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SEP 26 2018

PUBLIC SERVICE COMMISSION

September 25, 2018

VIA OVERNIGHT DELIVERY

Ms. Gwen R. Pinson Executive Director Public Service Commission 211 Sower Boulevard, P.O. Box 615 Frankfort, Kentucky 40602-0615

> Re: In the Matter of: Notice of Termination of Contracts and Application of Big Rivers Electric Corporation for a Declaratory Order and for Authority to Establish a Regulatory Asset—Case No. 2018-00146

Dear Ms. Pinson:

Enclosed for filing in the above-referenced matter are an original and ten (10) copies of: (i) the public version of Big Rivers Electric Corporation's Motion for Leave to File Settlement Agreement, Stipulation, and Recommendation and Supporting Testimony; and (ii) a petition for confidential treatment of the confidential information contained in the supporting testimony. Also enclosed is one (1) sealed copy of the confidential information being filed pursuant to the petition for confidential treatment.

I certify that, on this date, copies of this letter and all public attachments were served on each of the persons listed on the attached service list by electronic mail.

Please confirm the Commission's receipt of this information by placing the Commission's date stamp on the enclosed additional copy and returning it to Big Rivers in the self-addressed, postage paid envelope provided; and please feel free to contact me with any questions you may have about this filing.

Sincerely,

Tyson Kamuf Corporate Attorney, Big Rivers Electric Corporation tyson.kamuf@bigrivers.com

cc: Service list

BIG RIVERS ELECTRIC CORPORATION

NOTICE OF TERMINATION OF CONTRACTS AND APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A DECLARATORY ORDER AND FOR AUTHORITY TO ESTABLISH A REGULATORY ASSET CASE NO. 2018-00146

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SEP 26 2018

1	COMMONWEALTH OF KENTUCKY	JET 20 2010
2	BEFORE THE PUBLIC SERVICE COMMISSION	PUBLIC SERVICE COMMISSION
3	In the matter of:	
	NOTICE OF TERMINATION OF CONTRACTS AND APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A DECLARATORY ORDER AND FOR AUTHORITY TO ESTABLISH A REGULATORY ASSET) Case No. 2018-00146	
4	PETITION FOR CONFIDENTIAL TREATMENT	
5	1. Big Rivers Electric Corporation ("Big Rivers") hereby petition	s the
6	Kentucky Public Service Commission ("Commission"), pursuant to 807 KA	R 5:001

Section 13 and KRS 61.878, to grant confidential protection to the confidential

is hereinafter referred to as the "Confidential Information."

information contained in the Supplemental Direct Testimony of Robert W. Berry

filed with this petition. The information Big Rivers seeks to protect as confidential

Information, with the Confidential Information highlighted with transparent ink.

with this petition. Ten (10) copies of those pages with the Confidential Information

reducted are also being filed with this petition. 807 KAR 5:001 Section 13(2)(a)(3).

been served on all parties. 807 KAR 5:001 Section 13(2)(b). A copy of the

Confidential Information has been provided to all parties that have executed a

A copy of this petition and a copy of the redacted paper pages have

printed on yellow paper, or otherwise marked "CONFIDENTIAL," is being filed

One (1) sealed copy of the paper pages containing Confidential

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confidentiality agreement.

- 1 4. The Confidential Information is not publicly available, is not
- 2 disseminated within Big Rivers except to those employees and professionals with a
- 3 legitimate business need to know and act upon the information, and is not
- 4 disseminated to others without a legitimate need to know and act upon the
- 5 information.
- 5. If and to the extent the Confidential Information becomes generally
- 7 available to the public, whether through filings required by other agencies or
- 8 otherwise, Big Rivers will notify the Commission and have the information's
- 9 confidential status removed. 807 KAR 5:001 Section 13(10)(b).
- 10 6. As discussed below, the Confidential Information is entitled to
- 11 confidential treatment based upon KRS 61.878(1)(c)(1), which protects "records
- 12 confidentially disclosed to an agency or required by an agency to be disclosed to it,
- 13 generally recognized as confidential or proprietary, which if openly disclosed would
- 14 permit an unfair commercial advantage to competitors of the entity that disclosed
- 15 the records." See 807 KAR 5:001 Section 13(2)(a)(1).
- 7. The Confidential Information consists of sensitive internal, strategic
- 17 information taken from financial forecast model runs analyzing the financial
- 18 implications of Big Rivers exiting the Station Two contracts and Big Rivers'
- 19 projected revenue requirement. The Commission has consistently recognized that
- 20 such internal strategic planning information and related materials are entitled to
- 21 confidential treatment, as this information typically relates to the company's
- 22 economic status and business strategies. Information such as this which bears

- 1 upon a company's detailed inner workings is generally recognized as confidential or
- 2 proprietary. See, e.g., Hoy v. Kentucky Indus. Revitalization Authority, 907 S.W.2d
- 3 766, 768 (Ky. 1995) ("It does not take a degree in finance to recognize that such
- 4 information concerning the inner workings of a corporation is 'generally recognized
- 5 as confidential or proprietary"); Marina Management Servs. v. Cabinet for Tourism,
- 6 Dep't of Parks, 906 S.W.2d 318, 319 (Ky. 1995) (unfair commercial advantage arises
- 7 simply from "the ability to ascertain the economic status of the entities without the
- 8 hurdles systemically associated with the acquisition of such information about
- 9 privately owned organizations"). Additionally, the Commission has previously
- 10 granted confidential treatment to similar information. See, e.g., In the Matter of:
- 11 2014 Integrated Resource Plan of Big Rivers Electric Corporation, Order, P.S.C.
- 12 Case No. 2014-00166 (August 26, 2014) (the "2014 IRP Confidentiality Order")
- 13 (granting confidential treatment to NPV results of production cost model runs, and
- 14 rate projections); In the Matter of: Big Rivers Electric Corporation Filing of
- Wholesale Contract Pursuant to KRS 278.180 and KAR 5:011 Section 13, Order,
- P.S.C. Case No. 2014-00134 (November 21, 2014) (granting confidential treatment
- 17 to forecasted rates, revenues, and costs).
- 18 8. Accordingly, the Commission should grant confidential treatment to
- 19 the Confidential Information.

20 A. Time Period

- 9. Big Rivers requests that the Confidential Information remain
- 22 confidential for a period of five years from the date of this petition, at which time

- 1 the Confidential Information will be sufficiently outdated so that it could not be
- 2 used to competitively disadvantage Big Rivers. 807 KAR 5:001 Section 13(2)(a)(2).
- 3 WHEREFORE, Big Rivers respectfully requests that the Commission classify
- 4 and protect as confidential the Confidential Information.

Respectfully submitted,	
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5	
7 Laura Chambliss	
8 Tyson Kamuf	
9 Big Rivers Electric Corporatio	n
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34 tfunk@kdlegal.com	
35 tcostakis@kdlegal.com	
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37 Counsel for Big Rivers Electric	
38 Corporation	
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COMMONWEALTH OF KENTUCKY 1 SEP **26** 2018 BEFORE THE PUBLIC SERVICE COMMISSION 2 PUBLIC SERVICE COMMISSION 3 In the matter of: NOTICE OF TERMINATION OF CONTRACTS AND APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A Case No. DECLARATORY ORDER AND FOR 2018-00146 AUTHORITY TO ESTABLISH A REGULATORY ASSET 4 MOTION OF BIG RIVERS ELECTRIC CORPORATION FOR LEAVE TO 5 FILE SETTLEMENT AGREEMENT, STIPULATION, AND 6 7 RECOMMENDATION AND SUPPORTING TESTIMONY 8 9 Comes Big Rivers Electric Corporation ("Big Rivers"), by counsel, and respectfully moves the Kentucky Public Service Commission (the "Commission") for 10 11 leave to file (i) a Settlement Agreement, Stipulation, and Recommendation among the parties (the "Settlement Agreement"), and (ii) supporting testimony. In support 12 of this motion, Big Rivers states as follows. 13 Big Rivers and the two intervenors to this proceeding, the Attorney General 14 15 of the Commonwealth of Kentucky (the "AG") and Kentucky Industrial Utility 16 Customers, Inc. ("KIUC"), have had a number of discussions in an effort to resolve the remaining issues in this case. The product of those negotiations is the 17 unanimous Settlement Agreement attached hereto as Exhibit A. The Supplemental 18 19 Direct Testimony of Robert W. Berry, attached hereto as Exhibit B, describes and 20 supports the reasonableness of the Settlement Agreement. The Direct Testimony of 21 John Wolfram, attached hereto as Exhibit C, also supports the reasonableness of 22 the Settlement Agreement and describes the tariff changes that Big Rivers will file

- 1 if the Commission approves the Settlement Agreement. Big Rivers desires to
- 2 submit the Settlement Agreement and supporting testimony into the record of this
- 3 proceeding for the Commission's consideration and approval.
- 4 WHEREFORE, Big Rivers respectfully requests that the Commission enter
- 5 an order granting Big Rivers leave to file the Settlement Agreement and supporting
- 6 testimony filed with this motion.

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7 On this the 25th day of September, 2018.

1	Respectfully submitted,
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4	15
5	Laura Chambliss
6	Tyson Kamuf
7	Big Rivers Electric Corporation
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35	Counsel for Big Rivers Electric
36	Corporation
37	

1	SETTLEMENT AGREEMENT, STIPULATION, AND RECOMMENDATION
2	This Settlement Agreement, Stipulation, and Recommendation ("Agreement"
4	or "Settlement Agreement") is entered into this 24th day of September, 2018, by and
5	among the Attorney General of the Commonwealth of Kentucky ("Attorney
6	General"), Big Rivers Electric Corporation ("Big Rivers"), and Kentucky Industrial
7	Utility Customers, Inc. ("KIUC") with respect to In the Matter of: Notice of
8	$Termination\ of\ Contracts\ and\ Application\ of\ Big\ Rivers\ Electric\ Corporation\ for\ a$
9	Declaratory Order and for Authority to Establish a Regulatory Asset, P.S.C. Case
10	No. 2018-00146 (the "Proceeding"). The Attorney General, Big Rivers and KIUC
11	may be referred to herein individually as a "Party" and collectively as the "Parties."
12	WITNESSETH:
13	WHEREAS, on May 1, 2018, Big Rivers filed a Notice and Application
14	("Application") with the Kentucky Public Service Commission ("Commission") in the
15	Proceeding;
16	WHEREAS, in its Application, Big Rivers sought an order from the
17	Commission: (i) finding that the Station Two units are no longer capable of normal,
18	continuous, reliable operation for the economically competitive production of
19	electricity, and that as a result, those Station Two Contracts that are defined in the
20	Application as the "Terminated Contracts" terminated as of May 1, 2018; (ii)
21	authorizing Big Rivers to continue to operate Station Two under the terms of the
22	Station Two Contracts for a period up to and including May 31, 2019; and (iii)
23	authorizing Big Rivers to establish a regulatory asset (the "Station Two Regulatory

- 1 Asset") to defer expenses it incurs relating to the termination of the Terminated
- 2 Contracts, including but not limited to an approximately \$89.6 million asset
- 3 relating to the remaining net book value of the Station Two investment that Big
- 4 Rivers would otherwise have to retire and write off as a result of the termination of
- 5 the Terminated Contracts, as well as other expenses such as the costs of
- 6 consultants, legal costs, severance costs, and decommissioning costs;
- WHEREAS, in its Application, Big Rivers proposed to apply the revenues it
- 8 receives through rates associated with Station Two depreciation expense (the
- 9 "Depreciation Revenues") to offset the Station Two Regulatory Asset;
- 10 WHEREAS, the Commission issued an order on August 29, 2018, in the
- 11 Proceeding in which the Commission: (i) determined that "the Station Two units are
- 12 'no longer capable of normal, continuous, reliable operation for the economically
- 13 competitive production of electricity, as that phrase is used in the context of the
- 14 Station Two Contracts;" (ii) confirmed that "the Station Two Contracts have
- terminated, pursuant to their own terms, with the exception of the Joint Facilities
- 16 Agreement;" (iii) granted Big Rivers the authority to continue to operate Station
- 17 Two under the terms of the Station Two Contracts for a period up to May 31, 2019;
- and (iv) reserved ruling on Big Rivers' request for authorization to establish the
- 19 Station Two Regulatory Asset;
- WHEREAS, the Commission granted the Attorney General and KIUC full
- 21 intervention in the Proceeding. The members of KIUC who are participating in this
- 22 case are Kimberly-Clark Corporation and Domtar Paper Company, LLC. The

- 1 individual rights of other KIUC member companies are not affected or limited by
- 2 this Settlement Agreement;
- 3 WHEREAS, KIUC filed testimony in the Proceeding in which KIUC
- 4 recommended that: (i) the Commission reject Big Rivers' request for authority to
- 5 establish the Station Two Regulatory Asset; and (ii) the Commission direct Big
- 6 Rivers to defer as a regulatory liability KIUC's estimate of the savings resulting
- 7 from the termination of the Terminated Contracts;
- 8 WHEREAS, the Attorney General did not file testimony in this matter, thus
- 9 reserving his right to comment and provide the Commission any proposal for its
- 10 consideration;
- WHEREAS, in its October 29, 2013 Order in In the Matter of: Application of
- 12 Big Rivers Electric Corporation for an Adjustment of Rates, P.S.C. Case No. 2012-
- 13 00535, the Commission ordered Big Rivers to discontinue recording depreciation of
- 14 the Coleman Station as an expense and to instead defer this depreciation and
- record it in a regulatory asset account (the "Coleman Regulatory Asset");
- WHEREAS, in its April 25, 2014 Order in In the Matter of: Application of Big
- 17 Rivers Electric Corporation for an Adjustment of Rates, P.S.C. Case No. 2013-00199,
- 18 the Commission ordered Big Rivers to discontinue recording depreciation of the
- 19 Wilson Station as an expense and to instead defer this depreciation and record it in
- 20 a regulatory asset account (the "Wilson Regulatory Asset");

- WHEREAS, the Parties have reviewed the issues raised in the Proceeding
- 2 and have reached a settlement of the case, including the issues raised therein, as
- 3 embodied in this Agreement; and
- WHEREAS, it is the position of the Parties that this Agreement is a fair,
- 5 just, and reasonable resolution of all of the issues in the Proceeding, is supported by
- 6 sufficient and adequate data and information, and should be approved by the
- 7 Commission,
- 8 NOW, THEREFORE, for and in consideration of the premises and terms
- 9 and conditions set forth herein, the Parties agree and stipulate as follows:
- 1. Capitalized terms used but not defined herein shall have the meanings set
- forth in Big Rivers' Application or in Big Rivers' tariff on file with the Commission.
- 12 2. The Parties recommend that the Commission grant, unconditionally and
- 13 without change except as provided herein, Big Rivers' request made in its
- 14 Application that the Commission enter an order authorizing Big Rivers to establish
- 15 the Station Two Regulatory Asset.
- 16 3. The Parties recommend that in lieu of Big Rivers' proposal to apply the
- 17 Depreciation Revenues against the Station Two Regulatory Asset and in lieu of
- 18 KIUC's proposal that Big Rivers be required to establish a regulatory liability to
- 19 defer KIUC's estimate of the savings resulting from the termination of the
- 20 Terminated Contracts, the Commission authorize Big Rivers to provide the
- 21 following credits:

a. A "Station Two Depreciation Credit" in the amount of \$453,785 per month for twelve (12) consecutive months (total credit of \$5,445,420) beginning the latter of January 2019 or the month following the Commission's acceptance of Big Rivers' revised Member Rate Stability Mechanism ("MRSM") tariff. Each month in which a credit is owed, Big Rivers will deposit the monthly credit into the applicable Economic Reserve accounts for the Rural and Large Industrial rate classes. The credit will be allocated 72.62% to the Rural class and 27.38% to the Large Industrial class. The Large Industrial share will be applied to Large Industrial retail customer energy usage excluding energy associated with load to which a Big Rivers economic development rate applies.

i. If Big Rivers is able to cease operating Station Two prior to May 31, 2019, the amount of monthly Station Two Depreciation Credit for the remainder of the twelve-month credit period shall be increased by an amount determined (i) by multiplying \$9,422 by the number of days prior to May 31, 2019, that Big Rivers ceases operating Station Two, and (ii) dividing that result by the remaining number of months of the Station Two Depreciation Credit. For purposes of this Agreement, the date on which Big Rivers ceases operating Station Two is the date on which Big Rivers stops recording Station Two depreciation expense on its books.

ii. Big Rivers shall record the Station Two Depreciation Credit in each month in which Big Rivers would have otherwise recorded Station Two depreciation expense but for the termination of the Terminated Contracts, as follows: each month beginning with the first month in which Big Rivers no longer records Station Two depreciation expense on its books, through December 2020, Big Rivers will record \$286,601 on its books for the credit, except that such amount will be prorated for the month in which Big Rivers ceases operating Station Two.

Depreciation Credit between Rural and Large Industrial customer classes is based on the allocation of Station Two costs in Big Rivers' last cost of service study (the "2013 COSS"), which Big Rivers filed in P.S.C. Case No. 2013-00199. The Parties acknowledge that there are other possible methods of allocating the credit between customer classes. For example, an allocation based on Big Rivers' actual 2017 total revenues would result in an allocation of 75.75% to the Rural class and 24.25% to the Large Industrial class, whereas an allocation based on Big Rivers' actual 2017 MWh sales would result in an allocation of 70.61% to the Rural class and 29.39% to the Large Industrial Class. However, the Parties agree that the proposed allocation based on the 2013 COSS is reasonable and appropriate in that it does not unreasonably favor one class over the other and it

allocates the credit in the same proportion in which the 2013 COSS projected that the classes would pay for the Station Two costs in rates. Effectively, this allocation reflects a credit for the Station Two costs as closely as reasonably possible to how the Station Two costs are currently paid.

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b. A "TIER Credit" equivalent to an amount not less than the net margins that Big Rivers earns above the margins that would result in Big Rivers achieving a TIER of 1.45 for any calendar year beginning with calendar year 2019 and ending with the calendar year prior to the year in which new rates become effective in Big Rivers' next base rate case; provided that Big Rivers may, at its discretion, provide a TIER Credit greater than the credit under this calculation, but it is under no obligation to do so, and in no circumstance shall Big Rivers record a TIER Credit that will result in a TIER of less than 1.30 for any calendar year. The amount of any TIER Credit will be determined based on Big Rivers' TIER after any Nebraska Margins are deposited into the Economic Reserve pursuant to Big Rivers' MRSM tariff. The TIER Credit will be applied against the Station Two Regulatory Asset, the Wilson Regulatory Asset, and the Coleman Regulatory Asset. The TIER calculation used for this TIER Credit is the same calculation as Big Rivers and the Commission ordinarily use for ratemaking purposes.

