



Your Touchstone Energy® Cooperative 🗡

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

ELECTRONIC EXAMINATION BY THE)
PUBLIC SERVICE COMMISSION OF THE)
ENVIRONMENTAL SURCHARGE MECHANISM)
OF BIG RIVERS ELECTRIC CORPORATION)
FOR THE TWO-YEAR BILLING PERIOD)
ENDING JULY 31, 2019,)
AND THE PASS THROUGH MECHANISM OF)
ITS THREE MEMBER DISTRIBUTION)
COOPERATIVES)

Case No. 2020-00144

Responses to Commission Staff's First Request for Information dated May 5, 2020

FILED: June 5, 2020



ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF **BIG RIVERS ELECTRIC CORPORATION** FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019. AND THE PASS THROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

VERIFICATION

I. Nicholas R. ("Nick") Castlen, verify, state, and affirm that the responses to information requests 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.

Nick Castlen

Nicholas R. ("Nick") Castlen

COMMONWEALTH OF KENTUCKY) COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Nicholas R. ("Nick") Castlen on this the 5th day of June, 2020.

Public, Kentucky State at Large

My Commission Expires

Notary Public, Kentucky State-At-Large

Notary Public, Kentucky State-At-Large My Commission Expires: July 10, 2022 D: 604480

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF **BIG RIVERS ELECTRIC CORPORATION** FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASS THROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

VERIFICATION

I, Ronald D. ("Ron") Gregory, verify, state, and affirm that the responses to information requests 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.

Ronald D. ("Ron") G

COMMONWEALTH OF KENTUCKY) COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Ronald D. ("Ron") Gregory on this the 5^{th} day of June, 2020.

Notary Public, Kentucky State at Large

My Commission Expires

Notary Public, Kentucky State-At-Large My Commission Expires: July 10, 2022 ID: 604480

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF **BIG RIVERS ELECTRIC CORPORATION** FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASS THROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

VERIFICATION

I, Roger D. Hickman, verify, state, and affirm that the responses to information requests 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.

R. Hickmon

COMMONWEALTH OF KENTUCKY) COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Roger D. Hickman on this the day of June, 2020.

<u>P. Parsley</u> Public, Kentucky State at Large

My Commission Expires

Notary Public, Kentucky State-At-Large My Commission Expires: July 10, 2022 D: 604480

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1 Item 1) This request is addressed to BREC. Prepare a summary schedule showing the calculation of E(m) and the surcharge factor for the 2 expense months covered by the billing periods under review. Form 1.1 can 3 be used as a model for this summary. Include the expense months for the 4 two expense months subsequent to the billing period in order to show the 5 over- and under-recovery adjustments for the months included for the 6 7 billing periods. Include a calculation of any additional over- or underrecovery amount BREC believes needs to be recognized for the six-month 8 and two-year reviews. Provide all supporting calculations and 9 documentation in Excel spreadsheet format with formulas intact and 10 11 unprotected and all rows and columns fully accessible.

12

Response) Please see the attached schedule, in the format of Form 1.10, covering
each of the expense months from June 2017 through July 2019 (*i.e.*, the expense

Case No. 2020-00144 Response to Staff Item 1 Witness: Nicholas R. Castlen Page 1 of 2

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	months covered by the billing period under review plus the two expense months
2	subsequent to the billing period).
3	The schedule and all supporting calculations and documentation are also
4	provided in Excel spreadsheet format, with formulas intact and unprotected and all
5	rows and columns fully accessible, in a separate Excel file as part of the electronic
6	filing and on a CD accompanying these responses in the paper copy provided
7	pursuant to 807 KAR 5:001 §8(12)(a)2.
8	No additional over- or under-recovery is being requested by Big Rivers for
9	the billing period under review.
10	
11	
12	Witness) Nicholas R. Castlen
13	

Case No. 2020-00144 Response to Staff Item 1 Witness: Nicholas R. Castlen Page 2 of 2

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

For the Expense Months: June 2017 to July 2019

1	Coloulation of Total E(m)				1
1	Calculation of Total E(m)				
2	E(m) = OE - BAS + RORB, where				
3	OE = Pollution Control Operating Expenses				
4	BAS = Total Proceeds from By-Product and Allowance Sales				
5	$RORB = [(RB/12) \times (RORORB)]$			T 001 F	
6				June 2017	July 2017
7	OE	=	\$	2,497,522 =	2,387,138
8	BAS	=	\$	- = \$	-
9	RORB	=	\$	149,049 = \$	147,908
10	E(m)	=	\$	2,646,571 =	$2,\!535,\!046$
11					
12	Calculation of Jurisdictional Environmental Surcharge Billing I	Fact	or		
13	Member System Allocation Ratio for the Month (Form 3.00)	=		73.130293% =	68.791702%
14	Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,935,445 =	1,743,901
15	Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	104,686 =	(112, 231)
16	Prior Period Adjustment	=	\$	- = \$	-
17	E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	2,040,131 = \$	1,631,670
4.0	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with		·		, ,
18	the Current Expense Month (Form 3.00)	=	\$	18,759,664 =	18,970,063
19	CESF: E(m) / R(m); as a % of Revenue	=		10.875093% =	8.601289%
20					
21	Calculation of Total E(m)				
22	E(m) = OE - BAS + RORB, where				
$\frac{22}{23}$	OE = Pollution Control Operating Expenses				
$\frac{20}{24}$	BAS = Total Proceeds from By-Product and Allowance Sales				
$\frac{24}{25}$	$\begin{array}{llllllllllllllllllllllllllllllllllll$				
$\frac{23}{26}$	$= [(\mathbf{HD}/12) \times (\mathbf{HOHOHD})]$			August 2017	September 2017
$\frac{20}{27}$	OE		ው	~	-
$\frac{27}{28}$	BAS	=	\$	1,650,502 =	2,240,221
	RORB	=	ቅ	- =	-
29		=	ቅ	148,015 = \$	148,237
30 21	E(m)	=	\$	1,798,517 = \$	2,388,458
31					
32	Calculation of Jurisdictional Environmental Surcharge Billing I		or		
33	Member System Allocation Ratio for the Month (Form 3.00)	=		71.438476% =	70.700380%
34	Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,284,833 = \$	1,688,649
35	Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	(412,314) = \$	(146, 896)
36	Prior Period Adjustment	=	\$	- = \$	-
37	E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	872,519 = \$	$1,\!541,\!753$
38	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with				
90	the Current Expense Month (Form 3.00)	=	\$	19,016,324 =	18,923,281
	CESF: E(m) / R(m); as a % of Revenue			4.588263% =	

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 1 of 7

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

For the Expense Months: June 2017 to July 2019

Calculation of Total E(m)						
E(m) = OE - BAS + RORB, where						
OE = Pollution Control Operating Expenses						
BAS = Total Proceeds from By-Product and Allowance Sales						
$[RORB = [(RB/12) \times (RORORB)]$						
			October 2017]	November 2017
OE	=	\$	2,479,816	=	\$	2,377,315
BAS	=	\$	-	=	\$	-
RORB	=	\$	146,969	=	\$	147,248
E(m)	=	\$	2,626,785	=	\$	2,524,563
Calculation of Jurisdictional Environmental Surcharge Billing	Fact	or				
Member System Allocation Ratio for the Month (Form 3.00)	=		60.704496%	=		64.656917%
Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,594,577	=	\$	1,632,305
Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	377	=	\$	147,903
Prior Period Adjustment	=	Ŝ	-	=	\$	
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,594,954	=	\$	1,780,208
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with		Ψ	1,001,001		Ψ	1,100,200
the Current Expense Month (Form 3.00)	=	\$	19,005,182	=	\$	19,047,334
CESF: E(m) / R(m); as a % of Revenue	=	Ŧ	8.392206%		Ŧ	9.346232%
Calculation of Total E(m)						
Calculation of Total E(m) E(m) =OE - BAS + BORB where						
E(m) = OE - BAS + RORB, where						
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses						
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales						
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses			December 2017			January 2018
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)]	=	\$	December 2017 2,158,740	=	\$	January 2018 2,594,076
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE	=	\$	December 2017 2,158,740	=	69	January 2018 2,594,076
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS		\$ \$	2,158,740		\$ \$ \$	2,594,076
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS RORB	=	\$ \$ \$	2,158,740 	=	\$ \$	2,594,076 145,857
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS	= =	\$ \$ \$	2,158,740	=	\$ \$	2,594,076
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS RORB E(m)	= = =	\$\$ \$\$ \$	2,158,740 $-$ $146,030$ $2,304,770$	=	\$ \$	2,594,076 145,857
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS RORB E(m) Calculation of Jurisdictional Environmental Surcharge Billing	= = =	\$\$ \$\$ \$	2,158,740 $-$ $146,030$ $2,304,770$	= = =	\$ \$	2,594,076 145,857 2,739,933
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE BAS RORB = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE = [(RB/12) x (RORORB)] BAS =	= = = Fact	\$ \$ \$ cor	2,158,740 146,030 2,304,770 68.059737%	= = =	\$ \$	2,594,076 145,857 2,739,933 71.573300%
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS E(m) Calculation of Jurisdictional Environmental Surcharge Billing Member System Allocation Ratio for the Month (Form 3.00) Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	= = = <u>Fact</u> =	\$ \$ \$ cor \$	$\begin{array}{r} 2,158,740\\ -\\ 146,030\\ 2,304,770\\ \hline 68.059737\%\\ 1,568,620 \end{array}$	= = = =	·\$\$\$\$	2,594,076 145,857 2,739,933 71.573300% 1,961,060
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS E(m) Calculation of Jurisdictional Environmental Surcharge Billing Member System Allocation Ratio for the Month (Form 3.00) Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	= = <u>Fact</u> = =	\$ \$ \$ cor \$	2,158,740 146,030 2,304,770 68.059737%	= = = =	\$ \$ \$	2,594,076 145,857 2,739,933 71.573300% 1,961,060
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE = [(RB/12) x (RORORB)] Member System Allocation attion for the Month (Form 3.00) Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) Prior Period Adjustment	= = <u>Fact</u> = = =	\$ \$ \$ cor \$	2,158,740 - 146,030 2,304,770 68.059737% 1,568,620 87,603	= = = = =	·\$\$\$\$	2,594,076 145,857 2,739,933 71.573300% 1,961,060 (237,713)
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE = [(RB/12) x (RORORB)] Member System Allocation for fully a structure = [(RB/12) x (RORORB)] Member System Allocation Ratio for the Month (Form 3.00) = [(RB/12) x (Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) = [(RB/12) x (Member System Allocation Ratio Prior Period Adjustment = [(m) = [(RD/12) x (Member System Prior Period Adjustment E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period	= = <u>Fact</u> = = = =	\$ \$ \$ cor \$	$\begin{array}{r} 2,158,740\\ -\\ 146,030\\ 2,304,770\\ \hline 68.059737\%\\ 1,568,620 \end{array}$	= = = = = =	·\$\$\$\$	2,594,076 145,857 2,739,933 71.573300% 1,961,060
E(m) =OE - BAS + RORB, where OE = Pollution Control Operating Expenses BAS = Total Proceeds from By-Product and Allowance Sales RORB = [(RB/12) x (RORORB)] OE BAS BAS = [(RB/12) x (RORORB)] OE = [(RB/12) x (RORORB)] Member System Allocation attion for the Month (Form 3.00) Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) Prior Period Adjustment	= = <u>Fact</u> = = = =	\$ \$ \$ cor \$	2,158,740 - 146,030 2,304,770 68.059737% 1,568,620 87,603	= = = = = =	·\$\$\$\$	2,594,076 145,857 2,739,933 71.573300% 1,961,060 (237,713)

