

April 22, 2014

Ronald M. Sullivan

Jesse T. Mountjoy

Frank Stainback

James M. Miller

Michael A. Fiorella

Allen W. Holbrook

R. Michael Sullivan

Bryan R. Reynolds*

Tyson A. Kamuf

Mark W. Starnes

C. Ellsworth Mountjoy

Via Federal Express

Jeff DeRouen
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED

APR 23 2014

PUBLIC SERVICE
COMMISSION

Re: *In the Matter of: an Examination by the Public Service
Commission of the Environmental Surcharge Mechanism of Big
Rivers Electric Corporation for the Six-Month Billing Period
Ending January 31 , 2014*, PSC Case No. 2014-00097

*Also Licensed in Indiana

Dear Mr. DeRouen:

Enclosed for filing in the above referenced matter are an original and seven (7) copies of Big Rivers Electric Corporation's responses to the Public Service Commission Staffs' First Request for Information and an original and seven (7) copies of the Direct Testimony of Nicholas R. Castlen in support of the reasonableness of the environmental surcharge mechanisms of Big Rivers Electric Corporation, Jackson Purchase Energy Corporation, Kenergy Corp., and Meade County Rural Electric Cooperative Corporation. I certify that on this date, copies of this letter, the testimony, and the responses were served on all parties of record by first class mail, postage prepaid.

Please confirm the Commission's receipt of this information by having the Commission's date stamp placed on the enclosed additional copy and returning to Big Rivers in the self-addressed, postage paid envelope provided.

Should you have any questions about this matter, please contact me.

Sincerely,

TyA

Tyson Kamuf

TAK/lm
Enclosures

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

100 St. Ann Building
PO Box 727
Frankfort, Kentucky
42302-0727

cc: Billie Richert
DeAnna Speed
Gregory J. Starheim
G. Kelly Nuckols
Burns E. Mercer

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

VERIFICATION

I, Eric M. Robeson, verify, state, and affirm that 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.



Eric M. Robeson

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Eric M. Robeson on this the 17th day of April, 2014.



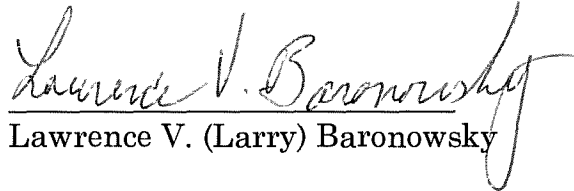
Notary Public, Ky. State at Large
My Commission Expires 1-12-17

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

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 7th day of April, 2014.



Notary Public, Ky. State at Large
My Commission Expires 1-12-17

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

VERIFICATION


I, Nicholas R. (Nick) Castlen, verify, state, and affirm that that the Direct Testimony and 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 17th day of April, 2014.



Notary Public, Ky. State at Large
My Commission Expires 1-12-17

ORIGINAL



Your Touchstone Energy® Cooperative 

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

AN EXAMINATION)
BY THE PUBLIC SERVICE COMMISSION)
OF THE ENVIRONMENTAL SURCHARGE)
MECHANISM OF BIG RIVERS ELECTRIC)
CORPORATION FOR THE)
SIX-MONTH BILLING PERIOD ENDING) Case No. 2014-00097
JANUARY 31, 2014)
AND THE PASS THROUGH MECHANISM)
OF ITS THREE MEMBER DISTRIBUTION)
COOPERATIVES)

**Responses to Commission Staff's
Initial Request for Information
dated April 1, 2014**

FILED: April 23, 2014

ORIGINAL

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

**Response to Commission Staff's
Initial Request for Information
dated April 1, 2014**

April 23, 2014

1 **Item 1)** *Prepare a summary schedule showing the calculation of $E(m)$*
2 *and the surcharge factor for the expense months covered by the billing*
3 *periods under review. Form 1.1 can be used as a model for this summary.*
4 *Include the expense months for the two expense months subsequent to the*
5 *billing period in order to show the over- and under-recovery adjustments*
6 *for the months included for the billing period. Include a calculation of*
7 *any additional over- or under-recovery amount Big Rivers believes needs*
8 *to be recognized for the billing periods under review. Include all*
9 *supporting calculations and documentation for the additional over- or*
10 *under-recovery.*

11

12 **Response)** Please see the attached schedule, in the format of Form 1.10,
13 covering each of the expense months from June 2013 through January 2014 (*i.e.*,
14 the expense months covered by the billing periods under review plus the
15 immediately following two months). No additional over/under recovery is sought
16 by Big Rivers Electric Corporation.

17

18

19 **Witness)** Nicholas R. Castlen

20

Big Rivers Electric Corporation

Case No. 2014-00097

Calculation of Total E(m) and Jurisdictional Surcharge Billing Factor

For the Expense Months: June 2013 to January 2014

Calculation of Total E(m)

1 E(m) = OE - BAS + RORB, where

2 OE = Pollution Control Operating Expenses

3 BAS = Total Proceeds from By-Product and Allowance Sales

4 RORB = [(RB/12) x (RORORB)]

		June 2013		July 2013
		Environmental Compliance Plans		Environmental Compliance Plans
10	OE	= \$ 2,303,304	= \$	2,633,009
11	BAS	= \$ -	= \$	-
12	RORB	= \$ -	= \$	-
14	E(m)	= \$ 2,303,304	= \$	2,633,009

Calculation of Jurisdictional Environmental Surcharge Billing Factor

20	Jurisdictional Allocation Ratio for the Month	=	90.400755%	=	84.093298%
21	Jurisdictional E(m) = E(m) x Jurisdictional Allocation Ratio	= \$	2,082,204	= \$	2,214,184
22	Adjustment for (Over)/Under Recovery	= \$	15,011	= \$	(28,399)
23	Prior Period Adjustment (if necessary)	= \$	-	= \$	-
25	Net Jurisdictional E(m) = Jurisdictional E(m) plus (Over)/Under plus Prior Period Adjustment(s)	= \$	2,097,215	= \$	2,185,785
28	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with the Current Expense Month	= \$	39,960,440	= \$	39,809,898
31	Jurisdictional Environmental Surcharge Billing Factor:				
32	CESF: E(m) / R(m); as a % of Revenue	=	5.248228%	=	5.490557%

Big Rivers Electric Corporation

Case No. 2014-00097

Calculation of Total E(m) and Jurisdictional Surcharge Billing Factor

For the Expense Months: June 2013 to January 2014

Calculation of Total E(m)

1	$E(m) = OE + BAS + RORB$, where				
2	OE	=	Pollution Control Operating Expenses		
3	BAS	=	Total Proceeds from By-Product and Allowance Sales		
4	RORB	=	$[(RB/12) \times (RORORB)]$		
5				<u>August 2013</u>	<u>September 2013</u>
6					
7			Environmental	Environmental	
8			Compliance Plans	Compliance Plans	
9					
10	OE	= \$	2,400,132	= \$	2,374,614
11	BAS	= \$	-	= \$	-
12	RORB	= \$	-	= \$	-
13					
14	E(m)	= \$	2,400,132	= \$	2,374,614
15					

Calculation of Jurisdictional Environmental Surcharge Billing Factor

19					
20	Jurisdictional Allocation Ratio for the Month	=	81.619269%	=	78.289691%
21	Jurisdictional E(m) = E(m) x Jurisdictional Allocation Ratio	= \$	1,958,970	= \$	1,859,078
22	Adjustment for (Over)/Under Recovery	= \$	(77,358)	= \$	135,278
23	Prior Period Adjustment (if necessary)	= \$	-	= \$	-
24					
25	Net Jurisdictional E(m) = Jurisdictional E(m) plus (Over)/Under				
26	plus Prior Period Adjustment(s)	= \$	1,881,612	= \$	1,994,356
27					
28	R(m) = Average Monthly Member System Revenue for the 12 Months				
29	Ending with the Current Expense Month	= \$	39,416,237	= \$	38,778,903
30					
31	Jurisdictional Environmental Surcharge Billing Factor:				
32	CESF: E(m) / R(m); as a % of Revenue	=	4.773698%	=	5.142889%