- 4. In Big Rivers' next base rate case, Big Rivers may request rate recovery for
- 2 the Station Two Regulatory Asset, the Wilson Regulatory Asset, and the Coleman
- 3 Regulatory Asset. Big Rivers may propose the same or a different amortization
- 4 period or cost allocation for each Regulatory Asset, but the amortization period will
- 5 be no longer than through the end of its "all-requirements" contracts with its
- 6 member distribution cooperatives. The Attorney General and KIUC each agree to
- 7 support Big Rivers' request for rate recovery of the Station Two Regulatory Asset
- 8 amortization. KIUC agrees to support Big Rivers' request for rate recovery of the
- 9 Coleman Regulatory Asset amortization.
- 5. As part of its next base rate case, Big Rivers will propose the reasonable and
- 11 prudent utilization of its member equity in such a way as to best achieve the dual
- goals of: 1) minimizing member rates; and 2) improving its credit metrics to best
- achieve and maintain an investment grade credit rating. KIUC agrees to support
- 14 Big Rivers' request for rate recovery of the Wilson Regulatory Asset amortization,
- 15 net of the reasonable and prudent utilization of member equity.
- 6. The Attorney General and KIUC acknowledge and agree: (i) that with the
- 17 termination of the Terminated Contracts, Big Rivers' Wilson generating station is
- 18 necessary to serve Big Rivers' Native System peak demand and energy needs, based
- on information provided in Big Rivers' latest IRP, Case No. 2017-003841; (ii) that

¹ See Case No. 2017-00384, In the Matter of: Big Rivers Electric Corporation's 2017 Integrated Resource Plan, wherein Big Rivers estimates that its "[n]ative peak requirements are projected to increase from 648 MW in 2017 to 691 MW . . . by the summer of 2031" at 17; see also tables on page 51-51 and 93-93, detailing the available generating capacity, generating performance indicators, historical and projected peak demand and historical and projected energy requirements, respectively.

- although Big Rivers is not currently recovering depreciation for its Wilson station or
- 2 the fixed costs it incurs to operate Wilson, Wilson has operated and provided
- 3 benefits to Big Rivers' members by, among other things, reducing wholesale and
- 4 retail fuel adjustment clause charges, and by enabling Big Rivers to secure new load
- 5 to mitigate the loss of the smelter load; and (iii) that although Wilson was expected
- 6 to be idled during the pendency of Case No. 2013-00199, it is needed to serve
- 7 customers on the Big Rivers system.
- 8 7. The Attorney General agrees to support rate recovery of the Wilson
- 9 Regulatory Asset amortization and Wilson's on-going depreciation expense and
- 10 fixed operating costs if in Big Rivers' next base rate case, the proposed annual
- impact on Big Rivers' Rural and Large Industrial classes is 0% or less as compared
- 12 to current rates.² Current rates are those rates charged to customers immediately
- prior to the filing of the application for an adjustment of base rates, or said
- differently, those rates that would be in effect absent the filing of an adjustment of
- 15 base rates.
- 8. Although the Attorney General and KIUC explicitly and unconditionally
- 17 agree to support the rate recovery of specific costs as specified herein, both parties
- 18 reserve the right to fully participate in the next base rate case proceeding and
- 19 provide alternatives and proposals for the Commission's consideration, including as
- 20 to the amortization periods for the regulatory assets proposed for recovery and/or
- 21 the reasonable and prudent utilization of member equity in such a way as to best

 $^{^2}$ In this Agreement, the terms "rate" or "rates" shall have the same definition as "rate" provided in KRS 278.010.

- achieve the dual goals of: 1) minimizing member rates; and 2) improving Big Rivers'
- 2 credit metrics to best achieve and maintain an investment grade credit rating.
- 3 Nevertheless, the Parties shall not provide the Commission any proposal or
- 4 argument for consideration that violates any section(s) of this Agreement.
- 5 9. The Parties agree that this Agreement is subject to the acceptance of and
- 6 approval by the Commission and the Rural Utilities Service ("RUS"), and they agree
- 7 to act in good faith and to use their best efforts to secure these approvals. Following
- 8 the execution of this Agreement, Big Rivers will file the Agreement with the
- 9 Commission and the RUS together with a request that the Commission and the
- 10 RUS consider and approve the Agreement without modification. If the Commission
- and RUS approve this Agreement without modification, the Parties each waive any
- 12 right to appeal or to file an action seeking review of or to seek reconsideration of
- any order of the Commission issued in accordance with this Agreement.
- 10. The Agreement shall in no way be deemed to divest the Commission of
- 15 jurisdiction under Chapter 278 of the Kentucky Revised Statutes.
- 11. If the Commission does not accept and approve this Agreement in its entirety
- and without change or if the Commission imposes conditions on its acceptance and
- approval that are unacceptable to any Party, then any adversely affected Party may
- 19 withdraw from the Agreement within the statutory periods provided for rehearing
- and appeal of the Commission's order by: (i) giving notice of withdrawal to all other
- 21 Parties; and/or (ii) timely filing for rehearing or appeal. If any Party timely seeks

- 1 rehearing of or appeals the Commission's order, all Parties will continue to have the
- 2 right to withdraw until the conclusion of all rehearings and appeals.
- 3 12. If the Agreement is voided or vacated for any reason after the Commission
- 4 has approved the Agreement, none of the Parties will be bound by the Agreement.
- 5 13. If the RUS does not accept and approve this Agreement in its entirety and
- 6 unchanged, or if the RUS imposes conditions on its acceptance and approval that
- 7 are unacceptable to any Party, then any adversely affected Party may withdraw
- 8 from the Agreement within seven (7) days of the Parties' receipt of notification of
- 9 RUS' non-approval or imposition of changes or conditions, by the withdrawing Party
- 10 giving notice of its withdrawal to all other Parties. If any Party timely withdraws
- from the Agreement under this paragraph, then any other Party or Parties will
- 12 continue to have the right to withdraw for seven (7) days after receiving the notice
- 13 of withdrawal.
- 14. Upon the latter of: (i) the expiration of the statutory periods provided for
- 15 rehearing and appeal of the Commission's order; (ii) the conclusion of all rehearings
- and appeals; and (iii) the expiration of the withdraw period following notice of RUS'
- 17 non-approval or imposition of changes or conditions, and except as otherwise
- 18 provided herein, all Parties that have not withdrawn will continue to be bound by
- 19 the terms of the Agreement as modified by the Commission or RUS.
- 20 15. Subsequent to obtaining all required Commission and RUS reviews and
- 21 approvals, Big Rivers shall file with the Commission tariff amendments reflecting
- 22 the tariff changes attached hereto as Exhibit 1. The Parties recommend that the

Until the account containing the original fund is exhausted, the amount of the MRSM credit provided to each Member during a month will each equal

- (i) the total amount of FAC charges billed to the Member during the month, plus
- (ii) the total dollar amount of ES charges billed to the Member during the month, less
- (iii) the total dollar amount of the Unwind Surcredits credited to the Member during the month, less
- (iv) one twelfth (1/12) of any rebates provided under the Rebate Adjustment during the current month or during any of the 11 preceding months, less
- (v) the total dollar amount of the EMA charged to the Member during the month; provided that the amounts subtracted in items (iii), (iv) and (v) cannot exceed the total of items (i) and (ii) in which case the monthly MRSM adjustment would be zero, <u>plus</u>
- (vi) the Member's share of the total dollar amount of the base rate increase awarded by the Commission in Case No. 2013 00199 applicable to the month.

After the account containing the original fund is exhausted, tThe MRSM credit will draw first from the accounts containing Nebraska Margins and then from the applicable accounts containing transmission revenues, and then from the applicable accounts containing the Station Two Depreciation Credit to provide a credit to each Member during a month-that will equal

the total amount of FAC charges associated with the applicable customer class and billed to the Member during the month, *plus*

the total dollar amount of ES charges associated with the applicable customer class and billed to the Member during the month, <u>less</u>

the total dollar amount of the Unwind Surcredits associated with the applicable customer class and credited to the Member during the month, <u>less</u>

one-twelfth (1/12) of any rebates associated with the applicable customer class and provided under the Rebate Adjustment during the current month or during any of the 11 preceding months, *less*

the total dollar amount of the EMA associated with the applicable customer class and charged to the Member during the month; provided that the amounts subtracted in items (iii), (iv) and (v) cannot exceed the total of items (i) and (ii) in which case the monthly MRSM adjustment would be zero, <u>plus</u> the Member's share of the total dollar amount of the base rate increase associated with the applicable eustomer class and awarded by the Commission in Case No. 2013-00199 applicable to the month.

Expense Mitigation Factor ("EMF") and Expense Mitigation Adjustment ("EMA"):

The EMF shall be the following:

I. \$0.000 per kWh for the first twelve (12) months following July 17, 2009;

H. \$0.002 per kWh for months 13 through 24 following July 17, 2009;

III. \$0.004 per kWh for months 25 through 36 following July 17, 2009;

IV. \$0.006 per kWh for months 37 through 48 following July 17, 2009;

V. \$0.007 per kWh for months 49 through 60 following July 17, 2009; and

VI. \$0.009 per kWh for months 61 through the termination of this MRSM tariff.

The EMA for the month shall be the EMF multiplied by the S (m) which is the jurisdictional sales for Standard Rate Schedule RDS and/or Standard Rate Schedule LIC to which this tariff applies for the current expense month. The EMF and EMA will expire after both the Economic Reserve and the Rural

Economic Reserve funds have been exhausted and no additional transmission revenues from Century-Hawesville or Nebraska Margins or Station Two Depreciation Credit are forthcoming.

If any portion of FAC or ES costs is transferred to or from base rates after July 17, 2009, then the MRSM will account for any effect of such transfers so that the Members will not see any impact on their bills, either positive or negative, of such transfers.

The MRSM adjustment shall be no longer applicable once the Economic Reserve is exhausted and no additional transmission revenues from Century-Hawesville or Nebraska Margins or Station Two Depreciation Credit are forthcoming, but the MRSM shall remain a schedule in this tariff until the Rural Economic Reserve Fund is depleted and no additional transmission revenues from Century-Hawesville or Nebraska Margins or Station Two Depreciation Credit are forthcoming, as described in the "Availability" section of this schedule. During the last month of this MRSM, or in any month that the amount remaining in the Economic Reserve does not fully fund the MRSM credit for a customer class, the amount remaining in the Economic Reserve for that class will be prorated to each Member on the basis of the total FAC and ES charges applicable to that class' non Smelter sales less credits under the Unwind Surcredits, less monthly prorated amounts under the Rebate Adjustment and less the EMA as applicable, plus the prorated base rate increase awarded by the Commission in Case No. 2013 00199.

Nebraska Margins:

The Nebraska Margins shall be the margins resulting from the wholesale contracts approved in Case No. 2014-00134. Pursuant to the Commission's Order in that case dated July 21, 2015, each January, Big Rivers shall compare its margins for the previous year to the margins that would have provided the Times Interest Earned Ratio ("TIER") that the Commission used to establish the revenue requirement in Big Rivers' most recent general rate proceeding (the "Revenue Requirement TIER").

Big Rivers shall also compare its average daily balance of unrestricted cash and temporary investments for the last three calendar months of the previous calendar year (the "Average Cash Balance") to the Cash Balance Threshold, as defined below.

Big Rivers shall also compare its average daily balance of unrestricted cash and temporary investments for the last three calendar months of the previous calendar year (the "Average Cash Balance") to the Cash Balance Threshold, as defined below.

- (1) If for the previous year:
 - (a) Big Rivers' actual margins are greater than the margins at the Revenue Requirement TIER;
 - (b) the Nebraska Margins are greater than zero; and
 - (c) the Average Cash Balance is greater than \$60,000,000 (the "Cash Balance Threshold").
 - then Big Rivers shall deposit into the Economic Reserve each month for twelve (12) consecutive months one-twelfth (1/12) of the lesser of:
 - (d) the portion of the Nebraska Margins from the previous calendar year that would reduce Big Rivers' actual TIER to the Revenue Requirement TIER; and
 - (e) the positive difference between the Average Cash Balance and the Cash Balance Threshold.
- (2) If one or more of (a), (b), and (c) above are not satisfied, then no Nebraska Margins for that year shall be deposited into the Economic Reserve.

- (3) If Big Rivers is required by this schedule to deposit all or a portion of the Nebraska Margins for a year into the Economic Reserve, it shall do so no later than the last business day of each month, beginning in February of the following year.
- (4) Each such deposit of Nebraska Margins shall be expensed in the prior calendar year in which Big Rivers earned those margins.

Station Two Depreciation Credit:

A "Station Two Depreciation Credit" shall be established in the amount of \$453,785 per month for twelve (12) consecutive months (for a total credit of \$5,445,420) beginning the latter of January 2019 or the month following the Commission's acceptance of this tariff, pursuant to the Commission's Order in Case No. 2018-00146 dated

- (1) Each month in which a credit is owed, Big Rivers will deposit the monthly credit into the applicable Economic Reserve accounts for the Rural and Large Industrial rate classes.
- (2) The credit will be allocated 72.62% to the Rural class and 27.38% to the Large Industrial class.
- (3) The Large Industrial share will be applied to Large Industrial retail customer energy usage excluding energy associated with load to which a Big Rivers economic development rate applies.

If Big Rivers is able to cease operating Station Two prior to May 31, 2019, the amount of monthly Station Two Depreciation Credit for the remainder of the twelve-month credit period shall be increased by an amount determined (i) by multiplying \$9,422 by the number of days prior to May 31, 2019, that Big Rivers ceases operating Station Two, and (ii) dividing that result by the remaining number of months of the Station Two Depreciation Credit. For purposes of this tariff, the date on which Big Rivers ceases operating Station Two is the date on which Big Rivers stops recording Station Two depreciation expense on its books.

ORIGINAL

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOTICE OF TERMINATION OF)	
CONTRACTS AND APPLICATION OF)	
BIG RIVERS ELECTRIC)	Case No.
CORPORATION FOR A DECLARATORY)	2018-00146
ORDER AND FOR AUTHORITY TO)	
ESTABLISH A REGULATORY ASSET)	

SUPPLEMENTAL DIRECT TESTIMONY

OF

ROBERT W. BERRY PRESIDENT AND CHIEF EXECUTIVE OFFICER

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: September 26, 2018

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1 2 3 4		SUPPLEMENTAL DIRECT TESTIMONY OF ROBERT W. BERRY
5		I. <u>INTRODUCTION</u>
6	Q.	Please state your name, business address, and position.
7	A.	My name is Robert W. Berry. I am employed by Big Rivers Electric
8		Corporation ("Big Rivers"), 201 Third Street, Henderson, Kentucky 42420, as
9		its President and Chief Executive Officer.
10	Q.	Did you provide direct testimony in this proceeding?
11	A.	Yes.
12	Q.	What is the purpose of your supplemental direct testimony?
13	A.	The purpose of my testimony is to sponsor and support the Settlement
14		Agreement, Stipulation, and Recommendation (the "Settlement Agreement")
15		among the parties to this proceeding. The Settlement Agreement is being
16		filed with this testimony.
17		II. THE SETTLEMENT AGREEMENT
18	Q.	Is the Settlement Agreement unanimous?
19	A.	Yes, the Settlement Agreement is unanimous among the parties to this
20		proceeding. Big Rivers is the applicant, and the Commission allowed only
21		two parties to intervene in this proceeding, the Attorney General of the
22		Commonwealth of Kentucky (the "Attorney General") and Kentucky
23		Industrial Utility Customers, Inc. ("KIUC"). Big Rivers, the Attorney

1	General, and KIUC are all parties to the Settlement Agreement. The City of
2	Henderson, Kentucky and Henderson Municipal Power & Light (collectively,
3	"Henderson") filed comments in this proceeding but did not request
4	intervention. The International Brotherhood of Electrical Workers filed a
5	petition to intervene that was denied by the Commission.

Q. Does the Settlement Agreement address all remaining issues in this proceeding?

A.

Yes. Big Rivers filed its Notice and Application ("Application") in this proceeding on May 1, 2018, to seek relief associated with the termination of certain contracts between Big Rivers and Henderson under which Big Rivers operated, maintained, and purchased a portion of the power from Henderson's "Station Two" generating plant. (The contracts that govern the relationship between Big Rivers and Henderson relating to Station Two are known as the "Station Two Contracts." The Station Two Contracts that have terminated are referred to herein as the "Terminated Contracts.")

More specifically, in its Application, Big Rivers asked the Commission to enter an order: (i) finding that the Station Two units are no longer capable of normal, continuous, reliable operation for the economically competitive production of electricity, and that as a result, the Terminated Contracts terminated as of May 1, 2018, pursuant to the terms of the Station Two Contracts; (ii) authorizing Big Rivers to continue to operate Station Two under the terms of the Station Two Contracts for a period up to and including

May 31, 2019; and (iii) authorizing Big Rivers to establish a regulatory asset (the "Station Two Regulatory Asset") to defer expenses it incurs relating to the termination of the Terminated Contracts, including but not limited to an approximately \$89.6 million asset relating to the remaining net book value of the Big Rivers' historical investment in Station Two that Big Rivers would otherwise have to retire and write off as a result of the termination of Terminated Contracts. Big Rivers also proposed in the Application to apply the revenues it receives through rates associated with Station Two depreciation expense (the "Depreciation Revenues") to offset the Station Two Regulatory Asset.

KIUC filed testimony in this proceeding recommending that: (i) the Commission reject Big Rivers' request for authority to establish the Station Two Regulatory Asset; and (ii) the Commission direct Big Rivers to defer as a regulatory liability KIUC's estimate of the savings resulting from the termination of the Terminated Contracts.

Pursuant to a request from the Commission at the July 25, 2018, oral argument in this matter, each of the parties to this proceeding filed a letter or notice with the Commission agreeing that they have no objection to the Commission granting Big Rivers' first two requests for relief. On August 29, 2018, the Commission entered an order granting Big Rivers' "request for a declaration finding that Station Two is no longer economically viable and confirming the termination of the" Terminated Contracts; granting Big

Rivers' request for authority to continue to operate "Station Two under the terms of the Station Two Contracts for a period up to May 31, 2019, unless [Big Rivers] and the city of Henderson reach a mutually acceptable agreement regarding the ongoing operation of Station Two prior to May 31, 2019, or the Commission directs [Big Rivers] to cease operation of Station Two prior to May 31, 2019;" and reserving a ruling on Big Rivers' request for authority to establish the Station Two Regulatory Asset.

Thus, the remaining issues in this case relate to the parties' disagreement over: (i) Big Rivers' request for authority to establish the Station Two Regulatory Asset and to offset that asset with the Depreciation Revenues; and (ii) KIUC's request that the Commission require Big Rivers to defer KIUC's estimate of the savings resulting from the termination of the Terminated Contracts. The Settlement Agreement resolves these remaining issues by the parties recommending that the Commission allow Big Rivers to establish the Station Two Regulatory Asset, and that, in lieu of offsetting the Station Two Regulatory Asset with the Depreciation Revenues or deferring KIUC's estimate of the savings, Big Rivers be allowed to establish two credits, the "Station Two Depreciation Credit" and the "TIER Credit," both of which I discuss later in this testimony.

A.	THE COMMISSION SHOULD GRANT BIG RIVERS THE
	AUTHORITY TO ESTABLISH THE STATION TWO
	REGULATORY ASSET AS REQUESTED

Q. Why should the Commission allow Big Rivers to establish the Station

Two Regulatory Asset?

Α.

Big Rivers' need for the Station Two Regulatory Asset must be viewed in the context of Big Rivers' recent history and its long-term plans for operating the cooperative. As the Commission knows, in 2009, Big Rivers and subsidiaries or affiliates of LG&E/KU implemented an early termination of a long-term lease of Big Rivers' generating facilities, and the related power purchase agreement by which Big Rivers obtained a fixed amount of power for its load requirements during the term of that lease. The termination transaction is generally referred to as the "Unwind" or "Unwind Transaction."

