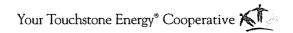
ORIGINAL





COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

APPLICATION OF BIG RIVERS)	
ELECTRIC CORPORATION FOR A)	Case No. 2012-00535
GENERAL ADJUSTMENT IN RATES)	

Response to the Office of the Attorney General's Initial Request for Information dated February 14, 2013

Volume 2 of 4

FILED: February 28, 2013

ORIGINAL

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Mr. Jeff DeRouen

Executive Director

February 28, 2013

Public Service Commission of Kentucky

P.O. Box 615

211 Sower Boulevard

Frankfort, KY 40602-0615

In The Matter Of:

Application of Big Rivers Electric Corporation For A

RECEIVED

FEB 28 2013

PUBLIC SERVICE

COMMISSION

General Adjustment In Rates - Case No. 2012-00535

Dear Mr. DeRouen:

Enclosed for filing are an original and ten (10) copies of (i) the response of Big Rivers Electric Corporation to the Public Service Commission Staff's Second Request for Information and the intervenor's first requests for information; (ii) a petition for confidential treatment for certain of the responses; and (iii) a Motion for Deviation. Please note that since the Commission has not ruled on the petition to intervene filed by Ben Taylor and the Sierra Club, Big Rivers is not responding to their information requests or sending them copies of the responses to the information requests that Big Rivers is responding to.

Copies of the responses, the petition, and the motion have been served on those parties listed on the attached service list by Federal Express or hand delivery.

Sincerely,

Tyson Kamuf

cc:

Service List

Billie J. Richert

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Mark A. Bailey, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Mark A. Bailey

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Mark A. Bailey on this the <u>27</u> day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Billie J. Richert, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Billie J. Richert

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Billie J. Richert on this the <u>27</u> day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Robert W. Berry, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Robert W. Berry

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Robert W. Berry on this the 27 day of February, 2013.

Notary Public, Ky. State at Large

My Commission Expires_

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Lindsay N. Barron, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Lindsay M. Barron

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Lindsay N. Barron on this the 27 day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, David G. Crockett, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

David G. Crockett

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by David G. Crockett on this the <u>27</u> day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, James V. Haner, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

James V. Haner

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by James V. Haner on this the $\frac{27}{2}$ day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires_____

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, DeAnna M. Speed, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

DeAnna M. Speed

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by DeAnna M. Speed on this the <u>17</u> day of February, 2013.

Joy P. Wright

Notary Public, Ky. State at Large
My Commission Expires

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

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

John Wolfram

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by John Wolfram on this the day of February, 2013.

Notary Public, Ky. State at Large My Commission Expires 8-9-2014

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Ted J. Kelly, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

	5. POXIL	
	Ted J. Kelly	
STATE OF MISSOURI COUNTY OF JACKSON))	

SUBSCRIBED AND SWORN TO before me by Ted J. Kelly on this the 27 day of February, 2013.

MOTARY SEAL ST

PAULA M. ANNAN My Commission Expires January 19, 2015 Jackson County Commission #11992872

Notary Public State of Missouri

My Commission Expires 1-19-15

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

VERIFICATION

I, Travis A. Siewert, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Travis A. Siewert

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Travis A. Siewert on this the day of February, 2013.

Notary Public, Ky/State at Large My Commission Expires 8 -9-2014

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 57)	Mr. Bailey's testimony (p. 11, lines 1 to 19) addresses Big
2	Rivers' co	ncerns with its investment grade credit ratings by rating
3	agencies.	Address the following and provide updates on a continuing
4	basis:	
5		
6		a. Provide all rating agencies investment grade rating of
7		Big Rivers for the period 2010 through 2013 YTD, and
8		provide related supporting documentation for those
9		ratings.
10		b. For Moody's, Fitch, and other rating agencies, identify
11		those factors that could cause a downgrade in Big
12		Rivers' credit ratings and provide supporting
13		documentation. In each case, explain where Big Rivers
14		currently stands in regards to these factors that could
15		cause a downgrade.
16		c. Explain in more specificity how Fitch defined
17		"insufficient, inadequate or untimely regulatory
18		support from the Kentucky Commission," (Bailey
19		testimony, p. 11).
20		
21	Response)	
22		

Case No. 2012-00535 Response to AG 1-57 Witness: Billie J. Richert Page 1 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

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Case No. 2012-00535 Response to AG 1-57 Witness: Billie J. Richert Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1

2 Witness) Billie J. Richert

Case No. 2012-00535 Response to AG 1-57 Witness: Billie J. Richert Page 3 of 3

FitchRatings

Fitch Places Big Rivers Electric Corp, KY's 2010A Pollution Control Rfdg Revs on Negative Watch Ratings Endorsement Policy

24 Aug 2012 9:48 AM (EDT)

Fitch Ratings-New York-24 August 2012: Fitch Ratings has placed the 'BBB-' rating on the \$83.3 million county of Ohio County, KY's pollution control refunding revenue bonds (Big Rivers Electric Corporation Project) series 2010A on Rating Watch Negative.

The rating action reflects the decision by Century Aluminum Co. (Century) to terminate its power contract with Big Rivers Electric Corporation and the uncertain effect that the termination will have on the electric cooperative's financial position and its ability to meet debt service payments.

SECURITY

The bonds are secured by a mortgage lien on substantially all of Big Rivers' owned tangible assets, which include the revenue generated from the sale or transmission of electricity.

WHAT COULD TRIGGER A RATING ACTION

INABILITY TO FIND ACCEPTABLE PURCHASERS: Extended over-reliance on short-term power sales as a replacement for the Century contract to meet debt service would likely result in a downward rating action.

INSUFFICIENT REGULATORY SUPPORT: Inadequate or untimely support by the Kentucky Public Service Commission (KPSC) would be viewed negatively.

IMPLEMENTATION OF REASONABLE MITIGATION PLAN: Implementation of a mitigation plan that maintains financial and operating stability would be supportive of credit quality.

CREDIT PROFILE

Big Rivers provides wholesale electric and transmission service to three electric distribution cooperatives. These distribution members provide service to a total of about 112,500 retail customers located in 22 western Kentucky counties. Kenergy Corporation, the largest of the three systems, is unique in that its electric load is dominated by two aluminum smelters, Rio Tinto Alcan (Alcan) and Century, which together account for more than one-half of Big River's operating revenues.

Century Terminates Contract

Under the power sales contracts between Kenergy and the smelters, which expire in 2023, the smelters are required to take-or-pay for specific quantities of energy, irrespective of their needs. The contracts further provide for termination on one years' notice without penalties subject to certain conditions including the termination and cessation of all aluminum smelting operations at the relevant facilities.

On Aug. 20, 2012, Century issued a notice to terminate its power contract with Big Rivers and stated its intent to close its Hawesville, KY smelter. Century claims that the smelter is not economically viable despite electric rates well below the national average and no apparent reduction in production.

Closure of the smelter has significant potential implications for Big Rivers, which has acknowledged the termination notice is valid. Besides the impact of the loss of some 700 plant employees, the remaining customers of Big Rivers will most likely have to absorb meaningfully higher rates, with the increase reflecting the amount, pricing and contractual provisions of surplus power sold to new customers.

Case No. 2012-00535 Attachment to Response for AG 1-57 Implementation of Mitigation Plan

Big Rivers management had previously developed a mitigation plan for the potential loss of the aluminum smelter loads and is presently looking into alternative arrangements with other power purchasers. However, implementation of future firm contractual arrangements will not likely occur immediately. As a result, it is likely that Big Rivers will begin the process of seeking emergency rate relief from the KPSC to help soften any negative effects from the expected loss of the smelter. According to Big Rivers, Alcan, the other larger smelter, has not expressed any intent to close its facility.

Future Financial Results Unclear

Big Rivers margins are expected to remain adequate to service financial obligations over the next 12 months, even with the expected closure of Century's facility, since Century remains obligated to make all required payments to Kenergy. However, as time passes, it will be necessary to decipher Big Rivers' revised business and financial plan and the effect on bond investors.

For additional information on the rating, see Fitch's report, 'Big Rivers Electric Corporation', dated Aug. 31, 2011, available at www.fitchratings.com

Contact:

Primary Analyst Alan Spen Senior Director +1-212-908-0594 Fitch, Inc. One State Street Plaza New York, NY 10004

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Committee Chairperson Dennis Pidherny Senior Director +1-212-908-0738

Media Relations: Elizabeth Fogerty, New York, Tel: +1 (212) 908 0526, Email: elizabeth.fogerty@fitchratings.com.

Additional information is available at 'www.fitchratings.com'. The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

In addition to the sources of information identified in Fitch's Revenue-Supported Rating Criteria and U.S. Public Power Rating Criteria, this action was informed by information from CreditScope

Applicable Criteria and Related Research:

- --'Revenue-Supported Rating Criteria', June 12, 2012;
- --'U.S. Public Power Rating Criteria', Jan. 11, 2012;
- -- 'Big Rivers Electric Corporation', Aug. 31, 2011.

Applicable Criteria and Related Research:

Revenue-Supported Rating Criteria U.S. Public Power Rating Criteria Big Rivers Electric Corporation

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Page 2 of 3

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Page 3 of 3

FitchRatings

FITCH DOWNGRADES BIG RIVERS ELECTRIC CORP, KY'S 2010A POLLUTION CONTROL RFDG REV BONDS TO 'BB'

Fitch Ratings-New York-06 February 2013: Fitch Ratings has downgraded the rating on Big Rivers Electric Corporation's \$83.3 million County of Ohio, KY's pollution control refunding revenue bonds series 2010A to 'BB' from 'BBB-'.

The Rating Outlook is revised to Negative.

SECURITY

The bonds are secured by a mortgage lien on substantially all of the Big Rivers' owned tangible assets, which include the revenue generated from the sale or transmission of electricity.

SENSITIVITIES/RATING DRIVERS

SPECULATIVE GRADE RISK: The rating downgrade and Outlook revision reflect Fitch's view that the credit quality of Big Rivers has become increasingly speculative, following the recent decisions by Alcan Primary Products Corporation (Alcan) and Century Aluminum Co. (Century) to terminate their respective power supply agreements with Big Rivers.

SALES DOMINATED BY SMELTERS: Alcan and Century both own and operate large aluminum smelting facilities served by Big Rivers, through its largest member Kenergy Corp. Together the two facilities account for approximately 65% and 70% of Big Rivers' total energy sales and revenues, respectively.

INCREASED RELIANCE ON WHOLESALE MARKET: Long-term stability at Big Rivers is likely to become increasingly reliant on less predictable off-system sales and related margins following closure of the smelting facilities. The use of cash reserves will partially mitigate this risk, but prevailing low power prices will stress results.

ABUNDANT LOW COST RESOURCES: Big Rivers benefits from abundant low-cost coal-fired power resources and an average wholesale system rate (\$39.07/MWh in 2011, net of credits) that is regionally competitive and among the lowest in the nation.

SUBJECT TO RATE REGULATION: The electric rates charged by Big Rivers and its members are regulated by the Kentucky Public Service Commission (KPSC), which could limit the cooperative's financial flexibility and may delay the timing or amount of necessary rate increases.

LIQUIDITY SOLID BUT FINANCIAL RESULTS UNCERTAIN: Big Rivers reported cash of \$113.25 million at Sept. 30, 2012, excluding restricted funds available for member rate mitigation. Funds are available to support operations and may be used to meet the cooperative's June 2013 scheduled debt maturity (\$58.8 million). Longer-term financial forecasts are being developed.

WHAT COULD TRIGGER A RATING ACTION

INABILITY TO FIND ACCEPTABLE PURCHASERS: Extended overreliance on short-term power sales as a replacement for the Century and Alcan agreements to meet debt service payments.

INSUFFICIENT REGULATORY SUPPORT: Inadequate or untimely support by the KPSC would be viewed negatively.

IMPLEMENTATION OF REASONABLE MITIGATION PLAN: Implementation of a mitigation plan that maintains reasonable financial and operating stability would be supportive of credit

quality.

CREDIT PROFILE

Big Rivers provides wholesale electric and transmission service to three electric distribution cooperatives. These distribution members provide service to a total of about 112,500 retail customers located in 22 western Kentucky counties. Kenergy Corporation, the largest of the three systems, is unique in that its electric load is dominated by two aluminum smelting facilities, owned and operated by Alcan and Century.

CENTURY AGREEMENT TERMINATED AUGUST 2012

Under the power supply agreements between Kenergy and the smelters, which expire in 2023, the smelters are required to take-or-pay for specific quantities of energy, irrespective of their needs. The contracts further provide for termination on one years' notice without penalties subject to certain conditions including the termination and cessation of all aluminum smelting operations at the relevant facilities.

On Aug. 20, 2012, Century issued a notice to terminate its power agreement with Big Rivers and stated its intent to close its Hawesville, KY smelter. Century claimed that the smelter was not economically viable despite electric rates well below the national average.

BIG RIVERS IMPLEMENTS MITIGATION PLAN

Big Rivers began looking into alternative arrangements with other power purchasers to redeploy its excess generating capacity immediately after the Century notice, consistent with the mitigation plan previously developed by management to address the potential loss of aluminum smelter load. In addition, Big Rivers has also filed for an increase in rates with the Kentucky Public Service Commission to eliminate anticipated short-falls in revenue as a result of the loss of the Century smelting load. The filing, submitted on Jan. 15, 2013, requests an increase in total revenue of \$74.5 million or 21.4%.

ALCAN FOLLOWS WITH TERMINATION NOTICE

Alcan delivered notice to Big Rivers' on Jan. 31, 2013 of its decision to terminate its power supply agreement noting, in particular, the Jan. 15, 2013 rate filing and anticipated increase in electric rates. Similar to the Century notice, Alcan stated that the planned rate increase would make the smelting facility in Robards, KY unprofitable, and that all smelting operations would be ceased at the end of the one-year notice period.

