

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

**APPLICATION OF BIG RIVERS ELECTRIC)
CORPORATION FOR APPROVAL TO MODIFY)
ITS MRSM TARIFF, CEASE DEFERRING) Case No. 2020-00064
DEPRECIATION EXPENSES, ESTABLISH)
REGULATORY ASSETS, AMORTIZE REGULATORY)
ASSETS, AND OTHER APPROPRIATE RELIEF)**

SETTLEMENT TESTIMONY
OF
STEPHEN J. BARON

ON BEHALF OF
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

May 2020

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL TO MODIFY ITS MRSM TARIFF, CEASE DEFERRING DEPRECIATION EXPENSES, ESTABLISH REGULATORY ASSETS, AMORTIZE REGULATORY ASSETS, AND OTHER APPROPRIATE RELIEF)
)
) **Case No. 2020-00064**
)
)
)

SETTLEMENT TESTIMONY OF STEPHEN J. BARON

1 **Q. Please state your name and business address.**

2 A. My name is Stephen J. Baron. My business address is J. Kennedy and Associates,
3 Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell,
4 Georgia 30075.

5

6 **Q. Have you previously filed Direct Testimony in this Case?**

7 A. Yes.

8

9 **Q. What is the purpose of your testimony?**

10 A. I am providing testimony in support of the Settlement Agreement among the
11 Attorney General of the Commonwealth of Kentucky ("Attorney General"), Big
12 Rivers Electric Corporation ("Big Rivers"), and Kentucky Industrial Utility

1 Customers, Inc. (“KIUC”) filed on May 29, 2020 (“Settlement”). While KIUC
2 supports the entire Settlement, my testimony addresses and supports the Settlement
3 provisions related to the implementation of a redesigned revenue neutral Large
4 Industrial Class rate based on test year 2013 costs and billing determinants,
5 approved by the Commission in Case No. 2013-00199 in May of 2014.

6
7 **Q. Would you please explain the proposed redesigned LIC rate?**

8 A. The current LIC energy charge of \$38.05/mWh approved by the Commission in the
9 2013 Big Rivers’ rate case. As I discussed in my Direct Testimony in this case, this
10 \$38.05/mWh energy charge was not consistent with Big Rivers’ actual 2013 test
11 year production energy costs because it did not reflect offsets for energy related off-
12 system sales and certain rider related energy costs that are separately recovered in
13 these riders. As shown in my Exhibit SJB-2, which was included in my Direct
14 Testimony, when these offsets are properly removed from the 2013 Production
15 Energy unit costs, the resulting LIC energy cost is \$33.267/mWh, not the
16 \$38.05/mWh that is currently being charged to LIC customers. This exhibit is also
17 included in my Post Conference data response to the Staff, which is attached as
18 Baron Exhibit SJB-5.¹

19

¹ Exhibit SJB-5 includes the complete data response, including all of the Public version attachments.

1 **Q. Is it necessary to redesign the LIC demand charge if the energy charge is**
2 **reduced from \$38.05/mWh to \$33.267/mWh, in order to maintain revenue**
3 **neutrality using 2013 test year costs and billing determinants,?**

4 A. Yes. As shown in my response to the Staff's data request (Exhibit SJB-5), in order
5 to produce a revenue neutral LIC rate design from the perspective of the 2013 rate
6 case, the LIC demand charge would be increased to \$13.406/kW from the current
7 rate of \$10.715. As can be seen on page 1 of 3 of the exhibit, the original LIC
8 revenue of \$66,084,734 is maintained in the redesigned rate, thus achieving revenue
9 neutrality.

10
11 **Q. In your Direct Testimony, you recommended that the LIC rate should be**
12 **redesigned based on a revenue neutral approach using 2019 costs and billing**
13 **determinants. Was that a reasonable proposal?**

14 A. Yes, from an economic and ratemaking standpoint I believe my proposal was
15 reasonable. However, based on discussions in a conference among the parties,
16 including the Commission Staff, the Commission's policy would have precluded
17 using the 2019 cost and billing data to redesign the LIC rate. As such, I now
18 recommend that the Settlement redesign be adopted, which uses the Commission
19 approved 2013 test year data.