One significant aspect of the Unwind was that Big Rivers would resume providing the wholesale power requirements for two aluminum smelters that were retail customers of one of Big Rivers' Member Distribution Cooperatives. Because the smelters would represent approximately 850 MW of Big Rivers' total post-Unwind system load of approximately 1,500 MW, prior to the Unwind, Big Rivers took steps to prepare for the possibility that the smelters might cease operations. For example, Big Rivers built

¹ See In the Matter of: The Applications of Big Rivers Electric Corporation for: (1) Approval of Wholesale Tariff Additions for Big Rivers Electric Corporation, (2) Approval of Transactions, (3) Approval to Issue Evidences of Indebtedness, and (4) Approval of Amendments to Contracts; and of E.On U.S., LLC, Western Kentucky Energy Corp., and LG&E Energy Marketing, Inc. for Approval of Transactions, P.S.C. Case No. 2007-00455.

transmission system improvements, which were approved by the Commission,² and even convinced the General Assembly to amend a state statute to assure that Big Rivers would be in a position to export and sell the full amount of the smelter load if the smelters closed.³

The Unwind was approved by the Commission on March 6, 2009,⁴ and closed on July 16, 2009. By 2012, the smelters were threatening closure because of world aluminum market conditions, and in response, Big Rivers developed and adopted a "Load Concentration Analysis and Mitigation Plan" (the "Mitigation Plan")⁵ that outlined its analysis of the steps that it could take in the event of smelter closures to mitigate the economic effects of the potential loss of load on Big Rivers and its Members. That plan included, among many other things, offsetting the loss of the smelter load and stabilizing Member rates by entering into long-term agreements to sell excess generation, expanding existing load, and reducing overall system operating expenses by laying-up or liquidating existing assets.

² See In the Matter of: Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line in Ohio County, Kentucky, Order, P.S.C. Case No. 2007-00177 (Oct. 30, 2007).

³ See In the Matter of: The Applications of Big Rivers Electric Corporation for: (1) Approval of Wholesale Tariff Additions for Big Rivers Electric Corporation, (2) Approval of Transactions, (3) Approval to Issue Evidences of Indebtedness, and (4) Approval of Amendments to Contracts; and of E.On U.S., LLC, Western Kentucky Energy Corp., and LG\$E Energy Marketing, Inc. for Approval of Transactions, P.S.C. Case No. 2007-00455, Joint Applicants' Post-Hearing Brief, at p. 45 (Dec. 31, 2008) (describing 2006 amendment to KRS 279.120).

⁴ Id., Order (March 6, 2009).

⁵ The Mitigation Plan was submitted to the Commission in Big Rivers' second smelter-related rate case (Case No. 2013-00199) pursuant to Post-Hearing Data Request Item 4, subject to a petition for confidential treatment.

The first of the two smelters gave notice on August 20, 2012, that it would terminate its retail service contract and cease operations in one year. The second smelter gave its one-year notice of termination of its contract on January 31, 2013. Although a series of negotiations and regulatory actions resulted in the smelters avoiding closure of their respective facilities by obtaining their power requirements from the market, 6 the impact on Big Rivers and its Members from the loss of the smelter loads was still substantial.

- Q. What was the immediate effect on Big Rivers resulting from the loss of the smelter loads?
- In addition to Big Rivers having to file two rate cases to address the
 impending revenue loss, the imminent loss of the smelter loads had a
 predictable effect on Big Rivers' credit ratings. In a matter of three days
 beginning February 4, 2013, the three credit rating agencies that rated Big
 Rivers or its debt reduced their ratings to below investment grade. Those
 actions triggered a mandatory notice by Big Rivers to the Rural Utilities
 Service ("RUS") of the ratings downgrades. To avoid a default under Big

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⁶ See P.S.C. Case Nos. 2013-00221 and 2013-00413.

⁷ Fitch Ratings, Inc. ("Fitch") (on February 6, 2013), S&P Global Ratings ("S&P") (on February 4, 2013) and Moody's Investors Services, Inc. ("Moody's") (on February 6, 2013) downgraded the credit ratings on Big Rivers' \$83.3 million County of Ohio, KY Pollution Control Refunding Revenue Bonds, Series 2010A. In addition, S&P downgraded its long-term rating on Big Rivers.

⁸ In accordance with Section 4.23 of the 2009 RUS Loan Contract, which is now found in Section 5.24 of Big Rivers' 2018 RUS Loan Contract (attached to Big Rivers' response to Item 4 of KIUC's Supplemental Requests for Information), Big Rivers notified RUS in writing on February 7, 2013, of its failure to maintain two Credit Ratings of Investment Grade. Big Rivers provided a corrective plan to RUS in 2013, and a second corrective plan to RUS on March 25, 2015. An update to the 2015 plan was provided to RUS on July 29, 2016.

Rivers' 2009 loan contract with RUS (the "2009 RUS Loan Contract"), Big Rivers had to provide the RUS a satisfactory "corrective plan" by which Big Rivers would regain at least two of its investment grade ratings. That requirement is also incorporated into Big Rivers' 2018 loan contract with RUS (the "2018 RUS Loan Contract"). Big Rivers is currently operating under the updated version of the corrective plan dated July 29, 2016, a copy of the public portions of which is attached as Exhibit Berry Supplemental-1. How did Big Rivers respond to the smelter termination loss? Since the smelters issued their termination notices, Big Rivers has been diligently pursuing its Mitigation Plan and working toward satisfying its corrective plan with RUS. Big Rivers filed two rate cases to address the smelter revenue loss. Big Rivers has temporarily reduced excess generation by idling its Coleman and Reid 1 generating plants, and is in the process of further reducing generation by exiting the Station Two Contracts. Big Rivers developed an economic development incentive rate, which helped secure a \$350 million expansion at the Aleris Rolled Products Manufacturing, Inc. ("Aleris") facility in Lewisport, Kentucky, resulting in a significant load increase on the Big Rivers system. And Big Rivers has entered into long-

term power sales agreements with a number of municipal utilities, public

power districts, and related entities, including entities in Nebraska and

Owensboro Municipal Utilities ("OMU") in Kentucky.

Missouri, as well as the Kentucky Municipal Energy Agency ("KyMEA") and

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Q.

A.

Big Rivers' goal is to regain all three of its investment grade ratings, and Big Rivers' mitigation efforts are starting to show results in that regard. Fitch upgraded Big Rivers' rating on its pollution control debt to minimum investment grade on July 5, 2018. Fitch based its upgrade, in part, on "supportive regulation," and improved financial performance, which Fitch found is "largely attributable to the full implementation of the cooperative's risk mitigation strategy and approved rate plan."9

On July 27, 2018, Moody's upgraded the rating on Big Rivers' senior secured debt by one notch to Ba1, which is still one notch below investment grade. Moody's stated that it "could take a negative rating action if there was a shift to a less credit supportive regulatory environment," and one of the factors that could lead to a downgrade from the current non-investment grade level is if recovery of regulatory assets does not occur in future rate proceedings. The reports issued with the Fitch, Moody's, and S&P's credit ratings actions show the importance the ratings agencies place on regulatory support and management of regulatory assets.

Q. How does this recent history relate to the Settlement Agreement's proposal that Big Rivers be authorized to establish the Station Two Regulatory Asset?

⁹ Fitch press release dated July 5, 2018, attached as Attachment 4 of 12 to Big Rivers' response to Item 1 of KIUC's Supplemental Request for Information, at page 1.

¹⁰ Moody's Credit Opinion dated July 27, 2018, attached as Exhibit Berry Supplemental-2, at page 4.

¹¹ See the credit report attachments to Big Rivers' Response to Item 1 of KIUC's Supplemental Requests for Information, and Moody's Credit Opinion dated July 27, 2018, attached as Exhibit Berry Supplemental-2.

With the reduction in generation from the idling of Coleman and Reid 1 and 1 A. 2 the termination of the Terminated Contracts, combined with the successes 3 Big Rivers has achieved in securing long-term power sales agreements and increasing native load sales, Big Rivers will have accomplished much of what 4 5 it set out to do when it began implementing the Mitigation Plan - right-sizing 6 Big Rivers in order to stabilize Member rates and mitigate against the 7 economic impacts of the smelter load loss. Big Rivers' mitigation efforts are 8 ongoing, and Big Rivers is continuing to work towards completing its goal of 9 regaining and maintaining all three of its investment grade credit ratings. 10 Obtaining the Commission's approval to establish the Station Two 11 Regulatory Asset, as requested in the application in this matter, is an 12 important step in accomplishing that goal. 13 What has the Commission's response been to the Mitigation Plan? Q. The Commission has been supportive of Big Rivers' load loss mitigation plans 14 A. 15 in the orders in Big Rivers' last two rate cases, a fact that has not been lost 16 on the credit rating agencies as reflected numerous places in the ratings 17 reports filed in this case. 12 In the first of the two smelter-related rate cases, the Commission found that it was reasonable to afford Big Rivers time to 18

pursue its mitigation strategies. 13

 $^{^{12}}$ See attachments to Big Rivers' response to Item 1 of KIUC's Supplemental Requests for Information and Exhibit Berry Supplemental-2.

¹³ In the Matter of: Application of Big Rivers Electric Corporation for an Adjustment of Rates, Order, P.S.C. Case No. 2012-00535 (Oct. 29, 2013), at page 19.

In the second of those cases, the Commission rejected a joint recommendation from KIUC and the Sierra Club that the Commission impose an "excess capacity adjustment" on Big Rivers:

It is the Commission's intent to permit sufficient rate relief to allow Big Rivers to adequately fund its operations, while minimizing the impact on ratepayers. However, it is not the Commission's intent, either explicitly or implicitly, to undermine Big Rivers' financial integrity or force Big Rivers to take actions that would thwart its ability to improve its financial and credit standings.¹⁴

At the urging of the intervenors in their briefs in that case, the Commission ordered a focused management audit of Big Rivers' "strategic planning, management, and decision-making" relating to the mitigation efforts. The October 6, 2015, final report in that focused audit "concluded that Big Rivers has largely followed the Mitigation Plan in a step-wise manner, consistent with the plan, which identified both short-term and long-term strategies to mitigate the loss of load." The findings in the audit were also viewed positively by the credit ratings agencies. Moody's, for example, in its latest report, found an "overall credit positive" impact from the focused audit. 16

¹⁴ In the Matter of: Application of Big Rivers Electric Corporation for a General Adjustment in Rates Supported by Fully Forecasted Test Period, Order, P.S.C. Case No. 2013-00199 (April 25, 2014), at page 18. This same statement appears a second time in the order at pages 19-20.

 $^{^{15}}$ Id., at page 48.

 $^{^{16}}$ Moody's Credit Opinion dated July 27, 2018, attached as Exhibit Berry Supplemental-2, at page 7.

Q. Please explain how failure to establish the Station Two Regulatory

Asset as requested would be detrimental to Big Rivers' goal of
regaining its investment grade credit ratings.

A.

If Big Rivers is not permitted to establish the proposed regulatory asset, it must expense or write off the remaining, undepreciated book value of its historical capital investment in Station Two, approximately \$89.6 million, and all other expenses related to termination of the Terminated Contracts. As Paul Smith, Big Rivers' Chief Financial Officer, explained in his response to Item 4 of KIUC's Initial Request for Information, the "credit ratings agencies have indicated that a lack of regulatory support for costs recovery of Big Rivers' assets, such as the Station Two assets which have benefited its Members for several decades, could be a credit challenge which would inhibit Big Rivers' ability to achieve an investment grade credit rating."

In the 1998 amendments to the Station Two Contracts, the term of most of those contracts was extended for the operating life of Station Two, which was determined to continue for so long as either Station Two unit was "capable of normal, continuous, reliable operation for the economically competitive production of electricity." Once the Station Two units were no longer economically competitive, their operating life and the term of the Terminated Contracts ended. But the rate at which Big Rivers' investment in Station Two was being depreciated was insufficient for the investment to be fully depreciated by the end of the plant's operating life, leaving an

unrecovered investment of approximately \$89.6 million. So, while Big Rivers' Members and their retail members/customers benefitted from Station Two over its operating life, they did not fully pay for Big Rivers' share of its costs.

Α.

It is important for Big Rivers to fully recover its investment in Station Two because Big Rivers uses those funds to pay the associated debt it incurred relating to that Station Two investment. If the Commission were to force Big Rivers to write off the remaining net book value of that investment, it could signal to the ratings agencies a loss of regulatory support for the recovery of prudent capital investments in generating assets, inhibiting Big Rivers' ability to maintain its current investment grade rating with Fitch and regain its investment grade ratings from Moody's and S&P.

Q. Why are investment grade credit ratings important to Big Rivers?

As previously described above, Big Rivers' loan contract with RUS requires Big Rivers to maintain an investment grade credit rating from at least two rating agencies, and if it fails to do so, to create a corrective plan satisfactory to the RUS that is reasonably expected to achieve two credit ratings of investment grade. This requirement alone makes investment grade credit ratings important to Big Rivers. Because Big Rivers does not have two investment grade ratings, and despite the fact that it is operating under a corrective plan to restore at least two investment grade ratings, under Section 5.13 of the 2018 RUS Loan Contract, RUS has the right at any time to direct Big Rivers to deposit all cash proceeds from its assets, except cash

proceeds deposited or required to be deposited with the Trustee pursuant to the Indenture, including amounts paid to Big Rivers by its Members on their respective wholesale power bills, into a segregated account pursuant to the Lockbox Agreement attached to the 2009 RUS Loan Contract.

Additionally, Big Rivers' credit ratings determine the interest rates and other terms under future borrowings. Regaining all three of its investment grade credit ratings will result in a material savings on future borrowings. Big Rivers' ability to issue new debt at favorable rates will be very important in the coming years as Big Rivers seeks to refinance its \$245.5 million outstanding RUS Series B note due in December 2023 and its \$83.3 million Series 2010A Pollution Control Bonds that matures in July 2031.

In addition to interest savings on future borrowings, Big Rivers would recognize immediate cost savings in the form of reduced fees and interest charges associated with its existing Senior Secured Credit Agreement with National Rural Utilities Cooperative Finance Corporation (CFC). Achieving and maintaining investment grade credit ratings will also reduce, or eliminate, the collateral requirements associated with the power purchase and sales agreements that are a vital part of the Mitigation Plan.

Q. Why would a write off of the Station Two net book value affect Big

Rivers' credit rating if, as Lane Kollen asserts on page 5, lines 1-3 of

his testimony filed in this proceeding, that Big Rivers' Members' "equity investment" in Big Rivers is "excessive"?

A.

Big Rivers' equity is not excessive, and Mr. Kollen offers no evidence to support his conclusion except that Big Rivers' equity is greater than the equity of East Kentucky Power Cooperative ("EKPC"). To the contrary, Big Rivers' equity is not in the top quartile of generating and transmission cooperatives ("G&Ts") in the country. Additionally, EKPC has a credit rating of A- while Big Rivers is the only G&T in the country that is rated and that has credit ratings below investment grade. For Big Rivers to regain and maintain all three of its investment grade credit ratings, it is important for Big Rivers to maintain regulatory support, to maintain a beneficial equity ratio and other credit metrics, and to address the other concerns that the ratings agencies have expressed. Losing regulatory support and slashing Big Rivers' equity ratio now will not help Big Rivers regain its investment grade ratings.

Mr. Kollen's comparisons to EKPC also ignore the regulatory assets that EKPC has on its books and any differences between EKPC and Big Rivers that would justify the establishment of the Station Two Regulatory Asset. For example, Big Rivers is aware that EKPC was granted the authority to establish a regulatory asset for its undepreciated investment in

its Dale generating station,¹⁷ as well as a regulatory asset for the costs it incurred relating to its planned Smith 1 generating unit that was ultimately not constructed.¹⁸ Mr. Kollen's attempts to compare Big Rivers and EKPC do not change the facts that Station Two provided benefits to Big Rivers' Members and their retail members/customers for over 40 years, they received these benefits without fully paying the cost over the same time period, and it is reasonable for Big Rivers to be granted the authority to establish the Station Two Regulatory Asset so that it can later seek recovery of its unrecovered investment.

Mr. Kollen's recommendation that Big Rivers be required to write off its unrecovered investment in Station Two would cause Big Rivers' equity to barely exceed the minimum required by its loan covenants, placing Big Rivers in jeopardy of default. Mr. Kollen's recommendation would erase Big Rivers' successful efforts to mitigate the loss of the smelter load for no good reason other than preventing Big Rivers from even asking in the future to recover its unrecovered investment in a plant that has provided over 40 years of benefits to ratepayers.

¹⁷ See In the Matter of: Application of East Kentucky Power Cooperative, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Undepreciated Balance of the William C. Dale Generation Station, Order, P.S.C. Case No. 2015-00302 (Feb. 11, 2016).

¹⁸ See In the Matter of: Application of East Kentucky Power Cooperative, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Amount Expended on its Smit 1 Generating Unit, Order, P.S.C. Case No. 2010-00449 (Feb. 28, 2011).

- Q. Would having to write off the remaining net book value of Big
- 2 Rivers' investment in Station Two have other negative
- 3 consequences?

4 A. Yes. Such a write off would result in a corresponding reduction in Bondable
5 Additions under Big Rivers' Indenture with its lenders. The amount of
6 Bondable Additions determines the amount of new debt Big Rivers can issue
7 under the Indenture, and so, a write off would reduce Big Rivers' ability to
8 issue new debt to finance capital projects in the future.

A write off would also negatively affect Big Rivers' future cash flows. The depreciation expense on generating assets generates the cash Big Rivers uses to pay the debt incurred with respect to those assets. Preventing Big Rivers from seeking recovery of the undepreciated Station Two amount will reduce the cash that Big Rivers could otherwise seek to generate in rates to pay debt when it becomes due. Further, not all of Big Rivers' debt is levelized. In fact, as noted above, Big Rivers' \$245.5 million outstanding RUS Series B note is due in December 2023. Because the Commission already required Big Rivers to defer depreciation expense on its Wilson and Coleman generating stations, Big Rivers is not currently generating cash that could be used to pay down that amount, increasing the importance of Big Rivers regaining all three of its investment grade credit ratings.

1		For these reasons, the Commission should approve the Settlement
2		Agreement and allow Big Rivers to establish the Station Two Regulatory
3		$\mathbf{Asset}.$
4		B. THE COMMISSION SHOULD ALLOW BIG RIVERS TO
5 6		ESTABLISH THE STATION TWO DEPRECIATION CREDIT AND THE TIER CREDIT IN LIEU OF OFFSETTING THE
7		STATION TWO REGULATORY ASSET WITH THE
8		DEPRECIATION REVENUES OR DEFERRING KIUC'S
9		ESTIMATE OF THE SAVINGS
0	Q.	What are the two credits contemplated by the Settlement Agreement
1		that you mentioned above?
12	A.	Under the Settlement Agreement, the parties recommend that Big Rivers be
13		allowed to provide two credits in lieu of offsetting the Station Two Regulatory
14		Asset with the Depreciation Revenues or deferring KIUC's estimate of the
15		savings. Those credits are referred to in the Settlement Agreement as the
16		Station Two Depreciation Credit and the TIER Credit.
17		i. <u>The Station Two Depreciation Credit</u>
18	Q.	What is the Station Two Depreciation Credit?
19	A.	The Station Two Depreciation Credit is a monthly credit that will reduce Big
20		Rivers' bills to its three Member Distribution Cooperatives through Big
21		Rivers' Member Rate Stability Mechanism ("MRSM") tariff. The MRSM
22		tariff is a tariff mechanism that draws upon various Economic Reserve
23		accounts. The MRSM was originally established as part of the Big Rivers

	"unwind" case (Case No. 2007-00455) to use some of the funds Big Rivers
	received as part of the unwind transaction to offset fuel and environmental
	surcharge costs resulting from the unwind. It was later expanded to allow
	Big Rivers to offset, for a period of time, the base rate increase granted in Big
	Rivers' last rate case, Case No. 2013-00199. Additionally, the Commission
	has allowed Big Rivers to amend the MRSM to add funds to pass through
	certain margins Big Rivers earns on sales to two municipal utilities and a
	public power district in Nebraska (the "Nebraska Margins") and to add
¥I	certain transmission revenues Big Rivers receives from Century Aluminum's
	aluminum smelter in Hancock County, Kentucky.