Closure of the smelting facilities has significant potential implications for Big Rivers, which has acknowledged that the termination notices are valid. Besides the impact of the loss of some 1,400 plant workers, the remaining residential and commercial customers of Big Rivers will most likely have to absorb meaningfully higher rates, with the increase reflecting the amount, pricing and contractual provisions of surplus power sold to new customers.

Big Rivers has redoubled its efforts to secure alternative power supply customers in the wake of the Alcan notice, but future firm contractual arrangements are unlikely over the near term. As a result, it is expected that Big Rivers will seek to modify its request for rate relief from the KPSC to reflect the loss of the full smelter load over time.

Fitch notes that Big Rivers and Kenergy have also reportedly entered into negotiations with Century to enter into an agreement to assist Century to access market power in order to keep the smelting operations open beyond Aug. 20, 2013. Alcan has requested a similar accommodation. Fitch expects that any such accommodation would be part of broader plan to address the operating and financial effect on Big Rivers

FUTURE FINANCIAL RESULTS UNCLEAR

Big Rivers margins are expected to remain adequate to service financial obligations through at least August 2013 since both Century and Alcan remain obligated to make all required payments to Kenergy. For the nine months ended Sept. 30, 2012, Big Rivers reported operating revenue, earnings before interest, taxes and depreciation and net margins, that were all largely in line with budget, and the same nine month period through 2011.

Positively, Big Rivers reported cash and cash equivalents of \$113.25 million at Sept. 30, 2012, excluding additional amounts held as special, restricted funds available for member rate mitigation. Big Rivers' unrestricted funds are available to support operations and may be used to meet the cooperative's June 2013 scheduled debt maturity (\$58.8 million).

As time passes, however, it will be necessary for Big Rivers' to develop and implement a revised business and financial plan that captures the related regulatory decisions, contractual negotiations and anticipated revenue volatility, and for Fitch to assess the impact on the cooperative's ability to meet scheduled debt service payments.

For additional information on the rating, see Fitch's report, 'Big Rivers Electric Corporation', dated Aug. 31, 2011.

Contact:

Primary Analyst Alan Spen Senior Director +1-212-908-0594 Fitch Ratings, Inc. One State Street Plaza New York, NY 10004

Secondary Analyst Dennis Pidherny Managing Director +1-212-908-0738

Committee Chairperson Christopher Hessenthaler Senior Director +1-212-908-0773

Media Relations: Elizabeth Fogerty, New York, Tel: +1 (212) 908 0526, Email: elizabeth.fogerty@fitchratings.com.

Additional information is available at 'www.fitchratings.com'. The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

In addition to the sources of information identified in Fitch's Revenue-Supported Rating Criteria and U.S. Public Power Rating Criteria, this action was informed by information from CreditScope.

Applicable Criteria and Related Research:

- --'U.S. Public Power Rating Criteria' (Dec. 18, 2012);
- --'Revenue-Supported Rating Criteria'(June 12, 2012);
- --'Big Rivers Electric Corporation'(Aug. 31, 2012).

Applicable Criteria and Related Research:

U.S. Public Power Rating Criteria

http://www.fitchratings.com/creditdesk/reports/report frame.cfm?rpt_id=696027

Revenue-Supported Rating Criteria

http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=681015

Big Rivers Electric Corporation

Case No. 2012-00535 Attachment to Response for AG 1-57 Witness: Billie J. Richert ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTP://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS. IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEBSITE 'WWW.FITCHRATINGS.COM'. PUBLISHED RATINGS, CRITERIA AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE 'CODE OF CONDUCT' SECTION OF THIS SITE.

Page 4 of 4

FitchRatings

FITCH AFFIRMS BIG RIVERS ELECTRIC CORP, KY'S 2010A POLLUTION CONTROL RFDG REV BONDS AT 'BBB-'

Fitch Ratings-New York-24 July 2012: Fitch Ratings has affirmed the 'BBB-' rating on the \$83.3 million County of Ohio, KY's pollution control refunding revenue bonds (Big Rivers Electric Corporation Project) series 2010A.

The Rating Outlook is Stable.

SECURITY

The bonds are secured by a mortgage lien on substantially all of the Big Rivers Electric Corporation's owned tangible assets, which include the revenue generated from the sale or transmission of electricity.

KEY RATING DRIVERS

HEAVY CUSTOMER CONCENTRATION: Big Rivers resumed electric service, through its largest member Kenergy Corp., to two local aluminum smelters (a combined demand of 850 MW at a 98% load factor) following the termination of its generating asset lease in 2009. The smelters accounted for a sizable 67% of total member revenue in 2011.

ABUNDANT LOW COST RESOURCES: Big Rivers benefits from abundant low-cost power resources and an average wholesale rate for rural and large industrial members (\$39.07/MWh in 2011, net of credits) that is regionally competitive and among the lowest in the nation. Member retail rates are similarly low and competitive.

SUBJECT TO RATE REGULATION: The electric rates charged by Big Rivers and its members are regulated by the Kentucky Public Service Commission (KPSC), which limits the cooperative's financial flexibility and may delay the timing or amount of necessary rate increases.

ACCEPTABLE FINANCIAL METRICS: Fitch-calculated financial metrics for 2011 include debt service coverage (DSC) of 1.53x and total debt/funds available for debt service (FADS) of 11.2x, which are acceptable for the current rating category. Including revenues from member rate stability (MRS) reserves, metrics improve to 1.95x (DSC) and 8.8x (debt/FADS).

ENVIRONMENTAL COMPLIANCE PLAN SUBMITTED: Big Rivers has submitted an environmental compliance plan (ECP) to the KPSC for approval that will ensure the cooperative's ability to operate its units for the long term. The estimated cost of compliance has declined from initial estimates but will be debt funded, increasing leverage.

RELIANCE ON WHOLESALE MARKET: Long-term stability at Big Rivers continues to rely heavily on off-system sales and related margins despite the continued benefit of MRS reserves and a rate adjustment mechanism included in the smelter power sale agreements. Near-term metrics will be stressed by ECP expenditures, low power prices and higher leverage.

WHAT COULD TRIGGER A RATING ACTION

Restrictive Rate Regulation: Future regulatory decisions that prevent the cooperative from adequately recovering costs would likely result in downward pressure on the rating or Outlook.

Deteriorating Operating Conditions: Declining non-smelter member sales, weak surplus energy sales, or constrained smelter operations that reduce financial margins and liquidity could also put downward pressure on the rating or Outlook.

CREDIT PROFILE

Big Rivers is a generation and transmission cooperative based in Henderson, Kentucky. Big Rivers supplies wholesale electric and transmission from its total capacity of 1,819 MW to three distribution cooperatives - Meade County Rural Electric Cooperative Corporation, Jackson Purchase Energy Corporation and Kenergy Corp. Combined, these members provide service to approximately 112,500 retail customers located in 22 western Kentucky counties.

Emergence from Bankruptcy

In September 1996, Big Rivers filed for voluntary Chapter 11 relief under the U.S. Bankruptcy code, generally due to an inability to sell power produced from its excess capacity at prices sufficient to cover its above-market costs. After emerging from bankruptcy in 1998, and in accordance with its plan of reorganization, Big Rivers entered into a 25-year lease of all its generating assets with Western Kentucky Energy Corp. (WKEC). The transaction essentially transferred the operational responsibilities of the assets and related risks in exchange for annual lease payments, and a fixed price purchase power contract with LG&E Energy Marketing, Inc. (LEM).

Unwinding the Lease Transaction

In 2009, the lease with WKEC was effectively unwound, resulting in Big Rivers receiving cash and consideration totaling \$865 million and resuming control of its generation fleet. Big Rivers also resumed electric service to two local aluminum smelters that have historically dominated the service area's electric demand and were supplied by LEM following the reorganization. Going forward, the smelters will again represent a significant portion of the cooperative's electric demand.

The consideration received in connection with the unwind allowed Big Rivers to pay down approximately \$140 million of debt, establish \$253 million of rate stabilization reserves and improve system equity from (19%) to approximately 30% at the time of closing.

Financial Performance Acceptable for Rating Category

Fiscal 2011 financial performance was relatively solid and generally on budget. Electric operating margins (\$50.9 million) for the year were slightly lower than forecasted. Weaker wholesale prices for power were nearly offset by increased, but more efficient, generation. Net margins for the year were almost on budget (\$5.6 million). Actual 2011 figures reported by Big Rivers for conventional TIER (1.12x), DSC (1.47x) and equity/capitalization (33%) were also solidly in line with forecasted performance.

Fitch-calculated ratios for DSC (1.53x) and total debt/FADS (11.2x) were acceptable for the current rating category and do not reflect the inclusion of withdrawals from reserves. Including those revenues, the metrics improve to 1.95x and 8.8x, respectively. Metrics for cash on hand (35 days, excluding reserves) and total liquidity on hand (108 days) remained somewhat low for the cooperative's operating profile.

For additional information please see Fitch's full rating report for Big Rivers dated Aug. 31, 2011.

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Additional information is available at 'www.fitchratings.com'. The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

In addition to the sources of information identified in Fitch's Revenue-Supported Rating Criteria and U.S. Public Power Rating Criteria, this action was informed by information from CreditScope.

Applicable Criteria and Related Research:

- --'Revenue-Supported Rating Criteria' (June 12, 2012);
- --'U.S. Public Power Rating Criteria' (Jan. 11, 2012).

Applicable Criteria and Related Research:
Revenue-Supported Rating Criteria
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=681015
U.S. Public Power Rating Criteria
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=665815

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Public Power / U.S.

Big Rivers Electric Corporation

Full Rating Report

Ratings

Outstanding Debt \$83,300,000 County of Ohio, KY Pollution Control Revenue Bonds Series 2010A BBB-

Rating Outlook

Key Utility Statistics Fiscal Year Ended 12/31/10

	vviiolesale
System type	Electric
NERC Region	MISO
Number of Customers	3
Annual Revenues (\$ Mil.)	530,06
Top User (% of Revenues)	53
Primary Fuel Source	Coal
Peak Demand (MW)	1,391
Energy Growth (%)	53.6
Debt Service Coverage (x)	1.32
Days Operating Cash	216.72
Equity/Capitalization (%)	31.85

Related Research

U.S. Public Power Peer Study — June 2011, June 20, 2011

Key Rating Drivers

Risk Profile Reshaped: The recent termination of its generating asset lease transaction has reshaped the risks surrounding Big Rivers Electric Corporation (Big Rivers), effectively reducing leverage and financial risk in exchange for increased reliance on a concentrated customer base and the wholesale marketplace.

Abundant Low-Cost Resources: Big Rivers benefits from abundant low-cost power resources and an average wholesale system rate of \$36.35 per MWh in 2010, net of credits, that is regionally competitive and among the lowest in the nation. Member retail rates are similarly low and competitive.

Heavy Customer Concentration: Big Rivers has resumed electric service to two local aluminum smelters through its largest member, Kenergy Corp. (Kenergy). The two smelters have a combined demand of 850 MW, and together account for approximately 53% of total energy sales.

Subject to Rate Regulation: The electric rates charged by Big Rivers and its members are regulated by the Kentucky Public Service Commission (KPSC), which limits the cooperative's financial flexibility, and may delay the timing or amount of necessary rate increases.

Acceptable Financial Metrics: Acceptable financial metrics for the rating category include fiscal 2010 debt service coverage (DSC) of 1.32x, and total debt to funds available for debt service (FADS) of 12.2x. Metrics improve to 1.78x (DSC) and 9.0x (debt to FADS) when revenues from member rate stability (MRS) reserves are included.

Forecast Stability: FADS and times interest earned ratios (TIER) are expected to remain relatively stable going forward, aided by the continued use of MRS reserves and a TIER-adjustment mechanism included in the cooperative's power sale agreements with the smelters.

What Could Trigger a Rating Action

Restrictive Rate Regulation: Future regulatory decisions that prevent the cooperative from adequately recovering costs would likely result in downward pressure on the rating or Outlook.

Onerous Environmental Regulation: Environmental regulations proposed by the U.S. Environmental Protection Agency (EPA), if adopted, could result in a much higher cost of compliance for the cooperative, versus other utilities with newer, more diversified resources.

Deteriorating Operating Conditions: Declining nonsmelter member sales, weak surplus energy sales, or constrained smelter operations that reduce financial margins and liquidity could also put downward pressure on the rating or Outlook.

Analysts

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Rating History

Rating	Action	Watch	Date
BBB	Affirmed	Stable	8/12/11
BBB-	Assigned	Stable	7/2/09

Credit Profile

Big Rivers is a generation and transmission cooperative based in Henderson, KY. Big Rivers supplies wholesale electric and transmission from its total capacity of 1,824 MW to three distribution cooperatives: Meade County Rural Electric Cooperative Corporation, Jackson Purchase Energy Corporation, and Kenergy. These members provide service to a total of approximately 112,500 retail customers located in 22 western Kentucky counties.

Each of the three Big Rivers members purchases power pursuant to a wholesale power contract (WPC) that extends through Dec. 31, 2043, well beyond the final maturity date of the cooperative's outstanding debt. Under the terms of the WPCs, the members are required to purchase all of the power required to meet the needs of their systems, except Kenergy's requirements for the smelters (see the Smelter Agreements section on page 4).

Bankruptcy

In September 1996, Big Rivers filed for voluntary Chapter 11 relief under the U.S. Bankruptcy Code, due to an inability to sell power produced from its excess capacity at prices sufficient to cover its above-market costs.