20
21 **Q. In your original proposal, you recommended that fossil fuel businesses (coal**
22 **mines and oil industry customers) continue on the current LIC rate design due**

1 **to their very low load factors and the impact of a cost-based rate. Is that**
2 **provision included in the Settlement proposal?**

3 A. Yes. These customers, as well as load served under an economic development rate
4 ("EDR") will continue on the current LIC rate design. These fossil fuel industry
5 customers, who are facing unprecedented economic hardships, would not be
6 impacted by the Settlement rate redesign. With regard to EDR customers, the EDR
7 rate provides for a substantial discount off of the LIC demand charge. If the
8 redesigned LIC rate applied to EDR load, it would effectively increase the discount
9 these customers receive. As such, the redesigned rate does not apply to the EDR
10 load, until such time as the EDR discount is eliminated, at which point the load
11 would be charged the then existing redesigned LIC rate.

12
13 **Q. Does that complete your testimony?**

14 A. Yes.
15
16

AFFIDAVIT

STATE OF GEORGIA)

COUNTY OF FULTON)

STEPHEN J. BARON, being duly sworn, deposes and states: that the attached is his sworn testimony and that the statements contained are true and correct to the best of his knowledge, information and belief.


Stephen J. Baron

Sworn to and subscribed before me on this
27th day of MAY 2020.


Notary Public



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

**APPLICATION OF BIG RIVERS ELECTRIC)
CORPORATION FOR APPROVAL TO MODIFY)
ITS MRSM TARIFF, CEASE DEFERRING) Case No. 2020-00064
DEPRECIATION EXPENSES, ESTABLISH)
REGULATORY ASSETS, AMORTIZE REGULATORY)
ASSETS, AND OTHER APPROPRIATE RELIEF)**

EXHIBIT __ (SJB-5)

OF

STEPHEN J. BARON

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF BIG RIVERS)
ELECTRIC CORPORATION FOR APPROVAL)
TO MODIFY ITS MRSM TARIFF, CEASE) Case No.
DEFERRING DEPRECIATION EXPENSES,) 2020-00064
ESTABLISH REGULATORY ASSETS,)
AMORTIZE REGULATORY ASSETS, AND)
OTHER APPROPRIATE RELIEF)

**RESPONSE OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.
TO POST INFORMAL CONFERENCE DATA REQUEST**

Q.1 During the May 14, 2020 Informal Conference Commission Staff made the following Data Request to KIUC: Please provide the revenue neutral redesign of the Large Industrial Class (LIC) rate using the financials approved by the Commission in the most recent Big Rivers base rate case (Case No. 2013-00199). This request was noted in Staff’s Informal Conference Memorandum filed May 15, 2020.

RESPONSE: Attached are three exhibits.

First is Baron Exhibit (SJB-2) attached to Mr. Baron’s Direct Testimony in this case. It shows that the cost-of-service based energy rate from Case No. 2013-00199 is \$33.267/MWh. This finding is discussed on page 12, line 2 of Mr Baron’ Direct Testimony.

Second is the revenue neutral redesign of the LIC rate using the financials and billing determinants from the 2013 rate case. Starting with the cost-based energy rate of \$33.267/MWh yields a cost-based demand charge of 13.406/KW/month. Compared to the currently approved rates, this is a \$4.78/MWh (12.6%) reduction in the LIC energy charge and a \$2.69/KW/month (25.1%) increase in the LIC demand charge.

Third is a bill impact analysis for the 21 LIC customers. The Economic Development load that receives a 90% demand charge reduction is maintained on the existing rate design. The Fossil Fuel customers (primarily coal mines) are highlighted in red. Please note the very low load factors for many of these customers.

Respectfully submitted,

/s/ Michael L. Kurtz

Michael L. Kurtz, Esq.

Kurt J. Boehm, Esq.

Jody Kyler Cohn, Esq.