- Q. What is the amount of the Station Two Depreciation Credit, and how will it be credited to Big Rivers' Members?
- A. Unless Big Rivers is able to complete its exit of the Station Two Contracts prior to May 31, 2019, the credit will be \$453,785 per month for twelve (12) consecutive months, for a total credit of \$5,445,420. Each month in which the credit is owed, Big Rivers will deposit the monthly amount into the applicable Economic Reserve accounts for Big Rivers' two rate classes (Rurals and Large Industrials), and the MRSM will draw from those accounts to reduce Big Rivers' Rural and Large Industrial bills to its Members. The total amount of each monthly credit will be divided between Rurals and Large Industrials by allocating 72.62% to the Rural class and 27.38% to the Large Industrial class.

January 1, 2021. The Station Two Depreciation Credit represents the depreciation expense savings for the 19 months between these two events.

The forecasted test period in Big Rivers' last rate case, CN 2013-00199, included annual depreciation expense associated with Station Two of \$3,439,211,¹⁹ which corresponds to \$286,601 per month or \$5,445,417 over the 19 months. Thus, the total Station Two Depreciation Credit will be \$5,445,417 if Big Rivers completes its exit of the Station Two Contracts on May 31, 2019.

The total Station Two Depreciation Credit will be greater than \$5,445,417 if Big Rivers is able to complete its exit of the Station Two Contracts prior to May 31, 2019. For each day prior to May 31, 2019, that Big Rivers is able to complete its exit of the contracts, the total amount of the credit to be provided will be increased by an amount corresponding to one day's worth of Station Two depreciation expense (\$3,439,211/365, or \$9,422).

The total credit will be credited to the applicable Economic Reserve accounts in 12 equal monthly installments beginning in January 2019, although the credit can begin later if there is a delay in obtaining any necessary approvals, such as the approval of RUS.

Q. Why is the Station Two Depreciation Credit provided over 12 months beginning in January 2019 rather than over 18 months beginning in June 2019, after the Station Two Contract exit is complete?

¹⁹ See Big Rivers' response to Item 4 of the Commission Staff's Initial Request for Information.

1	A.	Beginning the credit in January 2019 and providing it over 12 months
2		maximizes the bill impact resulting from the Station Two Depreciation
3		Credit. Additionally, having the credit last 18 months and expire at the same
4		time new rates go into effect as part of Big Rivers' next rate case would not be
5		consistent with the principle of gradualism if Big Rivers' next rate case
6		results in a rate increase.
7	Q.	How was the split between Rural and Large Industrial customers
8		determined?
9	A.	The allocation of the credit 72.62% to the Rural class and 27.38% to the Large
10		Industrial class is based on the allocation of the Station Two depreciation
11		expense in Big Rivers' last cost of service study (the "2013 COSS"), which Big
12		Rivers filed in Case No. 2013-00199. As the parties agreed in the Settlement
13		Agreement, this allocation is appropriate because it allocates the credit in the
14		same proportion in which the 2013 COSS projected that the classes would
15		pay for the Station Two costs in rates. In other words, the Settlement
16		Agreement reflects an allocation that is as close as reasonably possible to how
17		the Station Two costs are currently paid by the classes.
18	Q.	How will the Station Two Depreciation Credit affect retail

Q. How will the Station Two Depreciation Credit affect retail customers?

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A. As noted above, each monthly Station Two Depreciation Credit will be
applied to Member bills through the MRSM mechanism. Each of Big Rivers'
Members has an MRSM tariff that passes through any credit they receive

L	from Big Rivers' MRSM tariff for the Rural customer class to their
2	residential, commercial, and most industrial customers based on energy use.
3	The only other retail customers on the Big Rivers system are the
4	approximately 20 largest industrial customers who are served by the Member
5	Distribution Cooperatives through the Big Rivers Large Industrial tariff.

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Q.

The Large Industrial share of the Station Two Depreciation Credit will be applied to Large Industrial retail customer energy usage excluding energy associated with load to which a Big Rivers economic development rate applies.

- Why does the Large Industrial share exclude energy served under an economic development incentive rate, and how many retail customers does that impact?
- The Settlement Agreement contemplates providing the Station Two 13 Α. 14 Depreciation Credit to the customers that are currently paying the Station Two depreciation expense and in the proportion that they pay that expense. 15 The Big Rivers economic development incentive rate provides a 90% 16 reduction in demand charges for retail customers served under that rate. In 17 18 other words, customers served under the economic development incentive 19 rate are not contributing, or are contributing very little, to the Station Two 20 depreciation expense. As such, it is appropriate that these customers not 21 receive the credit.

The only retail customer on the Big Rivers system served under an economic development incentive rate is Aleris. Aleris' economic development incentive rate only applies to its load resulting from a recent expansion of its Lewisport facility. Aleris will receive its share of the Station Two Depreciation Credit applicable to its base load prior to the expansion.

ii. The TIER Credit

Q. Please explain the TIER Credit.

A.

A.

Under the TIER Credit, Big Rivers will apply any net margins that Big Rivers earns above the margins that would result in Big Rivers achieving a times interest earned ratio ("TIER") of 1.45 for any calendar year beginning with calendar year 2019 and ending with the calendar year prior to the year in which new rates become effective in Big Rivers' next base rate case. The TIER Credit is applied against the Station Two Regulatory Asset, as well as the regulatory assets that the Commission required Big Rivers to establish in its last two rate cases, Case Nos. 2012-00535 and 2013-00199, to defer the depreciation expense for the Big Rivers Wilson and Coleman generating stations.

Q. What is the purpose of the TIER Credit?

The TIER Credit represents the savings that Big Rivers will achieve as a result of the Station Two Contract termination, and it allows Big Rivers' members to receive the benefit of these savings without jeopardizing Big

Rivers' financial metrics or its efforts to regain its investment grade credit ratings.

3 Q. Why is the TIER Credit preferable to Lane Kollen's recommendation that the Commission require Big Rivers to defer his estimate of the 4 5 savings resulting from the termination of the Terminated Contracts? 6 A. In his testimony filed in this proceeding, Mr. Kollen provides an estimate of 7 the margin savings resulting from the termination of the Terminated 8 Contracts based on a schedule prepared by Big Rivers and included as an 9 attachment to Big Rivers' response to Item 5 of KIUC's Initial Request for 10 Information. However, that schedule is based on an outdated forecast, and 11 many assumptions and cost estimates shown in that analysis have changed.²⁰ 12 For example, that schedule assumed Big Rivers would exit the Station Two 13 Contracts by January 1, 2019, and that the savings resulting from the 14 Station Two Contract termination would begin by that date. However, Big 15 Rivers now expects that once it completes its exit of the Station Two 16 Contracts, which will be May 31, 2019, unless Big Rivers and the City of 17 Henderson are able to agree to an earlier date, it will continue to incur 18 expenses relating to Station Two, including labor costs, for about 3 additional 19 months. So, much of the savings Mr. Kollen presumes would result in 2019 will not be achieved in that year. Further, the outdated schedule did not take 20 21 into account that certain joint facility costs will transfer from Station Two to

²⁰ See Big Rivers' response to Item 8 of KIUC's Supplemental Request for Information.

Green Station. Big Rivers now estimates that the savings resulting from the Station Two Contract termination for the 15 months between September 2019 and the end of 2020 to be approximately

Big Rivers' loan contracts require Big Rivers to achieve a minimum margins for interest ratio ("MFIR"), which is a financial metric similar to TIER, based on calendar year results. Forcing Big Rivers to defer Mr. Kollen's assumed margin savings that may not materialize could have a negative impact in Big Rivers' MFIR, jeopardizing Big Rivers' financial condition and its ability to satisfy the financial covenants in its loan agreements and forcing Big Rivers to file an immediate and unnecessary rate increase.

Big Rivers' auditors will require that such a rate case include recovery of the Wilson regulatory asset that the Commission required Big Rivers to establish in the Commission's April 25, 2014, order in Case No. 2013-00199 to defer depreciation expense on Big Rivers' Wilson generating station. Such a rate case would involve Big Rivers seeking to include in its rates not only the Wilson depreciation expense that has been deferred since 2014, but also the fixed costs Big Rivers incurs to operate Wilson, which are not currently included in Big Rivers' rates. Because these Wilson-related costs exceed the savings resulting from the Station Two Contract termination, Big Rivers projects that will be required to ask for an approximately rate increase if it is forced to file an immediate rate case.

In lieu of deferring Mr. Kollen's assumed margin savings that may not be realized in 2019 or 2020, the Settlement Agreement proposes that Big Rivers use the margins that Big Rivers actually achieves once the Station Two Contract exit is complete, less the margins that Big Rivers projects it would achieve if the Station Two Contracts had continued, to reduce the Station Two, Wilson, and Coleman regulatory assets. Using the savings resulting from the Station Two Contract termination in this way does not jeopardize Big Rivers' financial condition if the Station Two Contract exit does not occur until May 31, 2019, or Big Rivers does not achieve a projected level of savings, and it enables Big Rivers to avoid an unnecessary rate increase.

I would also point out that the Settlement Agreement actually provides a greater benefit, and sooner, to Big Rivers' Members and their retail members/customers than Mr. Kollen's recommendation. Mr. Kollen's recommendation that Big Rivers be required to defer the savings from the Station Two Contract termination provides no immediate bill impact to ratepayers. The Settlement Agreement not only allows Big Rivers to use the savings resulting from the Station Two Contract termination to reduce the regulatory assets, but it also provides an immediate cash savings to ratepayers through the \$5.4 million Station Two Depreciation Credit.

If the Commission approves the Settlement Agreement, will Big

Q. If the Commission approves the Settlement Agreement, will Big

Rivers still have to file a rate case?

1 A. Big Rivers' plans to manage its wholesale rates are based on a carefully developed strategy. Big Rivers has worked hard to delay filing a rate case to 2 incorporate Wilson into base rates in order to avoid having to have an 3 4 unnecessary rate increase. Big Rivers anticipates filing its next base rate 5 case in 2020 with its new rates to go into effect, after the maximum suspension period, on January 1, 2021. Big Rivers' revenue requirement in 6 7 that rate case will reflect the savings resulting from the termination of the Terminated Contracts as well as the full value of the Nebraska, KvMEA, and 8 9 OMU contracts, all of which will reduce Big Rivers' revenue requirement 10 while still allowing Big Rivers to incorporate the Wilson and other regulatory 11 assets and Wilson operating costs into its rates. This strategy not only allows 12 Big Rivers to delay the need for a rate increase, but it also will result in a 13 revenue requirement that Big Rivers anticipates will require a minimal, if 14 any, rate increase.

Q. How was the 1.45 TIER threshold determined?

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A. The schedule Mr. Kollen relies upon was intended to isolate the financial impact to Big Rivers of the Station Two Contract termination. It projects that, for 2020, the first full year without the Station Two Contracts, Big Rivers would have earned a TIER of 1.45 in that year if the Station Two Contracts continued. As such, the 1.45 TIER represents a reasonable and appropriate threshold for capturing the savings Big Rivers achieves as a result of the Station Two Contract termination.

1	Q.	Why does the Settlement Agreement allow Big Rivers to apply the				
2		TIER Credit against the Station Two, Wilson, and Coleman				
3		regulatory assets, rather than just the Station Two Regulatory Assets				
4	A.	The Wilson and Coleman regulatory assets are negative factors cited by the				
5		ratings agencies in their reports. The Settlement Agreement's				
6		recommendation allowing the TIER Credit to be used to reduce not only the				
7		Station Two Regulatory Asset but also the Wilson and Coleman regulatory				
8		assets provides Big Rivers a tool it can use to show the ratings agencies that				
9		it is reducing these regulatory assets, and that it has the regulatory support				
10		to do so, which will help Big Rivers' efforts to regain and maintain its three				
11		investment grade credit ratings.				
12	Q.	Why does the Settlement Agreement provide Big Rivers the				
13		discretion to provide a greater TIER Credit?				
14	A.	The discretion to increase the amount of the TIER Credit is another tool Big				
15		Rivers can use to further reduce the Station Two, Wilson, and Coleman				
16		regulatory assets, but only if Big Rivers is able to achieve a TIER greater				
17		than the $1.30\ \mathrm{TIER}$ used to establish Big Rivers' rates in its last rate case,				
18		and only if Big Rivers determines that further reducing the regulatory assets				
19		is in its and its Members' best interests.				
20	Q.	Why does the Settlement Agreement require the TIER Credit to be				
21		determined after any Nebraska Margins are deposited into the				
22		Economic Reserve?				

1	A.	Under Big Rivers' MRSM tariff, certain Nebraska Margins are deposited into				
2		Economic Reserve accounts and then flowed to the Members through the				
3		MRSM mechanism. The amount of Nebraska Margins that Big Rivers				
4		deposits into the Economic Reserve in a year is limited to the amount of				
5		margins that would reduce Big Rivers' actual TIER for the previous year to				
6		the TIER used to establish the revenue requirement in Big River's most				
7		recent general rate proceeding. Because the TIER Credit reduces Big Rivers'				
8		actual TIER, calculating the TIER Credit before depositing the Nebraska				
9		Margins in the Economic Reserve could reduce the amount of Nebraska				
10		Margins that Big Rivers is allowed to pass through the MRSM.				
11	Q.	Why does the Settlement Agreement contain a provision about how				
12		Big Rivers will record the Station Two Depreciation Credit on its				
13		books?				
14	A.	This provision is meant to help avoid unintended consequences in the event				
15		that Big Rivers auditors might determine, without that guidance, that Big				
16		Rivers should record the credit in a year that Big Rivers does not anticipate				
17		match the period in which the depreciation expense is collected in rates.				
18 19		C. THE REMAINING PROVISIONS OF THE SETTLEMENT AGREEMENT ARE REASONABLE				
20	Q.	Are there any other provisions of the Settlement Agreement you				
21		wish to discuss, aside from the two credits?				

BIG RIVERS ELECTRIC CORPORATION

NOTICE OF TERMINATION OF CONTRACTS AND APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A DECLARATORY ORDER AND FOR AUTHORITY TO ESTABLISH A REGULATORY ASSET CASE NO. 2018-00146

VERIFICATION

I, Robert W. (Bob) Berry, verify, state, and affirm that I prepared or supervised the preparation of the Supplemental Direct Testimony filed with this Verification, and that Supplemental Direct Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Robert W. (Bob) Berry

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Robert W. (Bob) Berry on this the 24% day of September, 2018.

Notary Public, Kentucky State at Large

My Commission Expires

Paula mitchell

1-12-21





Updated Corrective Plan to Achieve Two Credit Ratings of Investment Grade

July 29, 2016

[Please note that Appendix A to this document contains **CONFIDENTIAL COMMERCIAL BUSINESS INFORMATION** relating to details of potential business transactions, the public disclosure of which would be highly damaging to Big Rivers Electric Corporation's commercial business interests.]

<u>Contractual Covenant: Maintenance of Two Credit Ratings of Investment Grade</u>

If Big Rivers fails to maintain two Credit Ratings of Investment Grade per Section 4.23 – Maintenance of Credit Ratings of the Amended and Consolidated Loan Contract dated as of July 16, 2009 (the Agreement) between Big Rivers Electric Corporation (Big Rivers) and United States of America acting by and through the Administrator of the Rural Utilities Service (RUS), Big Rivers must notify RUS in writing to that effect within five (5) days after becoming aware of such failure. Big Rivers became aware of this failure to maintain two Credit Ratings of Investment Grade when Fitch Ratings downgraded its rating from BBB- to BB on February 6, 2013. Standard & Poor's previously downgraded Big Rivers from BBB- to BB- on February 4, 2013. Big Rivers notified RUS in writing on February 7, 2013 pursuant to Section 4.23 (b) of the Agreement.

In addition, pursuant to Section 4.23 (c) of the Agreement, within thirty (30) days of the date on which Big Rivers fails to maintain two Credit Ratings of Investment Grade, Big Rivers in consultation with the RUS shall provide a written plan satisfactory to the RUS setting forth the actions that shall be taken that are reasonably expected to achieve two Credit Ratings of Investment Grade. This document is submitted by Big Rivers to the RUS as a written plan that is expected to be satisfactory to the RUS as is required under Section 4.23 (c). This plan is an update to the original submission from March 25, 2015.

Background

On August 20, 2012, Century Aluminum Company (Century) gave its one year contract termination notice to Kenergy Corp. and Big Rivers Electric Corporation. This notice indicated Century was ceasing all smelter operations at their Hawesville, Kentucky facility on August 20, 2013. Century was the source of approximately thirty-six percent (36%) of Big Rivers' wholesale revenues or approximately \$205 million for the twelve months ending December 31, 2012.

On January 31, 2013, Alcan Primary Products Corporation (Alcan) gave its one year contract termination notice to Kenergy Corp. and Big Rivers. This notice indicated Alcan was ceasing all smelter operations at their Sebree smelter located in Robards, Kentucky on January 31, 2014. Alcan was the source of approximately twenty-eight percent (28%) of Big Rivers' wholesale revenues or approximately \$155 million for the twelve months ending December 31, 2012.

As a result of Big Rivers receiving Alcan's notice of termination, all three rating agencies, Fitch Ratings (on February 6, 2013), Standard & Poor's (on February 4, 2013) and Moody's Investors Service (on February 6, 2013), downgraded the credit ratings on Big Rivers' \$83.3 million County of Ohio, KY Pollution Control Refunding Revenue Bonds, Series 2010A. In addition, Standard & Poor's downgraded its long term rating on Big Rivers. All three bond ratings are currently below investment grade as shown in the following table:

Big Rivers' Current Credit Ratings

Moody's	S&P	Fitch	
Aaa	AAA	AAA	
Aa1	AA+	AA+	
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A +	A +	Investment
A2	A	A	Grade
A3	A -	A-	
Baa1	BBB+	BBB+	
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	
Ba2	BB	BB	
Ba3	BB-	BB-	Non-Investment
B1	B+	B+	Grade
B2	В	В	
В3	В-	В-	

Indicates Big Rivers Current Rating with each Agency

Rating Agencies' Focus

Rating agencies focus on three key areas of Big Rivers' business when issuing ratings on Big Rivers' \$83.3M County of Ohio, Kentucky, Pollution Control Refunding Revenue Bonds. Primarily these three areas are:

- 1) Access to and maintenance of liquidity
- 2) Replacement load for Big Rivers' Member Kenergy's two largest customers who have terminated their contracts, and
- 3) Increased Big Rivers activity in off-system sales market

As part of Big Rivers' corrective plan to achieve two investment grade credit ratings Big Rivers' addresses each of these areas in this document.

Access to and Maintenance of Liquidity

Stability of Credit

Big Rivers current wholesale contracts with its Members are all requirement contracts that run through 2043. Big Rivers' Members have the obligation to purchase their full-requirements (except smelter load) from Big Rivers throughout the tenure of the contracts. While Big Rivers' rates are contingent on approval of the Kentucky Public Service Commission, Big Rivers has been consistently granted rates sufficient to enable it to maintain its required debt covenants. The Commission has approved base rate increases in recent years, as well as, approving the recovery of Big Rivers' planned capital and operation expenses associated with the MATS equipment for which Big Rivers has requested RUS funding.