Big Rivers Electric Corporation
Case No. 2014-00097

**Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor**

For the Expense Months: June 2013 to January 2014

Calculation of Total E(m)

1	E(m) = OE - BAS + RORB, where				
2	OE	=	Pollution Control Operating Expenses		
3	BAS	=	Total Proceeds from By-Product and Allowance Sales		
4	RORB	=	[(RB/12) x (RORORB)]		
5				<u>October 2013</u>	<u>November 2013</u>
6					
7				Environmental Compliance Plans	Environmental Compliance Plans
8					
9					
10	OE	= \$	2,789,415	= \$	1,821,722
11	BAS	= \$	62,121	= \$	15,457
12	RORB	= \$	5,737	= \$	5,733
13					
14	E(m)	= \$	2,733,031	= \$	1,811,998

Calculation of Jurisdictional Environmental Surcharge Billing Factor

19					
20	Jurisdictional Allocation Ratio for the Month	=	72.526908%	=	84.883462%
21	Jurisdictional E(m) = E(m) x Jurisdictional Allocation Ratio	= \$	1,982,183	= \$	1,538,087
22	Adjustment for (Over)/Under Recovery	= \$	411,297	= \$	681,765
23	Prior Period Adjustment (if necessary)	= \$.	= \$.
24					
25	Net Jurisdictional E(m) = Jurisdictional E(m) plus (Over)/Under				
26	plus Prior Period Adjustment(s)	= \$	2,393,480	= \$	2,219,852
27					
28	R(m) = Average Monthly Member System Revenue for the 12 Months				
29	Ending with the Current Expense Month	= \$	37,814,766	= \$	36,899,327
30					
31	Jurisdictional Environmental Surcharge Billing Factor:				
32	CESF: E(m) / R(m); as a % of Revenue	=	6.329485%	=	6.015969%

Big Rivers Electric Corporation

Case No. 2014-00097

Calculation of Total E(m) and Jurisdictional Surcharge Billing Factor

For the Expense Months: June 2013 to January 2014

Calculation of Total E(m)

1	E(m) = OE - BAS + RORB, where				
2	OE	=	Pollution Control Operating Expenses		
3	BAS	=	Total Proceeds from By-Product and Allowance Sales		
4	RORB	=	[(RB/12) x (RORORB)]		
5				<u>December 2013</u>	<u>January 2014</u>
6					
7				Environmental	Environmental
8				Compliance Plans	Compliance Plans
9					
10	OE	= \$	2,349,391	= \$	2,447,581
11	BAS	= \$	6,977	= \$	21,598
12	RORB	= \$	9,563	= \$	10,544
13					
14	E(m)	= \$	2,351,977	= \$	2,436,527
15					

Calculation of Jurisdictional Environmental Surcharge Billing Factor

19					
20	Jurisdictional Allocation Ratio for the Month	=	78.391089%	=	76.155449%
21	Jurisdictional E(m) = E(m) x Jurisdictional Allocation Ratio	= \$	1,843,740	= \$	1,855,548
22	Adjustment for (Over)/Under Recovery	= \$	534,278	= \$	287,040
23	Prior Period Adjustment (if necessary)	= \$	-	= \$	-
24					
25	Net Jurisdictional E(m) = Jurisdictional E(m) plus (Over)/Under				
26	plus Prior Period Adjustment(s)	= \$	2,378,018	= \$	2,142,588
27					
28	R(m) = Average Monthly Member System Revenue for the 12 Months				
29	Ending with the Current Expense Month	= \$	36,277,297	= \$	35,785,567
30					
31	Jurisdictional Environmental Surcharge Billing Factor:				
32	CESF: E(m) / R(m); as a % of Revenue	=	6.555113%	=	5.987296%

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
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FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

**Response to Commission Staff's
Initial Request for Information
dated April 1, 2014**

April 23, 2014

1 **Item 2)** *For each of the three Member Cooperatives, prepare a*
2 *summary schedule showing the Member Cooperative's pass-through*
3 *revenue requirement for the months corresponding with the billing*
4 *periods under review. Include the two months subsequent to the billing*
5 *periods included in the review periods. Include a calculation of any*
6 *additional over- or under-recovery amount the Member Cooperative*
7 *believes needs to be recognized for the billing periods under review.*
8 *Include all supporting calculations and documentation for the additional*
9 *over- or under-recovery.*

10

11 **Response)** The attached two sets of schedules (Attachment 1 for non-dedicated
12 delivery points and Attachment 2 for dedicated delivery points) reflect Big Rivers'
13 Members' environmental surcharge pass-through for the months corresponding to
14 Big Rivers' expense months of June 2013 through November 2013, applied to
15 Members' invoices for the service months of July 2013 through December 2013,
16 which Big Rivers billed to its Members August 2013 through January 2014. As
17 illustrated in the attached schedules, there is no billing lag for dedicated delivery
18 point customers.

19 As requested by the Commission, the attached schedules include the
20 Members' two billing months immediately following the review period. The
21 information on the attached schedules was obtained from the Members' monthly

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

**Response to Commission Staff's
Initial Request for Information
dated April 1, 2014**

April 23, 2014

1 Environmental Surcharge Schedules provided by Big Rivers' Members. Other
2 than the on-going cumulative over/under recovery mechanism, no additional
3 over/under recovery amount is requested.

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6 **Witness)** Nicholas R. Castlen

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BIG RIVERS ELECTRIC CORPORATION

Case No. 2014-00097

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KENERGY CORP. ENVIRONMENTAL SURCHARGE REVIEW NON-DEDICATED DELIVERY POINT CUSTOMERS					
(a)	(b)	(c)	(d)	(e)	(f)
Mo/Yr	Big Rivers' Invoice ES Amount for Service Month	(Over)/Under Recovery [from (f)]	Total Recoverable [(b) + (c)]	ES Amount Billed to Kenergy's Customers (Line 11 per Filing)	(Over)/Under Recovery [(d) for 2nd preceding month less (e) for current month]
Jul-13	\$ 307,454.30	\$ (38,274.06)	\$ 269,180.24	\$ 311,004.93	\$ (38,274.06)
Aug-13	\$ 355,641.02	\$ (13,844.78)	\$ 341,796.24	\$ 297,208.15	\$ (13,844.78)
Sep-13	\$ 342,953.18	\$ 10,545.85	\$ 353,499.03	\$ 258,634.39	\$ 10,545.85
Oct-13	\$ 257,520.03	\$ 24,126.52	\$ 281,646.55	\$ 317,669.72	\$ 24,126.52
Nov-13	\$ 410,934.89	\$ 11,982.82	\$ 422,917.71	\$ 341,516.21	\$ 11,982.82
Dec-13	\$ 458,036.89	\$ (29,634.36)	\$ 428,402.53	\$ 311,280.91	\$ (29,634.36)
Jan-14	\$ 603,901.94	\$ (52,822.62)	\$ 551,079.32	\$ 475,740.33	\$ (52,822.62)
Feb-14	\$ 494,765.42	\$ (36,725.06)	\$ 458,040.36	\$ 465,127.59	\$ (36,725.06)