After emerging from bankruptcy in 1998, and in accordance with its plan of reorganization, Big Rivers entered into a 25-year lease of all of its generating assets with Western Kentucky Energy Corp. (WKEC), at the time a wholly owned subsidiary of LG&E Energy Corp. (LG&E). The transaction essentially transferred the operational responsibilities of the assets and related risks in exchange for annual lease payments, and a fixed-price purchase power contract with LG&E Energy Marketing, Inc. (LEM), another subsidiary of LG&E.

The Unwind Transaction

In 2009, the lease with WKEC was effectively unwound, resulting in Big Rivers receiving cash and consideration with a value of \$865 million, and gaining back control of its generation fleet. Big Rivers also resumed electric service to two local aluminum smelters that have historically dominated the service area's electric demand, and were supplied by LEM following the reorganization. The smelters will again represent a significant portion of the cooperative's electric demand

The consideration received in connection with the unwind allowed Big Rivers to pay down approximately \$140 million of debt, establish \$253 million of rate-stabilization reserves, and improve system equity from negative 19% to approximately 30%.

Management, Governance, and Business Strategy

The board of Big Rivers consists of six members, comprised of two from each of the member cooperatives. Two members are elected each year, and serve three-year terms. There are full board meetings once a month, often supplemented with more informal meetings when necessary. There are no specific committees given the small size of the board. According to Big Rivers, management has an excellent working relationship with the board.

Since completing the unwind transaction, Big Rivers has expanded its senior management team to include two new vice presidents for production, and governmental relations and enterprise risk management, to oversee the expanded responsibilities related to power supply. The cooperative's employee base has also grown to approximately 630 employees, including

Related Criteria

Revenue-Supported Rating Criteria, June 20, 2011 U.S. Public Power Rating Criteria, March 28, 2011

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the production personnel acquired with the generating facilities, many of whom were employed by Big Rivers prior to the bankruptcy.

Fitch Ratings believes that the cooperative's post-unwind transition has progressed very well, due in large part to the many years of preparation undertaken by the Big Rivers management team in anticipation of the transaction.

Big Rivers assumed full operating responsibilities earlier this year without any disruption, although E.ON provided some initial support to the post-unwind transition, particularly in the areas of information technology and generation dispatch. In December 2000, Big Rivers became a fully integrated member of the Midwest Independent System Operator (MISO).

Regulation

Big Rivers and its members are subject to oversight by the KPSC, which constrains the board's rate-setting ability, compared to other public power and cooperative utilities that are self-regulated. The KPSC is an independent agency that regulates gas, water, sewer, electric, and telecommunications utilities in Kentucky.

Fitch views external rate regulation as limiting to financial flexibility, but the KPSC has been responsive to the needs of Big Rivers in recent years, particularly during the unwind approval process. The recent inclusion of rate tariffs, designed to allow the monthly recovery of fluctuations in the cost of fuel, purchased power, and costs related to environmental compliance, are credit positive, and are expected to lower the frequency of formal rate cases.

Big Rivers has also adopted a very proactive approach to rate setting (see the Rates and Cost Structure section on page 7), which is designed to anticipate the need for rate relief well in advance of the timetable required by the KPSC, and should increase the likelihood of timely rate relief. The KPSC will also allow utilities to file for emergency or interim rate relief that can be implemented within 30 days, if necessary, under certain circumstances. Corresponding retail rate increase requests are typically coordinated with those of Big Rivers, but members must file separately with the KPSC.

Member Profile and Service Area

Big Rivers serves three electric cooperatives, which together provide electric service to approximately 112,500 customers. While the operating profiles of Jackson Purchase and Meade are largely typical of rural electric cooperatives, including a heavy concentration of residential customer and electric sales, Kenergy's profile is somewhat unique because its electric load is dominated by two aluminum smelters. One smelter is owned by Rio Tinto Alcan Primary Products Corporation (Alcan), located in Sebree, KY, and the other is owned by Century Aluminum of Kentucky General Partnership (Century) in Hawesville, KY.

The Alcan and Century smelters accounted for 87.7% and 80.0% of the distribution cooperative's total energy sales and revenue, respectively, in 2010. By comparison, Jackson Purchase's entire large industrial load accounted for only 7.1% of its energy sales and 5.5% of revenue. An overview of the three members is provided on the next page.

Overview of the Big Rivers Members

	Jackson	Kenergy	Meade
Number of Consumers	29,152	54,991	28,267
Total MWh Sales	683,481	9,318,498	479,367
Total Revenues (\$)	45,400	399,473	33,648
Number of Residential Consumers	26,053	45,201	26,213
MWh — % Residential	64.6	8.7	78.2
Revenues — % Residential	68.8	14.3	77.8
Number of Small Commercial/Industrial Consumers (1,000 KVA or Less)	3,080	9,680	2,048
MWh — % Small Commercial	28.1	3.6	21.5
Revenues — % Small Commercial	25.5	5.6	22.0
Number of Large Commercial/Industrial Consumers (1,000 KVA or Less)	7	34	0
MWh — % Large Commercial	7.1	87.7	0.0
Revenues — % Large Commercial	5.5	80.0	0.0
KVA – Kilovolt-ampere. Source: Big Rivers.			

The Aluminum Smelters

Aluminum smelting is energy-intensive, with power costs accounting for approximately 33% of a smelter's production costs. Access to Big River's low-cost power has therefore been positive for the smelters, as both operations are adjacent to the Big Rivers generating facilities. The aluminum smelters have been fixtures in the Big Rivers service territory since the 1970s, and remain the dominant employers in western Kentucky, with 1,375 employees in total. A brief discussion of each facility and its owner is provided below.

Alcan is owned by Rio Tinto (IDR 'A-'/Stable), an international mining group. Its Kentucky facility is the company's only U.S. aluminum smelter. Alcan has been operating at that facility since 1973. The company produces 186,000 metric tons of primary aluminum annually from its three potlines. The base contract demand under its agreement with Big Rivers is 368 MW, which results in annual energy consumption projected at 3.1 terawatt-hours (TWh), assuming 24/7 operations and a 98% load factor.

Century Aluminum Company, the general partnership's parent, is a public company that owns and operates aluminum smelters in Kentucky, South Carolina, West Virginia, and Iceland. Operations at the facility in Hawesville began in 1970, and it currently produces 244,000 metric tons of primary aluminum from five potlines annually. The Century smelter's base contract demand is 482 MW, with projected annual consumption of 4.2 TWh.

Production at the smelting facilities has historically been relatively steady, although production at the Century facility was reduced from five potlines to four in the wake of declining aluminum prices in 2009–2010. Century's energy requirements fell from 4.1 TWh to approximately 3.3 TWh as a result. The fifth potline was recently returned to full utilization, and energy requirements have increased through 2011.

Smelter Agreements

In July 2009, as part of the unwind transaction, Big Rivers and Kenergy began supplying the sizable load requirements of the smelters, which had previously been the responsibility of LEM. Under the terms of various agreements, Big Rivers has agreed to supply energy to Kenergy, for resale to the smelters on a take-or-pay basis through the end of 2023, subject to certain termination conditions.

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The smelter agreements are designed to provide all of their aggregate energy requirements, including base monthly energy (850 MW hourly), supplemental energy (10 MW hourly of interruptible energy to each smelter), and back-up energy (imbalance energy for Kenergy made available to the smelters). Surplus capacity is generally marketed off-system by Big Rivers for the ultimate benefit of the smelters.

Charges under the smelter agreements are designed to provide a slight premium (25 cents per MWh) over the rates charged to Kenergy's other large industrial customers. They also incorporate the cooperative's standard recovery clauses for fuel, environmental compliance expenditures, and purchased power.

The smelter agreements also include certain provisions that allow for adjustments in the amounts paid by the smelters, designed to enable Big Rivers to achieve a TIER of 1.24x for each fiscal year. During years in which the cooperative's ratio falls below the 1.24x threshold, additional payments are required by the smelters, subject to limitations. If the cooperative's TIER exceeds 1.24x during any fiscal year, amounts contributing to the excess coverage may be rebated to the members, with a pro rata portion allocated to the smelters.

Fitch views the smelter agreements as supportive to credit quality, but also notes that the support is somewhat limited, given the ability of the smelters to terminate the agreements upon one-year notice. Some additional comfort is derived from the conditional nature of the termination provision, which would also require that a smelter cease all smelting operations within the Kenergy service area to terminate the agreement, but the ability to rely on contract revenues over the long term is still limited.

(MWhs)	2010	2009	2008	2007
Member Peak Demand (MW)	657	668	614	654
Total Peak Demand (MW)	1,391	1,308	614	654
Electric Sales — Members	3,411,558	3,159,032	3,312,709	3,327,805
Growth (%)	7.99	(4.64)	(0.45)	4.38
Electric Sales — Other	2,209,431	1,746,438	1,844,677	2,835,789
Growth (%)	26.51	(5.33)	(34.95)	37.51
Electric Sales — Smelter Contracts	6,348,431	2,885,491	0	C
Growth (%)	120.01	NM	NM	NM
Total Electric Sales	11,969,420	7,790,961	5,157,386	6,163,594
Growth (%)	53.63	51.06	(16.33)	17.39
NM – Not meaningful. Source: Big Rivers.				

Member energy demand has remained relatively stable since 2007, following a decline in 2009, due to unfavorable weather and economic weakness, and a subsequent rebound in 2010, as illustrated in the table above. However, member sales have become increasingly dominated by off-system sales of excess generating capacity and sales to the smelters following the unwind.

In 2010, member sales accounted for only 28.5% of total energy sales, reflecting a full year of sales under the smelter agreements. Big Rivers expects member load growth of approximately 1.4% per annum and declining market sales, as capacity is used to meet growing member demand. However, member sales are not expected to exceed 31% of total energy sales through 2019.

Assets and Operations

The Big Rivers resource portfolio and power supply is dominated by coal-fired generation, both owned and leased. Although coal-fired capacity accounts for 87% of the cooperative's resource capacity, coal-fired generation accounted for approximately 97% of total power supply in 2010. Purchases from the cooperative's Southeastern Power Administration allocation supplied most of the remaining power supply.

The current portfolio of assets and related capacity comfortably exceeds the forecast peak demand of the membership, including the massive smelter demand, and should remain adequate through the load forecast period (2025). No additional resources are contemplated at this time. The cooperative's current resources are summarized below.

Big Rivers Generating R	esources		
Owned Generation	Fuel Type	Capacity (MW)	Commercial Operation
Kenneth Coleman Plant			
Unit 1	Coal	150	1969
Unit 2	Coal	138	
Unit 3	Coal	155	1972
Robert D. Green Plant			
Unit 1	Coal	231	1979
Unit 2	Coal	223	1981
Robert A. Reid Plant			
Unit 1	Coal/Gas	65	1966
Combustion Turbine	Oil/Gas	65	1979
D.B. Wilson			
Unit 1	Coal	417	1986
Leased Generation			
HMP&L Station Two			
Unit 1	Coal	153	1973
Unit 2	Coal	159	1974
(City of Henderson Capacity Allocation)		(110)	
Total Owned/Leased Generation		1,651	Opening a september
Purchased Power			
SEPA Allocation		178	
Total Capacity		1,824	ļ.
HMP&L - Henderson Municipal Power & Lig Source: Big Rivers.	ht. SEPA – Southeastern Power	Administration.	

Despite the changes in ownership and operating responsibility following the unwind, the Big Rivers plants have continued to perform well when compared to similarly sized and equipped units. For the period 2007–2010, six of the eight units reported equivalent availability factors (EAF) in the top quartile. The EAF for the entire system in 2010 was a record 93.7%.

Environmental Compliance

Big Rivers reports that all of its units are in compliance with current environmental standards. Currently, eight of the cooperative's nine coal units are equipped with flue gas desulphurization systems to control SO2, and three of the units are equipped with selective catalytic reduction systems to control NOx emissions.

The cooperative could face greater-than-average challenges with respect to environmental regulations proposed by the EPA, given its near full reliance on coal-fired capacity and

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generation, and the characteristics of its fleet. Big Rivers estimates that full compliance with the regulations could require expenditures of approximately \$785 million by 2015, and increase wholesale rates and member retail rates by 39% and 20%, respectively.

The cooperative has acknowledged that it may seek to mothball certain units or explore fuel conversion to natural gas as an alternative, given the advanced age and relatively small size of certain generating units. Any shortfall in capacity necessary to serve its load, including that of the smelters, would likely be purchased initially, until a longer term strategy is adopted.

There is no renewable portfolio standard at this time in the state of Kentucky.

Transmission

Big Rivers is nearing the completion of a significant transmission expansion project that was initiated in concert with the unwind transaction. The \$20 million dual-phase project is designed to increase the cooperative's capability to export power off-system from 912 MW to approximately 1380 MW. This transfer capability is large enough to export excess generation, including the peak demand of both smelters.

Phase one of the transmission expansion project, which included a 345-kV tie with Kentucky Utilities Company, providing eastern path access to the Southwest Power Pool, was completed in April 2008. Big Rivers has recently been completing phase two expansion projects. The final project, construction of a 13-mile transmission line between the cooperative's D.B. Wilson generating facility and the Tennessee Valley Authority transmission system, is expected to be completed by year-end 2011.

Fitch views the cooperative's expanded export capability favorably, particularly given the prospect of significant excess capacity and reliance on off-system sales if the smelters were to discontinue operations. While the completion of the projects does not ensure the sale of excess capacity, it removes the physical constraints.

Coal Supply

The Big Rivers generating units are located nearby in the heart of the western Kentucky portion of Illinois Basin coal fields. Half of its coal supply is delivered by truck and half by barge, significantly reducing transportation costs and ultimate production costs. Big Rivers also assumed all of the WKEC coal supply contracts, many of which were favorably priced and have lowered the cost of production.