Lines of Credit

In September, 2014, Big Rivers and CFC negotiated and executed an Engagement Letter for a three-year, \$130 million Syndicated Facility ("2015 Credit Agreement"). In October 2014, Big Rivers received commitments from lenders for a total of \$190 million, and allocated the commitments proportionately to remain at the \$130 million request. The KPSC approved the transaction in February 2015. Big Rivers executed closing documents for the 2015 Credit Agreement on March 5, 2015. The 2015 Credit Agreement provides access to and maintenance of liquidity. Big Rivers has significant flexibility in the line and can borrow LIBO loans, Alternate Base Rate loans, up to \$25 million in Swingline loans, and has access to a \$50 million letter of credit. Included in the 2015 Credit Agreement is a short-term bridge loan of approximately \$30 million for Big Rivers' environmental compliance expenditures. At December 31, 2015, Big Rivers had a \$26 million borrowing outstanding under the 2015 Credit Agreement. The \$26 million borrowing was repaid in February 2016.

<u>Environmental Compliance Plan for Mercury and Air Toxics Standards (MATS)</u> <u>Financing</u>

Big Rivers resubmitted an application to RUS in October 2014 to obtain long-term financing for its MATS Environmental Compliance Plan. In the interim, Big Rivers has access to the 2015 Credit Agreement for bridge financing.

Transmission Construction Work Plan Financing

In December 2015, Big Rivers filed a loan application with the RUS requesting an RUS guaranteed FFB loan in the amount of \$20.5 million, for our 2013-2015 Transmission Construction Work Plan (CWP), as amended, many of such projects now having been completed. These projects have thus far been funded with available cash while awaiting RUS loan approval and loan funds availability.

Series A and B RUS Notes

Based on current projections, it is Big Rivers intent to pay the Series A Note principal as it comes due in 2019 and beyond. Currently, Big Rivers intends to refinance the Series B Note. Because refinancing with RUS is not currently available, Big Rivers intends to refinance with other counterparties. Big Rivers maintains strong relationships with CFC and CoBank. Big Rivers completed a significant financing with each of them in 2012, and as discussed above was oversubscribed in its most recent syndicated facility by nearly 50%. The relationships Big Rivers currently has, as well as, the access to capital markets that Big Rivers will be afforded when it regains Investment Grade Status should allow ample opportunities for financing the roughtly \$240 million Series B Note.

Rate Matters

Rate Case 2012-00535 - Century

As a result of Century's notification of termination, received on August 20, 2012, the Company filed an application with KPSC, on January 15, 2013, requesting authority to adjust its rates for wholesale electric service. The KPSC entered an order on October 29, 2013, granting Big Rivers an annual revenue increase of \$54.2 million, effective August 20, 2013. In its order, the KPSC excluded the Coleman plant depreciation from rate recovery at this time. The KPSC directed the Company to defer this depreciation expense and to record the amount in a regulatory asset account for future recovery. The KPSC's order indicated this action was being taken due to the planned temporary idling of Coleman, the length of time the plant will be idled, and the impact of the rate increase on customers. As of December 31, 2015, cumulative depreciation expense of \$13.7 million was deferred for the Coleman plant, which management believes is probable of recovery in future rates.

On November 20, 2013, the intervenors in this case filed a petition for rehearing on three issues. The KPSC granted rehearing on one issue on December 10, 2013. On July 24, 2014, the KPSC issued its Rehearing Order denying the intervenors' request to make adjustment to Big Rivers' rates.

The wholesale rate increase granted by the KPSC resulted in a base wholesale rate increase of approximately: 21.9% for rural customers; 11.8% for large industrial customers; and 11.2% for the remaining aluminum smelter (Century Aluminum Sebree LLC, formerly Alcan Primary Products Corporation).

Rate Case 2013-00199 - Alcan

As a result of Alcan's notification of termination, received on January 31, 2013, the Company filed an application with KPSC, on June 28, 2013, requesting authority to adjust its rates for wholesale electric service in the amount of \$70.4 million. This requested amount was later revised to \$71.2 million in the Company's rebuttal testimony filed December 17, 2013. The Company proposed to temporarily offset this rate increase by utilization of the Member Rate Stability Mechanism (MRSM). The Company also proposed to use transmission revenues from both smelters to replenish the Economic Reserve Fund. An evidentiary hearing was held by the KPSC in January 2014. The KPSC entered an order on April 25, 2014, granting Big Rivers an annual revenue increase of \$36.2 million, effective February 1, 2014. In its order, the KPSC approved Big Rivers' Depreciation Study, but excluded Wilson plant depreciation from rate recovery at this time because Big Rivers anticipated idling the Wilson facility in February 2014. The KPSC directed the Company to defer this depreciation expense, and continue deferring Coleman plant depreciation expense, and to record the amounts in regulatory asset accounts for future recovery. As of December 31, 2015, depreciation expense of \$38.6 million was deferred for the Wilson plant, which management believes is probable of recovery in future rates because the Wilson facility has continued to run due to stronger than anticipated market prices. The KPSC also approved Big Rivers' proposal to temporarily offset the rate increase by utilization of MRSM. The wholesale rate increase granted by the KPSC resulted in a base wholesale rate increase of approximately 16.3% for rural customers and 13.7% for large industrial customers.

On May 19, 2014, the intervenors in this case filed a petition for rehearing on two issues. The KPSC granted rehearing on one issue on June 6, 2014 to the limited extent that the issue was clarified in the June 6 Rehearing Order.

The rates in effect today are competitive in the Commonwealth, and the nation, and provide strong financial results sufficient to ensure organizational viability even without replacement load or the continued operation of Wilson Station.

Fuel Adjustment Clause Stipulation and Agreement

In 2015, Big Rivers entered into a Stipulation and Agreement with the Kentucky Industrial Utility Customers and the Office of the Attorney General, agreeing to flow \$4.6 million in margins back to our Members over a 15-month period through reduced fuel-adjustment clause costs in 2015 and 2016. The Stipulation and Agreement was approved by the KPSC on July 27, 2015. Big Rivers began including the credit in the FAC filing for the October 2015 expense month, after receiving RUS approval.

Replacement Load and Addressing Reliance on Off-System Sales

Big Rivers has made significant strides toward replacing the 400MW of replacement load included in Big Rivers' financial forecast. Big Rivers has secured contracts with three entities in Rural Nebraska (NeNPPD, City of Wayne and City of Wakefield) for power supply contracts that run from 2018-2026 (with an on-going evergreen provision, if desired by the parties). The entities' peak load is roughly 69MW. In July 2015, Big Rivers received approval from the KPSC to execute the wholesale power contracts with the Nebraska Consortium. These contracts are estimated to generate approximately \$62 million in net margins for the ten-year period ending 2026. Big Rivers will flow the prior year's margins back to its Members provided that (i) Big Rivers' actual margins are greater than the margins at the Revenue Requirement TIER; (ii) the Nebraska Margins are greater than zero; and (iii)the Average Cash Balance greater than \$60 million. Big Rivers has seen roughly 25MW of internal commercial load growth since the smelters provided their termination notice in late 2012. Big Rivers also has a current customer, Aleris, who has announced a \$350 million expansion in our territory. The KPSC and RUS approved the Aleris contract in June 2016.

Big Rivers recently entered into a ten-year power supply contract with the Kentucky Municipal Energy Agency (KyMEA). The contract initially calls for the supply of between 75 and 100 MW beginning in June of 2019, which could be expanded by up to 50 MW beginning later in the term. Combined with other recent power supply agreements, like the Nebraska entities and the significant expansion of one of Kenergy's industrial customers, a good portion of Wilson Station's future generation is now secured in stable contracts. Big Rivers will be submitting this contract to RUS for approval soon.

Load Concentration Mitigation Plan Activities Update

The **CONFIDENTIAL** Big Rivers Load Concentration Mitigation Plan Activities Update is attached as **CONFIDENTIAL** Appendix A.

Summary

Big Rivers has rates in place that are sufficient to sustain its business. Big Rivers has executed the 2015 Credit Agreement, a three year, \$130 million Syndicated Facility. Big Rivers negotiated wholesale power contracts that include 69 MW with flow starting in 2018, and received approval for those contracts from the KPSC. Big Rivers has negotiated a 10 year, 75-100MW contract with KyMEA which will be submitted to the RUS and PSC for approval in the coming weeks. Wilson continues to operate, and is expected to operate indefinitely, providing benefit to Big Rivers and its Members. A customer of Big Rivers' Member, Kenergy Corp, announced a \$350 million expansion with significant increased consumption. Big Rivers is confident it can regain two investment grade ratings with the rate relief from the KPSC along with the continued successful implementation of its Load Concentration Mitigation Plan. Big Rivers has strong liquidity, margins, and financial metrics and it continues to meet all of the financial debt covenants associated with both long-term and short-term debt.

Although Big Rivers has not yet received investment grade credit ratings, Big Rivers has received positive feedback from both creditors and the rating agencies. Big Rivers' oversubscription to its

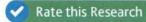
2015 Credit Agreement indicates creditor confidence. Likewise, the rating agencies have expressed confidence and optimism in Big Rivers' financial position. Moody's revised Big Rivers' outlook from negative to stable and reaffirmed their previous ratings. Likewise, both Fitch and S&P revised Big Rivers' outlook from negative to stable and reaffirmed their previous credit ratings. In our discussions with the rating agencies, they complimented the successes we achieved in our Mitigation Plan. Regaining investment grade credit ratings is not an easy task, and it is a goal Big Rivers focuses on daily. We have confidence we will regain our ratings through maintaining strong financial metrics, continued demonstration of regulatory support from the Kentucky Public Service Commission, and continued success of our Mitigation Plan.



CREDIT OPINION

27 July 2018

Update



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Big Rivers Electric Corporation

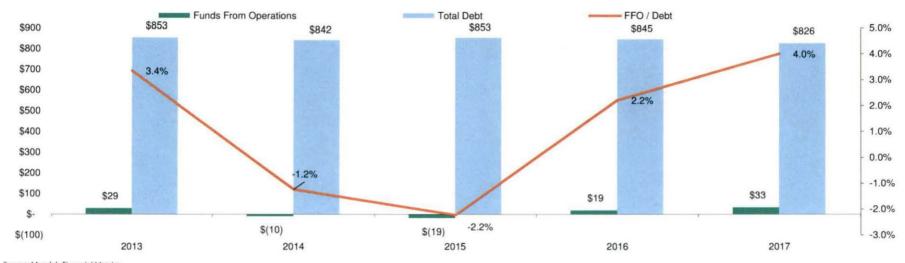
Update following rating upgrade

Summary

Big Rivers Electric Corporation's credit profile reflects a supportive regulatory environment and prospects for sustaining stronger financial metrics which are necessary to help balance business and financial risks owing to its substantial excess generation capacity and increasing regulatory assets, both of which could pose potential cost recovery and write-off challenges. Since 2013, progress in addressing excess generation capacity has included idling a 443 megawatt coal plant and signing medium-term contracts for the sale of excess capacity. Sizable rate increases approved by the Kentucky Public Service Commission (KPSC) and cost saving initiatives are helping to maintain viable financial performance. With regulatory support prevailing and sales of excess capacity phasing in, funds from operations (FFO) coverage of interest and debt are likely to strengthen further after improving in FY 2017 to 1.8x and 4%, respectively, from 1.5x and 2.2%, respectively, for FY 2016. Big Rivers is likely to be free cash flow positive for the next three years, while also maintaining ample liquidity.

MOODY'S INVESTORS SERVICE INFRASTRUCTURE AND PROJECT FINANCE

Exhibit 1
Historical FFO, Total Debt and FFO to Total Debt (\$ in millions)



Source: Moody's Financial Metrics

Credit Strengths

- » Contracted sales of excess capacity to be phased in over several years began in January 2018
- » The likelihood of sustaining sound net margins, no patronage capital returns to members and routine capital spending should drive free cash flow and contribute to debt reduction
- » Timely and substantial recovery of costs of service owing to regulatory support for base rate increases, a variable cost adjustment mechanism and an environmental cost surcharge bode well for improving financial metrics
- » Long term wholesale power contracts with three member owners through 2043 produce a steady and predictable revenue stream from electricity sold to rural residential and other non-smelter industrial customers
- » Ownership of generally competitive coal-fired generation plants

Credit Challenges

- » Avoiding customer backlash as bill credits have expired and the full impact of increases to the members' wholesale power rate has increased retail rates for members' customers
- » Increasing regulatory assets resulting from deferral of depreciation for certain coal-fired generation assets and other expenses poses potential cost recovery and write-off risks
- » Significant excess of mostly coal-fired, carbon-emitting, owned generation capacity, including idled capacity, while awaiting more clarity on future environmental regulations
- » Sizable debt maturities beyond the term of certain existing power sales agreements with replacement loads following termination of contracts with the two aluminum smelters
- » Finding additional long-term market opportunities to sell significant excess capacity beyond the term of existing contracts that are phasing in over the next few years
- » Local economic dependence on industrial activity, including two aluminum smelters

Rating Outlook

The stable rating outlook reflects a prevailing supportive regulatory environment and the likelihood that Big Rivers can sustain its financial metrics at the stronger levels attained in FY 2017 while continuing to achieve better than expected progress in reducing its significant excess capacity through off-system capacity and energy sales in the Midcontinent Independent System Operator (MISO) and other markets at favorable margins. The stable outlook also considers Big Rivers having free cash flow to reduce debt during the next three years, and incorporates our view that the smelters will continue to operate, thereby providing support for the local economy, including employment levels. The stable outlook further expects that Big Rivers will continue to pursue additional long-term contracts for the sale of its excess capacity for terms beyond those already in place.

Factors that Could Lead to an Upgrade

- » A rating upgrade is possible if credit supportive regulatory treatment remains intact and there is future support for cost recovery of the increasing regulatory asset account which would avoid potential write-offs while maintaining reasonably competitive rates
- » Achieving further successful financial results through ongoing strategies to mitigate a long capacity position
- » Achieving stronger metrics to balance its unique business and financial risks; for example, FFO coverage of interest and debt improving to 2.4x and in a range of 6%-7%, respectively, with the debt service coverage (DSC) ratio tracking at close to 1.2x or better on a sustained basis

Factors that Could Lead to a Downgrade

- » We could take a negative rating action if there was a shift to a less credit supportive regulatory environment and if liquidity unexpectedly deteriorates
- » The pressure for a negative rating action would increase if substantial and timely recovery of environmental compliance costs and increasing regulatory assets do not occur as anticipated under the KPSC approved environmental cost recovery mechanism and future rate proceedings, especially if such amounts increase beyond currently anticipated levels
- » A scenario under which either or both of the smelters discontinued operations would be credit negative owing to the potential residual negative effects on the local economy
- » In terms of metrics, FFO to debt and DSC ratios below 4% and 1.2x, respectively, for a sustained period would pressure the rating

Key Indicators

Exhibit 2
Big Rivers Electric Corporation

	2013	2014	2015	2016	2017
Times Interest Earned Ratio (TIER)	1.5x	1.6x	1.3x	1.1x	1.3x
DSC (Debt Service Coverage)	0.8x	1.5x	1.2x	1.2x	1.2x
FFO / Debt	3.4%	-1.2%	-2.2%	2.2%	4.0%
(FFO + Interest Expense) / Interest Expense	1.7x	0.8x	0.5x	1.5x	1.8x
Equity / Total Capitalization	33.1%	34.9%	35.3%	36.2%	37.2%

Source: Moody's Investors Service

Obligor Profile

Big Rivers is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by its three member system distribution cooperatives — Jackson Purchase Energy Corporation; Kenergy Corp; and Meade County Rural Electric Cooperative Corporation. These member system cooperatives provide retail electric power and energy to more than 116,000 residential, commercial, and industrial customers in 22 Western Kentucky counties. In aggregate, Big Rivers owns 1,444 net MW of coal-fired generating capacity at four stations, including Robert D. Green (454 MW), Robert A. Reid ((130 MW), D.B. Wilson (417 MW) and Kenneth C. Coleman (443 MW), which has been idled since May 2014. Including its rights to about 197 MW of coal-fired capacity from Henderson Municipal Power and Light (HMPL) Station Two and about 178 MW of contracted hydro capacity from the Southeastern Power Administration (SEPA) its total power capacity is 1,819 MW. Big Rivers' owned transmission system includes 1,299 miles of transmission lines and 24 substations. The cooperative also has about 25 transmission interconnections to link its system with several surrounding utilities. Unlike most of its peers, Big Rivers is subject to rate regulation by the KPSC.

Detailed Credit Considerations

Good progress on strategies to mitigate credit challenges resulting from sizable excess capacity following loss of aluminum smelters' load

Big Rivers has been making good progress towards replacing the roughly two-thirds of its annual energy sales, just under 60% of its system demand and in excess of 60% of its annual revenues previously derived from the contracts it had with two aluminum smelters. While initial worst case expectations contemplated the prospect that both smelters would cease operations upon expiration of their respective power contracts, regulatory approvals of the smelters' definitive agreements with Big Rivers and Kenergy enable the continued operations of both smelters with energy demands met by open market purchases of electricity. That said, in the absence of both smelters' load, Big Rivers remains long on generation. The progress in addressing the excess capacity is attributable to both supply-side and demand-side strategies, as well as reducing staff and controlling other expenses where feasible and without compromising reliability.

Supply-side strategies continue to unfold

Big Rivers supply-side initiatives included idling its 443-MW Coleman plant and it is taking steps to terminate its longstanding operating agreement with HMPL. The latter strategy, if successful, will reduce its excess capacity by eliminating its rights to about 197 MW of competitively challenged coal-fired capacity from the HMPL Station Two plant no later than May 2019. The latter strategy is the subject of a KPSC regulatory filing, through which Big Rivers has asked the KPSC to address its request to end the operating agreement with HMPL on an expedited basis during 2018. Big Rivers is also requesting regulatory asset treatment for its approximately \$90 million of net book value relating to its past investments in Station Two as part of the operating agreement, with an intent to seek recovery in the next rate case. Meanwhile, Big Rivers continues to honor the operating agreement with a desire to terminate by May 31, 2019 at the latest. If HMPL is successful in finding adequate replacement resources to meet its full requirements, Big Rivers and HMPL would terminate the operating agreement sooner than May 31, 2019.

Although the Coleman plant was idled in May 2014, it is being maintained to permit restart should market conditions become economically feasible. By idling the Coleman plant, Big Rivers achieved overall cost savings of about \$26 million annually. Big Rivers is reporting internal load growth and additional longer term opportunities may also arise for sales of electricity, depending on economic development activity in its service territory. For example, Big Rivers has an industrial customer utilizing the cooperative's economic development incentive rate in its business expansion, which will contribute significant growth to the cooperative's load. Meanwhile, Big Rivers is also considering the transfer of some environmental control equipment at the Coleman plant to its Wilson plant. If this strategy is successfully implemented, it is likely to reduce the financial impact of a potential writeoff if management elects to permanently shutter the Coleman plant in the future. The current net book value of the Coleman plant, including deferred depreciation, is estimated at \$181 million. The net book value includes approximately \$73 million of investments in scrubbers. The remaining amounts of net investment in both the Coleman and Station Two plants loom as potential write-off risks to Big Rivers' common equity if the cooperative is not able to recover the remaining costs from its customers as a regulatory asset.