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JACKSON PURCHASE ENERGY CORPORATION ENVIRONMENTAL SURCHARGE REVIEW NON-DEDICATED DELIVERY POINT CUSTOMERS					
(a)	(b)	(c)	(d)	(e)	(f)
Mo/Yr	Big Rivers' Invoice ES Amount for Service Month	(Over)/Under Recovery [from (f)]	Total Recoverable [(b) + (c)]	ES Amount Billed to JPEC's Customers (Line 11 per Filing)	(Over)/Under Recovery [(d) for 3rd preceding month less (e) for current month]
Jul-13	\$ 174,263.38	\$ (21,317.96)	\$ 152,945.42	\$ 159,445.10	\$ (21,317.96)
Aug-13	\$ 192,807.41	\$ (34,087.58)	\$ 158,719.83	\$ 169,345.07	\$ (34,087.58)
Sep-13	\$ 187,242.94	\$ (11,066.33)	\$ 176,176.61	\$ 202,974.25	\$ (11,066.33)
Oct-13	\$ 131,619.32	\$ (220.02)	\$ 131,399.30	\$ 153,165.44	\$ (220.02)
Nov-13	\$ 220,902.30	\$ 38,502.36	\$ 259,404.66	\$ 120,217.47	\$ 38,502.36
Dec-13	\$ 246,576.20	\$ 13,736.09	\$ 260,312.29	\$ 162,440.52	\$ 13,736.09
Jan-14	\$ 314,415.48	\$ (48,356.86)	\$ 266,058.62	\$ 179,756.16	\$ (48,356.86)
Feb-14	\$ 263,353.44	\$ (109,852.11)	\$ 153,501.33	\$ 369,256.77	\$ (109,852.11)

Case No. 2014-00097

Attachment (1 of 2) for Response to PSC 1-2

Witness: Nicholas R. Castlen

Page 1 of 2

BIG RIVERS ELECTRIC CORPORATION

Case No. 2014-00097

MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION ENVIRONMENTAL SURCHARGE REVIEW NON-DEDICATED DELIVERY POINT CUSTOMERS					
(a)	(b)	(c)	(d)	(e)	(f)
Mo/Yr	Big Rivers' Invoice ES Amount for Service Month	(Over)/Under Recovery [from (f)]	Total Recoverable [(b) + (c)]	ES Amount Billed to MCRECC's Customers (Line 11 per Filing)	(Over)/Under Recovery [(d) for 1st preceding month less (e) for current month]
Jul-13	\$ 110,863.92	\$ (9,192.25)	\$ 101,671.67	\$ 100,347.11	\$ (9,192.25)
Aug-13	\$ 129,176.57	\$ 2,976.92	\$ 132,153.49	\$ 98,694.75	\$ 2,976.92
Sep-13	\$ 123,277.54	\$ 14,481.59	\$ 137,759.13	\$ 117,671.90	\$ 14,481.59
Oct-13	\$ 104,105.29	\$ 8,968.25	\$ 113,073.54	\$ 128,790.88	\$ 8,968.25
Nov-13	\$ 172,073.80	\$ (25,301.40)	\$ 146,772.40	\$ 138,374.94	\$ (25,301.40)
Dec-13	\$ 201,893.98	\$ (29,357.28)	\$ 172,536.70	\$ 176,129.68	\$ (29,357.28)
Jan-14	\$ 279,567.56	\$ (25,838.97)	\$ 253,728.59	\$ 198,375.67	\$ (25,838.97)
Feb-14	\$ 217,793.23	\$ 18,194.85	\$ 235,988.08	\$ 235,533.74	\$ 18,194.85

BIG RIVERS ELECTRIC CORPORATION

Case No. 2014-00097

**KENERGY CORP-ENVIRONMENTAL SURCHARGE REVIEW
DEDICATED DELIVERY POINT CUSTOMERS**

(a)	(b)	(c)	(d)
Service Mo/Yr	Big Rivers Electric Invoice Amount for Service Month	Service Month to Retail Consumer	Monthly Over/Under (Column (b) less column (c))
Jul-13	\$ 1,580,127.78	\$ 1,580,127.78	\$ -
Aug-13	\$ 1,370,776.16	\$ 1,370,776.16	\$ -
Sep-13	\$ 814,725.80	\$ 814,725.80	\$ -
Oct-13	\$ 817,684.61	\$ 817,684.61	\$ -
Nov-13	\$ 1,053,080.35	\$ 1,053,080.35	\$ -
Dec-13	\$ 1,024,147.60	\$ 1,024,147.60	\$ -
Jan-14	\$ 1,130,297.30	\$ 1,130,297.30	\$ -
Feb-14	\$ 249,785.02	\$ 249,785.02	\$ -

**JACKSON PURCHASE ENERGY CORPORATION
ENVIRONMENTAL SURCHARGE REVIEW
DEDICATED DELIVERY POINT CUSTOMERS**

(a)	(b)	(c)	(d)
Service Mo/Yr	Big Rivers Electric Invoice Amount for Service Month	Service Month To Retail Consumer	Monthly (Over)/Under Recovery (Column (b) Less column (c))
Jul-13	\$ 1,863.86	\$ 1,863.86	\$ -
Aug-13	\$ 2,106.05	\$ 2,106.05	\$ -
Sep-13	\$ 2,115.31	\$ 2,115.31	\$ -
Oct-13	\$ 1,661.77	\$ 1,661.77	\$ -
Nov-13	\$ 2,210.95	\$ 2,210.95	\$ -
Dec-13	\$ 2,156.89	\$ 2,156.89	\$ -
Jan-14	\$ 2,192.09	\$ 2,192.09	\$ -
Feb-14	\$ 2,178.73	\$ 2,178.73	\$ -

Meade County Rural Electric Cooperative Corporation has no dedicated delivery point customers.

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
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OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

**Response to Commission Staff's
Initial Request for Information
dated April 1, 2014**

April 23, 2014

1 **Item 3)** *Refer to Form 2.5, Operating and Maintenance Expenses, for*
2 *each of the expense months covered by each billing period under review.*
3 *For each of the expense line items listed on this schedule, explain the*
4 *reason(s) for any change in the expense levels from month to month if that*
5 *change is greater than plus or minus 10 percent.*

6

7 **Response)** Please see the attached schedules of Operating and Maintenance
8 ("O&M") expenses, including the requested variance explanations, for the expense
9 months of May 2013 through November 2013. Please note, May 2013 is only being
10 shown for purposes of calculating the variances in the first month of the review
11 period.