BOEHM, KURTZ & LOWRY

36 East Seventh Street, Suite 1510

Cincinnati, Ohio 45202

Ph: (513) 421-2255 Fax: (513) 421-2764

E-Mail: MKurtz@BKLawfirm.com

KBoehm@BKLawfirm.com

JKylerCohn@BKLawfirm.com

**COUNSEL FOR KENTUCKY INDUSTRIAL
UTILITY CUSTOMERS, INC.**

May 18, 2020

DEVELOPMENT OF FUNCTIONALIZED PRODUCTION ENERGY COST/UNIT ENERGY COST - 2013 RATE CASE

Line	Description	Name	Functional Vector	2013-00199 (ALCAN CASE)	
				Total System	Production Energy
<u>Operation and Maintenance Expenses</u>					
Steam Power Generation Operation Expenses					
1	500 OPERATION SUPERVISION & ENGINEERING	OM500	PROFIX	\$ 3,007,988	-
2	501 FUEL	OM501	Energy	\$ 91,471,119	91,471,119
3	502 STEAM EXPENSES	OM502	PROFIX	\$ 21,174,678	-
4	505 ELECTRIC EXPENSES	OM505	PROFIX	\$ 5,963,270	-
5	506 MISC. STEAM POWER EXPENSES	OM506	PROFIX	\$ 4,078,186	-
6	507 RENTS	OM507	PROFIX	\$ -	-
7	509 ALLOWANCES	OM509	Energy	\$ 17,674	17,674
8	Total Steam Power Operation Expenses			\$ 125,712,914	\$ 91,488,793
Steam Power Generation Maintenance Expenses					
9	510 MAINTENANCE SUPERVISION & ENGINEERING	OM510	Energy	\$ 2,763,175	2,763,175
10	511 MAINTENANCE OF STRUCTURES	OM511	PROFIX	\$ 2,193,202	-
11	512 MAINTENANCE OF BOILER PLANT	OM512	Energy	\$ 17,108,406	17,108,406
12	513 MAINTENANCE OF ELECTRIC PLANT	OM513	Energy	\$ 3,584,767	3,584,767
13	514 MAINTENANCE OF MISC STEAM PLANT	OM514	PROFIX	\$ 1,437,608	-
14	Total Steam Power Generation Maintenance Expense			\$ 27,087,159	\$ 23,456,348
15	Total Steam Power Generation Expense			\$ 152,800,073	\$ 114,945,141
Other Power Generation Operation Expense					
16	546 OPERATION SUPERVISION & ENGINEERING	OM546	PROFIX		-
17	547 FUEL	OM547	Energy		-
18	548 GENERATION EXPENSE	OM548	PROFIX	\$ 36,837	-
19	549 MISC OTHER POWER GENERATION	OM549	PROFIX		-
20	550 RENTS	OM550	PROFIX		-
21	Total Other Power Generation Expenses			\$ 36,837	\$ -
Other Power Generation Maintenance Expense					
22	551 MAINTENANCE SUPERVISION & ENGINEERING	OM551	Energy		-
23	552 MAINTENANCE OF STRUCTURES	OM552	PROFIX		-
24	553 MAINTENANCE OF GENERATING & ELEC PLANT	OM553	Energy		-
25	554 MAINTENANCE OF MISC OTHER POWER GEN PLT	OM554	PROFIX		-
23	Total Other Power Generation Maintenance Expense			\$ -	\$ -
24	Total Other Power Generation Expense			\$ 36,837	\$ -
25	Total Station Expense			\$ 152,836,910	\$ 114,945,141
Other Power Supply Expenses					
26	555 PURCHASED POWER Energy	OM555	OMPP	\$ 9,476,864	9,476,864
27	555 PURCHASED POWER Demand	OMD555	OMPPD	\$ -	-
28	555 PURCHASED POWER BREC Share of HMP&L Station Two	OMH555	OMPPH	\$ 70,610,388	51,247,861
29	555 PURCHASED POWER OPTIONS	OMO555	OMPP	\$ -	-
30	555 BROKERAGE FEES	OMB555	OMPP	\$ -	-
31	555 MISO TRANSMISSION EXPENSES	OMM555	OMPP	\$ -	-
32	556 SYSTEM CONTROL AND LOAD DISPATCH	OM556	PROFIX	\$ -	-
33	557 OTHER EXPENSES	OM557	PROFIX	\$ 5,163,160	-
34	558 DUPLICATE CHARGES	OM558	Energy	\$ -	-
35	Total Other Power Supply Expenses	TPP		\$ 85,250,413	\$ 60,724,725