Demand-side strategies progressing well

Big Rivers' demand-side strategies include securing medium-term contracts for the sale of capacity and energy from its fleet to load serving municipal-distribution entities in Nebraska and Kentucky, making short-term off system sales and participating in the capacity markets.

In that regard, Big Rivers currently has three nine-year contracts to sell capacity and energy to three Nebraska entities which will grow to about 85 MW to the Nebraska entities. Power being provided under this contract began flowing this year and is scheduled to reach full output in 2022. Big Rivers also has executed a 10-year contract to transmit as much as 100 MW from its coal-fired Wilson Station to Kentucky Municipal Energy Agency (KyMEA), beginning in 2019, with the potential to increase the contract for sale of capacity by another 50 MW starting in 2022. Moreover, in June 2018, the City of Owensboro awarded its full-requirements contract, approximating 180 MW to Big Rivers, which together with other supply-side efforts, helps to further balance Big Rivers' generation capacity and load requirement. The contract with the City of Owensboro covers a term of June 2020 through December 2026 to provide the municipal utility's full annual energy requirements estimated at 825,000 megawatt hours and annual peak load of about 155 MW (net of its 25 MW SEPA contract).

These contracts are credit positive for Big Rivers because they lock up some of its substantial excess capacity and energy with load-serving municipal-distribution entities for multiple year periods, helping the cooperative replenish the smelter load lost during 2013-2014. The contracts are likely to prove beneficial for Big Rivers' long-term financial performance and provide a reliable source of recovery for Big Rivers' fixed and variable costs and contribute to its overall competitiveness through better rates for its members. Moreover, the contracts allow Big Rivers to become less dependent on the currently depressed wholesale power market for incremental revenues and helps diversify the cooperative's revenue stream, which historically was heavily dependent on the aluminum industry, to one that is less volatile and more predictable.

Setting aside the still idled Coleman capacity and assuming successful termination of the operating agreement with HMPL which eliminates rights to a portion of capacity at the Station Two plant, Big Rivers would have just under 1,200 MW of capacity available beginning in 2020. This level of capacity compares with average member peak load of 650 MW, plus additional aforementioned contracted capacity sales of about 350 MW phasing in during 2018-20 and allocating about 150 MW for an approximate 15% reserve margin, leaves Big Rivers very close to supply and demand balance. That said, overhang risks associated with the ultimate recovery of

the idled Coleman and Station Two investments remain, which together remain a rating constraint within the speculative grade rating category.

Smelters continue to operate, with increased production levels at the Hawesville smelter

Since canceling their respective contracts, both of the smelters continue to operate. We understand that the Hawesville smelter has been operating at about 40% of its capacity during recent years; however, with some economic aid and improved commodity pricing for aluminum, the Hawesville smelter is now operating at about 60% of its capacity with expectations to increase to 100% in 2019. The Sebree smelter has been operating for the most part at full production for several years. When compared with the alternative scenario of having both smelters permanently shut down, this outcome is acceptable particularly since Big Rivers and Kenergy are being reimbursed for any incremental costs to their members of the smelters' continued operation and there are residual benefits to the local economy.

More specifically, following regulatory approvals from the KPSC in 2013 and 2014, Century Aluminum of Kentucky (a subsidiary of Century Aluminum Company) continues to operate its Hawesville and Sebree smelters by purchasing electricity on the open market. Under an agreement that Big Rivers and Kenergy have with Century, Kenergy arranges with a third party for the energy purchases at wholesale market prices and Century pays the market price and additional amounts to cover any incremental costs incurred by Big Rivers and Kenergy to accommodate Century's desire to purchase energy on the market for the two smelters.

Rate case decisions and ongoing cost recovery mechanisms are credit positive factors serving as mitigants to credit challenges

In addition to the challenges facing Big Rivers in securing asset recovery for Coleman and Station Two in a credit benign manner, Big Rivers also remains exposed to incremental execution risk in securing extensions of the aforementioned medium term contractual arrangements with economically similar or better terms as Big Rivers' debt profile has sizable maturities extending beyond the tenor of the existing power sales contracts. Notwithstanding these credit challenges, Big Rivers' profile benefits from credit supportive rate case decisions rendered by the KPSC in October 2013 and April 2014, which resulted in approval of a combined wholesale power rate increase of about \$90.4 million. Moreover, as part of these decisions, residual cash, set aside in restricted accounts, provided a mitigant to Big Rivers' liquidity after the loss of the smelter load. Specifically, cash in the restricted accounts was used to provide bill credits during 2014-16, which temporarily minimized the rate shock to ratepayers until September 2015 for large industrial/business (non-smelter) customers and until August 2016 for rural (residential) customers.

With the expiration of bill credits in 2016, the full effects of the wholesale power rate increases are now being fully borne by Big Rivers' members and, in turn, the members' retail customers. The rate increases are credit positive for Big Rivers because the incremental amounts are estimated to result in about 90% of Big Rivers' total gross margins coming from its members that have all requirements contracts in place through 2043. The current wholesale power rates are likely to support steady financial performance at recently improved levels, ensure a degree of cushion for compliance with financial covenants and should allow for Big Rivers to further advance its strategies.

While Big Rivers faces ongoing challenges, our view of the credit profile acknowledges credit supportive actions and comments from the KPSC in the latest rate orders about prudent mitigation steps taken by Big Rivers as well as the commission's clear intention to ensure that electric rates are sufficient to maintain Big Rivers' financial integrity. In that regard, the KPSC rates approved in the April 2014 rate order are designed to enable Big Rivers to achieve a 1.3x times interest earned ratio (TIER), a level that is 20 basis points higher than the 1.1x margins for interest (MFI), essentially the equivalent of TIER, required as defined under Big Rivers' indenture. The additional revenue amounts to support Big Rivers' TIER at 1.3x is credit positive because the amounts help to partially offset certain other cost items not covered by the approved rate increases, the most significant of which relate to deferrals of any recovery of depreciation costs relating to the Coleman and Wilson plants. In addition to the predictable revenue stream provided by the contracts, entering the long term contracts for the sale of excess power also bodes well for Big Rivers' regulatory relationship with the KPSC, since the regulators established an action plan in 2013 that called for the pursuit of such supply contracts.

Maintaining supportive regulatory relationships remains an important credit factor for Big Rivers since its rate-setting is subject to regulation, which is atypical for an electric generation and transmission cooperative. Rate regulation can potentially introduce uncertainty around the timeliness and extent of future cost recovery, making that uncertainty an especially important credit risk factor for Big Rivers as its regulatory asset balance is increasing. With existing contracts in place as described above, we understand that Big

Rivers will likely seek regulatory approval for recovery of the regulatory asset balance tied to the Wilson plant depreciation deferrals beginning in 2021.

In addition to the 2013 and 2014 rate increases approved by the KPSC, the existence of certain fuel and purchased power cost adjustment mechanisms and the existence of an environmental cost surcharge in rates are favorable to Big Rivers' credit profile since they can temper risk of cost recovery shortfalls if there is a mismatch relative to existing rate levels.

Overall credit positive impact from KPSC mandated independent management audit

As required by the KPSC in its April 2014 rate order, an independent consultant conducted a comprehensive management audit, with a particular focus on Big Rivers' load mitigation strategies, and a final action plan was issued in December 2015. The action plan is a credit positive since it incorporates a combination of many supportive or neutral findings about Big Rivers' past decisions and future plans, as well as five specific, seemingly manageable, recommendations. Of those five recommendations, four were already in process as of the report date, including those relating to increasing expertise regarding the MISO market, pursuing new energy sales and analyzing the best use of the currently idled Coleman plant. Two of the five action items have been closed by the KPSC, including an agreement that the recommendation of adding a new board member with energy expertise is not warranted and that Big Rivers was sufficiently pursuing new energy sales.

Big Rivers has added staff resources focused on enhancing internal expertise in production cost and financial modeling to further leverage its association as a member of ACES and has executed amendments to its debt documents to address restrictions around the sale or early retirement of the Coleman plant. The advanced stage of action plans relating to these two items makes it likely that the items can be closed by the KPSC in the near term, perhaps as soon as October 2018.

With respect to the action item focusing on sale, retirement or redevelopment of the Coleman plant, Big Rivers is still studying its options and may opt to relocate a scrubber from the Coleman plant to its Wilson plant. This action item is expected to continue as an ongoing issue at least during the remainder of 2018. As Big Rivers moves forward in addressing the still open audit recommendations, it is currently required to report to the KPSC annually if necessary. Big Rivers has provided four reports to this point and anticipates filing its next report with the KPSC in October.

Reasonably competitive position maintained

Although Big Rivers' rates have increased following the loss of the smelter loads and KPSC approved rate increases, the economics of power produced from Big Rivers' generation sources have enabled it to still maintain a reasonable competitive position in the Southeast and even more so when compared to other regions around the country. The capacity factors and efficient operations of the assets resulted in a 2017 average member rate per MWh for rural members and large industrial members of \$85.14 and \$63.37, respectively, compared to \$82.21 and \$63.96, respectively, for 2016, \$82.35 and \$63.20, respectively, for 2015, \$81.79 and \$63.56, respectively, for 2014 and \$57.74 and \$47.00, respectively, for 2013 (in all instances, excluding the benefits of member rate stability mechanism).

Wholesale power contracts support Big Rivers' credit profile

The revenues derived under Big Rivers' long-term wholesale contracts with its members for sales to non-smelter customers are continuing as the contracts are in effect through December 31, 2043. The underlying favorable economics of power produced by Big Rivers' generation assets and bill credits provided during 2014-16 appear to have tempered any expressed or latent member disenchantment now that members are feeling the full impact of significant rate increases. Despite a relatively competitive starting point in 2013 and other price mitigating strategies, it remains possible that member unrest will surface, especially if further substantial rate increases become necessary to recover an increasing regulatory asset balance or if environmental compliance and other operating cost pressures surface unexpectedly. We understand that there was some decline in member satisfaction surveys for 2017, at least partially attributable to expiration of the rate stability mechanism.

Improved financial performance following base rate increases and other strategic initiatives

Big Rivers' financial performance is being supported by the outcomes in its last two rate cases and other mitigation strategies. Big Rivers' financial performance in fiscal year (FY) December 31, 2017 was reasonably consistent with its budget expectations and very much in line with FY 2016, including net margins of \$13.0 million, which supported a 1.32x TIER, a contractual MFI ratio of 1.32x and a DSC ratio of 1.22x, all as defined in the cooperative's debt documents. Although the net margins in fiscal years 2015-2017 were far

below the net margins of \$32.7 million achieved in FY 2014, financial performance during 2014 was aided by the positive weather effects of the polar vortex which added more than \$25 million on a non-reoccurring basis to Big Rivers' off-system margins that year.

For fiscal years 2015-2017 (including Moody's standard adjustments), Big Rivers' FFO coverage of interest, FFO to debt and DSC ratios averaged in the "Ba", "B" and "A" rating categories, respectively, for the ratios covered under the Rating Methodology for U.S. Electric G&T Cooperatives. For example, Big Rivers' three year average FFO coverage of interest, FFO to Debt, and DSC for 2015-2017 were 1.27x, 1.3%, and 1.2x, respectively. Although the average scores for two of these three metrics are at weak levels under the rating methodology, the ratio of FFO to interest and FFO to debt metrics during FY 2014 and to a lesser degree in FY 2015 are negatively affected by the accounting effects of noncash member rate mitigation revenue. The 2013 and 2014 rate case decisions firmly established the necessary revenue requirements and rate levels to maintain Big Rivers' financial viability and have restored these metrics to stronger levels in FY 2017 now that the economic reserve, rural economic reserve and transmission revenue economic reserve accounts have been utilized. The A category ranking for the average DSC ratio for the same period primarily reflects the absence of any large principal payments during the period. Big Rivers has some non-amortizing debt issues in its capital structure which can pressure the DSC ratio in years when large principal repayments are required. We expect that the DSC ratio can be sustained near 1.2x for the near term, with the next sizable bullet maturity of about \$240 million not until FY 2023.

For the same 2015-2017 period, the TIER averaged 1.2x (in the "A" category range) primarily reflecting supportive regulatory decisions which support net margins, and equity to total capitalization averaged 36.1% (in the "Aa" category range) as the metric is benefitting from debt reduction and full retention of net margins. With about \$181 million of net book value relating to the idled Coleman plant, Big Rivers could experience some pressure in complying with a minimum equity level as described in the liquidity section if it decides to shutter the plant permanently and has to take a write-off.

As noted in our summary above, Big Rivers' FFO coverage of interest and debt ratios strengthened in FY 2017 and prospectively are likely to be sustained to support the cooperative's credit quality as power sales agreements with entities in Nebraska and Kentucky help compensate for the substantial overcapacity at Big Rivers. Still, Big Rivers faces regulatory and execution risks as it eventually needs to seek recovery of increasing regulatory asset balances and decide on a final strategy to best address the idled Coleman plant.

Liquidity

We expect that Big Rivers will maintain ample liquidity over the next 12-18 months and will generate positive cash flow each year for the next several years.

Big Rivers supplements its existing cash on hand and internally generated cash flow with a multi-year \$100 million syndicated senior secured credit agreement with five financial institutions, led by National Rural Utilities Cooperative Finance Corporation (NRUCFC), which expires September 18, 2020. As of June 30, 2018, Big Rivers had a cash and temporary investments balance of about \$60.4 million and \$92.3 million available under the NRUCFC credit agreement. Big Rivers has manageable debt maturities over the next eight quarters, which are largely comprised of scheduled amortizations of long-term debt to be paid at roughly \$6.5 million per quarter. Terms of the NRUCFC credit agreement provide a good quality source of alternate liquidity in the form of a syndicated credit agreement which benefits from a multi-year tenor and the absence of any onerous financial covenants largely consistent with the financial covenants in existing debt documents. The syndicated agreement does, however, separately require Big Rivers to maintain a minimum equity balance at each fiscal quarter-end and year-end of \$375 million plus 50% of the cooperative's cumulative positive net margins for each of the preceding fiscal years, beginning with the fiscal year ended December 31, 2015. Big Rivers is comfortably in compliance with those covenants. Additionally, the credit agreement benefits from no ongoing material adverse change (MAC) clause. The syndicated credit agreement does not have any rating triggers, just a pricing grid based on Big Rivers' rating.

During 2017, Big Rivers also expanded its bank relationships by negotiating a \$15 million term loan with Federal Agricultural Mortgage Corporation, proceeds from which it pre-paid a portion of the existing series A loan from the Rural Utilities Service (RUS) to achieve interest cost savings. The note currently has an outstanding balance of \$14.3 million and a final maturity of October 23, 2020. More recently, in April 2018 Big Rivers received about \$46.1 million of funding from the RUS in the form of amortizing first mortgage bonds, with \$25.6 million maturing in 2033 and \$20.5 million maturing in 2043. Proceeds from these RUS loans and existing cash were used to repay in full the remaining balance of the RUS series A loan, thereby achieving interest cost savings, minimizing debt maturities for 2020 and 2021 and re-establishing access to low-cost RUS financing.

Debt Structure

As part of the unwinding of various transactions completed in 2009, Big Rivers replaced the previously existing RUS mortgage with a senior secured indenture. Under the senior secured indenture RUS and all senior secured debt holders, including the \$83.3 million of County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project; cusip number 677288AG7), are on equal footing in terms of priority of claim and lien on assets. The current senior secured indenture provides Big Rivers with the flexibility to access public debt markets without first obtaining a case specific RUS lien accommodation, while retaining the right to request approval from the RUS for additional direct borrowings under the RUS loan program, if they choose to do so. Given persistent questions about the availability of funds under the federally subsidized RUS loan program, the added flexibility of the current senior secured indenture is credit positive.

Other Considerations

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative Rating Methodology grid below is based on historical data through December 31, 2017. The grid indicated rating for Big Rivers' senior most obligations under the Methodology is currently Baa3. However, Big Rivers' actual senior secured rating of Ba1 reflects several of the unique risks at Big Rivers and the challenges facing the cooperative in mitigating these risks, including further implementation of its load mitigation strategies following the smelter contract terminations and addressing issues surrounding its increasing regulatory asset accounts and idled Coleman plant.

Methodology

Exhibit 3

U.S. Electric Generation & Transmission Cooperative Rating Methodology

Rating Factors		
Big Rivers Bectric Corporation, KY		
U.S. Bectric Generation & Transmission Cooperatives [1][2]	Ourrent FY 12/31/2017	
Factor 1: Wholesale Power Contracts and Regulatory Status (20%)	Measure	Score
a) % Member Load Served and Regulatory Status	Ba	Ba
Factor 2 : Pate Flexibility (20%)	THE RESERVE	
a) Board Involvement / Pate Adjustment Mechanism	Baa	Baa
b) Purchased Power / Sales (%)	32.5%	Baa
c) New Build Capex (% of Net PP& E)	Aa	Aa
d) Pate Shock Exposure	В	В
Factor 3 : Member / Owner Profile (10%)		
a) Residential Sales / Total Sales	29.8%	Ba
b) Members' Consolidated Equity / Capitalization	38.8%	Baa
Factor 4: 3-Year Average G&T Financial Metrics (40%)		TOTAL
a) Times Interest Earned Patio (TIER)	1.2x	Α
b) Debt Service Coverage Patio (DSC)	1.2x	Α
c) FFO / Debt	1.3%	В
d) (FFO + Interest) / Interest Expense (3 Year Avg)	1.3x	Ba
e) Equity/Total Adjusted Capitalization	36.1%	Aa
Factor 5 : G&T Size (10%)	100000	
a) MWh Sales	7.4	Baa
b) Net PP&E	\$1.0	Α
Pating:		
Indicated Rating from Grid		Baa3
Actual Pating Assigned (Senior Secured)		Ba1

Moody's 12-18 M View	N
As of Publishe	ed Date [3]
Measure	Score
Ba	Ba
Baa	Baa
25%-35%	Baa
Aa	Aa
В	В
25%-35%	Ba
38%-40%	Baa
1.2x-1.4x	A
1.2x	Α
4%-6%	Baa
1.8x-2x	Baa
36% - 39%	Aa
7-10	Baa
\$1 - \$1.1	A
φι-φι.ι	^
	Baa2
	Ba1

^[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

RATINGS

BIG RIVERS ELECTRIC CORPORATION, KY

Rating: County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project; cusip number 677288AG7) Outlook Ba1

Stable

^[2] As of 12/31/2016; Source: Moody's Financial Metrics™

^[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divest itures. Source: Moody's Investors Service

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ORIGINAL

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

NOTICE OF TERMINATION OF)	
CONTRACTS AND APPLICATION OF)	
BIG RIVERS ELECTRIC)	Case No.
CORPORATION FOR A DECLARATORY)	2018-00146
ORDER AND FOR AUTHORITY TO)	
ESTABLISH A REGULATORY ASSET)	

DIRECT TESTIMONY

OF

JOHN WOLFRAM PRINCIPAL CATALYST CONSULTING LLC

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: September 26, 2018

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1 2 3 4		OF JOHN WOLFRAM
5		I. INTRODUCTION
6	Q.	Please state your name, business address, and position.
7	A.	My name is John Wolfram. I am the Principal of Catalyst Consulting LLC.
8		My business address is 3308 Haddon Road, Louisville, Kentucky, 40241.
9	Q.	On whose behalf are your testifying?
10	A.	I am testifying on behalf of Big Rivers Electric Corporation ("Big Rivers").
11	Q.	Briefly describe your education and work experience.
12	A.	I received a Bachelor of Science degree in Electrical Engineering from the
13		University of Notre Dame in 1990 and a Master of Science degree in
14		Electrical Engineering from Drexel University in 1997. I founded Catalyst
15		Consulting LLC in June 2012. From March 2010 through May 2012, I was a
16	,	Senior Consultant with The Prime Group, LLC. I have developed cost of
17		service studies and rates for numerous electric and gas utilities, including
18		electric distribution cooperatives, generation and transmission
19		cooperatives, municipal utilities and investor-owned utilities. I have
20		performed economic analyses, rate mechanism reviews, ISO/RTO
21		membership evaluations, and wholesale formula rate reviews. I have also
22		been employed by the parent companies of Louisville Gas and Electric
23		Company ("LG&E") and Kentucky Utilities Company ("KU"), by the PJM

- 1 Interconnection, and by the Cincinnati Gas & Electric Company. A more
- 2 detailed description of my qualifications is included in Exhibit JW-1.
- 3 Q. Have you ever testified before the Kentucky Public Service
- 4 Commission ("Commission")?
- 5 A. Yes. I have testified in numerous regulatory proceedings before this
- 6 Commission. A listing of my testimony in other proceedings is included in
- 7 Exhibit JW-1.