12

13

14 **Witnesses)** Nicholas R. Castlen (Schedules of O&M Expenses) and
15 Lawrence V. Baronowsky (Reason(s) for Changes in Expense Levels)

16

Big Rivers Electric Corporation

Case No. 2014-00097

Form 2.5 - Operating and Maintenance Expenses Analysis

NOx Plan:

Expense Month	May-13	Jun-13	Jun-13 vs. May-13 % Change	Jul-13	Jul-13 vs. Jun-13 % Change	Aug-13	Aug-13 vs. Jul-13 % Change	Sep-13	Sep-13 vs. Aug-13 % Change	Oct-13	Oct-13 vs. Sep-13 % Change	Nov-13	Nov-13 vs. Oct-13 % Change
NOx Plan													
Anhydrous Ammonia	\$ 170,821	\$ 101,613	-41%	\$ 180,597	78%	\$ 85,453	-53%	\$ 149,939	75%	\$ 167,628	12%	\$ 81,518	-51%
Emulsified Sulphur for NOx	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Individual Expense Account Items	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Individual Expense Account Items	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Total NOx Plan O&M Expenses	\$ 170,821	\$ 101,613	-41%	\$ 180,597	78%	\$ 85,453	-53%	\$ 149,939	75%	\$ 167,628	12%	\$ 81,518	-51%

SO2 Plan:

Expense Month	May-13	Jun-13	Jun-13 vs. May-13 % Change	Jul-13	Jul-13 vs. Jun-13 % Change	Aug-13	Aug-13 vs. Jul-13 % Change	Sep-13	Sep-13 vs. Aug-13 % Change	Oct-13	Oct-13 vs. Sep-13 % Change	Nov-13	Nov-13 vs. Oct-13 % Change
SO2 Plan Expenses:													
Disposal-Flyash/Bottom Ash/Sludge	\$ 353,081	\$ 311,603	-12%	\$ 339,701	9%	\$ 315,225	-7%	\$ 293,479	-7%	\$ 425,004	45%	\$ 204,324	-52%
Off Spec Gypsum	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Fixation Lime	171,629	147,675	-14%	187,326	27%	204,524	9%	275,003	34%	283,256	3%	180,643	-36%
Reagent-Calcium Oxide (landfill stab	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Reagent-Limestone	417,267	406,436	-3%	427,873	5%	338,726	-21%	217,494	-36%	242,830	12%	201,415	-17%
Reagent-Lime	879,536	1,094,174	24%	1,222,612	12%	1,173,751	-4%	1,154,268	-2%	1,386,850	20%	881,164	-36%
Emulsified Sulphur for SO2	11,587	10,041	-13%	1,647	-84%	28,835	1651%	10,535	-63%	20,452	94%	16,047	-22%
Reagent-DiBasic Acid	218,504	140,407	-36%	160,464	14%	119,518	-26%	140,843	18%	104,678	-26%	129,661	24%
Reagent-Sodium BiSulfite for SO2	21,392	41,429	94%	38,608	-7%	74,844	94%	53,581	-28%	81,693	52%	77,290	-5%
Reagent-Hydroxy Basic Acid	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Total SO2 Plan O&M Expenses	\$ 2,072,996	\$ 2,151,765	4%	\$ 2,378,231	11%	\$ 2,255,423	-5%	\$ 2,145,203	-5%	\$ 2,544,763	19%	\$ 1,690,544	-34%

SO3 Plan:

Expense Month	May-13	Jun-13	Jun-13 vs. May-13 % Change	Jul-13	Jul-13 vs. Jun-13 % Change	Aug-13	Aug-13 vs. Jul-13 % Change	Sep-13	Sep-13 vs. Aug-13 % Change	Oct-13	Oct-13 vs. Sep-13 % Change	Nov-13	Nov-13 vs. Oct-13 % Change
SO3 Plan Expenses:													
Hydrated Lime - SO3	\$ 25,254	\$ 18,602	-26%	\$ 43,448	134%	\$ 30,670	-29%	\$ 53,696	75%	\$ 40,097	-25%	\$ 24,518	-39%
Individual Expense Account Items	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Individual Expense Account Items	-	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1	-	See Note 1
Total SO3 Plan O&M Expenses	\$ 25,254	\$ 18,602	-26%	\$ 43,448	134%	\$ 30,670	-29%	\$ 53,696	75%	\$ 40,097	-25%	\$ 24,518	-39%

Total	\$ 2,269,071	\$ 2,271,980	\$ 2,602,276	\$ 2,371,546	\$ 2,348,838	\$ 2,752,488	\$ 1,796,580
--------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------

Note 1: Percentage change not calculated because the cost incurred during the prior expense month was \$0.

Note 2: The monthly totals for Disposal Bottom Ash, Disposal Flyash and Disposal Flyash/Bottom Ash/Sludge have been consolidated due to similarity to better facilitate consistency.

Big Rivers Electric Corporation
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Form 2.5 - Operating and Maintenance Expenses Analysis

Variance Explanations:

Anhydrous Ammonia:

Jun-13 vs. May-13	The decrease was due to timing of product delivery and invoicing at Wilson.
Jul-13 vs. Jun-13	The increase was due to increased generation at HMP&L and timing of product delivery and invoicing at Wilson and HMP&L.
Aug-13 vs. Jul-13	The decrease was due to reduced generation at HMP&L and timing of product delivery and invoicing at Wilson and HMP&L along with a 14.28% reduction in ammonia cost.
Sep-13 vs. Aug-13	The increase was due to timing of product delivery and invoicing at Wilson and HMP&L.
Oct-13 vs. Sep-13	The increase was due to 13.7% increased generation at HMP&L.
Nov-13 vs. Oct-13	The decrease was due to timing of product delivery and invoicing at Wilson and HMP&L.

Disposal-Flyash/Bottom Ash/ Sludge:

Jun-13 vs. May-13	The decrease was due to 19.5% reduction in generation at Coleman.
Oct-13 vs. Sep-13	The increase was due to increased generation and ash pond dredging costs at Green and HMP&L along with additional charges for landfill capping at Wilson.
Nov-13 vs. Oct-13	The decrease was due to 43.5% reduction in generation at Green due to Unit 1 planned outage in November and there were no ash pond dredging costs at Green or HMP&L in November.

Fixation Lime:

Jun-13 vs. May-13	The decrease was due to timing of product delivery and invoicing at Green and operational needs at the Wilson landfill.
Jul-13 vs. Jun-13	The increase was due to 9.0% increase in generation at HMP&L and timing of product delivery and invoicing at Green and HMP&L.
Sep-13 vs. Aug-13	The increase was due to timing of product delivery and invoicing at Wilson and increased usage due to operational needs at the Wilson landfill.
Nov-13 vs. Oct-13	The decrease was due to 43.5% reduction in generation at Green due to Unit 1 planned outage in November and operational needs at the Wilson landfill.

Reagent Limestone:

Aug-13 vs. Jul-13	The decrease was due to 4.5% reduction in generation at Coleman and timing of product delivery and invoicing at Coleman and Wilson.
Sep-13 vs. Aug-13	The decrease was due to 4.0% reduction in generation at Wilson and timing of product delivery and invoicing at Coleman and Wilson.
Oct-13 vs. Sep-13	The increase was due to timing of product delivery and invoicing at Wilson.
Nov-13 vs. Oct-13	The decrease was due to timing of product delivery and invoicing at Wilson.

Big Rivers Electric Corporation

Case No. 2014-00097

Form 2.5 - Operating and Maintenance Expenses Analysis

Reagent-Lime:

Jun-13 vs. May-13	The increase was due to 48.0% increase in generation at HMP&L due to the Unit 2 planned outage in May.
Jul-13 vs. Jun-13	The increase was due to 9.0% increase in generation at HMP&L and timing of product delivery and invoicing at Green and HMP&L.
Oct-13 vs. Sep-13	The increase was due to 13.7% increase in generation at HMP&L and 5.9% increase in generation at Green.
Nov-13 vs. Oct-13	The decrease was due to 43.5% reduction in generation at Green due to Unit 1 planned outage in November.

Emulsified Sulfur for SO2:

Jun-13 vs. May-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. Less chemical was needed at Wilson in June than was added in May.
Jul-13 vs. Jun-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. Less chemical was needed at Wilson in July than was added in June and no chemical was added at HMP&L in July.
Aug-13 vs. Jul-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. More chemical was needed at Wilson in August than was added in July and chemical was added at HMP&L in August.
Sep-13 vs. Aug-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. Less chemical was needed at Wilson and at HMP&L in September than was added in August.
Oct-13 vs. Sep-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. More chemical was needed at Wilson and HMP&L in October than was added in September.
Nov-13 vs. Oct-13	Emulsified sulfur is ordered on an as needed basis and added in batch based on scrubber chemistry. Less chemical was needed at Wilson and at HMP&L in November than was added in October.