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 2 of 7

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

For the Expense Months: June 2017 to July 2019

Calculation of Total E(m)				
E(m) = OE - BAS + RORB, where				
OE = Pollution Control Operating Expenses				
BAS = Total Proceeds from By-Product and Allowance Sales				
$RORB = [(RB/12) \times (RORORB)]$				
]	February 2018	March 2018
OE	=	\$	2,227,350 = \$	$2,\!347,\!351$
BAS	=	\$	- = \$	-
RORB	=	\$	148,600 = \$	$145,\!824$
<u>E(m)</u>	=	\$	2,375,950 =	$2,\!493,\!175$
Calculation of Jurisdictional Environmental Surcharge Billing	Fact	or		
Member System Allocation Ratio for the Month (Form 3.00)	=	01	73.447352% =	67.029119%
Subtotal $E(m) =$ Subtotal $E(m) \times$ Member System Allocation Ratio	=	\$	1,745,072 =	1,671,153
Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	(470,106) =	(5,151)
Prior Period Adjustment	=	φ S	(470,100) $(22,348) =$	(0,101)
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,252,618 =	1,666,002
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with		Ψ	1,202,010 ψ	1,000,002
the Current Expense Month (Form 3.00)	=	¢	19,477,512 =	19,529,283
CESF: E(m) / R(m); as a % of Revenue	=	\$	6.431099% =	8.530789%
CESF. E(III) / IX(III), as a % of Revenue	_		0.43109970 -	0.00070970
Calculation of Total E(m)				
E(m) = OE - BAS + RORB, where				
OE = Pollution Control Operating Expenses				
BAS = Total Proceeds from By-Product and Allowance Sales				
$RORB = [(RB/12) \times (RORORB)]$				
			April 2018	May 2018
OE	=	\$	2,588,671 = \$	2,512,840
BAS	=	\$	- = \$	55
RORB	=	\$	156,343 =	139,960
E(m)	=	\$	2,745,014 =	2,652,745
	_			
Calculation of Jurisdictional Environmental Surcharge Billing	Fact	or		
Member System Allocation Ratio for the Month (Form 3.00)	=		57.550201% =	61.140634%
Subtotal $E(m) =$ Subtotal $E(m) \times$ Member System Allocation Ratio	=	\$	1,579,761 = \$	1,621,905
Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	19,104 = \$	243,026
Prior Period Adjustment	=	\$	- = \$	-
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,598,865 = \$	1,864,931
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with				
the Current Expense Month (Form 3.00)	=	\$	19,635,004 =	19,797,192

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 3 of 7

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

For the Expense Months: June 2017 to July 2019

1	Calculation of Total E(m)						
$\frac{1}{2}$	E(m) = OE - BAS + RORB, where						
$\frac{2}{3}$	OE = Pollution Control Operating Expenses						
1	BAS = Total Proceeds from By-Product and Allowance Sales						
$\frac{4}{5}$	$\begin{array}{llllllllllllllllllllllllllllllllllll$						
5 6	$- [(RD/12) \times (RORORD)]$			June 2018			July 2018
7	OE	=	\$	2,403,777	=	\$	2,613,989
8	BAS	=	\$	_,,,	=	\$	_, ,
9	RORB	=	Ŝ	141,156	=	\$	139,913
10	E(m)	=	\$	2,544,933	=	\$	2,753,902
11							
12	Calculation of Jurisdictional Environmental Surcharge Billing	Fact	or				
13	Member System Allocation Ratio for the Month (Form 3.00)	=		65.338420%	=		74.798009%
14	Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,662,819	=	\$	2,059,864
15	Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	42,297	=	\$	(126, 147)
16	Prior Period Adjustment	=	\$	-	=	\$	-
17	E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,705,116	=	\$	1,933,717
18	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with						
10	the Current Expense Month (Form 3.00)	=	\$	19,907,246	=	\$	19,892,355
19	CESF: E(m) / R(m); as a % of Revenue	=		8.565303%	=		9.720905%
20							
21	Calculation of Total E(m)						
22	E(m) = OE - BAS + RORB, where						
23	OE = Pollution Control Operating Expenses						
24	BAS = Total Proceeds from By-Product and Allowance Sales						
25	$RORB = [(RB/12) \times (RORORB)]$					-	
26				August 2018		Sep	otember 2018
27	OE	=	\$	$2,\!256,\!184$	=	\$	2,992,606
28	BAS	=	\$	-	=	\$	-
29	RORB	=	\$	139,848	=	\$	140,007
30	E(m)	=	\$	2,396,032	=	\$	3,132,613
31							
32	Calculation of Jurisdictional Environmental Surcharge Billing	Fact	or				
33	Member System Allocation Ratio for the Month (Form 3.00)	=		65.243081%	Ξ		66.785895%
34	Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,563,245	=	\$	2,092,144
35	Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	(211,141)	=	\$	(155, 637)
36	Prior Period Adjustment	=	\$	-	=	\$	-
37	E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,352,104	=	\$	1,936,507
	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with						, , ,
90							
38	the Current Expense Month (Form 3.00)	=	\$	19,960,314	=	\$	20,053,360

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 4 of 7

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

For the Expense Months: June 2017 to July 2019

Calculation of Total E(m) E(m) =OE - BAS + RORB, where						
OE = Pollution Control Operating Expenses						
BAS = Total Proceeds from By-Product and Allowance Sales						
$RORB = [(RB/12) \times (RORORB)]$						
$\mathbf{RORD} = \left[\left(\mathbf{RD}/12 \right) \times \left(\mathbf{RORORD} \right) \right]$			October 2018		ז	November 2018
OE	=	\$	2,374,347	=	\$	2,238,403
BAS	=	\$	_,011,011	=	\$	_,_00,100
RORB	=	\$	138,789	=	\$	140,006
E(m)	=	\$	2,513,136	=	\$	2,378,409
	7 4					
Calculation of Jurisdictional Environmental Surcharge Billing I Member System Allocation Ratio for the Month (Form 3.00)		or	78.166219%	_		86.3669319
	=	ው			ው	
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	=	\$ ¢	1,964,423	=	\$ ¢	2,054,159
Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$ ¢	(11,133)		\$ •	155,732
Prior Period Adjustment	=	\$	1 059 900	=	\$	-
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,953,290	=	\$	2,209,89
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with		~			.	
the Current Expense Month (Form 3.00)	=	\$	20,164,423		\$	20,326,35
CESF: E(m) / R(m); as a % of Revenue	=		9.686813%	=		10.872047
Calculation of Total E(m)						
E(m) = OE - BAS + RORB, where						
OE = Pollution Control Operating Expenses						
BAS = Total Proceeds from By-Product and Allowance Sales						
$RORB = [(RB/12) \times (RORORB)]$						
			December 2018			January 2019
OE	=	\$	2,363,027	=	\$	2,489,408
BAS	=	\$	-	=	\$	-
RORB	=	\$	$138,\!543$	=	\$	138,362
E(m)	=	\$	2,501,570	=	\$	2,627,770
Calculation of Jurisdictional Environmental Surcharge Billing l	Fact	or				
Member System Allocation Ratio for the Month (Form 3.00)	=		87.373318%	=		71.5494439
	=	\$	2,185,705	=	\$	1,880,158
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	_			=	\$	44,49
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	=	\$	25,177	—		
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)		\$ \$	25,177	=	\$	-
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) Prior Period Adjustment	=		25,177 - 2,210,882		\$ \$	1,924,64
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) Prior Period Adjustment E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment R(m) = Average Monthly Member System Revenue for the 12 Months Ending with	= =	\$	-	=	\$ \$	1,924,64
Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio Adjustment for (Over)/Under Recovery, as applicable (Form 2.00) Prior Period Adjustment E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	= =	\$	-	=	\$ \$ \$	1,924,640 20,027,502

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 5 of 7

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

For the Expense Months: June 2017 to July 2019

Calculation of Total E(m)						
E(m) = OE - BAS + RORB, where						
B OE = Pollution Control Operating Expenses						
BAS = Total Proceeds from By-Product and Allowance Sales						
5 RORB = $[(RB/12) \times (RORORB)]$						
3]	February 2019			March 2019
7 OE	=	\$	2,773,791	=	\$	2,196,49'
BAS BAS	=	\$	-	=	\$	-
P RORB	=	\$	139,961	=	\$	137,56
D = E(m)	=	\$	2,913,752	=	\$	2,334,05
1						
2 Calculation of Jurisdictional Environmental Surcharge Billing H	Fact	or				
3 Member System Allocation Ratio for the Month (Form 3.00)	=		62.984480%	=		68.221493
4 Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	=	\$	1,835,212	=	\$	1,592,33
5 Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	(261,060)	=	\$	137,28
B Prior Period Adjustment	=	\$	-	=	\$	-
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,574,152	=	\$	1,729,61
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with						
the Current Expense Month (Form 3.00)	=	\$	19,961,257	=	\$	20,011,81
9 CESF: E(m) / R(m); as a % of Revenue	=		7.886036%	=		8.642946
0						
1 Calculation of Total E(m)						
2 E(m) = OE - BAS + RORB, where						
3 OE = Pollution Control Operating Expenses						
BAS = Total Proceeds from By-Product and Allowance Sales						
5 RORB = $[(RB/12) \times (RORORB)]$						
3			April 2019			May 2019
7 OE	=	\$	2,111,592	=	\$	2,309,61
BAS	=	\$	-	=	\$	5
RORB	=	\$	138,262	=	\$	136,76
E(m)	=	\$	2,249,854	=	\$	2,446,32
2 Calculation of Jurisdictional Environmental Surcharge Billing H	Tact	or				
3 Member System Allocation Ratio for the Month (Form 3.00)	=		65.594124%	=		65.146187
4 Subtotal $E(m)$ = Subtotal $E(m)$ x Member System Allocation Ratio	=	\$	1,475,772	=	\$	1,593,68
Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	13,735	=	\$	385,87
3 Prior Period Adjustment	=	\$	-,	=	\$,
E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,489,507	=	\$	1,979,56
		r	,,-,·,·		ľ	,,
R(m) = Average Monthly Member System Revenue for the 12 Months Ending with						
8 R(m) = Average Monthly Member System Revenue for the 12 Months Ending with the Current Expense Month (Form 3.00)	=	\$	19,917,365	=	\$	19,840,39