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II. PURPOSE OF TESTIMONY

- 9 Q. What is the purpose of your testimony in this proceeding?
- 10 A. The purpose of my testimony is to support the Settlement Agreement.
- Stipulation, and Recommendation among the parties to this proceeding (the
- "Settlement Agreement"), which is being filed with this testimony, by
- rebutting the recommendations offered in the testimony of Mr. Lane Kollen
- filed by Kentucky Industrial Utility Customers, Inc. ("KIUC") that are
- 15 contrary to or inconsistent with the recommendations that the parties have
- agreed to in the Settlement Agreement. Specifically, I will address Mr.
- 17 Kollen's recommendations that (a) the Commission reject the Company's
- request to establish a regulatory asset of approximately \$89.6 million and
- instead require Big Rivers to record a one-time write off of that amount,
- and (b) the Commission direct Big Rivers to defer as a regulatory liability
- 21 KIUC's projected 2019 and 2020 increase in margins resulting from the
- termination of the Station Two contracts ("Termination"). I will also

1		explain and support some of the changes to Big Rivers' Member Rate
2		Stability Mechanism ("MRSM") tariff that will be required if the
3		Commission approves the Settlement Agreement.
4		III. <u>ISSUES</u>
5 6 7		A. MR. KOLLEN'S RECOMMENDATION TO REJECT BIG RIVERS' DEFERRAL IS INCONSISTENT WITH COMMISSION PRECEDENT
8	Q.	Mr. Kollen recommends that Big Rivers be required to write off the
9		nonrecurring expenses related to the Termination rather than
10		deferring that amount. Do you agree with this recommendation?
11	A.	No. Mr. Kollen's recommendation ignores Commission precedent by failing
12		to apply the criteria that the Commission has historically applied when
13		considering such deferrals.
14	Q.	What criteria has the Commission applied in the past when it
15		considered a request to establish a regulatory asset?
16	A.	Historically, the Commission has exercised its discretion to approve
17		regulatory assets where a utility has incurred: (1) an extraordinary,
18		nonrecurring expense which could not have reasonably been anticipated or
19		included in the utility's planning; (2) an expense resulting from a statutory
20		or administrative directive; (3) an expense in relation to an industry

- sponsored initiative; or (4) an extraordinary or nonrecurring expense that

 ver time will result in a saving that fully offsets the cost."
- 3 Q. Does the request by Big Rivers in this proceeding meet those
 4 criteria?
- 5 A. Yes. Since the expenses resulting from the termination of certain Station 6 Two-related contracts (the "Terminated Contracts") that Big Rivers is 7 seeking to defer are extraordinary and nonrecurring, and since the 8 termination of the Terminated Contracts will result in substantial savings 9 that fully offset the costs, the historically-applicable criteria are met, and 10 the Commission should allow Big Rivers to establish a regulatory asset to 11 defer those expenses. The Commission should not apply a different 12 standard to Big Rivers just because KIUC intervened in this proceeding.
- Q. Does Mr. Kollen challenge whether Big Rivers' request to establish
 a regulatory asset satisfies these criteria?
- 15 A. No. Mr. Kollen does not rebut Big Rivers' application of these criteria or its 16 conclusion that the criteria are met in the instant case. In fact, Mr. Kollen's 17 testimony confirms the existence of the facts required by the Commission to 18 support establishment of the regulatory asset proposed by Big Rivers. He 19 notes that "the termination of the Station Two contracts is a significant

¹ In the Matter of: The Application of East Kentucky Power Cooperative, Inc. for an Order Approving Accounting Practices to Establish a Regulatory Asset Related to Certain Replacement Power Costs Resulting from Generation Forced Outages, Order, P.S.C. Case No. 2008-00436 (Dec. 23, 2008), at p. 4.

positive event...and not simply a continuation of the status quo."² This supports the first of the Commission's criteria because it is "an extraordinary, nonrecurring expense." Mr. Kollen also acknowledges the savings associated with the Termination when he notes that "This step will result in significant savings."³ This supports the fourth criteria: that the deferred expense be "an extraordinary or nonrecurring expense that over time will result in a saving that fully offsets the cost." Thus, Mr. Kollen's own testimony indicates that the criteria necessary to support creation of a regulatory asset are present, which clears the way for approval of the proposed regulatory asset.

11 B. MR. KOLLEN'S RECOMMENDATION THAT BIG
12 RIVERS BE REQUIRED TO WRITE OFF ITS
13 UNRECOVERED INVESTMENT IN STATION TWO
14 CONSTITUTES SINGLE ISSUE RATEMAKING

- Q. Is Mr. Kollen's recommendation inconsistent with any accepted
 regulatory principles?
- Yes. Mr. Kollen's recommendation violates the widely-accepted principle
 prohibiting single issue ratemaking.
- 19 Q. What is single issue ratemaking?
- A. Single issue ratemaking occurs when a regulatory commission reviews and makes a rate determination with respect to a single component of the

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² See Kollen Direct at p.4:18-24.

³ See id. at p.9:14-15.

revenue requirement in isolation, without considering and reviewing all components of the revenue requirement in aggregate. Because of the interplay between revenue requirement components, a commission generally seeks to avoid changing rates based on changes in individual components of the revenue requirement without considering them in totality.

- Q. Does Mr. Kollen's recommendation to write off Big Rivers'
 unrecovered investment in Station Two Termination and the
 Station Two Termination-related expenses constitute single issue
 ratemaking?
- 12 Should not assume a continuation of the status quo."4 This means he wants
 13 to consider the ratemaking effects of the Termination expenses in this case,
 14 in isolation, instead of addressing the ratemaking later in the context of a
 15 full rate case. This constitutes single issue ratemaking.
- 16 Q. More specifically, how is Mr. Kollen's recommendation inconsistent
 17 with the prohibition of single issue ratemaking?
- A. Mr. Kollen seeks to preclude the establishment of a regulatory asset and to require Big Rivers to instead write off its \$89.6 million unrecovered investment in Station Two as well as the Station Two Termination-related expenses in order to prevent Big Rivers from ever seeking rate recovery of

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⁴ See id. at p.4:23-24.

these costs based on KIUC's allegation that the recovery of the amortized balance of that asset, in combination with other amounts already set aside on Big Rivers' books, would create rate shock for Big Rivers' Members and would yield rates that are "unfair, unjust and unreasonable." 5 Fundamentally, that is a ratemaking test taken from KRS 278.030(1), not a test for establishment of a regulatory asset. In addition, this assertion is premised on the deferral as a single issue, while not taking into consideration any other variables that will affect Big Rivers' test period revenue requirement at the time it files its next base rate case. These include a broad spectrum of financial information and facts that are not currently in existence, including but not limited to the authorized TIER, offsystem sales revenues, and expenses related to fuel, labor, plant maintenance, or depreciation. It is a violation of the prohibition of single issue ratemaking to conclude today that Big Rivers' rates will become "unfair, unjust and unreasonable" at some future point in time solely due to the impacts of regulatory asset rate treatment without also considering the impacts of other factors that are typically reviewed in base rate filings. In fact, as the Commission has pointed out, the purpose of a regulatory asset is to preserve a qualifying expense so that it may be considered for recovery in rates at a future point in time.6

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⁵ See Brief of Kentucky Industrial Utility Customers, Inc. filed in this docket, July 20, 2018, page 4, paragraph 2.

⁶ In the Matter of: Application of Big Rivers Electric Corporation for an Adjustment of Rates, P.S.C. Case No. 2012-00535, Order on Rehearing dated January 29, 2013, page 33.

1	C. MR. KOLLEN'S RECOMMENDATIONS THAT BIG
2	RIVERS BE REQUIRED TO WRITE OFF ITS
3	UNRECOVERED INVESTMENT IN STATION TWO AND
4	DEFER MARGINS IS A RATE CASE "END RUN"

Q. Do Mr. Kollen's recommendations that Big Rivers be required to write off its unrecovered investment in Station Two and defer margins resulting from the Termination essentially attempt to transform this proceeding into a rate review?

Yes. Mr. Kollen complains that "if the Company's proposal is adopted, then in between rate cases none of the savings will be provided to the members" because rates will not change to reflect those savings. This view oversimplifies the Company's proposal in its Application. The Termination will result in fuel and environmental cost savings that will translate into immediate reductions in the Fuel Adjustment Clause ("FAC") and Environmental Surcharge (ES") line items on Member bills. Furthermore, even absent the Settlement Agreement, because Big Rivers is an electric cooperative, any savings will ultimately benefit Big Rivers' Members, either in the form of equity or rate reductions, all else being equal. This is consistent with how traditional utility regulation operates. To suggest otherwise in this instance is to suggest a rate case "end run" and try to convert this request for particular accounting treatment between rate cases into a proxy rate case.

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⁷ See Kollen Direct at p. 10:4-5.

KIUC aims to assess the total current outstanding deferral balance 1 \mathbf{Q} . 2 that Big Rivers' customers may ultimately be asked to pay in a future rate proceeding, and asserts that adding another \$89.6 3 4 million to this "already considerable" balance would be an "imprudent approach that would result in unjust and unreasonable 5 rates for customers."8 KIUC also claims to assess the level of 6 potential rate impact that establishing an \$89.6 million regulatory 7 8 asset may ultimately have on the Company's customer classes and 9 "whether requiring customers to ultimately pay down that asset would result in rate shock."9 Is this appropriate? 10 11 No. The pertinent issue before the Commission is whether or not to A. 12 authorize Big Rivers to establish a regulatory asset based on the Commission's historic criteria. Possible impacts that the regulatory asset 13 could have on Big Rivers' future rates are irrelevant to that decision, but 14 15 are reasonable factors that the Commission can consider if and when Big 16 Rivers proposes to recover the regulatory asset in its rates. 17 Q. KIUC's basic position is that approving the establishment of the 18 \$89.6 million regulatory asset would be "an imprudent approach 19 that would result in unjust and unreasonable rates for customers."10 Do you agree? 20

⁸ See KIUC Brief at p. 3, paragraph 2.

⁹ See id. at p. 4, paragraph 2.

¹⁰ See id. at p. 3, paragraph 2.

- No: I strongly disagree. The establishment of a regulatory asset does not 1 A. 2 impact customer rates, and therefore cannot result in unjust and 3 unreasonable rates for customers. The fundamental flaw in KIUC's 4 argument is the premise that the establishment of a regulatory asset 5 automatically translates into rate recovery of that asset from Big Rivers' 6 Members. In reality, these are two separate decision points, each with 7 different criteria, facts, and considerations. KIUC is inappropriately 8 attempting to consolidate two Commission decisions into one. Big Rivers is 9 adhering to the historical practice by seeking authority to establish the 10 regulatory asset now, and is not proposing specific ratemaking treatment at 11 this juncture.
 - Q. Mr. Kollen's position also requires the Commission to base its decision on whether to allow Big Rivers to establish a regulatory asset on the potential rate impact of two other existing regulatory assets that were established in Big Rivers' last two rate cases. Is this appropriate?

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A. No. This position takes the improper ratemaking consideration of the Station Two deferral a step further by trying to take the potential ratemaking effects of *other* approved deferrals into consideration. This is inappropriate for several reasons.

First, the consideration of the requested regulatory asset in this case stands on its own merits. The requested deferral in this case is independent

of any other regulatory asset, current or proposed, and it should be decided by applying the same criteria that are applied to other proposed deferrals in other Commission cases. Whether or not other deferrals have been approved is not one of the Commission's criteria for establishment of a regulatory asset.

Second, this is not a rate case, and the ratemaking treatment of each approved regulatory asset or liability should be decided independently in a future filing.

Third, the KIUC actually recommended the establishment of the other two regulatory assets that the KIUC is concerned about now. 11 It appears inconsistent for Mr. Kollen to now cite the regulatory assets that KIUC proposed in the last two rate cases as cause for denying the requested regulatory asset in this case.

For these reasons, it is inappropriate to base a determination on whether Big Rivers should be authorized to establish the Station Two Regulatory Asset on the potential rate impacts of other approved regulatory assets that are not at issue in the instant case.

¹¹ See In the Matter of: The Application of Big Rivers Electric Corporation for an Adjustment of Rates, P.S.C. Case No. 2012-00535, Main Brief of Kentucky Industrial Utility Customers, Inc., filed July 26, 2013, pages 45-46, and In the Matter Of: The Application of Big Rivers Electric Corporation for an Adjustment of Rates, P.S.C. Case No. 2013-00199, Brief of Kentucky Industrial Utility Customers, Inc., Ben Taylor, and Sierra Club, filed February 14, 2014, pages 55-60.

1	D. MR. KOLLEN'S COMPARISON OF BIG RIVERS'
2	EQUITY RATIO TO EAST KENTUCKY POWER
3	COOPERATIVE IS NOT MEANINGFUL

Mr. Kollen compares Big Rivers to East Kentucky Power 4 Q. 5 Cooperative ("EKPC"), particularly with respect to its equity ratio. 6 Is this reasonable? 7 A. No. It is not meaningful to compare Big Rivers to EKPC, particularly with 8 respect to equity ratios, for several reasons. First, much of Big Rivers' 9 equity is a result of the Unwind Transaction, centered around providing 10 service to two aluminum smelters, as described in the supplemental direct 11 testimony of Mr. Robert Berry – a situation unique to Big Rivers. Second, 12 EKPC is unique in that its equity position has been the subject of close 13 consideration since the Commission initiated a focused management audit 14 of EKPC in December, 2008. The equity issues EKPC has been managing 15 over the last decade do not apply to Big Rivers. Third, comparing Big 16 Rivers to a single G&T is not useful due to the sample size. The comparison 17 of Big Rivers' equity relative to a larger set of G&Ts (along with the 18 explanation of why Mr. Kollen's claim that Big Rivers' equity ratio is

"excessive" is unsupported and flawed) is also addressed in the

20 supplemental direct testimony of Mr. Berry.

1	E. MR. KOLLEN'S RECOMMENDATION TO DEFER
2	MARGINS IS UNREASONABLE

3	Q.	Mr. Kollen recommends that the Commission direct Big Rivers to
4		defer as a regulatory liability KIUC'S projected 2019 and 2020
5		increase in margins resulting from the Termination. Is this
6		reasonable?
7	A.	No. Mr. Kollen provides no evidence to support his recommendation, and it
8		is inappropriate for several reasons. First, the margins Mr. Kollen proposes
9		to defer are neither extraordinary nor non-recurring; they are on-going
10		amounts. This is not consistent with the criteria described previously which
11		apply to "extraordinary" or "non-recurring" amounts.
12		Second, from a practical standpoint, creating a deferral for margins
13		is different than doing so for expenses, because margins are not categorized
14		and recorded in numerous, particular accounts pursuant to the RUS
15		Uniform System of Accounts. It is more reasonable to defer expenses that
16		can be tied to amounts in a specific RUS accounts than it is to defer
17		margins that are not tied to any specific RUS account.
18		Third, basing a deferral on a preliminary and outdated forecast is
19		unreasonable. As Mr. Berry explains in his supplemental direct testimony,
20		Big Rivers' current estimate of the savings during the 15 months between
21		the current contract exit date of May 31, 2019, and the January 1, 2021,

date it expects its new rates to go into effect, is substantially less than its

2016 preliminary estimate for the 2019-2020 savings that was based on a contract exit date of January 1, 2019.

Fourth, and most importantly, the entire projection that Mr. Kollen relies upon for his recommendation to defer margins was prepared on a different basis than the forecast that was used to develop rates in Big Rivers' last rate case in Case No. 2013-00199. Thus, the margins from the projection should not be used in any accounting deferral because they violate the matching principle.

9 Q. What is the matching principle?

A.

- 10 A. The matching principle requires that for ratemaking purposes, all revenues,
 11 expenses, rate base, and capital items reflect the same time period. 12
- Q. How is the Mr. Kollen's recommendation to defer 2019 and 2020
 projected margins inconsistent with the matching principle?
 - Mr. Kollen seeks to establish a regulatory liability that will effectively provide Big Rivers' Members with rate relief to offset the costs of Station Two that are presently included in Member rates. However, the amounts that he proposes to defer do not match up with the Station Two costs that are included in current rates. It is not appropriate to set aside margins that are based on a preliminary 2016 forecast of 2019 and 2020 financial results when actual Member rates were established in a 2013 docket based on a fully forecasted test period corresponding to the 12 months beginning

¹² In The Matter Of: Application of East Kentucky Power Cooperative, Inc. To Adjust Electric Rates, P.S.C. Case No. 94-336, Order on Rehearing dated February 28, 1996.

1		February 1, 2014, and ending January 31, 2015. The margins that Mr.
2		Kollen recommends be set aside do not match the costs for Station Two that
3		were incorporated into existing rates; thus they violate the matching
4		principle.
5	Q.	How does the recommendation in the Settlement Agreement that
6		Big Rivers be authorized to provide the TIER Credit differ for
7		ratemaking purposes from Mr. Kollen's recommendation to defer
8		2019 and 2020 projected margins?
9	A.	The Settlement Agreement addresses the future ratemaking options in a
10		comprehensive manner and with the consent of all of the parties to this
11		case; Mr. Kollen's recommendation does neither. Here, the agreement of the
12		parties on how to defer the ratemaking treatment obviates the need for the
13		Commission to address potential claims regarding the legality of single-
14		issue rate-making and the matching principle.13
15 16		F. MR. KOLLEN'S RECOMMENDATIONS ARE INTELLECTUALLY INCONSISTENT
17	Q.	Mr. Kollen makes two recommendations regarding the
18		establishment of a regulatory asset and a regulatory liability. Are
19		they consistent with one another?

¹³ The Commission adopted a similar approach to address the MISO exit fees for LG&E and KU; see In the Matter of: Investigation Into the Membership of Louisville Gas and Electric Company and Kentucky Utilities Company in the Midwest Independent Transmission System Operator, Inc., Order, P.S.C. Case No. 2003-00266 (May 31, 2006), at page 25.