Reagent-Dibasic Acid:

Jun-13 vs. May-13	The decrease was due to timing of product delivery and invoicing at Wilson.
Jul-13 vs. Jun-13	The increase was due to timing of product delivery and invoicing at Wilson.
Aug-13 vs. Jul-13	The decrease was due to timing of product delivery and invoicing at Wilson.
Sep-13 vs. Aug-13	The increase was due to timing of product delivery and invoicing at Wilson.
Oct-13 vs. Sep-13	The decrease was due to timing of product delivery and invoicing at Wilson.
Nov-13 vs. Oct-13	The increase was due to timing of product delivery and invoicing at Wilson.

Big Rivers Electric Corporation

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Form 2.5 - Operating and Maintenance Expenses Analysis

Reagent-Sodium BiSulfite for SO₂:

Jun-13 vs. May-13	Sodium BiSulfite is ordered on an as needed basis and added in batch based on scrubber chemistry. The increase was due to timing of product delivery and invoicing and operational needs related to fuel quality at Wilson.
Aug-13 vs. Jul-13	Sodium BiSulfite is ordered on an as needed basis and added in batch based on scrubber chemistry. The increase was due to timing of product delivery and invoicing and operational needs related to fuel quality at Wilson. Also chemical was added at HMP&L in August and none was added in July.
Sep-13 vs. Aug-13	Sodium BiSulfite is ordered on an as needed basis and added in batch based on scrubber chemistry. The decrease was due to operational needs related to fuel quality at Wilson and chemical was added at HMP&L in August and none was added in September.
Oct-13 vs. Sep-13	Sodium BiSulfite is ordered on an as needed basis and added in batch based on scrubber chemistry. The increase was due to timing of product delivery and invoicing and operational needs related to fuel quality at Wilson.

Hydrated Lime - SO₃:

Jun-13 vs. May-13	The decrease was due to operational needs related to ambient conditions at Wilson.
Jul-13 vs. Jun-13	The increase was due to timing of product delivery and invoicing and operational needs related to ambient conditions at Wilson.
Aug-13 vs. Jul-13	The decrease was due to operational needs related to ambient conditions at Wilson.
Sep-13 vs. Aug-13	The increase was due to timing of product delivery and invoicing and operational needs related to ambient conditions at Wilson.
Oct-13 vs. Sep-13	The decrease was due to timing of product delivery and invoicing and operational needs related to ambient conditions at Wilson.
Nov-13 vs. Oct-13	The decrease was due to operational needs related to ambient conditions at Wilson.

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Attachment for Response to PSC 1-3

Witnesses: Nicholas R. Castlen and Lawrence V. Baronowsky

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BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
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OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
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**Response to Commission Staff's
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dated April 1, 2014**

April 23, 2014

1 **Item 4)** *Refer to Big Rivers monthly reports for the expense months of*
2 *October and November 2013.*

3
4 *a. Explain how Big Rivers determined the rate of return used*
5 *to calculate the return on rate base and how the method*
6 *used is in accordance with the Commission's Order in Case*
7 *No. 2012-00063.*

8 *b. Provide the calculations and supporting data for the rate*
9 *of return of 6.14 percent for October and 5.85 percent for*
10 *November. Provide all supporting calculations and*
11 *documentation in Excel spreadsheet format, with formulas*
12 *intact and unprotected and all rows and columns*
13 *accessible.*

14
15 **Response)**

16 a. Big Rivers determined the rates of return, used in its monthly
17 Environmental Surcharge ("ES") reports for the October and
18 November 2013 expense months, by (1) calculating its average
19 cost of debt (i.e. weighted average interest rate on long-term debt)
20 during the respective expense month and (2) applying a 1.24
21 Times Interest Earned Ratio ("TIER") to the monthly average cost
22 of debt calculated in step (1).

BIG RIVERS ELECTRIC CORPORATION

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1 The average cost of debt for each expense month was
2 calculated as follows:

3

$$\frac{\text{Month-to-Date Interest Expense on Long-Term Debt}}{\text{Average Outstanding Long-Term Debt during the Month}} \times \frac{\text{No. of Days in Year}}{\text{No. of Days in Month}}$$

4

5 This method of calculating the Rate of Return on Rate Base
6 ("RORORB") is in accordance with the Commission's Order, dated
7 October 1, 2012, in Case No. 2012-00063, ("the October 2012
8 Order") which approved the revised ES Tariff as provided in Big
9 Rivers' response, filed July 6, 2012, to Item 12 of the Commission
10 Staff's Second Request for Information, dated June 22, 2012, in
11 that proceeding.

12 The revised ES Tariff, referenced in the October 2012
13 Order, defines RORORB as the average cost of debt for
14 environmental compliance plan projects approved by the
15 Commission plus application of a Times Interest Earned Ratio of
16 1.24. A copy of Big Rivers' ES Tariff is provided as an attachment
17 to Item 5.

18 Although the definition of RORORB, included in Big Rivers'
19 ES Tariff, does not explicitly state the time period which the

BIG RIVERS ELECTRIC CORPORATION

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1 calculation of the average cost of debt should be based on, the
2 Tariff does indicate that the calculation of E(m) should be based
3 on actual costs and revenues for the current expense month.
4 Because the average cost of debt can fluctuate from month-to-
5 month, using the average cost of debt for the current expense
6 month (rather than a historical average or forecasted amount)
7 ensures that the calculation accurately reflects the cost associated
8 with the current expense month.

9 b. Please see the attachment to this response for the calculations
10 and supporting data for the rate of return of 6.14 percent for
11 October 2013, and 5.85 percent for November 2013. These
12 calculations are also provided in Excel spreadsheet format, with
13 formulas intact and unprotected and all rows and columns
14 accessible, on the CD accompanying these responses.

15
16
17
18

Witness) Nicholas R. Castlen

Big Rivers Electric Corporation
Case No. 2014-00097
Calculation of Rate of Return on Environmental Compliance Rate Base
Expense Months of October and November 2013

	<u>Nov-13</u>	<u>Oct-13</u>
<u>Month-to-Date Interest Expense on Long-Term Debt:</u>		
RUS - Series A Note	\$ 384,020.58	\$ 396,819.43
RUS - Series B Note	\$ 648,536.22	\$ 670,154.10
CoBank - Series 2012A Notes	\$ 809,498.20	\$ 836,481.47
CFC - Series 2012B Refinance Note	\$ 872,204.92	\$ 1,088,440.01
CFC - Series 2012B Equity Note	\$ 186,746.32	\$ 186,746.31
Series 2010A P.C. Bonds	\$ 416,500.00	\$ 416,500.00
<hr/>		
(a) Total Monthly Interest Expense on Long-Term Debt	\$ 3,317,506.24	\$ 3,595,141.32
Total Outstanding Long-Term Debt (Beginning of Month)	\$ 856,010,461.10	\$ 855,999,027.12
Total Outstanding Long-Term Debt (End of Month)	\$ 852,980,908.70	\$ 856,010,461.10
(b) Average Outstanding Long-Term Debt during Month	\$ 854,495,684.90	\$ 856,004,744.11
(c) Number of Days During Year	365	365
(d) Number of Days During Month	30	31
<hr/>		
(e) Average Cost of Debt [(a) ÷ (b)] x [(c) ÷ (d)]	4.72%	4.95%
(f) Applicable TIER ¹	1.24	1.24
<hr/>		
(g) Rate of Return on Environmental Compliance Rate Base [(e) x (f)]	5.85%	6.14%

¹ Times Interest Earned Ratio ("TIER") applicable to the average cost of debt for calculating the Rate of Return on Environmental Compliance Plan Rate Base per the ES - Environmental Surcharge Tariff approved by Order of the Commission dated October 1, 2012 (Case No. 2012-00063).