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 6 of 7

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

For the Expense Months: June 2017 to July 2019

1	Calculation of Total E(m)				
2	E(m) = OE - BAS + RORB, where				
3	OE = Pollution Control Operating Expenses				
4	BAS = Total Proceeds from By-Product and Allowance Sales				
5	$RORB = [(RB/12) \times (RORORB)]$				
6				June 2019	July 2019
7	OE	=	\$	2,345,967 = \$	2,493,629
8	BAS	=	\$	- = \$	-
9	RORB	=	\$	137,591 = \$	$136,\!549$
10	E(m)	=	\$	2,483,558 = \$	2,630,178
11					
12	Calculation of Jurisdictional Environmental Surcharge Billing I	Fact	or		
13	Member System Allocation Ratio for the Month (Form 3.00)	=		65.283658% =	67.894324%
14	Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	=	\$	1,621,358 = \$	1,785,742
15	Adjustment for (Over)/Under Recovery, as applicable (Form 2.00)	=	\$	129,035 = \$	50,436
16	Prior Period Adjustment	=	\$	- = \$	-
17	E(m) = Subtotal E(m) plus (Over)/Under Recovery plus Prior Period Adjustment	=	\$	1,750,393 = \$	1,836,178
18	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with				
10	the Current Expense Month (Form 3.00)	=	\$	19,690,277 = \$	19,608,018
19	CESF: E(m) / R(m); as a % of Revenue	=		8.889631% =	9.364424%

Case No. 2020-00144 Attachment for Response to Staff Item 1 Witness: Nicholas R. Castlen Page 7 of 7

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1 Item 2) This request is addressed to the Member Cooperatives. For each of the Member Cooperatives, prepare a summary schedule showing the 2 3 Member Cooperative's pass-through revenue requirement for the months corresponding with the billing period under review. Include the two 4 5 months subsequent to the billing period included in the review periods. Include a calculation of any additional over- or under-recovery amount the 6 Member Cooperative believes needs to be recognized for the six-month and 7 8 two-year reviews. Provide all supporting calculations and documentation 9 in Excel spreadsheet format with formulas intact and unprotected and all 10 rows and columns fully accessible.

11

12 **Response**) The following five schedules listed below, and attached to this 13 response, reflect the Member Cooperatives' environmental surcharge pass-through 14 revenue requirements for the months corresponding with Big Rivers' expense 15 months of June 2017 through July 2019, applied to Big Rivers' Members' invoices

> Case No. 2020-00144 Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 3

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	for the service months of July 2017 through August 2019, which Big Rivers billed
2	to its Members during the months of August 2017 through September 2019 (i.e., the
3	months corresponding with the two-year review plus the two subsequent months).
4	
5	• Attachment 1 – Jackson Purchase Energy Corporation Non-Dedicated
6	Delivery Point Customers;
7	• Attachment 2 – Kenergy Corp. Non-Dedicated Delivery Point Customers;
8	• Attachment 3 – Meade County Rural Electric Cooperative Corporation Non-
9	Dedicated Delivery Point Customers;
10	• Attachment 4 – Jackson Purchase Energy Corporation Dedicated Delivery
11	Point Customers; and
12	• Attachment 5 – Kenergy Corp. Dedicated Delivery Point Customers.
13	
14	Note: Meade County Rural Electric Cooperative Corporation has no dedicated
15	delivery point customers.

Case No. 2020-00144 Response to Staff Item 2 Witness: Nicholas R. Castlen Page 2 of 3

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	As illustrated in the attached schedules, there is a one-month billing lag for
2	the Members' non-dedicated delivery point customers and no billing lag for the
3	Members' dedicated delivery point customers.
4	The information in the attached schedules was obtained from the Members'
5	monthly Environmental Surcharge Schedules provided by Big Rivers' Members.
6	Other than the on-going cumulative over-/under-recovery mechanism, no additional
7	over-/under-recovery amounts are being requested by the Members for the billing
8	period under review.
9	All schedules, supporting calculations, and documentation are provided in
10	Excel spreadsheet format, with all cells and formulas intact and unprotected, in a
11	separate Excel file as part of the electronic filing <i>and</i> on a CD accompanying these
12	responses in the paper copy provided pursuant to 807 KAR 5:001 §8(12)(a)2.
13	
14	
15	Witness) Nicholas R. Castlen

Case No. 2020-00144 Response to Staff Item 2 Witness: Nicholas R. Castlen Page 3 of 3

1	JACKSON PURCHASE ENERGY CORPORATION (JPEC) NON-DEDICATED DELIVERY POINT CUSTOMERS														
2 L 3															
4	(u)	Big Rivers'	(0)	(u)					ES Amount		JPEC's				IPEC's (Over)/Under
5	Big Rivers'	ES Factor	Big Rivers'	Month Billed		Big Rivers'	Month Billed		Billed to JPEC's		(Over)/Under		JPEC's Total		Recovery
6	Expense	Based on	Service	by		voice ES Amount	by		Customers		Recovery		Recoverable		for 3rd preceding month
7	Month	Expense Month	Month	Big Rivers	for	the Service Month	JPEC		(Line 11 per Filing)		[from (j)]		[(e) + (h)]	less	(g) for current month)]
8	Jun-17	10.875093%	Jul-17	Aug-17	\$	579,585.24	Sep-17	\$	414,021.18	\$	(81,697.22)	\$	497,888.02	\$	(81,697.22)
9	Jul-17	8.601289%	Aug-17	Sep-17	\$	401,720.58	Oct-17	\$	404,567.69	\$	(105,053.49)	\$	296,667.09	\$	(105,053.49)
10	Aug-17	4.588263%	Sep-17	Oct-17	\$	190,989.90	Nov-17	\$	500,928.02	\$	(45,923.62)	\$	145,066.28	\$	(45,923.62)
11	Sep-17	8.147387%	Oct-17	Nov-17	\$	283,083.86	Dec-17	\$	385,929.36	\$	111,958.66	\$	395,042.52	\$	111,958.66
12	Oct-17	8.392206%	Nov-17	Dec-17	\$	306,514.35	Jan-18	\$	254,646.28	\$	42,020.81	\$	348,535.16	\$	42,020.81
13	Nov-17	9.346232%	Dec-17	Jan-18	\$	438,370.51	Feb-18	\$	122,079.41	\$	22,986.87	\$	461,357.38	\$	22,986.87
14	Dec-17	8.684854%	Jan-18	Feb-18	\$	464,677.15	Mar-18	\$	440,509.00	\$	(45,466.48)	\$	419,210.67	\$	(45,466.48)
15	Jan-18	8.912569%	Feb-18	Mar-18	\$	362,494.38	Apr-18	\$	535,576.57	\$	(187,041.41)	\$	175,452.97	\$	(187,041.41)
16	Feb-18	6.431099%	Mar-18	Apr-18	\$	242,231.37	May-18	\$	451,786.60	\$	9,570.78	\$	251,802.15	\$	9,570.78
17	Mar-18	8.530789%	Apr-18	May-18	\$	278,445.89	Jun-18	\$	293,705.95	\$	125,504.72	\$	403,950.61	\$	125,504.72
18	Apr-18	8.142932%	May-18	Jun-18	\$	336,732.70	Jul-18	\$	162,863.39	\$	12,589.58	\$	349,322.28	\$	12,589.58
19	May-18	9.420179%	Jun-18	Jul-18	\$	446,625.86	Aug-18	\$	233,566.62	\$	18,235.53	\$	464,861.39	\$	18,235.53
20	Jun-18	8.565303%	Jul-18	Aug-18	\$	439,516.08	Sep-18	\$	517,934.03	\$	(113,983.42)	\$	325,532.66	\$	(113,983.42)
21	Jul-18	9.720905%	Aug-18	Sep-18	\$	461,234.75	Oct-18	\$	464,720.77	\$	(115,398.49)	\$	345,836.26	\$	(115,398.49)
22	Aug-18	6.773962%	Sep-18	Oct-18	\$	298,073.62	Nov-18	\$	472,321.28	\$	(7,459.89)	\$	290,613.73	\$	(7,459.89)
23	Sep-18	9.656771%	Oct-18	Nov-18	\$	369,178.30	Dec-18	\$	283,651.00	\$	41,881.66	\$	411,059.96	\$	41,881.66
24	Oct-18	9.686813%	Nov-18	Dec-18	\$	391,919.34	Jan-19	\$	302,808.98	\$	43,027.28	\$	434,946.62	\$	43,027.28
25	Nov-18	10.872047%	Dec-18	Jan-19	\$	449,389.71	Feb-19	\$	233,972.52	\$		\$	506,030.92	\$	56,641.21
26	Dec-18	10.952069%	Jan-19	Feb-19	\$	503,242.71	Mar-19	\$	490,283.27	\$		\$	424,019.40	\$	(79,223.31)
27	Jan-19	9.610015%	Feb-19	Mar-19	\$	364,772.34	Apr-19	\$	481,713.31	\$			318,005.65		(46,766.69)
28	Feb-19	7.886036%	Mar-19	Apr-19	\$	308,687.08	May-19	\$	499,322.58				315,395.42		6,708.34
29	Mar-19	8.642946%	Apr-19	May-19	\$	260,319.05	Jun-19	\$	344,988.18				339,350.27		79,031.22
30	Apr-19	7.478434%	May-19	Jun-19	\$	289,858.08	Jul-19	\$	287,521.61	\$			320,342.12		30,484.04
31	May-19	9.977448%	Jun-19	Jul-19	\$	416,946.82	Aug-19	\$	267,074.96	\$,		465,267.28		48,320.46
32	Jun-19	8.889631%	Jul-19	Aug-19	\$	422,951.33	Sep-19	\$	420,719.00				341,582.60		(81,368.73)
33	Jul-19	9.364424%	Aug-19	Sep-19	\$	449,700.33	Oct-19	\$,	\$	· · · · · ·		372,592.04		(77,108.29)

Case No. 2020-00144 <u>Attachment 1 of 5</u> for Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 1