- A. No. Mr. Kollen recommends first that Big Rivers be required to write off the
 approximate \$89.6 million net book value of Station Two instead of
 establishing a regulatory asset for that amount, and second that Big Rivers
 establish a regulatory liability for the projected increase in margins for
 2019 and 2020 resulting from the Termination. But the reasoning behind
 the two recommendations is not consistent.
- 7 Q. How is the reasoning behind the two recommendations inconsistent?
- 9 A. For his second recommendation, Mr. Kollen explains that the 10 "establishment of a regulatory liability will give the Commission the 11 flexibility to determine the appropriate amortization of the regulatory liability in the next rate case." 14 Although the actual amounts that Mr. 12 13 Kollen recommends for margin deferral are not appropriate to defer for the 14 reasons already mentioned, the principle that he explains here for 15 regulatory liabilities – i.e. that setting amounts aside gives the Commission 16 the flexibility to address the ratemaking impacts of those amounts in a 17 future rate case on a comprehensive basis – is correct. That principle also 18 applies to regulatory assets, including the regulatory asset Big Rivers 19 proposed for the Station Two costs in its Application in this case. In other 20 words, Mr. Kollen's justification for establishing a regulatory liability is the

¹⁴ See Kollen Direct at p. 4:14-16.

1		very same reasoning that supports Big Rivers' request for establishing a
2		regulatory asset.
3	Q.	Did Mr. Kollen apply this same reasoning for his first
4		recommendation to deny the Big Rivers deferral and instead
5		require Big Rivers to write off the Station Two net book value?
6	A.	No. Mr. Kollen did not consider any "flexibility" or "appropriate
7		amortization" factors in his review of Big Rivers' proposed regulatory asset
8		and his corresponding recommendation to write off the Station Two
9		amounts. He ignores those factors and instead attempts to develop
10		justifications for a write off that for practical purposes convert this
11		accounting deferral case into a rate case. Simply put, Mr. Kollen would
12		decide the ratemaking treatment now for the Station Two net book value,
13		but defer the margins associated with the Station Two Termination for
14		consideration in a future rate case. This amounts to having it both ways,
15		but that is inconsistent and unreasonable.
16 17 18		G. THE COMMISSION SHOULD APPROVE THE TARIFF CHANGES ATTACHED AS EXHIBIT 1 TO THE SETTLEMENT AGREEMENT
19	Q.	Is Big Rivers proposing revisions to its MRSM tariff to reflect the
20		terms of the Settlement Agreement?
21	A.	Yes. The changes to the MRSM tariff in redlined format are attached as
22		Exhibit 1 to the Settlement Agreement. Pursuant to the Settlement
23		Agreement, if the Commission and RUS approve the Settlement

Agreement, Big Rivers will make a tariff filing asking the Commission to accept and approve the revised MRSM tariff.

Q. Please explain the revisions to the MRSM tariff.

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4 The MRSM tariff describes the operation of the Economic Reserve ("ER"). A. 5 Big Rivers originally established this reserve of \$157 million pursuant to the Commission's Order in the Unwind dated March 6, 2009, in Case No. 6 2007-00455. The MRSM was originally intended to draw on the ER to 7 mitigate the monthly impacts of the FAC and the ES charges on each non-8 9 Smelter Member's bill, net of the credits received under the Unwind Surcredit and Rebate Adjustment. It was later amended to allow ER funds 10 to be used to offset the base rate increase awarded by the Commission in 11 Case No. 2013-00199. Since the ER was a vehicle for providing certain 12 13 funded amounts back to Big Rivers' Members, it was expanded over time to include other sources of Member credits as well. Today, the MRSM defines 14 15 the funding of the ER from several sources, including the original fund (although that fund has been depleted), the transmission revenues Big 16 17 Rivers receives from Century-Hawesville ("Transmission Revenues") 18 (pursuant to the Commission's Order dated April 25, 2014, in Case No. 19 2013-00199), and the Nebraska Margins (pursuant to the Commission's 20 Order dated July 21, 2015, in Case No. 2014-00134). These sources are set 21 up in five stand-alone investment accounts within the ER. 15

¹⁵ The first account is for the original fund, the second is for transmission revenues allocated to the Rural class (customers served under Standard Rate Schedule RDS), the third is for

With this filing, Big Rivers is proposing to revise the MRSM tariff to
add the Station Two Depreciation Credits to the list of funding sources for
the ER. Big Rivers is also proposing to remove language from the MRSM
tariff that is no longer applicable.

5 Q. What language from the MRSM tariff is Big Rivers proposing to
6 remove?

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7 Α. The current MRSM tariff specifies that the ER is funded from the original 8 \$157 million reserve and offsets the FAC, ES, and previous base rate 9 increase, net of the Unwind Surcredit and the Rebate Adjustment. 10 However, the original \$157 million reserve is fully depleted, as are the 11 Unwind Surcredit and the Rebate Adjustment -- so these amounts no longer 12 apply. The only ER funding sources that currently remain are the 13 Transmission Revenues and the Nebraska Margins, which are essentially 14 depleted and replenished each month.

Also, the MRSM was set up such that the original credit amounts were mitigated over time using an Expense Mitigation Factor ("EMF") – but that is no longer applicable since the original funds are depleted and the ER no longer offsets the FAC, ES, and base rate increase. The funds are basically replenished and depleted monthly, in full, regardless of the FAC, ES, or base rate amounts. For these reasons, the language in the MRSM

transmission revenues allocated to the Large Industrial class (customers served under Standard Rate Schedule LIC), the fourth is for Nebraska Margins allocated to the Rural class, and the fifth is for Nebraska Margins allocated to the Large Industrial class.

- tariff pertaining to the offsetting of FAC and ES, the Unwind Surcredit, the
 Rebate Adjustment, and the EMF is no longer applicable and may be
 removed. Removal of this language also ensures that the full amount of the
 monthly credits for Transmission Revenues, Nebraska Margins, and the
 new Station Two Depreciation Credit will be passed through to the
- Q. How does the MRSM incorporate the Station Two Depreciation
 8 Credit amounts?
- 9 Α. In the revisions to the MRSM tariff, the ER is funded first by the 10 Transmission revenues, then by the Nebraska Margins, then by the Station 11 Two Depreciation Credits. The funds from each of these three sources is 12 allocated to Big Rivers' two rate classes (Rural and Large Industrial) using a different ratio. The tariff language governing the allocation of Station 13 14 Two Depreciation Credits between the Rural and Large Industrial classes 15 mirrors the language in the Settlement Agreement. Mr. Berry describes 16 the reasons for the allocation of the Station Two Depreciation Credit in his 17 supplemental direct testimony.

IV. CONCLUSION

Members each month.

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- 19 Q. What is your conclusion with regard to Mr. Kollen's
- 20 recommendations discussed herein?
- 21 A. Mr. Kollen's recommendations are seriously flawed. Specifically:

1) The recommendation to require Big Rivers to write off the Station

Two net book value instead of establishing a regulatory asset ignores

Commission precedent, constitutes single-issue ratemaking, creates
a rate case "end run," is not supported, relies upon a flawed

comparison to EKPC, and is inconsistent with his other

recommendation in this case.

2) The recommendation that Big Rivers should establish a regulatory liability for KIUC's projected 2019 and 2020 margins resulting from the Station Two Termination violates the matching principle, and relies upon an outdated forecast of future financials that is inconsistent with the expenses and revenues assumed in setting Big Rivers' current rates.

Neither of these recommendations is appropriate, reasonable or necessary.

Instead, the Commission should approve the unanimous Settlement

Agreement, which properly recognizes that Big Rivers' request to establish
a regulatory asset related to the Station Two Termination satisfies the
historically-applicable Commission criteria because the expenses resulting
from the termination of the Terminated Contracts that Big Rivers is
seeking to defer are extraordinary and nonrecurring, and the termination of
the Terminated Contracts will result in substantial savings that fully offset
the costs. The Commission can then consider the possible ratemaking
options for the deferral in a future rate case, consistent with conventional

1 Commission practice. The Settlement Agreement also allows the Members and their retail customers to benefit from the savings resulting from the 2 Termination through the Station Two Depreciation Credit and TIER Credit 3 through a unanimous agreement, which obviates the need for the 4 5 Commission to address potential claims regarding the legality of single-6 issue rate-making and the matching principle. 7 Q. Do you have any other recommendations? 8 A. Yes. I recommend that if the Settlement Agreement is approved by the 9 Commission and the RUS, the Commission accept the changes to Big 10 Rivers' MRSM tariff set forth in Exhibit 1 to the Settlement Agreement. 11 Do you have any recommendations if the Commission does not Q. 12 approve the Settlement Agreement? 13 A. Yes. I recommend that if the Commission does not approve the Settlement 14 Agreement, that the Commission grant Big Rivers the authority to 15 establish the Station Two Regulatory Asset as set forth in Big Rivers' 16 application, allow Big Rivers to offset that asset with the revenues it 17 collects associated with Station Two depreciation expense, and reject Mr. 18 Kollen's recommendations for the reasons stated in my testimony and the 19 supplemental direct testimony of Mr. Berry. 20 Does this conclude your testimony? Q.

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Α.

Yes.

BIG RIVERS ELECTRIC CORPORATION

NOTICE OF TERMINATION OF CONTRACTS AND APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A DECLARATORY ORDER AND FOR AUTHORITY TO ESTABLISH A REGULATORY ASSET CASE NO. 2018-00146

VERIFICATION

I, John Wolfram, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that Rebuttal Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

John Wolfram

COMMONWEALTH OF KENTUCKY)
COUNTY OF JEFFERSON)

SUBSCRIBED AND SWORN TO before me by John Wolfram on this the day of September, 2018.

Notary Public, Kentucky State at Large

My Commission Expires

June 9

GEOFFREY LEASI Notary Public

State at Large Kentucky

My Commission Expires June 9, 2019

JOHN WOLFRAM

Summary of Qualifications

Provides consulting services to investor-owned utilities, rural electric cooperatives, and municipal utilities regarding utility rate and regulatory filings, cost of service studies, wholesale and retail rate designs, tariffs and special contracts, formula rates, and other analyses.

Employment

CATALYST CONSULTING LLC

June 2012 - Present

Principal

Provide consulting services in the areas of tariff development, regulatory analysis, economic development, revenue requirements, cost of service, rate design, and other utility regulatory areas.

Provide utility clients assistance regarding regulatory policy and strategy; project management support for utilities involved in complex regulatory proceedings; process audits; state and federal regulatory filing development; cost of service development and support; the development of special rates, including economic development rates, to achieve strategic objectives; the development of rate alternatives for use with customers; and energy efficiency program development.

Prepare retail and wholesale rate schedules and/or filings submitted to the Federal Energy Regulatory Commission ("FERC"), state regulators, and/or Boards of Directors for electric and gas utilities.

THE PRIME GROUP, LLC

March 2010 - May 2012

Senior Consultant

E.ON U.S., LLC, Louisville, KY

1997 - 2010

(Louisville Gas & Electric Company and Kentucky Utilities Company)

Director, Customer Service & Marketing (2006 - 2010)

Manager, Regulatory Affairs (2001 - 2006)

Lead Planning Engineer, Generation Planning (1998 - 2001)

Power Trader, LG&E Energy Marketing (1997 - 1998)

PJM INTERCONNECTION, LLC, Norristown, PA

1990 - 1993: 1994 - 1997

Project Lead - PJM OASIS Project

Chair, Data Management Working Group

CINCINNATI GAS & ELECTRIC COMPANY, Cincinnati, OH

1993 - 1994

Electrical Engineer - Energy Management System

Education

Bachelor of Science Degree in Electrical Engineering, University of Notre Dame, 1990 Master of Science Degree in Electrical Engineering, Drexel University, 1997 Leadership Louisville, 2006

Associations

Senior Member, Institute of Electrical and Electronics Engineers (IEEE) IEEE Power Engineering Society

Expert Witness Testimony & Proceedings

FERC:

Submitted direct testimony for Midwest Power Transmission Arkansas, LLC in FERC Docket No. ER15-2236 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Kanstar Transmission, LLC in FERC Docket No. ER15-2237 regarding a proposed Transmission Formula Rate.

Supported Westar Energy and Kansas Gas & Electric Company in FERC Docket Nos. FA15-9-000 and FA15-15-000 regarding an Audit of Compliance with Rates, Terms and Conditions of Westar's Open Access Transmission Tariff and Formula Rates, Accounting Requirements of the Uniform System of Accounts, and Reporting Requirements of the FERC Form No. 1.

Submitted direct testimony for Westar Energy in FERC Docket Nos. ER14-804 and ER14-805 regarding proposed revisions to a Generation Formula Rate.

Supported Intermountain Rural Electric Association and Tri-State G&T in FERC Docket No. ER12-1589 regarding revisions to Public Service of Colorado's Transmission Formula Rate.

Supported Intermountain Rural Electric Association in FERC Docket No. ER11-2853 regarding revisions to Public Service of Colorado's Production Formula Rate.

Supported Kansas Gas & Electric Company in FERC Docket No. FA14-3-000 regarding an Audit of Compliance with Nuclear Plant Decommissioning Trust Fund Regulations and Accounting Practices.

Supported LG&E Energy LLC in FERC Docket No. PA05-9-000 regarding an Audit of Code of Conduct, Standards of Conduct, Market-Based Rate Tariff, and MISO's Open Access Transmission Tariff at LG&E Energy LLC.

Submitted remarks and served on expert panel in FERC Docket No. RM01-10-000 on May 21, 2002 in Standards of Conduct for Transmission Providers staff conference, regarding proposed rulemaking on the functional separation of wholesale transmission and bundled sales functions for electric and gas utilities.

Kansas:

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-WSEE-328-RTS regarding overall rate design, prior rate case settlement commitments, lighting tariffs, an Electric Transit rate schedule, Electric Vehicle charging tariffs, and tariff general terms and conditions.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 18-KG&E-303-CON regarding the Evaluation, Measurement and Verification ("EM&V") of an energy efficiency demand response program offered pursuant to a large industrial customer special contract.

Submitted report for Westar Energy, Inc. in Docket No. 18-WCNE-107-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

Submitted direct and rebuttal testimony for Westar Energy, Inc. in Docket No. 15-WSEE-115-RTS regarding rate designs for large customer classes, establishment of a balancing account related to new rate options, establishment of a tracking mechanism for costs related to compliance with mandated cyber and physical security standards, other rate design issues, and revenue allocation.

Kentucky:

Submitted data request responses on behalf of Big Rivers Electric Corporation in Case No. 2018-00146 regarding ratemaking issues associated with the anticipated termination of contracts regarding the operation of an electric generating plant owned by the City of Henderson. Kentucky.

Submitted direct testimony on behalf of fifteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case No. 2018-00050 regarding the economic evaluation of and potential cost shift resulting from a purchased power agreement proposed by South Kentucky R.E.C.C.

Submitted direct testimony on behalf of Big Sandy R.E.C.C. in Case No. 2017-00374 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct testimony on behalf of Progress Metal Reclamation Company in Kentucky Power Company Case No. 2017-00179 regarding the potential implementation of a Load Retention Rate or revisions to an Economic Development Rate.

Submitted direct testimony on behalf of Kenergy Corp. and Big Rivers Electric Corporation in Case No. 2016-00117 regarding a marginal cost of service study in support of an economic development rate for a special contracts customer.

Submitted rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2014-00134 regarding ratemaking treatment of revenues associated with proposed wholesale market-based-rate purchased power agreements with entities in Nebraska.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2013-00199 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00535 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony on behalf of Big Rivers Electric Corporation in Case No. 2012-00063 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct, rebuttal, and rehearing direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2011-00036 regarding revenue requirements and pro forma adjustments in a base rate case.

Submitted direct testimony for Louisville Gas & Electric Company in Case No. 2009-00549 and for Kentucky Utilities Company in Case No. 2009-00548 for adjustment of electric and gas base rates, in support of a new service offering for Low Emission Vehicles, revised special charges, and company offerings aimed at assisting customers.

Submitted discovery responses for Kentucky Utilities and/or Louisville Gas & Electric Company in various customer inquiry matters, including Case Nos. 2009-00421, 2009-00312, and 2009-00364.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2008-00148 regarding the 2008 Joint Integrated Resource Plan.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Administrative Case No. 2007-00477 regarding an investigation of the energy and regulatory issues in Kentucky's 2007 Energy Act.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2007-00319 for the review, modification, and continuation of Energy Efficiency Programs and DSM Cost Recovery Mechanisms.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2007-00067 for approval of a proposed Green Energy program and associated tariff riders

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2005-00467 and 2005-00472 regarding a Certificate of Public Convenience and Necessity for the construction of transmission facilities.

Submitted discovery responses for Kentucky Utilities in Case No. 2005-00405 regarding the transfer of a utility hydroelectric power plant to a private developer. Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2005-00162 for the 2005 Joint Integrated Resource Plan.

Presented company position for Louisville Gas & Electric Company and Kentucky Utilities Company at public meetings held in Case Nos. 2005-00142 and 2005-00154 regarding routes for proposed transmission lines.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in an Investigation into their Membership in the Midwest Independent Transmission System Operator, Inc. ("MISO") in Case No. 2003-00266.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in a Focused Management Audit of Fuel Procurement practices by Liberty Consulting in 2004.

Supported Louisville Gas & Electric Company and Kentucky Utilities Company in a Focused Management Audit of its Earning Sharing Mechanism by Barrington-Wellesley Group in 2002-2003.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2002-00381 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

Submitted direct testimony for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2002-00029 regarding a Certificate of Public Convenience and Necessity for the acquisition of two combustion turbines.

Virginia:

Submitted direct testimony for Kentucky Utilities Company d/b/a Old Dominion Power in Case No. PUE-2002-00570 regarding a Certificate of Public Convenience and Necessity for the acquisition of four combustion turbines.

Presentations

"Residential Three-Part Rates: The Great Rate Debate: Residential Demand Rates" presented to CFC Forum, June 2018.

"New Developments in 2018 Rate Filings" presented to Kentucky Electric Cooperatives Accountants' Association Summer Meeting, June 2018.

"Benefits of Cost of Service Studies" presented to Tri-State Electric Cooperatives Accountants' Association Spring Meeting, April 2017.

"Proper Design of Utility Rate Incentives" presented to APPA/Area Development's Public Power Consultants Forum, March 2017.

"Utility Hot Topics and Economic Development" presented to APPA/Area Development's Public Power Consultants Forum, March 2017.

"Emerging Rate Designs" presented to CFC Independent Borrowers Executive Summit, November 2016.

"Optimizing Economic Development" presented to Grand River Dam Authority Municipal Customer Annual Meeting, September 2016.

"Tomorrow's Electric Rate Designs, Today" presented to CFC Forum, June 2016.

"Reviewing Rate Class Composition to Support Sound Rate Design" presented to EEI Rate and Regulatory Analysts Group Meeting, May 2016.

"Taking Public Power Economic Development to the Next Level" presented to APPA/Area Development's Public Power Consultants Forum, March 2016.

"Ratemaking for Environmental Compliance Plans" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, September 2015.

"Top Utility Strategies for Successful Attraction, Retention & Expansion" presented to APPA/Area Development's Public Power Consultants Forum, March 2015.

"Economic Development and Load Retention Rates" presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, September 2013.

"The Case for Economic Development Rates: Theory and Regulatory Considerations" presented to 2011 Electric Cooperative Rate Conference, October 2011.

"Rates for Distributed Generation" presented to 2010 Electric Cooperative Rate Conference, October 2010.

"What Utilities Can Do to Advance Energy Efficiency in Kentucky" panel session of Second Annual Kentucky Energy Efficiency Conference, October 2007.

Articles

"Economic Development Rates: Public Service or Piracy?" *IAEE Energy Forum*, International Association for Energy Economics, 2016 Q1 (January 2016), 17-20.