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 5)** *Is Big Rivers aware of the practice of other Kentucky utilities*
2 *with an environmental surcharge to calculate a rate of return to be used*
3 *prospectively in the monthly filings in an environmental surcharge review*
4 *until changed by the Commission in a subsequent six-month or two-year*
5 *environmental surcharge review proceeding? If so, did Big Rivers*
6 *consider adopting this method for establishing the rate of return for its*
7 *monthly reports instead of its current practice of calculating the rate of*
8 *return on a monthly basis? Explain Big Rivers' decision to adopt its*
9 *current method.*

10

11 **Response)** Big Rivers was not aware of the practice of other Kentucky utilities
12 with an environmental surcharge to calculate a rate of return to be used
13 prospectively in the monthly filings in an environmental surcharge review until
14 changed by the Commission in a subsequent six-month or two-year environmental
15 surcharge review proceeding.

16 Big Rivers calculated the rate of return used in its monthly
17 Environmental Surcharge ("ES") filings based on the language included in its ES
18 Tariff approved by the Commission in its October 2012 Order in Case No. 2012-
19 00063. Based on Big Rivers' ES Tariff,

20

BIG RIVERS ELECTRIC CORPORATION

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1 "The ES shall provide for monthly adjustments based on a percent of
2 revenues equal to the difference between the environmental costs in the
3 base period and in the current period based on the following formula:
4

$$5 \text{ CESF} = \text{Net Jurisdictional E(m)} / \text{Jurisdictional R(m)}$$

$$6 \text{ MESF} = \text{CESF} - \text{BESF}$$

7
8
9 Where E(m) is the total of each approved environmental compliance plan
10 revenue requirement of environmental costs for the current expense
11 month and R(m) is the revenue for the current expense month..."
12

13 Because the ES Tariff states that the monthly ES factor shall be
14 based on environmental compliance costs during the current expense month, Big
15 Rivers used the monthly cost of debt for the current expense month to calculate
16 the rate of return used in its monthly ES filings.

17 A copy of Big Rivers' current ES Tariff is provided as an attachment
18 to this response.
19
20

21 **Witness)** Nicholas R. Castlen
22



Your Touchstone Energy Cooperative (Name of Utility)

For All Territory Served By Cooperative's Transmission System P.S.C. KY. No. 26

Original SHEET NO. 58 CANCELLING P.S.C. KY. No. 25 Original SHEET NO. 61

RATES, TERMS AND CONDITIONS - SECTION 2

ES - Environmental Surcharge:

Applicability:

To all Big Rivers' Members.

Availability:

The Environmental Surcharge ("ES") is mandatory to Standard Rate Schedule RDS, Standard Rate Schedule LIC, and to the FAC and the Non-FAC PPA adjustment clauses, including service to the Smelters under the Smelter Agreements. [T] [T]

Rate:

The ES shall provide for monthly adjustments based on a percent of revenues equal to the difference between the environmental compliance costs in the base period and in the current period based on the following formula:

CESF = Net Jurisdictional E(m)/Jurisdictional R(m)

MESF = CESF - BESF

MESF = Monthly Environmental Surcharge Factor

CESF = Current Environmental Surcharge Factor

BESF = Base Environmental Surcharge Factor (presently equal to zero)

Where E(m) is the total of each approved environmental compliance plan revenue requirement of environmental costs for the current expense month and R(m) is the revenue for the current expense month as set forth below.

Definitions:

Please see Section 4 for definitions common to all tariffs. [T]

(1) E(m) = [(RB/12)(RORORB)] + OE - BAS

Where:

- (a) RB is the Environmental Compliance Rate Base, defined as electric plant in service for applicable environmental projects adjusted for accumulated depreciation, cash working capital, spare parts inventory, and limestone inventory, and emission allowance inventory;


DATE OF ISSUE February 7, 2014 DATE EFFECTIVE February 1, 2014

/s/ Billie J. Richert

ISSUED BY: Billie J. Richert, Vice President Accounting, Rates, and Chief Financial Officer Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420 All rates in this tariff are subject to change and/or refund on issuance of the Commission's Final Order in Case No. 2013-00199.

KENTUCKY PUBLIC SERVICE COMMISSION JEFF R. DEROUEN EXECUTIVE DIRECTOR TARIFF BRANCH Brent Kinley EFFECTIVE 2/1/2014 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Your Touchstone Energy® Cooperative 
(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
P.S.C. KY. No. 26

Original SHEET NO. 59

CANCELLING P.S.C. KY. No. 25

Original SHEET NO. 62

RATES, TERMS AND CONDITIONS – SECTION 2

ES - Environmental Surcharge – (continued)

Definitions (continued):

- (b) RORORB is the Rate of Return on the Environmental Compliance Rate Base, designated as the average cost of debt for environmental compliance plan projects approved by the Commission plus application of a Times Interest Earned Ratio of 1.24;
- (c) OE represents the Monthly Pollution Control Operating Expenses, defined as the operating and maintenance expense and emission allowance expense of approved environmental compliance plans; and
- (d) BAS is the net proceeds from By-Products and Emission Allowance Sales.
- (2) Total E(m) is multiplied by the Jurisdictional System Allocation Ratio to arrive at Jurisdictional E(m). The Jurisdictional Allocation Ratio is the ratio of the 12-month total revenue from sales to Members to which the ES will be applied ending with the current expense month, divided by the 12-month total revenue from sales to Members and off-system sales for the current expense month.
- (3) The revenue R(m) is the average monthly revenue, including base revenues and automatic adjustment clause charges or credits less Environmental Surcharge revenues, for Big Rivers for the twelve months ending with the current expense month.
- (4) Jurisdictional E(m) is adjusted for Over/(Under) Recovery and, if ordered by the Commission, a Prior Period Adjustment to arrive at Net Jurisdictional E(m).
- (5) The current expense month (m) shall be the second month preceding the month in which the ES is billed.

DATE OF ISSUE February 7, 2014
DATE EFFECTIVE February 1, 2014

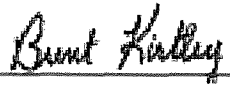
/s/ Billie J. Richert

ISSUED BY: Billie J. Richert,
Vice President Accounting, Rates, and
Chief Financial Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420
*All rates in this tariff are subject to change and/or refund on issuance of
the Commission's Final Order in Case No. 2013-00199.*

**KENTUCKY
PUBLIC SERVICE COMMISSION**

**JEFF R. DEROUEN
EXECUTIVE DIRECTOR**

TARIFF BRANCH


EFFECTIVE
2/1/2014
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
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**Response to Commission Staff's
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April 23, 2014

1 **Item 6)** *Explain why Big Rivers has not calculated a cash working*
2 *capital allowance on ES Form 2.40, and carried the result forward to ES*
3 *Form 2.00 to determine Big Rivers' environmental compliance rate base.*
4 *When does Big Rivers anticipate including a cash working capital*
5 *allowance calculation in the rate base determination on the monthly*
6 *reports?*

7
8 **Response)** Big Rivers' 2007 environmental compliance plan, approved by the
9 Commission in its Order dated June 25, 2008, in Case No. 2007-00460 (the "2007
10 Plan"), only allowed for recovery of certain variable operating and maintenance
11 expenses associated with its existing environmental compliance programs.
12 Because the 2007 Plan did not include any capital projects or investments in
13 utility plant, Big Rivers did not seek a return on investment for such projects.