1 2	KENERGY CORP. NON-DEDICATED DELIVERY POINT CUSTOMERS															
² L 3	(a)	(b)	(c)	(d)		(e)	(f)							(j)		
4 5 6	Big Rivers' Expense	Big Rivers' ES Factor Based on	Big Rivers' Service	Month Billed by		Big Rivers' oice ES Amount	Month Billed by	0,		Kenergy's (Over)/Under Recovery			Kenergy's Total Recoverable		energy's (Over)/Under Recovery for 2nd preceding month	
7		Expense Month	Month	Big Rivers		he Service Month	Kenergy		(Line 11 per Filing)	+	[from (j)]	+	[(e) + (h)]		s (g) for current month]	
8	Jun-17	10.875093%	Jul-17	Aug-17	\$	1,014,987.58	Sep-17	\$	680,618.94	\$	(149,927.03)		865,060.55	\$	(149,927.03)	
9	Jul-17	8.601289%	Aug-17	Sep-17	\$	714,573.60	Oct-17	\$,	\$ \$	(126,675.95)		587,897.65	\$	(126,675.95)	
10	Aug-17	4.588263%	Sep-17	Oct-17	\$	345,251.06	Nov-17	\$	730,042.47	\$	135,018.08		480,269.14	\$	135,018.08	
11	Sep-17	8.147387%	Oct-17	Nov-17	\$	529,459.27	Dec-17	\$	510,826.95	\$	77,070.70		606,529.97	\$	77,070.70	
12	Oct-17	8.392206%	Nov-17	Dec-17	\$	559,666.16	Jan-18	\$	433,572.84	\$	46,696.30		606,362.46		46,696.30	
13	Nov-17	9.346232%	Dec-17	Jan-18	\$	798,875.66	Feb-18	\$,		(48,745.34)		750,130.32	\$	(48,745.34)	
14	Dec-17	8.684854%	Jan-18	Feb-18	\$	855,558.96	Mar-18	\$	837,103.06		(230,740.60)		624,818.36	\$	(230,740.60)	
15	Jan-18	8.912569%	Feb-18	Mar-18	\$	666,812.69	Apr-18	\$	746,233.36	\$	3,896.96		670,709.65	\$	3,896.96	
16	Feb-18	6.431099%	Mar-18	Apr-18	\$	463,493.00	May-18	\$	400,911.40	\$	223,906.96	\$	687,399.96	\$	223,906.96	
17	Mar-18	8.530789%	Apr-18	May-18	\$	516,590.91	Jun-18	\$	630,999.35	\$	39,710.30	\$	556,301.21	\$	39,710.30	
18	Apr-18	8.142932%	May-18	Jun-18	\$	606,885.13	Jul-18	\$	563,184.50	\$	124,215.46	\$	731,100.59	\$	124,215.46	
19	May-18	9.420179%	Jun-18	Jul-18	\$	806,546.94	Aug-18	\$	702,322.93	\$	(146,021.72)	\$	660,525.22	\$	(146,021.72)	
20	Jun-18	8.565303%	Jul-18	Aug-18	\$	782,975.05	Sep-18	\$	885,372.83	\$	(154,272.24)	\$	628,702.81	\$	(154,272.24)	
21	Jul-18	9.720905%	Aug-18	Sep-18	\$	842,986.56	Oct-18	\$	675,162.26	\$	(14,637.04)	\$	828,349.52	\$	(14,637.04)	
22	Aug-18	6.773962%	Sep-18	Oct-18	\$	548,916.38	Nov-18	\$	580,469.73	\$	48,233.08	\$	597,149.46	\$	48,233.08	
23	Sep-18	9.656771%	Oct-18	Nov-18	\$	683,100.54	Dec-18	\$	706,162.94	\$	122,186.58	\$	805,287.12	\$	122,186.58	
24	Oct-18	9.686813%	Nov-18	Dec-18	\$	735,905.13	Jan-19	\$	518,164.94	\$	78,984.52	\$	814,889.65	\$	78,984.52	
25	Nov-18	10.872047%	Dec-18	Jan-19	\$	820,582.40	Feb-19	\$	903,187.14	\$	(97,900.02)	\$	722,682.38	\$	(97,900.02)	
26	Dec-18	10.952069%	Jan-19	Feb-19	\$	968,268.47	Mar-19	\$	869,036.58	\$	(54,146.93)	\$	914,121.54	\$	(54,146.93)	
27	Jan-19	9.610015%	Feb-19	Mar-19	\$	679,514.76	Apr-19	\$	791,326.51	\$	(68,644.13)	\$	610,870.63	\$	(68,644.13)	
28	Feb-19	7.886036%	Mar-19	Apr-19	\$	592,973.00	May-19	\$	761,588.31	\$	152,533.23	\$	745,506.23	\$	152,533.23	
29	Mar-19	8.642946%	Apr-19	May-19	\$	475,200.28	Jun-19	\$	553,542.48	\$	57,328.15	\$	532,528.43	\$	57,328.15	
30	Apr-19	7.478434%	May-19	Jun-19	\$	520,955.77	Jul-19	\$	565,838.54	\$	179,667.69	\$	700,623.46		179,667.69	
31	May-19	9.977448%	Jun-19	Jul-19	\$	766,265.57	Aug-19	\$			(139,007.60)		627,257.97		(139,007.60)	
32	Jun-19	8.889631%	Jul-19	Aug-19	\$	771,702.71	Sep-19	\$	835,081.20	\$	(134,457.74)		637,244.97	\$	(134,457.74)	
33	Jul-19	9.364424%	Aug-19	Sep-19	\$	808,992.32	Oct-19	\$,		(122,467.83)		686,524.49	\$	(122,467.83)	

Case No. 2020-00144 <u>Attachment 2 of 5</u> for Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 1

$1 \\ 2$	MEADE COUNTY RURAL ELECTRIC COOPERATIVE CORPORATION (MCRECC) NON-DEDICATED DELIVERY POINT CUSTOMERS														
² L 3							(f)	V Ľ	(g)		(h)	(i)			(j)
4 5 6 7	Big Rivers' Expense	Big Rivers' ES Factor Based on	Big Rivers' Service	Month Billed by		Big Rivers' voice ES Amount	Month Billed by		ES Amount Billed to MCRECC's Customers		MCRECC's (Over)/Under Recovery	MCRECC's Total Recoverable		[(i	ACRECC's (Over)/Under Recovery) for 1st preceding month
/		Expense Month	Month	Big Rivers		the Service Month	MCRECC	¢	(Line 11 per Filing)	¢	[from (j)]	¢	[(e) + (h)]	1	ss (g) for current month]
8	Jun-17	10.875093%	Jul-17	Aug-17	\$	371,196.10	Sep-17	\$,	\$	· · · · ·		330,709.66	\$	(40,486.44)
9	Jul-17	8.601289%	Aug-17	Sep-17	\$	260,586.21	Oct-17	\$	297,171.11	\$,		294,124.76		33,538.55
10	Aug-17	4.588263%	Sep-17	Oct-17	\$	122,542.77	Nov-17	\$	245,543.06	\$,		171,124.47	\$	48,581.70
11	Sep-17	8.147387%	Oct-17	Nov-17	\$	194,911.13	Dec-17	\$	168,920.48	\$,	\$ ¢	197,115.12	\$	2,203.99
12	Oct-17	8.392206%	Nov-17	Dec-17	\$	249,380.42	Jan-18	\$	237,135.24	\$	· · · · · ·		,		(40,020.12)
13	Nov-17	9.346232%	Dec-17	Jan-18	\$	361,579.38	Feb-18	\$ ¢	276,860.19		· · · · ·		294,079.49	\$	(67,499.89)
14	Dec-17	8.684854%	Jan-18	Feb-18	\$	408,742.59	Mar-18	\$ ¢	345,056.56	\$	× , , ,		357,765.52	\$ ¢	(50,977.07)
15	Jan-18 Eab. 18	8.912569%	Feb-18 Mor 18	Mar-18	¢	300,816.32	Apr-18	\$ \$	256,702.39	\$,		401,879.45	\$ ¢	101,063.13
16	Feb-18	6.431099%	Mar-18	Apr-18	¢	210,450.74	May-18	\$ ¢	393,950.59	\$,		,		7,928.86
17	Mar-18	8.530789%	Apr-18	May-18	\$	227,526.64	Jun-18	\$ ¢	182,788.46	\$,	\$ ¢	,	\$ ¢	35,591.14
18	Apr-18	8.142932%	May-18	Jun-18	\$	226,317.65	Jul-18	\$ ¢	268,616.95	\$	× , , , ,		220,818.48	\$ ¢	(5,499.17)
19 20	May-18	9.420179%	Jun-18	Jul-18	¢	295,025.74	Aug-18	\$ ¢	258,813.54		× , , ,		257,030.68	\$	(37,995.06)
20	Jun-18	8.565303%	Jul-18	Aug-18	\$	290,813.63	Sep-18	\$	284,208.88	\$	× , , ,		263,635.43	\$	(27,178.20)
21	Jul-18	9.720905%	Aug-18	Sep-18	\$	308,373.32	Oct-18	\$	248,511.93	\$,		323,496.82	\$	15,123.50
22	Aug-18	6.773962%	Sep-18	Oct-18	\$	197,820.24	Nov-18	\$ ¢	292,894.53	\$,	\$ ¢	,	\$	30,602.29
23	Sep-18	9.656771%	Oct-18	Nov-18	\$	261,011.33	Dec-18	\$ ¢	212,002.41	\$,		277,431.45	\$ ¢	16,420.12
24	Oct-18	9.686813%	Nov-18	Dec-18	\$	332,959.28	Jan-19 Eab 10	\$ ¢	330,074.16		× , , ,		280,316.57	\$ ¢	(52,642.71)
25 26	Nov-18	10.872047%	Dec-18	Jan-19 Eab. 10	¢	383,033.48	Feb-19 Mar 10	\$ ¢	300,886.29	\$	· · · · ·		362,463.76	\$ ¢	(20,569.72)
26	Dec-18	10.952069%	Jan-19 Eab 10	Feb-19 Mar 10	¢ \$	465,385.34	Mar-19	¢	391,512.40		· · · · ·		436,336.70	\$ ¢	(29,048.64)
27	Jan-19	9.610015%	Feb-19	Mar-19	\$	303,544.93	Apr-19	\$	382,070.50		,		357,811.13		54,266.20
28	Feb-19	7.886036%	Mar-19	Apr-19	\$ ¢	281,141.62	May-19	¢	355,547.60		,		283,405.15		2,263.53
29 20	Mar-19	8.642946%	Apr-19	May-19	\$	208,444.41	Jun-19	\$	197,122.30		,		294,727.26		86,282.85
30	Apr-19	7.478434%	May-19	Jun-19	\$ ¢	196,633.76	Jul-19	\$ ¢	318,246.44		· · · · · · · · · · · · · · · · · · ·		173,114.58		(23,519.18)
31	May-19	9.977448%	Jun-19	Jul-19	\$	285,542.81	Aug-19	\$	190,469.95	\$, , , , , , , , , , , , , , , , , , ,		268,187.44		(17,355.37)
32	Jun-19	8.889631%	Jul-19	Aug-19	\$	294,089.66	Sep-19	\$	330,911.42		· · · · · ·		231,365.68		(62,723.98)
33	Jul-19	9.364424%	Aug-19	Sep-19	\$	304,053.20	Oct-19	\$	219,602.36	\$	5 11,763.32	\$	315,816.52	\$	11,763.32

Case No. 2020-00144 <u>Attachment 3 of 5</u> for Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 1