Capital Resource and Expenditure Plan

The Big Rivers' capital plan for 2011–2019 totals \$460.7 million, and will largely be financed with internally generated funds. Nearly all of the remaining expenditures will be related to modest improvements at the cooperative's generating units, with the exception of the transmission expenditures noted above. The current capital plan does not incorporate any major expenditures for additional environmental compliance.

Rates and Cost Structure

Pursuant to the terms of the WPCs and the indenture, the Big Rivers board is required to review its wholesale rate at least annually and seek revisions to ensure covenant compliance, as necessary. Any change in rates charged by Big Rivers is subject to the approval of the KPSC.

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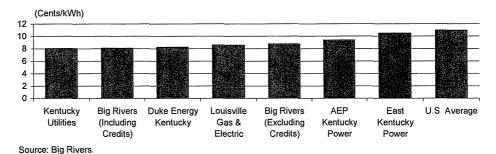
A number of factors mitigate the risks related to rate-regulation, including Big Rivers' proactive policies dictating annual reviews of the cooperative's annual budget and financial forecast. Big Rivers seeks to anticipate the need for rate relief well in advance of any projected revenue shortfall, given the anticipated seven-month time frame for KPSC approval and implementation of rate increases.

The rate structure flexibility approved by the KPSC as part of the unwind has also improved the timeliness of rate recovery. The KPSC has most notably implemented a fuel-adjustment clause, which allows Big Rivers to track changes in fuel costs and adjust rates accordingly on a monthly basis without further approval. The KPSC has also implemented an environmental surcharge to recover costs related to programs limiting the emissions of coal-fired generation.

The very competitive cost structure exhibited by Big Rivers, and the resulting wholesale and retail rates, among the lowest in the nation, are further mitigating regulatory risk. Although the competitiveness of the cooperative's wholesale and member retail rates are currently subsidized as a result of the MRS credit, charges excluding the credit are still relatively attractive. In 2010, Big Rivers reported a nonsmelter member wholesale rate of \$36.35 per MWh. Excluding the MRS credit, the rate was \$44.26 per MWh, comfortably below the average member revenue per MWh for cooperatives nationwide.

Member retail rates similarly remain equally competitive with the region's other power suppliers, and nationwide, largely due to low power costs. Retail rates for the smelters and Kenergy's other large industrial customers averaged 4.4 cents per kWh in 2010, well below the Kentucky state average of 6.0 cents per kWh. Residential rates across the membership are also solidly in line with neighboring utilities as shown below.

Average Residential Electric Rate — April 2011



Big Rivers filed for a general rate increase of 6.85% with the KPSC on March 1, 2011. Discovery, testimony, and public hearings were completed in July 2011, and a final order is expected from the KPSC in August, with new rates effective Sept. 1, 2011. The filing also seeks to redistribute certain costs across the various customer classes. Under the terms of the KPSC order approving the unwind, Big Rivers was required to file a rate case within three years of the closing. Big Rivers is filing for a rate increase sooner than expected, keeping with the policies noted earlier, and in response to lower than anticipated off-system revenues.

The cooperative's current financial forecast incorporates somewhat modest base rate increases, but actual wholesale rates are projected to increase significantly over time, due to a forecast increase in coal costs and the depletion of the MRS reserves. While the resulting 2019

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rates for the smelters and non-smelter members are still expected to be regionally competitive, the higher cost of power to be borne by members may introduce some economic strain. The cooperative's current forecast does not include the potential cost effect of further environmental compliance, which would most likely introduce more strain.

Managing its power supply operations and the ultimate cost of its wholesale power in the wake of escalating costs, diminishing reserves, and potentially burdensome environmental regulations will be the single greatest challenge for Big Rivers, and the most important factor in the cooperative's future creditworthiness.

Financial Position

The significant changes in the operating profile of Big Rivers in recent years, particularly the effect of the unwind, make the comparison of historical financial metrics difficult. Fitch's assessment of Big Rivers' financial position is largely based on fiscal 2010 performance against budget (the first full year of post-unwind operations) and the cooperative's projected performance under both base case and stressed scenarios.

Financial performance for fiscal 2010 was relatively solid and virtually on budget. Operating margins for the year were slightly lower than forecast (\$51.3 million versus \$54.6 million forecast), as weaker wholesale prices for power were nearly offset by increased, but more efficient, generation. Net margins for the year were almost exactly on budget (\$7.0 million versus \$7.1 million budgeted). Actual figures reported by Big Rivers for TIER (1.14x), DSC (1.47x), and equity to capitalization (32%) were also solidly in-line with forecast performance.

Fitch-calculated ratios for DSC (1.32x) and total debt to FADS (12.2x) were commensurate with the current rating, and do not reflect the inclusion of withdrawals from the MRS reserve. Including those revenues, the metrics improve to 1.78x and 9.0x, respectively. Metrics for cash on hand (37 days, excluding the MRS reserves) and total liquidity on hand (109 days) were somewhat low for the cooperative's operating profile.

Fitch has reviewed Big River's financial forecast, and believes the near-term targets are achievable and based on reasonable assumptions. Maintenance of a TIER in excess of 1.0x, coupled with the absence of significant capital expenditures and the anticipated refunding of maturing debt, should allow the cooperative to gradually improve its liquidity and equity ratios to levels commensurate for the current rating.

Fitch has also reviewed Big Rivers' sensitivity analysis, which assumes the loss of both smelters at the end of 2012 and the sale of excess capacity at base case wholesale price projections. Maintaining coverage and cash levels consistent with the cooperative's goals would require average base rates approximately 15% higher than the base case projections for the period 2013–2017, based on the expectation that market-based sales can be executed. An increase of this magnitude is not unreasonable, but would likely strain the members and draw scrutiny from the KPSC. The current rating adequately reflects these risks.

Debt

At Dec. 31, 2010, Big Rivers reported total long-term debt of \$817.0 million, the largest portion of which is the Rural Utilities Service (RUS) Series A note for \$558.7 million, which has a final maturity of 2021, but requires payments of \$60 million in 2012 and \$200 million in 2016 as negotiated with the RUS. The cooperative's remaining long-term debt includes a RUS Series B note for \$116.2 million, maturing in 2023, and two series of County of Ohio, KY, tax-exempt

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pollution control bonds, series 1983 and series 2010 A, totaling \$58.8 million and \$83.3 million, respectively.

The series 2010 A bonds were remarketed in June 2010 as fixed-rate bonds, with a final maturity of July 2031. The series 1983 bonds are currently held as bank bonds by the liquidity provider (Dexia Credit), bear interest at a variable rate, and mature in June 2013. As with the scheduled 2012 and 2016 RUS payments, Big Rivers expects to refinance the series 1983 maturity, introducing a moderate degree of refinancing risk, and reinforcing the importance of continued access to the capital markets. Fitch believes this risk is manageable.

Liquidity

Big Rivers maintains lines of credit totaling \$100 million with CoBank, ACB (\$50 million), and National Rural Utilities Cooperative Finance Corporation (\$50 million), which provide additional liquidity for operations. The current lines of credit expire in 2012 and 2014, respectively, and are expected to be renewed upon expiration.

Member Cooperatives

The consolidated financial profile of the Big Rivers membership has improved marginally in recent years, and is supportive of the cooperative's rating. For the year ended Dec. 31, 2010, the members reported consolidated operating income before depreciation, interest, and taxes of \$37.3 million on total revenues of \$482.2 million, and an aggregate ratio for debt service coverage of 1.84x, as calculated by Big Rivers. The improved performance is due, in part, to the approval of rate increases at both Jackson Purchase and Kenergy. At year-end 2010, the members reported total net worth of \$131 million, and an aggregate ratio of equity to capitalization of 35.9%. A summary of aggregate metrics for 2008–2010 is provided below.

\$ Mil.)	2008	2009	2010
Operating Revenues	434.0	422,8	482.2
Operating Income Before Depreciation, Interest, and Taxes	28.5	30.8	37.3
DSC (x)	1,46	1.52	1.84
ΠER (x)	1.37	1.44	2.11
Net Debt	220.1	236.7	233.9
Total Margins Plus Equities	111.9	117.9	131.0
Equity/Capitalization (%)	33.7	33.2	35.9

Financial Summary — Big Rivers Electric Cooperative

(\$000, Fiscal Years Ended Dec. 31)	2006	2007	2008	2009	2010
Cash Flow (x)					
Debt Service Coverage	2.93	2.64	1.24	3.52	1.78
Adjusted Debt Service Coverage with General Fund Transfer	2.93	2.64	1.24	3.52	1.78
Coverage of Full Obligations	2.01	1.87	1,19	2.88	1.49
Liquidity					
Days Cash On Hand	257	275	98	78	37
Days Liquidity On Hand	297	302	130	201	109
Leverage					
Debt/Funds Available for Debt Service (x)	7.6	7.0	7.3	2.3	9.0
Equity/Capitalization (%)	(26.0)	(19.6)	(17.5)	30.9	31.9
Equity/Adjusted Capitalization (%)	(18.4)	(13.4)	(13.3)	25.2	26.6
Net Debt/Net Utility Plant (x)	1.04	1.00	1.10	0.73	0.72
Other (%)					
Operating Margin	34.2	29.7	34.6	14.9	9.7
General Fund Transfer/Total Revenue	0.0	0.0	0.0	0.0	0.0
Capex/Depreciation	39.3	55.2	66.3	157.4	113.4
Income Statement					
Total Operating Revenues	258,588	329,870	273,181	373,360	527,324
Total Operating Expenses	170,260	231,836	178,542	317,668	476,072
Operating Income	88,328	98,034	94,639	55,692	51,252
Adjustment to Operating Income for Debt Service Coverage	50,176	53,963	47,075	37,951	40,384
Funds Available for Debt Service	138,504	151,997	141,714	362,180	91,636
Total Annual Debt Service	47,277	57,559	114,211	102,849	51,453
Balance Sheet			and the second s		
Unrestricted Funds	96,143	148,914	38,903	60,290	44,780
Restricted Funds	186,690	192,932	-	243,225	217,562
Total Debt	1,053,034	1,061,737	1,039,120	848,552	826,996
Equity and/or Retained Earnings	(217,371)	(174,137)	(154,602)	379,392	386,575
Source: Fitch Ratings and CreditScope.					

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FITCH RATES BIG RIVERS ELECTRIC CORP., KY'S 2010A POLLUTION CONTROL REV RFDG BONDS 'BBB-'

Fitch Ratings-New York-12 May 2010: Fitch Ratings assigns a 'BBB-' rating with a Stable Outlook to the \$83.3 million County of Ohio, KY's pollution control refunding revenue bonds, series 2010A, Big Rivers Electric Corporation Project.

New Issue Details:

Big Rivers is issuing the pollution control refunding revenue bonds, series 2010A to refund the outstanding series 2001A periodic auction rate securities. The new debt will be in the fixed-rate mode and is expected to mature in 2031.

RATING RATIONALE:

- --The 'BBB-' rating and Stable Outlook reflect Big Rivers Electric Corporation's (Big Rivers) low-cost power resources and competitive retail rates. Sufficient liquidity in the form of cash reserves established as a part of the unwind from E.ON will provide rate stability over the next few years.
- --Also factored into the rating is Big Rivers' heavy customer concentration. The two aluminum smelters served by Big Rivers accounted for approximately 46% of capacity and 52% of sales in fiscal 2009.
- --Customer concentration risk is somewhat mitigated by the all-requirements contracts with its three distribution cooperative members and the fact that Big Rivers has transmission access to a number of regional transmission organizations to sell surplus power as needed and should a large load be reduced. As the transmission expansion projects are completed, the customer concentration risk should decline further.
- --Based on financial projections, Big Rivers appears to have sufficient cash flow and cushion in the form of excess reserves and debt service coverage. In the event of a smelter shutdown, debt service coverage and maintenance of healthy reserves would require larger and more frequent rate increases as well as increased dependence on excess power sales than projected in the base case scenario.
- --If there is a smelter closure, there is risk associated with Big Rivers' ability to pass on higher costs to members. Given the low rates enjoyed by members, Big Rivers appears to have room to pass on higher than anticipated rate increases and still maintain rates comparable to other regional utilities.
- --Limited fuel diversity and dependence on coal could result in future cost increases as environmental regulations are developed regarding fossil fuel.
- --Big Rivers is subject to the Kentucky Public Service Commission's (PSC) regulations. To date the relationship with the PSC has been favorable; however, this additional oversight could delay the timing or amount of necessary rate increases, leaving the generation and transmission (G&T) cooperative with less financial flexibility. Favorably, fuel costs and environmental costs can be passed-through to customers through members without the need for PSC approval. Fitch will continue to monitor any PSC decisions and the potential impact as Big Rivers plans for future rate increases.

KEY RATING DRIVERS:

- --The transmission expansion projects are well underway and Phase I was completed in April 2008. The second phase is now scheduled to be completed in 2011. While six months behind the original schedule, it does not appear to face material opposition and completion of the project is expected to further mitigate some of the customer concentration risk. Fitch will continue to monitor the progress of the transmission expansion projects.
- --The rating and Outlook reflect what appears to be a favorable outcome of the unwind transaction with E.ON. Sufficient financial reserves and strong all-requirements contracts with its members

serve to balance the concerns over customer concentration to the smelters and dependence on the sale of excess power. Fitch will monitor Big Rivers' ability to generate sound financial metrics. Negative rating implications from declines in non-smelter member sales, weak surplus energy sales, or constrained smelter operations, could put downward pressure on the rating should financial margins and liquidity deviate materially from financial projections.

SECURITY:

The bonds are secured by a mortgage lien on substantially all of the owned tangible assets of the corporation which includes the revenue generated from the sale or transmission of electricity.