14 Big Rivers' 2012 environmental compliance plan, as approved by the
15 Commission in its October 2012 Order in Case No. 2012-00063 (the "2012 Plan"),
16 allows Big Rivers to recover fixed costs and a return on investment for projects
17 associated with its 2012 Plan, in addition to the recovery of variable operating and
18 maintenance expenses associated with both its 2007 and 2012 plans.

19 Because Big Rivers' 2012 Plan projects have not yet been completed
20 or placed into service, only Construction Work-in-Progress is currently included in
21 the calculation of Big Rivers' environmental compliance rate base on Form 2.00 of
22 its monthly ES filing. Additional items, such as a Working Capital Allowance,

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1 Emission Allowance Inventory, Spare Parts, and Limestone Inventory, will be
2 included in the calculation of Big Rivers' environmental compliance rate base once
3 projects associated with its 2012 Plan are completed and placed into service. Big
4 Rivers currently expects the initial project(s) associated with its 2012 Plan to be
5 completed and placed into service during the first quarter of 2015.

6
7
8
9

Witness) Nicholas R. Castlen

BIG RIVERS ELECTRIC CORPORATION

**AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION
OF THE ENVIRONMENTAL SURCHARGE MECHANISM
OF BIG RIVERS ELECTRIC CORPORATION
FOR THE SIX-MONTH BILLING PERIOD ENDING JANUARY 31, 2014
AND THE PASS THROUGH MECHANISM
OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES
CASE NO. 2014-00097**

**Response to Commission Staff's
Initial Request for Information
dated April 1, 2014**

April 23, 2014

1 **Item 7)** *Explain why Big Rivers has not included the emission*
2 *allowance inventory on ES Form 2.00 to determine Big Rivers'*
3 *environmental compliance rate base. When does Big Rivers anticipate*
4 *including the emission allowance inventory in the rate base*
5 *determination on the monthly reports?*

6

7 **Response)** Please see the response to Item 6.

8

9

10 **Witness)** Nicholas R. Castlen

11

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 8)** *In Big Rivers' response to Commission Staffs First Request for*
2 *Information in Case No. 2013-00347, Item 6, Big Rivers stated that it did*
3 *not anticipate proceeding with the installation of the MATS equipment at*
4 *the Coleman and Wilson stations due to the pending idling of these units.*

5
6 *a. Explain whether the response continues to accurately*
7 *describe Big Rivers' intent regarding the installation of*
8 *MATS equipment at the Coleman Station.*

9 *b. On March 20, 2014, Big Rivers informed the Commission*
10 *that due to favorable sales of power through February 2015,*
11 *Big Rivers would postpone the idling of the Wilson station*
12 *until February 2015. Explain what effect this postponement*
13 *will have on Big Rivers' plan to not install MATS*
14 *equipment at Wilson, given the MATS compliance date is*
15 *April 2015.*

16
17 **Response)**

18 a. Correct. Big Rivers does not anticipate proceeding with
19 installation of MATS equipment at Coleman at this time.

20 b. Big Rivers continues to evaluate its MATS compliance options at
21 Wilson in light of its recent announcement that Wilson will
22 continue operation through February 2015. It is Big Rivers'

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1 intent to seek the one-year extension for MATS compliance from
2 the Kentucky Division for Air Quality within the next 60 days. In
3 addition, we are reviewing various test data to determine if minor
4 operational changes will be sufficient to achieve MATS
5 compliance at Wilson without additional equipment.

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7
8
9

Witness) Eric M. Robeson

ORIGINAL

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

AN EXAMINATION BY THE PUBLIC)
SERVICE COMMISSION OF THE)
ENVIRONMENTAL SURCHARGE)
MECHANISM OF BIG RIVERS ELECTRIC)
CORPORATION FOR THE SIX-MONTH)
BILLING PERIOD ENDING JANUARY 31,)
2014 AND THE PASS THROUGH)
MECHANISM OF ITS THREE MEMBER)
DISTRIBUTION COOPERATIVES)

Case No.
2014-00097

DIRECT TESTIMONY

OF

NICHOLAS R. CASTLEN

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION,
JACKSON PURCHASE ENERGY CORPORATION,
KENERGY CORP., AND
MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION

FILED: April 23, 2014

Case No. 2014-00097
Witness: Nicholas R. Castlen
Page 1 of 9

1 **DIRECT TESTIMONY**
2 **OF**
3 **NICHOLAS R. CASTLEN**
4

5 **Q. Please state your name, business address, and position.**

6 A. My name is Nicholas R. Castlen, and my business address is Big Rivers
7 Electric Corporation ("Big Rivers"), 201 Third Street, Henderson, Kentucky,
8 42420. I am the Manager of Finance at Big Rivers.

9 **Q. Please summarize your education and professional experience.**

10 A. I received a Bachelor of Science in Accounting from the University of
11 Kentucky in 2006 and a Master of Science in Accounting from the
12 University of Kentucky in 2007. I became a Certified Public Accountant
13 ("CPA") in the state of Kentucky in 2007.

14 Before assuming my current position as Manager of Finance in July
15 2013, I was a Staff Accountant at Big Rivers primarily responsible for
16 accounting for the Company's long- and short-term debt obligations and
17 various rate mechanisms. Prior to joining Big Rivers, I was a Revenue
18 Accounting Analyst at LG&E and KU Energy LLC from December 2009 to
19 April 2012, where I was responsible for various accounting, reporting, and
20 analysis roles for retail and wholesale, electric and gas utility revenues.
21 From January 2006 to December 2009, I was employed by
22 PricewaterhouseCoopers LLP as an Audit and Assurance Associate.

23 **Q. Please summarize your duties at Big Rivers.**

1 A. As Manager of Finance my primary responsibilities involve providing
2 direction and oversight to corporate accounting and finance activities
3 related to regulatory requirements, debt administration, financial
4 forecasting, taxes (income, property, and sales & use), and fixed assets.
5 Additionally, I am responsible for Big Rivers' following rate mechanisms
6 and the related filings with the Kentucky Public Service Commission
7 ("Commission"): Fuel Adjustment Clause ("FAC"), Environmental
8 Surcharge ("ES"), Unwind Surcredit ("US"), and Non-FAC Purchased Power
9 Adjustment ("NFPPA").

10 **Q. Have you previously testified before the Commission?**

11 A. Yes. I've provided testimony and responses to data requests in Case Nos.
12 2012-00534, 2013-00139, and 2013-00347 (reviews of Big Rivers' ES
13 mechanism). I have also provided responses to data requests and served as
14 a witness in Case Nos. 2012-00555, 2013-00266, and 2013-00449 (reviews of
15 Big Rivers' FAC mechanism).

16 **Q. On whose behalf are you filing this testimony?**

17 A. I am filing this testimony on behalf of Big Rivers and its three member
18 distribution cooperatives, Jackson Purchase Energy Corporation ("JPEC"),
19 Kenergy Corp. ("Kenergy"), and Meade County Rural Electric Cooperative
20 Corporation ("Meade County") (collectively, "the Members").

21 **Q. What is the purpose of your testimony in this proceeding?**

22 A. The purpose of my testimony is to describe the application of Big Rivers' ES

1 mechanism as billed from August 1, 2013 through January 31, 2014 (which
2 corresponds to the expense months of June 2013 through November 2013).
3 Additionally, I have coordinated with Big Rivers' Members in the
4 preparation of this testimony and prepared responses to the Commission
5 Staff's First Request for Information ("Commission's Initial Requests") that
6 accompany this testimony.