1	JACKSON PURCHASE ENERGY CORPORATION (JPEC)										
2		(1)	()		TED DELIVERY POINT						
3	(a)	(b)	(c)	(d)	(e)	(f)	(g)				
4	Big Rivers'	Big Rivers' ES			Big Rivers'			JPEC			
5	Expense	Factor Based on	Big Rivers'	Month Billed	Invoice ES Amount	Month Billed	ES Amount Billed	(Over)/U			
6	Month	Expense Month	Service Month	by Big Rivers	for the Service Month	by JPEC	to JPEC's Customers	[column (e)			
7	Jun-17	10.875093%	Jul-17	Aug-17	\$ 6,127.43	Aug-17	\$ 6,127.43	\$			
8	Jul-17	8.601289%	Aug-17	Sep-17	\$ 3,166.12	Sep-17	\$ 3,166.12	\$			
9	Aug-17	4.588263%	Sep-17	Oct-17	\$ 1,572.74	Oct-17	\$ 1,572.74	\$			
10	Sep-17	8.147387%	Oct-17	Nov-17	\$ 1,997.50	Nov-17	\$ 1,997.50	\$			
11	Oct-17	8.392206%	Nov-17	Dec-17	\$ 2,324.15	Dec-17	\$ 2,324.15	\$			
12	Nov-17	9.346232%	Dec-17	Jan-18	\$ 2,113.22	Jan-18	\$ 2,113.22	\$			
13	Dec-17	8.684854%	Jan-18	Feb-18	\$ 1,820.86	Feb-18	\$ 1,820.86	\$			
14	Jan-18	8.912569%	Feb-18	Mar-18	\$ 2,071.43	Mar-18	\$ 2,071.43	\$			
15	Feb-18	6.431099%	Mar-18	Apr-18	\$ 2,020.66	Apr-18	\$ 2,020.66	\$			
16	Mar-18	8.530789%	Apr-18	May-18	\$ 2,117.08	May-18	\$ 2,117.08	\$			
17	Apr-18	8.142932%	May-18	Jun-18	\$ 1,842.23	Jun-18	\$ 1,842.23	\$			
18	May-18	9.420179%	Jun-18	Jul-18	\$ 2,100.72	Jul-18	\$ 2,100.72	\$			
19	Jun-18	8.565303%	Jul-18	Aug-18	\$ 1,743.35	Aug-18	\$ 1,743.35	\$			
20	Jul-18	9.720905%	Aug-18	Sep-18	\$ 1,923.48	Sep-18	\$ 1,923.48	\$			
21	Aug-18	6.773962%	Sep-18	Oct-18	\$ 100.13	Oct-18	\$ 100.13	\$			
22	Sep-18	9.656771%	Oct-18	Nov-18	\$ 134.45	Nov-18	\$ 134.45	\$			
23	Oct-18	9.686813%	Nov-18	Dec-18	\$ 145.40	Dec-18	\$ 145.40	\$			
24	Nov-18	10.872047%	Dec-18	Jan-19	\$ 168.64	Jan-19	\$ 168.64	\$			
25	Dec-18	10.952069%	Jan-19	Feb-19	\$ 182.24	Feb-19	\$ 182.24	\$			
26	Jan-19	9.610015%	Feb-19	Mar-19	\$ 141.83	Mar-19	\$ 141.83	\$			
27	Feb-19	7.886036%	Mar-19	Apr-19	\$ 108.19	Apr-19	\$ 108.19	\$			
28	Mar-19	8.642946%	Apr-19	May-19	\$ 99.17	May-19	\$ 99.17	\$			
29	Apr-19	7.478434%	May-19	Jun-19	\$ 95.16	Jun-19	\$ 95.16	\$			
30	May-19	9.977448%	Jun-19	Jul-19	\$ 146.84	Jul-19	\$ 146.84	\$			
31	Jun-19	8.889631%	Jul-19	Aug-19	\$ 136.07	Aug-19	\$ 136.07	\$			
32	Jul-19	9.364424%	Aug-19	Sep-19	\$ 144.34	Sep-19	\$ 144.34	\$			

Case No. 2020-00144 <u>Attachment 4 of 5</u> for Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 1

(h)	
C's Monthly	
Under Recover	у
e) less column	(g)]
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-
	-

1	KENERGY CORP.										
2				DEDICA	ATED	DELIVERY POINT	CUSTOMERS				
3	(a)	(b)	(c)	(d)		(e)	(f)	(g)	(h)		
4	Big Rivers'	Big Rivers' ES				Big Rivers'			Kenergy's Monthly		
5	Expense	Factor Based on	Big Rivers'	Month Billed	Ir	nvoice ES Amount	Month Billed	ES Amount Billed	(Over)/Under Recovery		
6	Month	Expense Month	Service Month	by Big Rivers	for	the Service Month	by Kenergy	to Kenergy's Customers	[column (e) less column (g)]		
7	Jun-17	10.875093%	Jul-17	Aug-17	\$	480,548.29	Aug-17	\$ 480,548.29	\$ -		
8	Jul-17	8.601289%	Aug-17	Sep-17	\$	398,519.51	Sep-17	\$ 398,519.51	\$ -		
9	Aug-17	4.588263%	Sep-17	Oct-17	\$	211,785.15	Oct-17	\$ 211,785.15	\$ -		
10	Sep-17	8.147387%	Oct-17	Nov-17	\$	384,397.79	Nov-17	\$ 384,397.79	\$ -		
11	Oct-17	8.392206%	Nov-17	Dec-17	\$	389,465.55	Dec-17	\$ 389,465.55	\$ -		
12	Nov-17	9.346232%	Dec-17	Jan-18	\$	416,982.07	Jan-18	\$ 416,982.07	\$ -		
13	Dec-17	8.684854%	Jan-18	Feb-18	\$	395,529.86	Feb-18	\$ 395,529.86	\$ -		
14	Jan-18	8.912569%	Feb-18	Mar-18	\$	396,303.25	Mar-18	\$ 396,303.25	\$ -		
15	Feb-18	6.431099%	Mar-18	Apr-18	\$	315,318.29	Apr-18	\$ 315,318.29	\$ -		
16	Mar-18	8.530789%	Apr-18	May-18	\$	398,295.69	May-18	\$ 398,295.69	\$ -		
17	Apr-18	8.142932%	May-18	Jun-18	\$	384,790.47	Jun-18	\$ 384,790.47	\$ -		
18	May-18	9.420179%	Jun-18	Jul-18	\$	440,778.64	Jul-18	\$ 440,778.64	\$ -		
19	Jun-18	8.565303%	Jul-18	Aug-18	\$	401,209.06	Aug-18	\$ 401,209.06	\$ -		
20	Jul-18	9.720905%	Aug-18	Sep-18	\$	474,835.84	Sep-18	\$ 474,835.84	\$ -		
21	Aug-18	6.773962%	Sep-18	Oct-18	\$	318,326.47	Oct-18	\$ 318,326.47	\$ -		
22	Sep-18	9.656771%	Oct-18	Nov-18	\$	467,350.19	Nov-18	\$ 467,350.19	\$ -		
23	Oct-18	9.686813%	Nov-18	Dec-18	\$	467,183.92	Dec-18	\$ 467,183.92	\$ -		
24	Nov-18	10.872047%	Dec-18	Jan-19	\$	512,226.13	Jan-19	\$ 512,226.13	\$ -		
25	Dec-18	10.952069%	Jan-19	Feb-19	\$	534,863.19	Feb-19	\$ 534,863.19	\$ -		
26	Jan-19	9.610015%	Feb-19	Mar-19	\$	439,392.00	Mar-19	\$ 439,392.00	\$ -		
27	Feb-19	7.886036%	Mar-19	Apr-19	\$	377,507.09	Apr-19	\$ 377,507.09	\$ -		
28	Mar-19	8.642946%	Apr-19	May-19	\$	399,667.84	May-19	\$ 399,667.84	\$ -		
29	Apr-19	7.478434%	May-19	Jun-19	\$	352,928.99	Jun-19	\$ 352,928.99	\$ -		
30	May-19	9.977448%	Jun-19	Jul-19	\$	460,226.69	Jul-19	\$ 460,226.69	\$ -		
31	Jun-19	8.889631%	Jul-19	Aug-19	\$	412,187.04	Aug-19	\$ 412,187.04	\$ -		
32	Jul-19	9.364424%	Aug-19	Sep-19	\$	448,931.85	Sep-19	\$ 448,931.85	\$ -		

Case No. 2020-00144 <u>Attachment 5 of 5</u> for Response to Staff Item 2 Witness: Nicholas R. Castlen Page 1 of 1

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	Item 3) This request is addressed to BREC. Refer to Form 2.5,
2	Operating and Maintenance Expenses, for the last six expense months in
3	the two-year review period. For each of the expense line items listed on this
4	schedule, explain the reason(s) for any change in the expense levels from
5	month to month if that change is greater than plus or minus 10 percent.
6	
7	Response) Please see the attached schedule for the monthly Operating and
8	Maintenance ("O&M") expenses from Form 2.50 and the requested variance
9	explanations for the six-month review period.
10	
11	

- 12 Witnesses) Nicholas R. Castlen (Schedule of O&M Expenses) and
- 13 Ronald D. Gregory (*Reason(s)* for Changes in Expense Levels)

Case No. 2020-00144 Response to Staff Item 3 Witnesses: Nicholas R. Castlen (Schedule of O&M Expenses) and Ronald D. Gregory (Reason(s) for Changes in Expense Levels) Page 1 of 1

NOx Plan:													
			Dec-18 vs.		Jan-19 vs.		Feb-19 vs.		Mar-19 vs.		Apr-19 vs.		May-19 vs.
			Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Apr-19
Expense Month	Nov-18	Dec-18	% Change	Jan-19	% Change	Feb-19	% Change	Mar-19	% Change	Apr-19	% Change	May-19	% Change
NOx Plan	•					•		•					•
Anhydrous Ammonia	\$ 22,214	\$ 29,872	34%	\$ 32,593	9%	\$ 42,098	29%	\$ 20,918	-50%	\$ 30,708	47%	\$ 1,004	-97%
Emulsified Sulphur for NOx	-	-	Note 1										
Total NOx Plan O&M Expenses	\$ 22,214	\$ 29,872	34%	\$ 32,593	9%	\$ 42,098	29%	\$ 20,918	-50%	\$ 30,708	47%	\$ 1,004	-97%
SO2 Plan:													
			Dec-18 vs.		Jan-19 vs.		Feb-19 vs.		Mar-19 vs.		Apr-19 vs.		May-19 vs.
			Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Apr-19
Expense Month	Nov-18	Dec-18	% Change	Jan-19	% Change	Feb-19	% Change	Mar-19	% Change	Apr-19	% Change	May-19	% Change
SO2 Plan Expenses:				•						-	•		
(Note 2)	\$ 553,308	\$ 494,709	-11%	\$ 472,852	-4%	\$ 911,081	93%	\$ 519,515	-43%	\$ 500,964	-4%	\$ 517,652	3%
Fixation Lime	134,142	190,527	42%	131,149	-31%	100,411	-23%	119,109	19%	92,186	-23%	115,715	26%
Reagent-Limestone	-	40,048	Note 1	134,982	237%	156,895	16%	151,095	-4%	112,272	-26%	184,108	64%
Reagent-Lime	898,160	939,910	5%	785,087	-16%	787,156	0%	696,176	-12%	801,248	15%	826,985	3%
Emulsified Sulphur for SO2	4,175	96,928	2222%	17,689	-82%	33,042	87%	6,168	-81%	15,516	152%	32,798	111%
Reagent-DiBasic Acid	43,704	44,800	3%	92,650	107%	76,435	-18%	89,791	17%	46,260	-48%	107,395	132%
Reagent-Sodium BiSulfite for SO2	45,007	27,299	-39%	61,242	124%	80,679	32%	67,460	-16%	17,825	-74%	51,454	189%
Total S02 Plan O&M Expenses	\$ 1,678,496	\$ 1,834,221	9%	\$ 1,695,651	-8%	\$ 2,145,699	27%	\$ 1,649,314	-23%	\$ 1,586,271	-4%	\$ 1,836,107	16%
SO3 Plan:													
			Dec-18 vs.		Jan-19 vs.		Feb-19 vs.		Mar-19 vs.		Apr-19 vs.		May-19 vs.
			Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Apr-19
Expense Month	Nov-18	Dec-18	% Change	Jan-19	% Change	Feb-19	% Change	Mar-19	% Change	Apr-19	% Change	May-19	% Change
SO3 Plan Expenses:													
Hydrated Lime - SO3	\$ -	\$-	Note 1	\$ -	Note 1	\$ -	Note 1	\$-	Note 1	\$ -	Note 1	\$ -	Note 1
Total S03 Plan O&M Expenses	\$ -	\$ -	Note 1										