DEVELOPMENT OF FUNCTIONALIZED PRODUCTION ENERGY COST/UNIT ENERGY COST - 2013 RATE CASE

Line	Description	Name	Functional Vector	2013-00199 (ALCAN CASE)	
				Total System	Production Energy
Customer Service Expense					
36	908 CUSTOMER ASSISTANCE EXPENSES	OM908	TUP	\$ 1,293,291	-
37	909 INFORMATIONAL AND INSTRUCTIONA	OM909	TUP	\$ 31,897	-
38	913 ADVERTISING EXPENSES	OM913	TUP	\$ 143,537	-
38	Total Customer Service Expense	OMCS		\$ 1,468,725	\$ -
39	Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service				\$ 175,669,866
Administrative and General Expense					
40	920 ADMIN. & GEN. SALARIES-	OM920	LBSUB9	\$ 13,444,105	4,626,857
41	921 OFFICE SUPPLIES AND EXPENSES	OM921	LBSUB9	\$ 8,876,103	3,054,756
42	923 OUTSIDE SERVICES EMPLOYED	OM923	LBSUB9	\$ 4,081,955	1,404,826
43	926 EMPLOYEE BENEFITS	OM926	LBSUB9	\$ 398,481	137,139
44	930 MISCELLANEOUS GENERAL EXPENSES	OM930	LBSUB9	\$ 1,657,246	570,350
45	931 RENTS AND LEASES	OM931	PGP	\$ 1,933	-
46	935 MAINTENANCE OF GENERAL PLANT	OM935	PGP	\$ 217,906	-
47	Total Administrative and General Expense	OMAG		\$ 28,677,728	\$ 9,793,928
48	Total Operation and Maintenance Expenses	TOM			\$ 185,463,795
49	Operation and Maintenance Expenses Less Purchased Power	OMLPP			\$ 84,498,137
50	Cash Working Capital - Operation and Maintenance Expenses				10,562,267
51	Total System ROR after Proposed Rate Increase - 2013-00199				4.03%
52	Revenue Requirement for Cash Working Capital				425,315
53	Total Revenue Requirements Classified as Energy				<u>\$ 185,889,110</u>
54	TOTAL REGULAR SALES TO MEMBER COOPERATIVES (kWh)				3,291,731,000
UNIT COSTS AS CALCULATED AND PRESENTED IN 2013-00199					
55	Average Steam Production Cost (\$/mWh) - PSC 2-30				34.919
56	Unadjusted Unit Cost Calculation (\$/mWh) - PSC 2-33				56.472
CORRECTIONS TO REFLECT OFF-SYSTEM SALES					
57	Credit Revenue from Total Special Sales (Non-member)				(57,983,831)
58	Add back Special Sales - Capacity				
59	Energy Related Off-System Sales Revenue Credit (Line 57 + Line 58)				
60	Net Revenue Requirement applicable to Member Sales (Line 53 + Line 59)				127,905,279
61	Adjusted Unit Energy Cost (\$/mWh) (Line 59/Line 54)				38.857
ADJUSTMENTS TO CREDIT RIDER REVENUES COLLECTED ON AN ENERGY BASIS					
62	FAC Revenues				(19,581,659)
63	ES O&M Expense Included in Energy Revenue Requirements (Bottom/Fly Ash Disposal in Acct 501, Allowances in Acct 509)				-
64	NFPPA Revenues				1,183,384
65	Net Member Base Rate Revenue Requirement - Energy				\$ 109,507,003
66	Adjusted Base Rate Unit Energy Cost (\$/mWh)				33.267