CREDIT SUMMARY:

Big Rivers is a G&T cooperative based in Henderson, Kentucky. In 2009, Big Rivers re-acquired operating control of its coal-fired generation fleet from E.ON through the unwind transaction. Under operations by E.ON, all of the main generating units were well maintained and retrofitted with the latest air pollution control equipment. Big Rivers now supplies 1,828 megawatts (MW) of low-cost wholesale electric and transmission service to its three electric distribution cooperative members: Meade County Rural Electric Cooperative Corporation, Jackson Purchase Energy Corp. and Kenergy Corporation. Combined, these members provide service to approximately 112,000 retail customers that are located in 22 western Kentucky counties.

Since Fitch's initial rating, Big Rivers has successfully completed the unwind transaction and has worked on integrating outside operations into its existing infrastructure. Compensation from E.ON as a part of the unwind transaction, has allowed Big Rivers to establish reserves and build its equity as anticipated. While 2009 financial results were strong, they were also skewed by the unwind transaction. Fitch believes 2010 financials will better reflect the performance of the restructured entity. Additionally, the use of ACES Power Marketing should help manage the utility's off-system power sales and could result in a benefit to financial performance.

Applicable criteria available on Fitch's web site at 'www.fitchratings.com' include:

- --'Revenue-Supported Rating Criteria' (Dec. 29, 2009)
- --'Public Power Rating Guidelines' (June 11, 2009).

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Issuer Comment: Big Rivers Electric Corporation -- Credit Opinion

Global Credit Research - 07 Feb 2013

Rating Drivers

- » Increased need for rate increases and dependence on off-system sales following contract termination notices from two aluminum smelters
- » Rates subject to regulation by the Kentucky Public Service Commission (KPSC)
- » Revenues from electricity sold under long-term wholesale power contracts with member owners
- » Ownership of generally competitive coal-fired generation plants; pursuing environmental compliance plan approved by regulators; environmental cost surcharge in place

Corporate Profile

Big Rivers Electric Corporation (Big Rivers) is an electric generation and transmission cooperative (G&T) 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 about 113,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

Recent Events

Effective February 6, 2013 we downgraded the senior secured rating of \$83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project) to Ba1 from Baa2 and the rating remains under review for downgrade. The rating action primarily reflects significantly increased financial and operating risks for Big Rivers due to the January 31, 2013 announcement by Alcan Corporation that its subsidiary, Alcan Primary Products Corporation (Alcan) issued a 12-month notice to terminate its power contract with BREC. This announcement came on the heels of the August 20, 2012 announcement by Century Aluminum Company that its subsidiary, Century Aluminum of Kentucky (Century) issued a 12-month notice to terminate its power contract with Big Rivers for its Hawesville, Kentucky smelter. See press release of February 6, 2013 posted to moodys.com for further details relating to this action.

Rating Rationale

The Ba1 senior secured rating considers credit risk related to the fact that Big Rivers' largest member owner, Kenergy Corp., makes a high concentration of its sales to two aluminum smelters (Century and Alcan), both of whom face credit challenges due to the significant volatility in both metal prices and demand. In addition, these smelters have served notice of intent to terminate their respective power purchase arrangements with Big Rivers, consistent with requirements for a one-year notice period and meeting other conditions to do so. Big Rivers' rating is further constrained because its rates are regulated by the KPSC, which is atypical for the G&T coop sector. Big Rivers' credit profile also reflects the financial benefits of several steps it took to unwind a lease and other transactions in 2008 and 2009 wherein its prior deficit net worth turned substantially positive, cash receipts were utilized to reduce debt, and two committed bank credit facilities aggregating \$100 million were established to improve liquidity.

Detailed Rating Considerations

High Smelter Load Concentration; Credit Challenge Tied to Anticipated Loss Of Smelter Load

Under historical operating conditions, the two smelters served by Kenergy have been consuming approximately 7 million MWh of energy annually, representing a substantial load concentration risk (e.g. about two-thirds of member energy load and close to 60% of member revenues for Big Rivers in 2011). This risk is a significant constraint to Big Rivers' rating, making its financial and operating risk profile unique compared to peers. This risk was magnified in August 2012 and most recently in January 2013 when each of the two smelters (Century and Alcan), gave notice to terminate the power purchase contract with Big Rivers. Under the terms of the contract, termination of the contract requires the terminating party to give notice to Big Rivers of their decision twelve months prior to the planned termination date. During the twelve month period, each of the terminating parties (Century and Alcan, in this case) must continue to make payments to Big Rivers over the 12 month period. Under the Century contract, the 12 month period ends in August 2013 while the 12 month period ends in January 2014 under the Alcan contract. Although Century and Alcan are required to pay base energy charges as defined in their respective agreements with Big Rivers) for power (482 MW and 368 MW, respectively, at 98% capacity factor) during the 12-month notice periods, neither one is required to continue operating their smelter plants.

Following this development, Big Rivers is evaluating a number of options to mitigate the substantial loss in smelter load. While challenges exist for the cooperative to implement some of the mitigation strategies, the near completion of several of Big Rivers' multiple transmission capacity upgrade projects undertaken in recent years will enhance Big Rivers' ability to sell electric output in the wholesale market. To that end, Big Rivers became a transmission owning member of the Midwest Independent Transmission System Operator (MISO) in December 2010. As a result, Big Rivers has enhanced its reliability and transmission capability helping to ensure compliance with mandated emergency reserve requirements established by regulators. Also, these steps along with legislation that permits sales to non-members provide additional flexibility for Big Rivers to move excess power off system following termination notices from Century and Alcan.

Improved Balance Sheet Following Completion Of Unwind Of Historical Transactions In 2009

In 2008, Big Rivers bought out two leveraged lease transactions and in 2009 completed a series of other steps to terminate another lease and other long-term transactions previously involving E.ON U.S. LLC and Western Kentucky Energy Corp. At the same time, Big Rivers terminated other agreements and entered into various new arrangements whereby it has been selling to Kenergy 850 MW in aggregate for resale to the two aluminum smelters. This arrangement represents a concentration of load risk for Big Rivers, which is now exacerbated by the contract termination notices served by the two aluminum smelters. Still, there were key credit positives resulting from consummation of all the unwind transactions as follows: elimination of Big Rivers' deficit net worth, with equity of \$379.4 million at December 31, 2009. which increased to \$389.8 million as of December 31, 2011 compared to a negative \$155 million at 12/31/2008, and partial utilization of the \$505.4 million in cash payments received from E.ON to repay about \$140.2 million of debt owed to the Rural Utilities Service (RUS) and to establish \$252.9 million of reserves. The reserves were comprised of: a \$157 million Economic Reserve for future environmental and fuel cost increases; a \$35 million Transition Reserve to mitigate potential costs if the smelters decide to terminate their agreements or otherwise curtail their load due to reduced aluminum production; and a \$60.9 million Rural Economic Reserve, which would be used over two years to provide credits to rural customers upon full utilization of the Economic Reserve.

Under a contract times interest earned ratio (TIER) arrangement with the two smelters, Rivers targets a minimum TIER of 1.24 times, which is above the level required under its financial covenants. Under current market conditions and given contract termination notices from the two aluminum smelters, Big Rivers has filed for rate relief as it anticipates that the TIER will otherwise drop below the 1.24 times target should the contracts with Century and Alcan be terminated.

Coal-Fired Plants Represent Valuable Assets Even As Environmental Costs Loom

Big Rivers owns generating capacity of about 1,444 megawatts (MW) in four substantially

Case No. 2012-00535 Attachment to Response for AG 1-57 Witness: Billie J. Richert Page 2 of 6 coal-fired plants. Total power capacity is about 1,824 MW, including rights to about 197 MW of coal-fired capacity from Henderson Municipal Power and Light (HMP&L) Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration. The economics of power produced from these sources enables Big Rivers to maintain a reasonable competitive advantage in the Southeast and even more so when compared to other regions around the country. The consistently high capacity factors and efficient operations of the assets results in average system wholesale rates to members around 4,7 cents per kWh (including the beneficial effects of the member rate stability mechanism). This compares to the average wholesale rate of 4.4 cents per kWh to serve the two smelter loads in 2011.

Because Big Rivers is substantially dependent on coal-fired generation, it faces uncertainty with regard to future environmental regulations, including the final form and substance those will take, the timing for implementation, and the amount of related costs to comply. We note that the Economic Reserve should help mitigate some of the need for initial rate increases to cover future compliance costs.

Regulatory Risk Exists; However, Offsets Are Present

Big Rivers is subject to regulation for rate setting purposes by the KPSC, which is atypical for the sector and can pose challenges in getting timely rate relief if and when needed. We view the existence of certain fuel and purchased power cost adjustment mechanisms available to Big Rivers as favorable to its credit profile since they can temper risk of cost recovery shortfalls if there is a mismatch relative to existing rate levels. Big Rivers received KPSC approval for a \$26.7 million (6.17%) base rate increase effective November 17, 2011. We consider this a reasonably good outcome versus the approximate \$30 million rate increase that was requested. The net effects of various appeals in this case decision resulted in the Kentucky PSC largely reaffirming its decision in January 2013; importantly, some corrections to calculations resulted in an approximately \$1 million increase to the previously approved revenue amount. The rate increase is intended to bolster wholesale margins, address increased depreciation costs, administrative costs tied to joining the MISO, and maintenance costs incurred during generation plant outages.

Following this rate case outcome, Big Rivers filed a rate case with the KPSC on January 15, 2013, seeking approval for a \$74.5 million rate increase. While the substantial majority of this sizable request is due to impending load loss when Century's notice period expires, additional amounts would make up for declining margins from off system sales and other cost pressures. The actual percentage rate impact would vary by customer class and we note the availability of funds in the economic and rural economic reserve accounts that can be used to offset the significant impact for the non-smelter customer classes through credits to the fuel adjustment clause and the environmental surcharge. Since filing its rate case in January, Big Rivers has responded to additional data requests from the KPSC and is requesting that new rates become effective August 20, 2013. If the case is not decided by then, Big Rivers would be permitted under state statutes to implement the rate increase, subject to refund, pending a final KPSC decision in the rate case. Given the recent contract termination notice from Alcan, we expect that Big Rivers will file another rate case later this year for rate increases to take effect by January 31, 2014.

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 will continue as the contracts were extended by an additional 20 years to December 31, 2043 when the unwind of transactions were completed in 2009. From a historical perspective, the relatively low cost power provided under the contracts mitigated the credit risk that would typically stem from member disenchantment. However, we believe going forward the pending rate case filed in January and another case likely to follow raise the specter for member unrest as the level of requested increases is quite substantial in the January filing alone. The currently overall sound member profile helps provide a degree of assurance of this revenue stream, which is integral to servicing Big Rivers' debt.

Liquidity

Big Rivers supplements its internally generated funds with \$100 million of unsecured committed revolver capacity, with National Rural Utilities Cooperative Finance Corporation (NRUCFC) and CoBank providing \$50 million each. The NRUCFC and CoBank facilities expire on July 16, 2014 and July 27, 2017, respectively. The \$50 million NRUCFC facility provides for issuance of up to \$10 million of letters of credit. As of September 30, 2012 Big Rivers had approximately \$113 million of cash and temporary investments and it had about \$45 million of unused capacity available under the NRUCFC facility. The NRUCFC facility has a condition that precludes use of the facility upon termination of a contract with either of the smelters, so Big Rivers is negotiating amendment and extension of this facility ahead of August 20, 2013, to ensure it maintains access to the facility. The CoBank facility has a condition that precludes use of the facility when termination notice is provided, so Big Rivers plans to address this through negotiation of an amendment to re-establish access. Some of the cash on hand will be used to repay the impending \$58.8 million tax-exempt debt maturity due June 1, 2013. We anticipate that Big Rivers will internally fund its maintenance capex and management indicates that there may be some flexibility in that budget; however, we understand that the cooperative is arranging funding for environmental related capex, which is currently estimated to be about \$60 million during 2013-2014. Beyond the June 2013 maturity, long-term debt maturities are very modest amortizations of existing debt around \$21 million to be paid in quarterly installments.

The quality of the alternate liquidity provided by the bank revolvers benefits from the multi-year tenors and the absence of any onerous financial covenants, which largely mirror the financial covenants in existing debt documents. Big Rivers is in compliance with those covenants. Additionally, the NRUCFC facility benefits from no ongoing material adverse change (MAC) clause; however, the CoBank facility is considered of lesser quality because of the ongoing nature of its MAC clause related to each drawdown and as noted above is currently unavailable given the contract termination notices served. There are no applicable rating triggers in any of the facilities that could cause acceleration or puts of obligations; however, a ratings based pricing grid applies. We understand that Big Rivers will pursue steps to amend and extend existing bank credit facilities to shore up liquidity as it copes with credit challenges going forward.

Structural Considerations

As part of the unwinding of various transactions completed in 2009, Big Rivers replaced the previously existing RUS mortgage with a new senior secured indenture. Under the current senior secured indenture RUS and all senior secured debt holders 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, we consider the added flexibility of the current senior secured indenture to be credit positive.

Rating Outlook

The rating is under review for downgrade as we assess the financial and operating effects and what mitigating strategies Big Rivers will pursue following contract termination notices from the two aluminum smelters.

What Could Change the Rating - Up

In light of the rating review for possible downgrade and the uncertainty at Big Rivers that persists following the announcements by Century and Rio Tinto, the rating is not likely to be upgraded or stabilized in the near term.

What Could Change the Rating - Down

Several factors are likely to cause us to further lower Big Rivers' rating including our assessment of the likelihood of success in implementing the numerous mitigation strategies

on the drawing board. Of particular interest to the rating review is the degree to which Big Rivers' future financial results will depend upon the margins from the unregulated wholesale power market through both short-term and long-term off-system sales as well as our assessment of the cooperative's ability to secure needed rate increases from the non-smelter member load. The rating could also be negatively affected should efforts to shore up external liquidity sources fail to meet our understanding of Big Rivers' near-term objectives. Further, downward rating pressure could occur should environmental capital requirements increase substantially particularly with the lack of a clear regulatory mechanism in place.