7 This testimony also includes information the Members have provided
8 me in support of their pass-through mechanisms that are also under review
9 in this proceeding and that the Members use to pass through, to their retail
10 members, the costs Big Rivers charges to them under Big Rivers' ES
11 mechanism. The review period for the Members' pass-through mechanisms
12 that corresponds to the August 1, 2013 through January 31, 2014 billing
13 period for Big Rivers' environmental surcharge mechanism are the billing
14 months of September 2013 through February 2014 for non-dedicated
15 delivery point customers (*i.e.*, there is a one-month lag for non-dedicated
16 delivery point customers), and August 2013 through January 2014 for
17 dedicated delivery point customers (*i.e.*, there is no billing lag for dedicated
18 delivery point customers).

19 **Q. Please provide a brief overview of Big Rivers' ES mechanism.**

20 A. Big Rivers' ES mechanism was approved by Order of the Commission dated
21 June 25, 2008, in Case No. 2007-00460, which was part of the transaction
22 that unwound Big Rivers' 1998 lease with E.ON U.S. LLC and its affiliates

1 (the "Unwind Transaction") that was approved by Order of the Commission
2 dated March 6, 2009, in Case No. 2007-00455. Big Rivers' ES went into
3 effect immediately following the July 16, 2009, closing of the Unwind
4 Transaction for service commencing July 17, 2009.

5 Big Rivers' environmental compliance plan approved by the
6 Commission in Case No. 2007-00460 (the "2007 Plan") consists of a program
7 and the costs associated with controlling each of sulfur dioxide ("SO₂"),
8 nitrogen oxide ("NO_x"), and sulfur trioxide ("SO₃"). The environmental
9 surcharge costs Big Rivers may recover under KRS 278.183, and its 2007
10 Plan, include reagent costs, sludge and ash disposal costs, and emission
11 allowance costs.

12 For the SO₂ program, Big Rivers recovers through its ES mechanism
13 the costs of reagents, the costs for the disposal of coal combustion
14 byproducts (fly ash, bottom ash, and scrubber sludge), and the costs of
15 purchasing SO₂ emission allowances. For the NO_x program, Big Rivers
16 recovers the costs of reagents and the costs of purchasing additional NO_x
17 emission allowances as needed. For the SO₃ program, Big Rivers recovers
18 the costs of a reagent. Due to generating unit design and Big Rivers'
19 compliance plan, no Big Rivers generating unit utilizes all the same
20 reagents. Depending on the unit facilities, various reagents are used to
21 treat the flue gas, thereby removing the three targeted emissions. The SO₂
22 reagents are comprised of emulsified sulfur, lime, fixation lime, limestone,

1 dibasic acid, and sodium bisulfite. The NO_x reagents are comprised of
2 anhydrous ammonia and emulsified sulfur. The SO₃ reagent is comprised
3 of lime hydrate. Note that the 2007 Plan included only operating and
4 maintenance (“O&M”) costs.

5 In its Order dated October 1, 2012, in Case No. 2012-00063, the
6 Commission approved certain additions to the 2007 Plan relating to the
7 Mercury and Air Toxics Standards (“MATS”) rule. The additions (the “2012
8 Plan”) involve installing activated carbon injection and dry sorbent injection
9 systems and emission control monitors at the Big Rivers Coleman, Wilson,
10 and Green generating stations; and installing emission control monitors at
11 Henderson Municipal Power & Light’s Station Two generation station. The
12 2012 Plan includes both the capital and O&M costs associated with the
13 projects, as well as recovery of Big Rivers’ actual costs incurred in Case No.
14 2012-00063 (amortized over three years).

15 Please note that as a result of the termination of retail power
16 contracts by two aluminum smelters, Big Rivers currently plans to idle its
17 Coleman generation station on May 1, 2014, and its Wilson generation
18 station beginning in March 2015. As such, Big Rivers does not plan to
19 proceed with the MATS projects at those stations at this time. Big Rivers
20 will, however, complete the MATS projects at Coleman prior to it returning
21 to service. Big Rivers is reviewing test data to determine if minor
22 operational changes will be sufficient to achieve MATS compliance at

1. ~~Wilson without additional equipment.~~

2 Big Rivers' ES mechanism allows Big Rivers to recover costs related
3 to the 2007 Plan (which only includes O&M costs) and the 2012 Plan, less
4 proceeds from by-product and emission allowance sales, plus or minus an
5 ongoing cumulative under- or over-recovery adjustment.

6 **Q. Please provide a brief overview of the Members' pass-through**
7 **mechanisms.**

8 A. The Members' pass-through mechanisms allow each Member to bill its
9 retail customers for the portion of Big Rivers' environmental surcharge that
10 Big Rivers bills each Member. JPEC's pass-through mechanism was
11 approved by the Commission in Case No. 2008-00010; Kenergy's
12 mechanism was approved by the Commission in Case No. 2008-00009; and
13 Meade County's was approved by the Commission in Case No. 2007-00470.

14 **Q. Have there been any changes to Big Rivers' environmental**
15 **surcharge mechanism since the prior review?**

16 A. No.

17 **Q. Has Big Rivers sold any SO₂ or NO_x allowances during the expense**
18 **months corresponding to the billing periods under review in this**
19 **case?**

20 A. Yes. While the Coleman generation units were designated as System
21 Support Resource ("SSR") units within MISO, Big Rivers sold SO₂ and NO_x
22 allowances from its inventory to cover the allowances used by its Coleman

1 generation units. Big Rivers charged market prices for those allowances
2 during each month of the review period. These sales were reported in the
3 monthly ES filings on ES Forms 2.31 (SO₂ allowances), 2.32 (NO_x - Ozone
4 Season allowances), and 2.33 (NO_x – Annual Allowances). The net proceeds
5 from the sales of these allowances were included in the monthly ES filings
6 during the review period on ES Form 1.10 as a reduction to total
7 recoverable environmental compliance expenses (E(m)).

8 **Q. Has Big Rivers' environmental surcharge mechanism been**
9 **accurately compiled, and is it operating as intended?**

10 A. Yes.

11 **Q. Have the Members' pass-through mechanisms been accurately**
12 **compiled, and are they operating as intended?**

13 A. The Members believe their pass-through mechanisms have been accurately
14 compiled and are operating as intended.

15 **Q. Are the amounts charged under Big Rivers' environmental**
16 **surcharge mechanism during the review period just and**
17 **reasonable?**

18 A. Yes.

19 **Q. Are the amounts charged under the Members' pass-through**
20 **mechanisms during the review period just and reasonable?**

21 A. The Members believe the amounts charged under their pass-through
22 mechanisms are just and reasonable.

1 **Q. Do Big Rivers and its Members have additional over- or under-**
2 **recovery amounts they believe need to be recognized?**

3 A. No. Big Rivers and its Members are not requesting any additional over- or
4 under-recovery amount. The normal over/under recovery carry-forward
5 element of Big Rivers' environmental surcharge mechanism is operating as
6 intended.

7 **Q. Did Big Rivers recover any capital costs through its ES mechanism**
8 **during the period under review?**

9 A. Yes. Big Rivers recovered capital costs associated with its 2012 Plan
10 projects during the period under review through the inclusion of
11 Construction Work-in-Progress balances for its 2012 Plan projects in the
12 calculation of environmental compliance rate base on ES Form 2.00 in its
13 monthly ES filings.

14 **Q. What Base Environmental Surcharge Factor ("BESF") cost did Big**
15 **Rivers use during the review period?**

16 A. Big Rivers had no environmental surcharge related costs in its base rates
17 during the review period.

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.