Page 1 of 5

Case No. 2020-00144

Attachment for Response to Staff Item 3

Witnesses: Nicholas R. Castlen (Schedules of O and M Expenses) and

Ronald D. Gregory (Reason(s) for Changes in Expense Levels)

<u>2012 Plan:</u>					-								
			Dec-18 vs.		Jan-19 vs.		Feb-19 vs.		Mar-19 vs.		Apr-19 vs.		May-19 vs.
			Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Apr-19
Expense Month	Nov-18	Dec-18	% Change	Jan-19	% Change	Feb-19	% Change	Mar-19	% Change	Apr-19	% Change	May-19	% Change
2012 Plan Expenses:		-	-	-	-	-	-	-	-	-	-	-	-
Project 9 - Wilson Hg	\$ 2,420	\$ 9,497	292%	\$ 115,982	1121%	\$ 83,060	-28%	\$ 93,057	12%	\$ 23,326	-75%	\$ 51,159	119%
Project 10 - Green Hg	460,614	421,688	-8%	578,800	37%	440,330	-24%	369,663	-16%	408,534	11%	358,490	-12%
Project 11 - HMP&L Hg	12,291	5,300	-57%	3,465	-35%	-	-100%	-	Note 1	-	Note 1	-	Note 1
Total 2012 Plan	\$ 475,325	\$ 436,485	-8%	\$ 698,247	60%	\$ 523,390	-25%	\$ 462,720	-12%	\$ 431,860	-7%	\$ 409,649	-5%
	• • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • •			* • • • • • • • • • • • • • • • • • • •	-	• • • • • • • • • • • • • • • • • • •	-
Total	\$ 2,176,035	\$ 2,300,578		\$ 2,426,491		\$ 2,711,187		\$ 2,132,952		\$ 2,048,839	_	\$ 2,246,760	_

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 comparability.

Case No. 2020-00144 **Attachment for Response to Staff Item 3** Witnesses: Nicholas R. Castlen (Schedules of O and M Expenses) and Ronald D. Gregory (Reason(s) for Changes in Expense Levels) Page 2 of 5

Variance Explanations:

Anhydrous Ammonia:

· · · · · · · · · · · · · · · · · · ·		
Dec-18 vs. Nov-18	34%	The increase was due to timing of product delivery and invoicing at HMPL
Feb-19 vs. Jan-19	29%	The increase was due to increased generation at Wilson in February compared to Januar
Mar-19 vs. Feb-19	-50%	The decrease was due to decreased generation at Wilson in March compared to Februar
Apr-19 vs. Mar-19	47%	The increase was due to timing of product delivery and invoicing at Wilson.
May-19 vs. Apr-19	-97%	The decrease was due to timing of product delivery and invoicing at Wilson.

Disposal-Flyash/Bottom Ash/Sludge:

Dec-18 vs. Nov-18	-11%	The decrease was due to decreased generation at Wilson, due to the Planned Outage.
Feb-19 vs. Jan-19	93%	The increase was driven by the timing of the landfill true-up cost at Green Station.
Mar-19 vs. Feb-19	-43%	The decrease was due to decreased generation at Green Station

Fixation Lime:

Dec-18 vs. Nov-18	42%	The increase was due to increased generation at Green in December compared to Novem
Jan-19 vs. Dec-18	-31%	The decrease was due to decreased generation at Green and HMPL in January compared
Feb-19 vs. Jan-19	-23%	The decrease was due to decreased generation at Green in February compared to January
Mar-19 vs. Feb-19	19%	The increase was due to invoice timing and payment
Apr-19 vs. Mar-19	-23%	The decrease was due to invoice timing and payment
May-19 vs. Apr-19	26%	The increase was due to invoice timing and payment

Reagent-Limestone:

		
Jan-19 vs. Dec-18	237%	The increase was due to increased generation at Wilson in January compared to Decemb
Feb-19 vs. Jan-19	16%	The increase was due to increased generation at Wilson in February compared to January
Apr-19 vs. Mar-19	-26%	The decrease was due to decreased generation at Wilson in April compared to March.
May-19 vs. Apr-19	64%	The increase was due to increased generation at Wilson in May compared to April.

Case No. 2020-00144 **Attachment for Response to Staff Item 3** Witnesses: Nicholas R. Castlen (Schedules of O and M Expenses) and Ronald D. Gregory (Reason(s) for Changes in Expense Levels) Page 3 of 5

ary.

ary and timing of product delivery and invoicing.

mber.

ed to December.

ry and the HMPL units were retired in February

nber.

ary.

Variance Explanations (continued):

Reagent-Lime:

Jan-19 vs. Dec-18	-16%	The decrease was due to decreased generation at HMPL in January compared to Decem
Mar-19 vs. Feb-19	-12%	The decrease was due to decreased generation at Green in March compared to February
Apr-19 vs. Mar-19	15%	The increase was due to increased generation at Green in April compared to March.

Emulsified Sulfur for SO2:

Dec-18 vs. Nov-18	2222%	The increase was due to timing of product delivery and invoicing at Green.
Jan-19 vs. Dec-18	-82%	The decrease was due to timing of product delivery and invoicing at Green.
Feb-19 vs. Jan-19	87%	The increase was due to timing of product delivery and invoicing at Green.
Mar-19 vs. Feb-19	-81%	The decrease was due to timing of product delivery and invoicing at Green.
Apr-19 vs. Mar-19	152%	The increase was due to timing of product delivery and invoicing at Green.
May-19 vs. Apr-19	111%	The increase was due to timing of product delivery and invoicing at Green.

Reagent-Dibasic Acid:

L 10 D 10	10-11	
Jan-19 vs. Dec-18	107%	The increase was due to increased generation at Wilson in January compared to Decemb
Feb-19 vs. Jan-19	-18%	The decrease was due to timing of product delivery and invoicing at Wilson.
Mar-19 vs. Feb-19	17%	The increase was due to timing of product delivery and invoicing at Wilson.
Apr-19 vs. Mar-19	-48%	The decrease was due to timing of product delivery and invoicing at Wilson.
May-19 vs. Apr-19	132%	The increase was due to increased generation at Wilson in May compared to April.

Reagent-Sodium BiSulfite for SO2:

Dec-18 vs. Nov-18	-39%	The decrease was due to timing of product delivery and invoicing at Green.
Jan-19 vs. Dec-18	124%	The increase was due to increased generation at Wilson in January compared to Decemb
Feb-19 vs. Jan-19	32%	The increase was due to timing of product delivery and invoicing at Green.
Mar-19 vs. Feb-19	-16%	The decrease was due to timing of product delivery and invoicing at Green.
Apr-19 vs. Mar-19	-74%	The decrease was due to timing of product delivery and invoicing at Green and Wilson.
May-19 vs. Apr-19	189%	The increase was due to increased generation at Wilson in May compared to April.

Case No. 2020-00144

Attachment for Response to Staff Item 3 Witnesses: Nicholas R. Castlen (Schedules of O and M Expenses) and Ronald D. Gregory (Reason(s) for Changes in Expense Levels)

Page 4 of 5

nber.	
у.	
nber.	
nber.	
l.	

Variance Explanations (continued):

Project 9 - Wilson Hg

Dec-18 vs. Nov-18	292%	The increase was due to stack testing and HCI testing costs.
Jan-19 vs. Dec-18	1121%	The increase was due to increased generation at Wilson in January compared to Decemb
Feb-19 vs. Jan-19	-28%	The decrease was due to timing of product delivery and invoicing at Wilson.
Mar-19 vs. Feb-19	12%	The increase was due to timing of product delivery and invoicing at Wilson.
Apr-19 vs. Mar-19	-75%	The decrease was due to timing of product delivery and invoicing at Wilson.
May-19 vs. Apr-19	119%	The increase was due to increased generation at Wilson in May compared to April.

Project 10 - Green Hg

Jan-19 vs. Dec-18	37%	The increase was due to timing of invoicing at Green.
Feb-19 vs. Jan-19	-24%	The decrease was due to decreased generation at Green in February compared to January.
Mar-19 vs. Feb-19	-16%	The decrease was due to decreased generation at Green in March compared to February.
Apr-19 vs. Mar-19	11%	The increase was due to increased generation at Green in April compared to March.
May-19 vs. Apr-19	-12%	The decrease was due to timing of invoicing at Green.

Project 11 - HMP&L Hg

Dec-18 vs. Nov-18	-57%	The decrease was due to variability in costs for trap analysis or stack testing, which are i
Jan-19 vs. Dec-18	-35%	The decrease was due to variability in costs for trap analysis or stack testing, which are i
Feb-19 vs. Jan-19	-100%	HMPL units were retired in February

Case No. 2020-00144 **Attachment for Response to Staff Item 3** Witnesses: Nicholas R. Castlen (Schedules of O and M Expenses) and Ronald D. Gregory (Reason(s) for Changes in Expense Levels) Page 5 of 5

nber, as well as stack testing and RATA certification costs.

ry.

incurred on as needed basis for compliance monitoring incurred on as needed basis for compliance monitoring

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1 Item 4) This request is addressed to BREC. Refer to BREC's monthly 2 environmental surcharge reports for the last six expense months in the two-3 year review period. Provide the calculations and supporting data for the 4 rates of return included in each monthly environmental surcharge filing. 5 Provide all supporting calculations and documentation in Excel 6 spreadsheet format, with formulas intact and unprotected and all rows and 7 columns fully accessible.

8

9 Response) Please see the attachment to this response for the calculations and supporting data for the rates of return included in each monthly environmental surcharge filing for the six-month review period. These calculations are provided in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible, in a separate Excel file as part of the electronic filing *and* on a CD accompanying these responses in the paper copy provided pursuant to 807 KAR 5:001 §8(12)(a)2.