Other Considerations

Mapping To Moody's U.S. Electric Generation & Transmission Cooperatives Rating Methodology

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative rating Methodology is based on historical data through December 31, 2011. The Indicated Rating for Big Rivers' senior most obligations under the Methodology is currently A2 and relies on the aforementioned historical quantitative data and qualitative assessments. The Indicated Rating under the Methodology largely reflects better scores for the factors relating to dependence on purchased power and financial metrics such as equity as a percentage of capitalization, FFO to debt and FFO to interest, all of which improved upon completion of the unwind transactions in 2009. Notwithstanding the current A2 Indicated Rating for Big Rivers under the Methodology, its actual senior secured rating of Ba1 reflects the unique risks relating to Big Rivers' load concentration to the smelters, the smelter termination notices and the fact receipt of the notices will not impact cash flow until August 2013 (Century) and until January 2014 (Alcan).

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Rating Action: Moody's downgrades rating of County of Ohio, Kentucky (Big Rivers Electric Corporation Project) to Ba1 from Baa2; rating remains under review for further downgrade

Global Credit Research - 06 Feb 2013

\$83.3 million of securities affected

New York, February 06, 2013 -- Moody's Investors Service downgraded the senior secured rating of \$83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project) to Ba1 from Baa2. The rating, which had been placed under review for downgrade on August 21, 2012, remains under review for further downgrade.

"The rating downgrade related to the aforementioned bonds, which were previously issued by the county on behalf of Big Rivers Electric Corporation (BREC), reflects the significantly increased financial and operating risks for BREC due to the January 31, 2013 announcement by Alcan Corporation that its subsidiary, Alcan Primary Products Corporation (Rio Tinto Alcan) issued a 12-month notice to terminate its power contract with BREC", said Kevin Rose, Vice President-Senior Analyst. This announcement follows the August 20, 2012 announcement by Century Aluminum Company that its subsidiary, Century Aluminum of Kentucky issued a 12-month notice to terminate its power contract with BREC. Both announcements cite that smelter operations at Rio Tinto Alcan's Sebree smelter and Century's Hawesville smelter are not economically viable with current contract power rates and under current market conditions. "On a combined basis, one of BREC's three member-owners, Kenergy Corp., has been serving the two aluminum smelters comprising roughly two-thirds of BREC's annual energy sales and accounting for just under 60% of its system demand and in excess of 60% of annual revenues", Rose added.

Despite the fact that BREC will continue receiving revenues from base energy charges over the respective 12 month notice periods (ending August 20, 2013 in the case of Century and January 31, 2014 in the case of Rio Tinto Alcan), the rating remains under review for downgrade, reflecting the uncertainty concerning BREC's mitigation strategies under consideration, including whether BREC will obtain approval from the Kentucky Public Service Commission (KPSC) for significant rate increases to address anticipated revenue shortfalls. Moody's notes that BREC is among the few electric generation and transmission cooperatives subject to rate regulation, which can sometimes pose challenges in implementing timely rate increases. In addition to monitoring the recently filed request for a rate increase at the KPSC, the rating review will also consider BREC's prospects for mitigating the impact from the termination notices through other steps, including through shoring up liquidity, entering into bilateral sales arrangements; making short-term off system sales in the wholesale market; participating in the capacity markets; temporarily idling generation and reducing staff; and possibly selling generating assets.

BREC filed a rate case with the KPSC on January 15, 2013, seeking approval for a \$74.5 million rate increase. While the substantial majority of this sizable request is due to impending load loss when Century's notice period expires, additional amounts would make up for declining margins from off system sales and other cost pressures. The actual percentage rate impact would vary by customer class and we note the availability of funds in the economic and rural economic reserve accounts that can be used to offset the significant impact for the nonsmelter customer classes. Since filing its rate case in January, BREC has responded to additional data requests from the KPSC and is requesting that new rates become effective August 20, 2013. If the case is not decided by then, BREC would be permitted under state statutes to implement the rate increase, subject to refund, pending a final KPSC decision in the rate case.

In terms of liquidity, BREC has a cash balance in excess of \$100 million available to repay its impending \$58.8 million tax-exempt debt maturity on June 1, 2013 and external liquidity is currently comprised of \$100 million of multi-year revolving credit facilities evenly split between National Rural Utilities Cooperative Finance Corporation and CoBank. Maintaining bank facilities to supplement its internally generated cash flow in the face of existing challenges will be integral to BREC's credit profile going forward.

In light of the rating review for possible downgrade and the uncertainty at BREC that persists following the announcements by Century and Rio Tinto, the rating is not likely to be upgraded or stabilized in the near term. Several factors are likely to cause us to further lower BREC's rating including our assessment of the likelihood of

success in implementing the numerous mitigation strategies on the drawing board. Of particular interest to the rating review is the degree to which BREC's future financial results will depend upon the margins from the unregulated wholesale power market through both short-term and long-term off-system sales as well as our assessment of the cooperative's ability to secure needed rate increases from the non-smelter member load. The rating could also be negatively affected should efforts to shore up external liquidity sources fail to meet our understanding of BREC's near-term objectives. Further, downward rating pressure could occur should environmental capital requirements increase substantially particularly with the lack of a clear regulatory mechanism in place.

Big Rivers Electric Corporation 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 approximately 113,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

The principal methodology used in this rating was U.S. Electric Generation & Transmission Cooperatives published in December 2009. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

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Issuer Comment: Big Rivers Electric Corporation -- Credit Opinion

Global Credit Research - 22 Aug 2012

Rating Drivers

- » High industrial concentration to two aluminum smelters and dependence on off-system sales
- » Rates subject to regulation by the Kentucky Public Service Commission (KPSC)
- » Revenues from electricity sold under long-term wholesale power contracts with member owners
- » Stronger balance sheet resulting from deleveraging following the unwinding of 1998 vintage transactions, which was completed in 2009
- » Ownership of generally competitive coal-fired generation plants; pursuing environmental compliance plan, pending regulatory decision

Corporate Profile

Big Rivers Electric Corporation (Big Rivers) is an electric generation and transmission cooperative (G&T) 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 about 113,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

Recent Events

Effective August 21, 2012 we downgraded the senior secured rating of \$83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project) to Baa2 from Baa1. Concurrently, the rating for the bonds, which were previously issued by the county on behalf of Big Rivers Electric Corporation, was placed under review for further downgrade. The rating actions primarily reflect increased financial and operating risks for Big Rivers due to the August 20, 2012 announcement by Century Aluminum Company (Caa1 senior unsecured; stable) that its subsidiary, Century Aluminum of Kentucky issued a 12-month notice to terminate its power contract with Big Rivers for its Hawesville, Kentucky smelter. See press release of August 21, 2012 posted to moodys.com for further details relating to this action.

Summary Rating Rationale

The Baa2 senior secured rating considers credit risk related to the fact that Big Rivers' largest member owner, Kenergy Corp., makes a high concentration of its sales to two aluminum smelters (Century Aluminum Company: senior unsecured Caa1; stable) and Rio Tinto: senior unsecured A3; stable), both of whom face credit challenges due to the significant volatility in both metal prices and demand. In addition, these smelters have the option to terminate their respective power purchase arrangements, subject to a one-year notice and other conditions. As noted above, Century exercised this option effective August 20, 2012. Big Rivers' rating is further constrained because its rates are regulated by the KPSC, which is atypical for the G&T coop sector. The Baa2 rating also reflects the financial benefits of several steps taken by Big Rivers to unwind a lease and other transactions in 2008 and 2009 wherein its prior deficit net worth turned substantially positive, cash receipts were utilized to reduce debt, and two committed bank credit facilities aggregating \$100 million were established to improve liquidity. Revenues generated from reasonably competitive power sold to non-smelter customers under

long-term wholesale contracts with the three member owners continue to support Big Rivers' financial performance. A\$26.7 million (6.17%) base rate increase approved by the KPSC in September 2011 was also generally supportive in nature. The outcome of a pending filing before the KPSC related to future environmental related capital expenditures will be integral to Big Rivers' future financial performance as new debt financing will play a role in the financing strategy, particularly as it also copes with Century's recent contract termination notice.

Detailed Rating Considerations

High Smelter Load Concentration; Credit Challenge Tied to Potential Loss Of Smelter Load

Under historical operating conditions, the two smelters served by Kenergy have been consuming nearly 7 million MWh of energy annually, representing a substantial load concentration risk (e.g. about two-thirds of member energy load and close to 60% of member revenues for Big Rivers in 2011). This risk is a significant constraint to Big Rivers' rating, making its financial and operating risk profile unique compared to peers. All but one of Big Rivers' multiple transmission capacity upgrade projects undertaken in recent years are now complete, with the last remaining project estimated for completion in 2014 or 2015. Also, Big Rivers became a transmission owning member of the Midwest Independent Transmission System Operator (MISO) in December 2010. As a result, Big Rivers has enhanced its reliability and transmission capability helping to ensure compliance with mandated emergency reserve requirements established by regulators. Also, these steps along with legislation that permits sales to non-members provide additional flexibility for Big Rivers to move excess power off system following Century's announcement.

Although Century is required to pay a base fixed energy charge (as defined to cover fixed and variable costs) for power (482 MW at 98% capacity factor) during the 12-month notice period, it is not required to continue operating the smelter plant. Despite the fact that Big Rivers will continue receiving base fixed energy charge revenues over the next 12 months, Big Rivers' rating is under review for downgrade as we consider the extent to which it can overcome revenue shortfalls to be created by the anticipated loss of a significant portion of its energy load. Among the possible mitigating steps Big Rivers might take would be using cash reserves established to partially compensate for loss of smelter load; entering into bilateral sales arrangements; making short-term off system sales in the wholesale market; participating in the capacity markets; temporarily idling generation; selling generating assets; and seeking emergency rate increases through filings with the KPSC. With respect to the latter possibility, we note that Big Rivers being rate regulated has in the past posed challenges in implementing timely rate increases.

Financial Flexibility Improved Following Completion Of Unwind Of Historical Transactions In 2009

In 2008, Big Rivers bought out two leveraged lease transactions and in 2009 completed a series of other steps to terminate another lease and other long-term transactions previously involving E.ON U.S. LLC (formerly known as: LG&E Energy Marketing Inc.) and Western Kentucky Energy Corp. These entities previously leased and operated the generating units owned by Big Rivers. In turn, Big Rivers was purchasing the power from these units at generally fixed below market rates to use in servicing the requirements of its three members, exclusive of the load requirements of Kenergy's two large aluminum smelters. At the same time, Big Rivers terminated other agreements and entered into various new arrangements whereby it has been selling to Kenergy 850 MW in aggregate for resale to the two aluminum smelters. This arrangement represents a concentration of load risk for Big Rivers. Key credit positives resulting from consummation of all the unwind transactions were as follows: elimination of Big Rivers' deficit net worth, with equity of \$379.4 million at December 31, 2009, which increased to \$389.8 million as of December 31, 2011 compared to a negative \$155 million at 12/31/2008, and partial utilization of the \$505.4 million in cash payments received from E.ON to repay about \$140.2 million of debt owed to the Rural Utilities Service (RUS) and to establish \$252.9 million of reserves. The reserves were comprised of: a \$157 million Economic Reserve for future environmental and fuel cost increases; a \$35 million Transition Reserve to mitigate potential

costs if the smelters decide to terminate their agreements or otherwise curtail their load due to reduced aluminum production; and a \$60.9 million Rural Economic Reserve, which would be used over two years to provide credits to rural customers upon full utilization of the Economic Reserve.

Under a contract times interest earned ratio (TIER) arrangement with the two smelters, Big Rivers targets a minimum TIER of 1.24x, which is above the level required under its financial covenants. Under current market conditions, we expect that Big Rivers would file for rate relief as necessary, as we would anticipate that the TIER drops below the 1.24x target should the contract with Century be terminated.

Coal-Fired Plants Represent Valuable Assets Even As Environmental Costs Loom

Big Rivers owns generating capacity of about 1,444 megawatts (MW) in four substantially coal-fired plants. Total power capacity is about 1,824 MW, including rights to about 202 MW of coal-fired capacity from Henderson Municipal Power and Light (HMP&L) Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration. The economics of power produced from these sources enables Big Rivers to maintain a solid competitive advantage in the Southeast and even more so when compared to other regions around the country. The consistently high capacity factors and efficient operations of the assets results in average system wholesale rates to members around 4.7 cents per kWh (including the beneficial effects of the member rate stability mechanism). This compares to the average wholesale rate of 4.4 cents per kWh to serve the two smelter loads in 2011.

Because Big Rivers is substantially dependent on coal-fired generation, it faces uncertainty with regard to future environmental regulations, including the final form and substance those will take, the timing for implementation, and the amount of related costs to comply. We note that the Economic Reserve should help mitigate some of the need for initial rate increases to cover future compliance costs.

Regulatory Risk Exists: However, Offsets Are Present

Big Rivers is subject to regulation for rate setting purposes by the KPSC, which is atypical for the sector and can pose challenges in getting timely rate relief if and when needed. We view the existence of certain fuel and purchased power cost adjustment mechanisms available to Big Rivers as favorable to its credit profile since they can temper risk of cost recovery shortfalls if there is a mismatch relative to existing rate levels. Big Rivers received KPSC approval for a \$26.7 million (6.17%) base rate increase effective November 17, 2011. We consider this a reasonably good outcome versus the approximate \$30 million rate increase that was requested. The rate increase is intended to bolster wholesale margins, address increased depreciation costs, administrative costs tied to joining the Midwest Independent Transmission System Operator (MISO), and maintenance costs incurred during generation plant outages.

