are netted out in the FAC to
7 have zero impact to Big Rivers' Members.

8

9

10 **Witness)** Wayne O'Bryan

11

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 8)** *For each of the six months under review, please provide the*
2 *fuel cost in \$/mwh that was assigned to: 1) native load; and 2) off-system*
3 *sales.*

4

5 **Response)** Please see the table below.

6

Big Rivers Electric Corporation Average Generation Fuel Costs for Native Load and Off-System Sales in FAC Calculation (\$ / MWH) November 2013 through April 2014		
Month During Review Period	Average Fuel Costs for Native Load in FAC ^{1,2}	Average Fuel Costs for Off-System Sales in FAC ^{1,2,3}
November 2013	\$ 24.59	\$ 23.87
December 2013	\$ 25.89	\$ 24.22
January 2014	\$ 27.44	\$ 25.45
February 2014	\$ 25.57	\$ 24.48
March 2014	\$ 25.82	\$ 24.42
April 2014	\$ 24.44	\$ 24.44

7

8 **Note(s) –**

- 9 1. Because the Fuel Cost Schedule (page 2 of the monthly Form A filing), which calculates
10 generation fuel costs recoverable through the FAC (*i.e.*, assigned to native load), includes
11 adjustments for MISO Make Whole Payments received for startup fuel costs during the
12 month, the cost of fuel which would have been used in plants suffering forced outages, and
13 the cost of fuel related to substitute generation during forced outages, the average fuel
14 costs assigned to native load for calculating the FAC (shown above) do not equal the
15 system average fuel costs.
- 16 2. Adjustments for forced outages in the FAC are made to both fuel costs and purchased
17 power costs. Because energy from forced outages is typically replaced by a combination of
18 generation from other units and purchased power, the FAC adjustments can impact fuel

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

- 1 costs and purchased power costs differently; this may skew the comparison of fuel costs for
2 native load and off-system sales.
3 3. In the context of fuel costs for Off-System Sales, the Off-System Sales are comprised of all
4 sales excluding those designated as Back-To-Back transactions. Please see the response to
5 Item 7.

6

7

8 **Witness)** Nicholas R. Castlen

9

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 9)** *For each of the six months under review, please provide the*
2 *purchase power costs in \$/mwh that was assigned to: 1) native load; and 2)*
3 *off-system sales.*

4
5 **Response)** Please see the table below.

6

Big Rivers Electric Corporation Average Purchase Power Costs for Native Load and Off-System Sales in FAC Calculation (\$ / MWH) November 2013 through April 2014		
Month During Review Period	Average Purchase Power Costs for Native Load in FAC ²	Average Purchase Power Costs for Off-System Sales in FAC ³
November 2013	\$ 21.39	\$ 30.64
December 2013	\$ 16.55	\$ 35.11
January 2014	\$ 25.57	\$ 73.11
February 2014	\$ 22.76	See Note 1
March 2014	\$ 24.13	See Note 1
April 2014	\$ 24.71	See Note 1

7

8 **Note(s) –**

- 9 1. No power purchases for off-system sales were made during the months of February, March,
10 and April 2014.
- 11 2. Adjustments for forced outages in the FAC are made to both fuel costs and purchased
12 power costs. Because energy from forced outages is typically replaced by a combination of
13 generation from other units and purchased power, the FAC adjustments can impact fuel
14 costs and purchased power costs differently; this may skew the comparison of purchased
15 power costs for native load and off-system sales.
- 16 3. In the context of purchased power costs for Off-System Sales, the Off-System Sales are
17 comprised solely of Back-to-Back transactions. See the response to Item 7.

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1

2

3 **Witness)** Nicholas R. Castlen

4

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2013 THROUGH APRIL 30, 2014
CASE NO. 2014-00230**

**Response to Kentucky Industrial Utility Customers, Inc.'s
Initial Request for Information
dated September 12, 2014**

September 23, 2014

1 **Item 10)** *Please confirm that the fuel costs of Wilson were included in*
2 *the FAC process for each of the six months under review. If the fuel costs*
3 *of Wilson were not included in the FAC please explain why not.*

4

5 **Response)** Confirmed.

6

7

8 **Witness)** Nicholas R. Castlen

9