> Case No. 2020-00144 Response to Staff Item 4 Witness: Nicholas R. Castlen Page 1 of 2

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1		
2		
3	Witness)	Nicholas R. Castlen
4		

Case No. 2020-00144 Response to Staff Item 4 Witness: Nicholas R. Castlen Page 2 of 2

Big Rivers Electric Corporation Case No. 2020-00144 **Calculations for Rates of Return on Environmental Compliance Rate Base** For the Expense Months: December 2018 through May 2019

Calculations of Monthly Rates of Return on Environmental Compliance Rate Base:

Expense M	onth:	<u>Dec-18</u>		<u>Jan-19</u>		<u>Feb-19</u>		<u>Mar-19</u>		<u>Apr-19</u>		<u>May-19</u>
	\$,	\$,	\$	819,001.06	\$,	\$,	\$	919,715.91
CoBank - Series 2012A Notes		679,477.10		671,206.54		606,251.07		671,206.54		640,904.36		662,267.84
CFC - Series 2012B Refinance Note		869,515.35		869,515.35		783,083.99		860,251.22		832,803.59		856,234.62
CFC - Series 2012B Equity Note		151,574.00		151,574.00		151,573.99		149,641.81		149,641.81		149,641.81
Series 2010A P.C. Bonds		416,500.00		416,500.00		416,500.00		416,500.00		416,500.00		416,500.00
CFC - Series 2017B Refinance Note		41,512.50		41,512.50		39,206.25		39,206.25		39,206.25		39,206.25
RUS Guaranteed FFB Loan W8		61,559.75		61,559.75		55,602.35		61,559.75		59,573.95		61,559.75
RUS Guaranteed FFB Loan X8		44,782.05		44,782.07		40,448.32		44,782.07		43,337.49		44,782.07
a) Total Monthly Interest Expense on Long-Term Debt	\$	3.158.609.98	\$	3.163.401.38	\$	2.911.667.03	\$	3.149.898.81	\$	3.072.015.11	\$	3,149,908.25
	·	-, -,		-,,	•	, , ,	•	-, , ,	•	-)	•	-) -)
Total Outstanding Long-Term Debt (Beginning of Month)	\$	767,092,264.16	\$	767,358,782.17	\$	767,358,782.17	\$	762,998,986.25	\$	763,217,437.65	\$ 7	763,217,437.65
		767,358,782.17		767,358,782.17		762,998,986.25		763,217,437.65		763,217,437.65	-	759,572,066.38
	\$, ,	\$, ,	\$, ,	\$, ,	\$, ,		761,394,752.02
						, ,		, ,		<i>, ,</i>		, ,
c) Number of Days During Year		365		365		365		365		365		365
d) Number of Days During Month		31		31		28		31		30		31
e) Average Cost of Debt $[(a) \div (b)] \times [(c) \div (d)]$		4.85%		4.85%		4.96%		4.86%		4.90%		4.87%
(f) Applicable TIFR $^{(1)}$		1 24		1 24		1 24		1 24		1 24		1.24
		1.27		1.27		1.27		1.27		1.27		1.27
P) Rate of Return on Environmental Compliance Rate Base $l(e) \times (f)$	1	6.01%		6.01%		6.15%		6.03%		6.08%		6.04%
$\mathbf{F}_{\mathbf{r}}$	1	0.01/0		0.01/0		0.10 /0		0.0070		0.0070		0.0470
(Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note CoBank - Series 2012A Notes CFC - Series 2012B Refinance Note CFC - Series 2012B Equity Note Series 2010A P.C. Bonds CFC - Series 2017B Refinance Note RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan X8 a) Total Monthly Interest Expense on Long-Term Debt Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt (End of Month) b) Average Outstanding Long-Term Debt during Month c) Number of Days During Year d) Number of Days During Month e) Average Cost of Debt $[(a) \div (b)] x [(c) \div (d)]$ (f) Applicable TIER ⁽¹⁾	RUS - Series B Note\$CoBank - Series 2012A NotesCFC - Series 2012B Refinance NoteCFC - Series 2012B Equity NoteSeries 2010A P.C. BondsCFC - Series 2017B Refinance NoteRUS Guaranteed FFB Loan W8RUS Guaranteed FFB Loan X8a)Total Monthly Interest Expense on Long-Term Debt f Total Outstanding Long-Term Debt (Beginning of Month) f Total Outstanding Long-Term Debt (End of Month) f	Monthlv Interest Expense on Long-Term Debt (by Obligation):RUS - Series B Note\$ 893,689.23CoBank - Series 2012A Notes $679,477.10$ CFC - Series 2012B Refinance Note $869,515.35$ CFC - Series 2012B Equity Note $151,574.00$ Series 2010A P.C. Bonds $416,500.00$ CFC - Series 2017B Refinance Note $41,512.50$ RUS Guaranteed FFB Loan W8 $61,559.75$ RUS Guaranteed FFB Loan X8 $44,782.05$ a) Total Monthly Interest Expense on Long-Term Debt\$ 767,092,264.16Total Outstanding Long-Term Debt (Beginning of Month) $5767,092,264.16$ Total Outstanding Long-Term Debt (Beginning of Month) $767,225,523.17$ b)Number of Days During Year 365 d) Number of Days During Month 31 e)Average Cost of Debt $[(a) \div (b)] x [(c) \div (d)]$ 4.85% (f)Applicable TIER ⁽¹⁾ 1.24	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note CoBank - Series 2012A Notes\$ 893,689.23 \$ 679,477.10CFC - Series 2012B Refinance Note CFC - Series 2012B Equity Note Series 2010A P.C. Bonds $869,515.35$ ($151,574.00$)CFC - Series 2017B Refinance Note RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan X8 $416,500.00$ ($41,512.50$)a) Total Monthly Interest Expense on Long-Term Debt\$ 3,158,609.98 \$ $a)$ Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt during Month\$ 767,092,264.16 \$ 767,358,782.17 \$ $b)$ Number of Days During Year365 $d)$ Number of Days During Month31 $e)$ Average Cost of Debt $f(a) \div (b)$ $x f(c) \div (d)$ 4.85% (f) Applicable TIER $^{(I)}$ 1.24	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note \$ 893,689.23 \$ 906,751.17 CoBank - Series 2012A Notes $679,477.10$ $671,206.54$ CFC - Series 2012B Refinance Note $869,515.35$ $869,515.35$ CFC - Series 2012B Refinance Note $151,574.00$ $151,574.00$ $151,574.00$ Series 2010A P.C. Bonds $416,500.00$ $416,500.00$ $416,500.00$ CFC - Series 2017B Refinance Note $41,512.50$ $41,512.50$ $41,512.50$ RUS Guaranteed FFB Loan W8 $61,559.75$ $61,559.75$ $61,559.75$ RUS Guaranteed FFB Loan X8 $44,782.05$ $44,782.07$ a) Total Monthly Interest Expense on Long-Term Debt \$ $767,092,264.16$ \$ $767,358,782.17$ Total Outstanding Long-Term Debt (Beginning of Month) \$ $767,092,264.16$ \$ $767,358,782.17$ $767,358,782.17$ $767,358,782.17$ $767,358,782.17$ 701 Outstanding Long-Term Debt during Month \$ $767,092,264.16$ \$ $767,358,782.17$ $b)$ Average Outstanding Long-Term Debt during Month \$ $767,358,782.17$ \$ $767,358,782.17$ $c)$ Number of Days During Year 365 365 365	Monthly Interest Expense on Long-Term Debt (bv Obligation): \$ 893,689.23 906,751.17 \$ RUS - Series B Note \$ 893,689.23 \$ 906,751.17 \$ CoBank - Series 2012A Notes $679,477.10$ $671,206.54$ CFC - Series 2012B Equity Note $151,574.00$ $151,574.00$ Series 2012B Equity Note $151,574.00$ $151,574.00$ Series 2017B Refinance Note $41,512.50$ $41,512.50$ RUS Guaranteed FFB Loan W8 $61,559.75$ $61,559.75$ RUS Guaranteed FFB Loan X8 $44,782.05$ $44,782.07$ a) Total Monthly Interest Expense on Long-Term Debt \$ 3,158,609.98 \$ 3,163,401.38 \$ Total Outstanding Long-Term Debt (Beginning of Month) $767,358,782.17$ $767,358,782.17$ \$ 701 Outstanding Long-Term Debt (End of Month) $767,252,523.17$ \$ 767,358,782.17 \$ $c)$ Number of Days During Year 365 365 365 d Number of Days During Month 31 31 e Average Cost of Debt $l(a) \div (b) x [(c) \div (d)]$ 4.85% 4.85% (f) Applicable TIER (1) 1.24 1.24 1.24	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note\$ 893,689.23\$ 906,751.17\$ 819,001.06CoBank - Series 2012A Notes $679,477,10$ $671,206.54$ $606,251.07$ CFC - Series 2012B Refinance Note $869,515.35$ $869,515.35$ $869,515.35$ CFC - Series 2012B Equity Note $151,574.00$ $151,574.00$ $151,573.99$ Series 2010A P.C. Bonds $416,500.00$ $416,500.00$ $416,500.00$ CFC - Series 2017B Refinance Note $41,512.50$ $39,206.25$ RUS Guaranteed FFB Loan N8 $61,559.75$ $61,559.75$ $55,602.35$ RUS Guaranteed FFB Loan X8 $44,782.05$ $44,782.07$ $40,448.32$ a) Total Monthly Interest Expense on Long-Term Debt\$ $3,158,609.98$ \$ $3,163,401.38$ \$ $2,911,667.03$ b) Total Outstanding Long-Term Debt (Beginning of Month) $767,092,264.16$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ $767,358,782.17$ \$ 7	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 809,215.35COBank - Series 2012A Notes $679,477.10$ $671,206.54$ $606,251.07$ CPC - Series 2012B Refinance Note $869,515.35$ $869,515.35$ $783,083.99$ CPC - Series 2012B Equity Note $151,574.00$ $151,574.00$ $151,573.09$ Series 2010A P.C. Bonds $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ CPC - Series 2017B Refinance Note $41,512.50$ $41,512.50$ $41,59.75$ $55,602.35$ RUS Guaranteed FFB Loan W8 $61,559.75$ $61,559.75$ $55,602.35$ $44,782.07$ $40,448.32$ a) Total Monthly Interest Expense on Long-Term Debt\$ 3,158,609.98\$ 3,163,401.38\$ 2,911,667.03\$b) Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt during Month\$ 767,022,264.16\$ 767,358,782.17\$ 765,178,884.21\$c) Number of Days During Year 365 365 365 365 365 d) Number of Days During Month 31 31 28 e) Average Cost of Debt $f(a) \div (b)$ x $f(c) \div (d)$ 4.85% 4.85% 4.96% (f) Applicable TIER ⁽¹⁾ 1.24 1.24 1.24 1.24	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 906,751.17RUS - Series D12A Notes\$ 906,751.17\$ 671,206.54 $606,251.07$ $671,206.54$ CPC - Series 2012B Refinance Note $679,477.10$ $671,206.54$ $606,251.07$ $671,206.54$ CPC - Series 2012B Refinance Note $151,574.00$ $151,574.00$ $151,573.99$ $149,641.81$ Series 2010A P.C. Bonds $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ CPC - Series 2017B Refinance Note $41,512.50$ $41,512.50$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ $44,782.07$ $40,448.32$ $44,782.07$ a) Total Monthly Interest Expense on Long-Term Debt\$ 3,158,609.98\$ 3,163,401.38\$ 2,911,667.03\$ 7,62,998,986.25 $767,358,782.17$ \$ 767,358,782.17\$ 767,358,782.17\$ 762,998,986.25 $763,217,437.65$ b)Average Outstanding Long-Term Debt during Month $5 767,358,782.17$ \$ 767,358,782.17\$ 763,3108,211.95 $763,217,437.65$ c)Number of Days During Year 365 365 365 365 365 d)Number of Days During Month 31 31 28 31 e)Average Cost of Debt $[(a) + (b)] \times [(c) + (d)]$ 4.85% 4.85% 4.96% 4.86% (f)Applicable TIER (1) 1.24 </td <td>Monthly Interest Expense on Long-Term Debt (bv Obligation): RUS - Series B Note CoBank - Series 2012A Notes\$ 893,689.23 (67),4477.10\$ 906,751.17 (671,206.54)\$ 819,001.06 (67),206.54\$ 906,751.17 (67),206.54CPC - Series 2012B Equiny Note Series 2012B Refinance Note CPC - Series 2012B Refinance Note (CPC - Series 2012B Refinance</td> <td>Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note CoBank - Series 2012A Notes\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 906,751.17\$ 890,047.66COBank - Series 2012B Refinance Note Series 2012B Equity Note$679,477.10$$671,206.54$$600,251.07$$671,206.54$$640,904.36$CFC - Series 2012B Refinance Note Series 2017B Refinance Note$869,515.35$$869,515.35$$783,083.99$$860,251.22$$832,803.59$CFC - Series 2017B Refinance Note RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan X8$416,500.00$$416,500.00$$416,500.00$$416,500.00$$416,500.00$Quaranteed FFB Loan X8$44,782.07$$44,782.07$$40,448.32$$44,782.07$$43,337.49$a) Total Monthly Interest Expense on Long-Term Debt Total Outstanding Long-Term Debt (Beginning of Month) b)$\$ 767,092,264.16$ Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt (due of Month) b)$\$ 767,092,264.16$ Total Outstanding Long-Term Debt (due of Month) Total Outstanding Long-Term Debt (due of Month) b)$\$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) b)$\$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) Total Outstanding Long-Term Debt (due of Month) b)$\$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) CF$\$ 763,217,437,65$ Total Outstanding Long-Term Debt (due of Month) CF</td> <td>Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series 2012A Notes\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 906,751.17\$ 809,047.66\$ 640,904.36COBank - Series 2012B Refinance Note$679,477.10$$671,206.54$$606,251.07$$671,206.54$$640,904.36$CFC - Series 2012B Refinance Note$151,574.00$$151,574.00$$151,574.00$$151,573.99$$860,251.22$$832,803.59$CFC - Series 2012B Refinance Note$151,574.00$$151,574.00$$151,574.00$$416,500.00$$416,500.00$$416,500.00$$416,500.00$CFC - Series 2017B Refinance Note$41,512.50$$41,512.50$$39,206.25$$39,206.25$$39,206.25$$39,206.25$RUS Guaranteed FFB Loan X8$61,559,75$$56,502.35$$61,559,75$$56,502.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,559,75$$55,602.35$$61,529,76$$57,62,217,437,65$$57,62,217,437,65$$57,62,217,437,65$$57,62,217,437,65$$57,62,217,437,65$$57,62,217,437,65$</td>	Monthly Interest Expense on Long-Term Debt (bv Obligation): RUS - Series B Note CoBank - Series 2012A Notes\$ 893,689.23 (67),4477.10\$ 906,751.17 (671,206.54)\$ 819,001.06 (67),206.54\$ 906,751.17 (67),206.54CPC - Series 2012B Equiny Note Series 2012B Refinance Note CPC - Series 2012B Refinance Note (CPC - Series 2012B Refinance	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series B Note CoBank - Series 2012A Notes\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 906,751.17\$ 890,047.66COBank - Series 2012B Refinance Note Series 2012B Equity Note $679,477.10$ $671,206.54$ $600,251.07$ $671,206.54$ $640,904.36$ CFC - Series 2012B Refinance Note Series 2017B Refinance Note $869,515.35$ $869,515.35$ $783,083.99$ $860,251.22$ $832,803.59$ CFC - Series 2017B Refinance Note RUS Guaranteed FFB Loan W8 RUS Guaranteed FFB Loan X8 $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ Quaranteed FFB Loan X8 $44,782.07$ $44,782.07$ $40,448.32$ $44,782.07$ $43,337.49$ a) Total Monthly Interest Expense on Long-Term Debt Total Outstanding Long-Term Debt (Beginning of Month) b) $$ 767,092,264.16$ Total Outstanding Long-Term Debt (Beginning of Month) Total Outstanding Long-Term Debt (due of Month) b) $$ 767,092,264.16$ Total Outstanding Long-Term Debt (due of Month) Total Outstanding Long-Term Debt (due of Month) b) $$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) b) $$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) Total Outstanding Long-Term Debt (due of Month) b) $$ 767,252,523.17$ Total Outstanding Long-Term Debt (due of Month) CF $$ 763,217,437,65$ Total Outstanding Long-Term Debt (due of Month) CF	Monthly Interest Expense on Long-Term Debt (by Obligation): RUS - Series 2012A Notes\$ 893,689.23\$ 906,751.17\$ 819,001.06\$ 906,751.17\$ 809,047.66\$ 640,904.36COBank - Series 2012B Refinance Note $679,477.10$ $671,206.54$ $606,251.07$ $671,206.54$ $640,904.36$ CFC - Series 2012B Refinance Note $151,574.00$ $151,574.00$ $151,574.00$ $151,573.99$ $860,251.22$ $832,803.59$ CFC - Series 2012B Refinance Note $151,574.00$ $151,574.00$ $151,574.00$ $416,500.00$ $416,500.00$ $416,500.00$ $416,500.00$ CFC - Series 2017B Refinance Note $41,512.50$ $41,512.50$ $39,206.25$ $39,206.25$ $39,206.25$ $39,206.25$ RUS Guaranteed FFB Loan X8 $61,559,75$ $56,502.35$ $61,559,75$ $56,502.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,559,75$ $55,602.35$ $61,529,76$ $57,62,217,437,65$ $57,62,217,437,65$ $57,62,217,437,65$ $57,62,217,437,65$ $57,62,217,437,65$ $57,62,217,437,65$