Big Rivers is in midst of regulatory proceedings at the KPSC relating to an environmental compliance plan. The extent to which timely and adequate regulatory support for recovery of environmental compliance costs appears evident will also be an integral part of the rating review process. The KPSC decision in this filing is expected in the fourth quarter of 2012.

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 will continue as the contracts were extended by an additional 20 years to December 31, 2043 when the unwind of transactions were completed in 2009. The relatively low cost power provided under the contracts makes member disenchantment unlikely, even following recent base rate increases approved by the KPSC in 2011 and, in the medium to longer term, due to environmental compliance costs. The currently overall sound member profile provides assurance of this revenue stream, which is integral to servicing Big Rivers' debt. The potential for degradation in the creditworthiness of the smelters is a particular credit concern, only tempered in part by assurances of two month's worth of payment obligations covered by letters of credit from an A1 rated financial institution (or some other form

acceptable to Big Rivers) under certain circumstances.

Big Rivers' net margins for 2011 reflected a modest decline versus 2010 as results in 2011 reflect the net effects of higher expenses in 2011 due to full year membership in MISO and the absence of one-time items that benefitted 2010 results, largely offset by an increase in 2011 net sales margin.

On a historical basis, Big Rivers dramatically improved its equity position whereby its equity to total capitalization is now over 30% thanks to significant debt reductions following the unwind. At this level, Big Rivers equity to total capitalization maps to the A category for this metric under the rating Methodology. Even with expected continuation of management's current practice of not returning patronage capital back to members (a credit positive strategy in our view) we anticipate that the equity ratio will decline moderately as new debt is added over the next couple of years to fund a capital program originally estimated at \$550 million for 2012-2015, but which is likely to be reduced in the near term given recent developments related to environmental regulations. We also note that Big Rivers' historical three-year average metrics such as funds from operations (FFO) to debt and FFO to interest are particularly strong due to the one time effects of the unwind, and are therefore not sustainable at those levels.

Liquidity

Big Rivers supplements its internally generated funds with \$100 million of unsecured committed revolver capacity, with National Rural Utilities Cooperative Finance Corporation (NRUCFC) and CoBank providing \$50 million each. The NRUCFC and CoBank facilities expire on July 16, 2014 and July 27, 2017, respectively. The \$50 million NRUCFC facility provides for issuance of up to \$10 million of letters of credit. We view the significant increase in available bank credit following the completion of the unwind transaction in 2009 as credit positive. As of June 30, 2012 Big Rivers had approximately \$48 million of cash and temporary investments and it currently has full capacity available under the two credit facilities. Assuming little change to future usage of the bank facilities and the cash position, as well as no change to management's current policy of not returning patronage capital back to members, we anticipate that Big Rivers should be able to adequately meet its short-term working capital needs and modest current maturities of long-term debt. However, new debt financing is anticipated over the next few years to fund any negative free cash flow resulting from the planned capital program. Following KPSC financing approval, Big Rivers completed about \$537 million of financing transactions in aggregate with CoBank and NRUCFC on July 27, 2012 to prepay as planned a significant portion of its 5.75% RUS Series A note, fund a portion of its capital expenditures and to replenish its \$35 million Transition Reserve balance. Approximately \$235 million of this financing activity was completed through a 20-year senior secured term loan with CoBank and \$302 million was completed through a 20-year senior secured term loan with NRUCFC.

The quality of the alternate liquidity provided by the bank revolvers benefits from the multi-year tenors and the absence of any onerous financial covenants, which largely mirror the financial covenants in existing debt documents. Big Rivers is in compliance with those covenants. Additionally, the NRUCFC facility benefits from no ongoing material adverse change (MAC) clause; however, the CoBank facility is considered of lesser quality because of the ongoing nature of its MAC clause related to each drawdown. There are no applicable rating triggers in any of the facilities that could cause acceleration or puts of obligations; however, a ratings based pricing grid applies.

Structural Considerations

As part of the unwinding of various transactions completed in 2009, Big Rivers replaced the previously existing RUS mortgage with a new senior secured indenture. Under the current senior secured indenture RUS and all senior secured debt holders 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, we consider the added flexibility of the current senior secured indenture to be credit positive.

Rating Outlook

The rating is under review for downgrade as we assess the financial and operating effects and what mitigating strategies Big Rivers will pursue following Century's decision to submit its 12-month notice that it will terminate its power supply agreement with Big Rivers for its Hawesville, KY smelter plant.

What Could Change the Rating - Up

A rating upgrade is unlikely given the review for downgrade for reasons cited above. Success in mitigating the effects of load loss due to Century's announcement, regulatory support for environmental cost recovery and other future rate increases that may be necessary due to load loss could help stabilize the outlook. Moreover, structural changes that eliminate rate regulation of cooperatives in Kentucky could contribute to a positive action, especially if it coincides with improvement in market conditions for the aluminum smelters and sustained improvement of FFO to interest and debt metrics to near 2.3x and 8%, respectively, on average.

What Could Change the Rating - Down

Loss of significant load due to Century's announcement that is not otherwise compensated for through off system power sales or other measures could contribute to a negative action, as would the inability to secure needed rate increases from the non-smelter member load. From a regulatory perspective, the lack of a coherent recovery mechanism for environmental capital requirements, should they be incurred, could place downward pressure on the rating. In terms of credit metrics, if FFO to interest and debt falls below 2x and 5%, respectively, for a sustained period of time, then rating pressure could result.

Other Considerations

Mapping To Moody's U.S. Electric Generation & Transmission Cooperatives Rating Methodology

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative rating Methodology is based on historical data through December 31, 2011. The Indicated Rating for Big Rivers' senior most obligations under the Methodology is currently A2 and relies on the aforementioned historical quantitative data and qualitative assessments. The Indicated Rating under the Methodology largely reflects better scores for the factors relating to dependence on purchased power and financial metrics such as equity as a percentage of capitalization, FFO to debt and FFO to interest, all of which improved upon completion of the unwind transactions in 2009. Notwithstanding the current A2 Indicated Rating for Big Rivers under the Methodology, its actual senior secured rating of Baa2 reflects the unique risks relating to Big Rivers' load concentration to the smelters and the fact that it is subject to rate regulation by the KPSC persist and represent significant constraints to its rating level.

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Rating Action: Moody's downgrades rating of County of Ohio, Kentucky (Big Rivers Electric Corporation Project) to Baa2 from Baa1; reviews rating for further downgrade

Global Credit Research - 21 Aug 2012

\$83.3 million of securities affected

New York, August 21, 2012 – Moody's Investors Service downgraded the senior secured rating of \$83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project) to Baa2 from Baa1. Concurrently, the rating for the bonds, which were previously issued by the county on behalf of Big Rivers Electric Corporation (BREC), was placed under review for further downgrade.

RATINGS RATIONALE

The rating actions primarily reflect increased financial and operating risks for BREC due to the August 20, 2012 announcement by Century Aluminum Company (Caa1 senior unsecured; stable) that its subsidiary, Century Aluminum of Kentucky issued a 12-month notice to terminate its power contract with BREC for its Hawesville, Kentucky smelter. In its announcement, Century cited that its smelter is not economically viable with its current power rate and under current market conditions. "On a combined basis, one of BREC's three member-owners, Kenergy Corp., has been serving two aluminum smelters (Century and Rio Tinto, A3 senior unsecured; stable) comprising roughly two-thirds of BREC's annual energy sales and accounting for just under 60% of its system demand", said Kevin Rose, Vice President-Senior Analyst. "Energy sales to Century alone accounted for approximately 30% of BREC's 2011 electric energy revenues of approximately \$562 million", Rose added.

Although Century is required to pay a fixed demand charge for power (482 MW at 98% capacity factor) during the 12-month notice period, it is not required to continue operating the smelter plant. Despite the fact that BREC will continue receiving fixed demand revenues over the next 12 months, the review for possible downgrade will consider the extent to which it can overcome revenue shortfalls to be created by the anticipated loss of a significant portion of its energy load. Among the possible mitigating steps BREC might take would be using cash reserves established to partially compensate for loss of smelter load; entering into bilateral sales arrangements; making short-term off system sales in the wholesale market; participating in the capacity markets; temporarily idling generation; selling generating assets; and seeking emergency rate increases through filings with the Kentucky Public Service Commission (KPSC). With respect to the latter possibility, Moody's notes that BREC is among the few electric generation and transmission cooperatives subject to rate regulation, which can sometimes pose challenges in implementing timely rate increases.

Century's announcement comes at a time when BREC is also challenged by sizable costs to comply with eventual environmental regulations. BREC is in midst of regulatory proceedings at the KPSC relating to an environmental compliance plan. The extent to which timely and adequate regulatory support for recovery of environmental compliance costs appears evident will also be an integral part of the rating review process. The KPSC decision in this filing is expected in the fourth quarter of 2012.

Meanwhile BREC's ratings continue to reflect its considerable generation resource base, including generating capacity ownership of about 1,444 megawatts (MW) in four substantially coal-fired plants. The cooperative's total power capacity is about 1,824 MW, including rights to about 202 MW of coal-fired capacity from Henderson Municipal Power and Light (HMP&L) Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration. The revenues derived under BREC's long-term wholesale contracts with its members for non-smelter load will continue to serve the cooperative well as the contracts were extended by an additional 20 years to December 31, 2043 when the unwind of certain transactions were completed in 2009. BREC supplements its internally generated cash flow with \$100 million of external bank lines evenly split with CoBank and National Rural Utilities Cooperative Finance Corporation. These facilities expire in July 2017 and July 2014, respectively.

Big Rivers Electric Corporation 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 approximately 112,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

The principal methodology used in this rating was U.S. Electric Generation & Transmission Cooperatives published in December 2009. Please see the Credit Policy page on www.moodys.com for a copy of this methodology.

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Rating Action: Moody's assigns Baa1 rating to County of Ohio, Kentucky bonds to be issued on behalf of Big Rivers Electric Corp.

Global Credit Research - 10 May 2010

\$83.3 million of securities affected

New York, May 10, 2010 -- Moody's Investors Service assigned a Baa1 senior secured rating to a proposed offering of \$83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project) to be issued on behalf of Big Rivers Electric Corporation (BREC). The rating outlook for BREC is stable. Proceeds from the issuance of these bonds will be used to refund \$83.3 million in aggregate principal amount of PCRBs, Series 2001A (Big Rivers Electric Corporation Project) outstanding, which were previously issued on behalf of BREC by the county. The prior bonds were Periodic Auction Reset Securities that were insured as to the payment of principal and interest when due by Ambac Assurance Corporation. The Baa1 rating for the proposed offering represents the relative standing of the PCRBs as standalone senior secured obligations of BREC, ranking on parity with all of BREC's existing debt under its first mortgage bond indenture dated as of July 1, 2009, as supplemented and amended.

At the same time, Moody's notes that BREC may decide to deliver the bonds with an unconditional senior unsecured guaranty from National Rural Utilities Cooperative Finance Corporation (NRUC: senior unsecured A2; stable outlook). Under this scenario, the NRUC guaranty would result in a rating of A2 for the proposed PCRBs, consistent with NRUC's current senior unsecured debt rating, and BREC's senior secured debt rating of Baa1 would become the underlying rating for the proposed PCRBs.

"The Baa1 senior secured rating for BREC considers the financial benefits of several steps it took to unwind a lease and other transactions with E.ON U.S. LLC and two affiliates (E.ON) in 2008 and 2009 wherein its prior deficit net worth turned substantially positive, cash receipts were utilized to reduce debt, and two committed bank credit facilities aggregating \$100 million were established to improve liquidity" said Vice President, Kevin Rose. BREC and E.ON completed the unwinding of the transactions effective July 16, 2009. "Revenues generated from competitively priced power sold under long-term wholesale contracts with the three member owners should continue to generate FFO to interest and debt metrics in support of the Baa1 senior secured rating level, while capital expenditures are largely met with internally generated funds", Rose added.

A significant constraint to BREC's rating is that one of its member owners, Kenergy Corp., makes a high concentration of its sales to two aluminum smelters (Century Aluminum Company and Rio Tinto Alcan), both of whom face credit challenges due to the significant volatility in both metal prices and demand. In addition, these smelters have the option to terminate their respective power purchase arrangements, subject to a one-year notice and other conditions. BREC's rating is further constrained because its rates are regulated by the Kentucky Public Service Commission, which is atypical for the cooperative sector and can sometimes pose challenges in implementing timely rate increases when needed to recover higher costs of service.

The stable rating outlook for BREC is based on its successful completion of the unwind transactions, thereby improving its financial profile and repositioning itself to continue efficiently meeting the needs of its members in the future.

Under the potential scenario where NRUC's senior unsecured guaranty forms the basis for the rating of the PCRBs, we note that NRUC's A2 senior unsecured debt rating is based on its high quality asset portfolio; an excellent competitive position that includes an ability to raise margins on member loans; a strong track record in managing credit restructurings; an improved risk management program and a declining exposure to the more volatile telecommunications sector. The rating also takes into account NRUC management's attempts in recent years to reduce the degree of single obligor exposure within the loan portfolio; the company's reliance on capital markets to fund its lending business, continuing high leverage and the challenges associated with managing certain problem loans.

The stable rating outlook for NRUC incorporates our view that modest loan growth among rural electric cooperatives will help maintain strong asset quality within the loan portfolio. To that end, we believe that the telecom portfolio, a source of loan portfolio weakness, will continue to represent less than 10% of the total loan portfolio. The stable outlook factors in NRUC's plans to lower leverage through the offering of member capital securities and through the change in NRUC's patronage retention cycle, and incorporates an expectation that NRUC will maintain sufficient liquidity as well as access to private sources of funding to mitigate the firm's reliance on wholesale funding.