UPDATED LARGE INDUSTRIAL RATE DESIGN

Case No. 2013-00199										
	As Approved					Adjusted for Corrected Unit Energy Cost				
	Billing Determinants	Charge	Billings	% of Base Rates	% of Total Rates	Charge	Billings	% of Base Rates	% of Total Rates	
<u>Large Industrial Customers</u>										
Demand Charge	kW-Mo	1,746,400	10.7150	\$ 18,712,676	33.342%	28.316%	13.4060	\$ 23,412,238	41.7%	35.4%
Energy Charge	kWh	983,179,000	0.038050	\$ 37,409,961	66.658%	56.609%	0.033270	\$ 32,710,365	58.3%	49.5%
Total Demand and Energy Charges		0.057083	\$ 56,122,637	100.0%		0.057083	\$ 56,122,604	100.0%		
Non-Smelter Non-FAC PPA		-0.000363	(356,508)			-0.000363	(356,508)			
FAC		0.005944	5,843,877			0.005944	5,843,877			
Environmental Surcharge		0.004688	4,608,733			0.004688	4,608,733			
Surcredit		-0.000136	(134,005)			-0.000136	(134,005)			
Total		983,179,000	0.067215	\$ 66,084,734	100.0%		0.067215	\$ 66,084,701	100.0%	
MRS Net Billed Difference							\$	(33)		

BIG RIVERS ELECTRIC CORPORATION
SALES OF ELECTRICITY
YEAR TO DATE ENDING DECEMBER 31, 2019

SALES FOR RESALE	MAXIMUM 30 MINUTE DEMAND	MWH BILLED	LOAD FACTOR	LEGACY	PRESENT	PROPOSED	BILLING IMPACT	BASE
					BASE REVENUE	BASE REVENUE		PERCENT CHANGE
KY65	61,237	25,662.424	57.4%		1,632,610	1,674,732	42,122	2.6%
KY65	697	405.827	79.8%		22,910	22,846	(64)	-0.3%
	149,842	62,504.534	57.1%	L	3,983,857	3,983,857	-	0.0%
	322,389	177,071.899	75.2%		10,191,982	10,213,126	21,145	0.2%
KY65	472,231	239,576.433	69.5%		14,175,838	14,196,983	21,145	0.1%
KY65	19,811	5,641.117	39.0%		426,919	453,266	26,347	6.2%
KY65	117,281	45,304.752	52.9%		2,980,512	3,079,558	99,046	3.3%
KY65	33,120	267.479	1.1%		365,058	452,906	87,847	24.1%
KY65	9,600	487.456	7.0%		121,412	144,915	23,504	19.4%
KY65	40,150	4,592.412	15.7%		604,949	691,040	86,092	14.2%
KY65	180,000	130,748.355	99.5%		6,903,675	6,763,078	(140,597)	-2.0%
KY65	790	300.277	52.1%		19,890	20,581	691	3.5%
KY65	28,370	10,199.087	49.2%		692,060	719,652	27,592	4.0%
KY65	1,216	341.370	38.5%		26,019	27,659	1,641	6.3%
KY65	438,178	294,419.631	92.0%		15,897,744	15,669,555	(228,189)	-1.4%
KY65	53,307	18,907.254	48.6%		1,290,606	1,343,678	53,072	4.1%
KY65	41,657	20,007.182	65.8%		1,207,628	1,224,093	16,465	1.4%
KY65	1,200	-	0.0%		12,858	16,087	3,229	25.1%
KY65	3,000	374.495	17.1%		46,395	52,677	6,283	13.5%
KY65	85,850	51,964.339	82.9%		2,897,126	2,879,759	(17,367)	-0.6%
KY65	154,658	84,755.269	75.1%		4,882,098	4,893,153	11,054	0.2%
KY65	23,023	11,724.997	69.8%		692,828	698,737	5,909	0.9%
KY20	4,456	390.246	12.0%		62,595	72,721	10,126	16.2%
TOTAL REGULAR SALES TO LARGE INDUSTRIALS	1,769,832	946,070.402			54,961,729	55,097,676	135,948	0.2%