29 Notes:

30⁽¹⁾ Applicable Times Interest Earned Ratio ("TIER") for calculating the Rate of Return on Environmental Compliance Rate Base per Big Rivers' Environmental Surcharge Tariff approved by Order of the

31 Commission dated October 1, 2012 (Case No. 2012-00063).

Case No. 2020-00144 **Attachment for Response to Staff Item 4** Witness: Nicholas R. Castlen Page 1 of 1

<u>Apr-19</u>	

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	Item 5)	This request is addressed to BREC. KRS 278.183(3) provides
2	that dur	ing the two-year review the Commission shall, to the extent
3	appropri	ate, incorporate environmental surcharge amounts found just and
4	reasonab	le into the existing base rates of the utility.
5	<i>a</i> . S	State whether BREC believes any surcharge amounts need to be
6	i	ncorporated into its base rates in conjunction with this two-year
7	I	review. If so, provide the surcharge amount that BREC believes
8	ક	should be incorporated into its existing base rates.
9	<i>b</i> . 1	For subpart a. above, explain how the surcharge amount should be
10	i	ncorporated into the base rates, including all supporting
11	C	calculations, workpapers, and assumptions as well as any
12	C	analysis that BREC believes supports its position. Provide all
13	٤	supporting schedules in Excel spreadsheet format, with formulas
14	i	ntact and unprotected and all rows and columns fully accessible.

Case No. 2020-00144 Response to Staff Item 5 Witnesses: Roger D. Hickman (a. only) and Nicholas R. Castlen (b., c., and d. only) Page 1 of 4

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1	с.	Provide the Base Environmental Surcharge Factor (BESF) that
2		reflects all environmental surcharge amounts previously
3		incorporated into existing base rates and the amount determined
4		in subpart b. above. Include all supporting calculations,
5		workpapers, and assumptions. Provide all supporting schedules
6		in Excel spreadsheet format, with formulas intact and unprotected
7		and all rows and columns fully accessible.
8	d.	State whether BREC believes that there will need to be
9		modifications to either the surcharge mechanism or the monthly
10		surcharge reports, other than a revision to BESF, as a result of

11 incorporating environmental surcharge amounts into BREC's

12 existing base rates. If so, provide a detailed explanation of the

13 *modifications and provide updated monthly surcharge reports.*

14

Case No. 2020-00144 Response to Staff Item 5 Witnesses: Roger D. Hickman (a. only) and Nicholas R. Castlen (b., c., and d. only) Page 2 of 4

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1 **Response**)

2	a.	Big Rivers does not believe any surcharge amounts need to be
3		incorporated into its base rates in conjunction with this two-year
4		environmental surcharge (ES) review. This position aligns with Big
5		Rivers' Members' request that any amount appearing on the ES line of a
6		customer's billing statement represent a customer's total portion of
7		his(her) environmental compliance charges, versus having a portion of
8		those charges embedded in Big Rivers' existing base rates.
9		Commission Staff previously noted this position in its Informal
10		Conference (IC) Memo, dated March 23, 2016, in Case No. 2015-00320.1

¹ See In the Matter of: An Examination By The Public Service Commission Of The Environmental Surcharge Mechanism Of Big Rivers Electric Corporation For The Two-Year Billing Period Ending June 31, 2015 And The Pass Through Mechanism Of Its Three Member Distribution Cooperatives. IC Memo filed March 23, 2016.

² Ibid. Order dated May 31, 2016, page 7.

Case No. 2020-00144 Response to Staff Item 5 Witnesses: Roger D. Hickman (a. only) and Nicholas R. Castlen (b., c., and d. only) Page 3 of 4

ELECTRONIC EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF BIG RIVERS ELECTRIC CORPORATION FOR THE TWO-YEAR BILLING PERIOD ENDING JULY 31, 2019, AND THE PASSTHROUGH MECHANISM OF ITS THREE MEMBER DISTRIBUTION COOPERATIVES CASE NO. 2020-00144

Response to Commission Staff's First Request for Information dated May 5, 2020

June 5, 2020

1		In its Order dated May 31, 2016, in Case No. 2015-00320, ² the	
2		Commission noted that Big Rivers' position was reasonable at the time of	
3		that Order. Big Rivers' Members' position is unchanged from the earlier	
4		two-year review. Therefore, Big Rivers believes this position remains	
5		reasonable and does not recommend any roll-in into its base rates.	
6	b.	Not Applicable.	
7	c.	Not Applicable.	
8	d.	Not Applicable.	
9			
10			
11	Witnesses) Roger D. Hickman (a. only) and		
12		Nicholas R. Castlen (b., c., and d. only)	

13

Case No. 2020-00144 Response to Staff Item 5 Witnesses: Roger D. Hickman (a. only) and Nicholas R. Castlen (b., c., and d. only) Page 4 of 4