For more information on NRUC, please refer to the Analysis dated December 10, 2009 and the most recent Credit Opinion dated December 9, 2009. Both can be found on moodys.com under the National Rural Utilities Cooperative Finance

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Corporation heading

The principal methodology used in rating BREC is U.S. Electric Generation & Transmission Cooperatives, published in December 2009 and available on www.moodys.com in the Rating Methodologies sub-directory under the Research & Ratings tab. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Rating Methodologies sub-directory on Moody's website.

The last rating action for BREC was July 14, 2009 when Moody's assigned a (P)Baa1 senior secured rating to proposed PCRBs representing a standalone senior secured obligation of BREC.

The principal methodologies used in rating NRUC are U.S. Electric Generation & Transmission Cooperatives, published in December 2009 and Rating Methodology: Analyzing the Credit Risks of Finance Companies, published in October 2000, and both are available on www.moodys.com in the Rating Methodologies sub-directory under the Research & Ratings tab. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Rating Methodologies sub-directory on Moody's website.

The last rating action for NRUC was November 24, 2009 when the ratings were affirmed with a stable rating outlook.

Big Rivers Electric Corporation 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 111,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

Based in Herndon, Virginia, National Rural Utilities Cooperative Finance Corporation is a private, not for profit cooperative association exclusively serving rural electric, service, and telecommunication utilities. The principal purpose of the company is to provide its members with a source of financing to supplement the loan programs of the Rural Utilities Service of the United States Department of Agriculture.

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CREDIT OPINION

Big Rivers Electric Corporation

Henderson, Kentucky, United States

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Key Indicators [1]				
	2008	2007	2006	2005
TIER [2]	1,5	1.7	1.5	1.4
DSCR [2]	1.2	1.8	1.6	1.8
FFO / Interest	1.8	2.1	1.9	1.8
FFO / Debt	6%	6%	5%	4%
Equity / Capitalization	-17%	-16%	-21%	-26%
Net Operating Margin	35%	30%	34%	32%

[1] All ratios calculated in accordance with Moody's Electric G&T Cooperative Rating Methodology using Moody's standard adjustments

[2] Moody's definitions may differ from indenture covenants

Rating Drivers

- » Stronger balance sheet resulting from deleveraging following the unwinding of 1998 vintage transactions
- » Ownership of competitively advantaged coal-fired generation plants
- » High industrial concentration to two aluminum smelters
- Rates subject to regulation by the Kentucky Public Service Commission (KPSC)
- » Substantial revenues from electricity sold under long-term wholesale power contracts with member owners

Corporate Profile

Big Rivers Electric Corporation is an electric generation and transmission cooperative (G&T) 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 111,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

This Credit Opinion provides an in-depth discussion of credit rating(s) for Big Rivers Electric Corporation and should be read in conjunction with Moody's most recent Credit Opinion and rating information available on Moody's website.

:Case:No: 2012-00535

Summary Rating Rationale

The (P)Baa1 senior secured rating considers the financial benefits of several steps taken by Big Rivers to unwind a lease and other transactions in 2008 and 2009 wherein its prior deficit net worth turned substantially positive, cash receipts were utilized to reduce debt, and two committed bank credit facilities aggregating \$100 million were established to improve liquidity. Revenues generated from competitively priced power sold under long-term wholesale contracts with the three member owners should continue to generate FFO to interest and debt metrics in support of the rating level, while capital expenditures are largely met with internally generated funds. Big Rivers' senior secured rating is a notch below the median A3 senior most rating for the sector.

A significant constraint to Big Rivers' rating is that one of its member owners, Kenergy Corp., makes a high concentration of its sales to two aluminum smelters (Century Aluminum Company: Corporate Family Rating Caa3; stable outlook and Rio Tinto Alcan: senior unsecured rating Baa1; stable outlook), both of whom face credit challenges due to the significant volatility in both metal prices and demand. In addition, these smelters have the option to terminate their respective power purchase arrangements, subject to a one-year notice and other conditions. Big Rivers' rating is further constrained because its rates are regulated by the KPSC, which is atypical for the G&T coop sector.

Detailed Rating Considerations

Unwind Of Historical Transactions Completed; Financial Flexibility Improved

In 2008, Big Rivers bought out two leveraged lease transactions and in 2009 completed a series of other steps to terminate another lease and other long-term transactions previously involving E.ON U.S. LLC (formerly known as: LG&E Energy Marketing Inc.) and Western Kentucky Energy Corp. These entities previously leased and operated the generating units owned by Big Rivers. In turn, Big Rivers was purchasing the power from these units at generally fixed below market rates to use in servicing the requirements of its three members, exclusive of the load requirements of Kenergy's two large aluminum smelters. At the same time, Big Rivers terminated other agreements and entered into various new arrangements whereby it now sells to Kenergy 850 MW in aggregate for resale to the two aluminum smelters. This arrangement reintroduces a concentration of load risk for Big Rivers. Key credit positives resulting from consummation of all the unwind transactions are as follows: elimination of Big Rivers' deficit net worth, with equity expected to be close to \$379 million when December 31, 2009 financial statements are published (compared to a negative \$155 million at 12/31/2008), and partial utilization of the \$505.4 million in cash payments received from E.ON to repay about \$140.2 million of debt owed to the Rural Utilities Service (RUS) and to establish \$252.9 million of reserves. The reserves were comprised of: a \$157 million Economic Reserve for future environmental cost increases; a \$35 million Transition Reserve to mitigate potential costs if the smelters decide to terminate their agreements or otherwise curtail their load due to reduced aluminum production; and a \$60.9 million Rural Economic Reserve, which would be used over two years to provide credits to rural customers upon exhaustion of the Economic Reserve.

As part of the unwind process, Big Rivers completed the buyout of leveraged leases with Bank of America and Phillip Morris Capital Corporation (PMCC) during 2008. Among the positive credit effects of the buyouts were removal of \$922 million of defeased obligations (about \$735 million of which was off-balance sheet), and removal of exposure to Ambac, albeit at a net cost of \$120 million, including a \$12 million PMCC note. We note, however, that part of the cash payment from E.ON

upon consummation of unwinding all the various transactions included full reimbursement of Big Rivers' lease buyout costs, and the \$16 million remaining deferred loss on reacquired debt was written off.

Under a contract times interest earned ratio (TIER) arrangement with the two smelters, Big Rivers is targetting to maintain a minimum TIER of 1.24x, which would leave ample cushion under its financial covenants and positioning itself favorably among its similarly rated peers. Under current market conditions, we expect that Big Rivers would file for rate relief as necessary, in the event that TIER drops below the 1.24x target, exclusive of the non-recurring effects from the unwind transaction.

Coal-Fired Plants Represent Valuable Assets Even As Environmental Costs Loom

Big Rivers owns generating capacity of about 1,444 megawatts (MW) in four substantially coal-fired plants. Total power capacity is about 1,833 MW, including rights to about 212 MW of coal-fired capacity from Henderson Municipal Power and Light (HMP&L) Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration. The economics of power produced from these sources enables Big Rivers to maintain a solid competitive advantage in the Southeast and even more so when compared to other regions around the country. The consistently high capacity factors and efficient operations of the assets results in wholesale rates to members around \$36 per MWh, which translates to member retail rates to residential customers around 7 cents per kWh.

Because Big Rivers is substantially dependent on coal-fired generation, it faces a high degree of uncertainty associated with the form and substance of future environmental legislation, the timing for implementation, and the amount of related costs to comply. We view this as more of a medium-term issue at this time and note that the Economic Reserve should help mitigate some of the need for initial rate increases to cover future compliance costs.

Regulatory Risk Exists; However, Offsets Are Present

Big Rivers is subject to regulation for rate setting purposes by the KPSC, which is atypical for the sector and can pose challenges in getting timely rate relief if and when needed. We view the existence of certain fuel and purchased power cost adjustment mechanisms available to Big Rivers as favorable to its credit profile since they can temper risk of cost recovery shortfalls if there is a mismatch relative to existing rate levels. We do not anticipate any filing for general rate increases by Big Rives in 2010, although we would not rule out additional revenues generated under the fuel adjustment clause and through use of a portion of the various reserve funds. The KPSC issued an order on March 6, 2009 requiring Big Rivers to file for a general review of its financial operations and rates by July 16, 2012 (i.e. three years from the closing of the unwind transaction). We understand that management intends to comply with this mandate by filing its case with the KPSC in mid-2011 so that new rates would be effective January 1, 2012. Big Rivers' existing depreciation study and tariffs have been in place since July 1998 and September 1997, respectively.

Wholesale Power Contracts Are A Linchpin To Sound Credit Profile

The substantial revenues derived under Big Rivers' long-term wholesale contracts with its members will continue as the contracts were extended by an additional 20 years to December 31, 2043 when the unwind of transactions were completed in 2009. The low cost power provided under the contracts makes member disenchantment unlikely, even in the face of potential rate increases in the medium to longer term due to environmental compliance costs. The currently overall sound member profile

provides assurance of this revenue stream, which is integral to servicing Big Rivers' debt. The potential for further degradation in the creditworthiness of the smelters is a particular credit concern, only tempered in part by assurances of two month's worth of payment obligations covered by letters of credit from an A1 rated financial institution (or some other form acceptable to Big Rivers) under certain circumstances.

Concerns About Potential Loss Of Smelter Load Cannot Be Ignored

Under historical operating conditions, the two smelters served by Kenergy can be expected to consume over 7 million MWh of energy annually, representing a substantial load concentration risk. As noted above, this risk is a significant constraint to Big Rivers' rating, making its operating and risk profile rather unique compared to peers. At this stage either of the two smelters could serve a one-year notice of termination of their contract at any time. However, if one smelter has given notice prior to the completion of the transmission capacity upgrade the other smelter may not give a termination notice with an effective date prior to December 31, 2011. Given the cost effective power being provided by Big Rivers to allow Kenergy to service this load, we do not currently expect the smelters to exercise this option. Moreover, Big Rivers' current plans to join MISO, the ongoing expansion of its own transmission lines and legislation to permit sales to non-members, when coupled with the low cost of the power, should enhance Big Rivers' ability to move excess power off system in the event that the smelters cancel their contracts or otherwise reduce load due to curtailment of aluminum production due to market and economic conditions. Indeed, during 2009, Century Aluminum of Kentucky arranged for the orderly curtailment of one of its five potlines, pending improvement in economic conditions. Century Aluminum's potline remains shut down and Big Rivers has moved to sell into the open market the approximately 87 megawatts of capacity it would otherwise be providing to Kenergy for service to the one Century Aluminum pot line.

Liquidity

Since July 2009, Big Rivers has been supplementing its internally generated funds with \$100 million of unsecured committed revolver capacity, with National Rural Utilities Cooperative Finance Corporation (NRUCFC) and CoBank providing \$50 million each. The NRUCFC and CoBank facilities, which expire on July 16, 2014 and July 16, 2012, respectively, replaced the smaller \$15 million facility previously provided by NRUCFC, which was terminated upon completion of the unwind transactions in 2009. The \$50 million NRUCFC facility provides for issuance of up to \$10 million of letters of credit. We view the significant increase in available bank credit as credit positive. We understand that as of December 31, 2009 there were no borrowed amounts outstanding under the bank facilities, but \$5.7 million of letters of credit were issued and outstanding. Based on Big Rivers' increase in available bank credit, our understanding that an unrestricted cash balance near \$60 million is likely to be reported when 12/31/2009 financial statements are published, and assuming cash flow from operations in 2010 of approximately \$61 million and no change in management's current policy of not returning any patronage capital to members, we expect Big Rivers to have sufficient means to meet its anticipated short-term working capital needs, capital expenditures (approximately \$41 million) and scheduled principal repayments (approximately \$14 million) over the next four quarters. The quality of the alternate liquidity provided by the bank revolvers benefits from the multi-year tenor and the absence of any onerous financial covenants, which largely mirror the financial covenants in existing debt documents. Big Rivers is in compliance with those covenants and we expect that to remain so in the foreseeable future. Additionally, the NRUCFC facility benefits from no ongoing material adverse change (MAC) clause; however, the CoBank facility is considered of lesser quality because of the ongoing nature of its MAC clause related to each drawdown. There are no applicable

Witness: Billie J. Richert Page 4 of 9 rating triggers in any of the facilities that could cause acceleration or puts of obligations; however, a ratings based pricing grid applies.

Structural Considerations

Prior to completion of the unwind transactions in 2009, substantially all of Big Rivers' assets were subject to the lien of an RUS mortgage; however, certain tax exempt debt of Big Rivers and any outstanding amounts under the previously existing \$15 million secured NRUCFC line of credit enjoyed a super priority of payment claim and lien on assets under the then existing RUS mortgage over RUS. As part of the unwinding of various transactions completed in 2009, Big Rivers replaced the previously existing RUS mortgage with a new senior secured indenture. The new senior secured indenture re-established RUS and all senior secured debt holders on equal footing in terms of priority of claim and lien on assets. The new senior secured indenture also 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 borrow from RUS, if they choose to do so. Given persistent questions about the availability of funds under the federally subsidized RUS loan program, we consider the added flexibility of the new senior secured indenture to be credit positive.

Rating Outlook

The stable rating outlook is based on Big Rivers' successful completion of the unwind transactions, thereby improving its financial profile and repositioning itself to continue efficiently meeting the needs of its members in the future.

What Could Change the Rating - Up

Given the rating constraints linked to customer load concentration at Kenergy, rate regulation, and looming pressures tied to environmental issues, a rating upgrade is unlikely in the foreseeable future. Changes to eliminate rate regulation of cooperatives in Kentucky could contribute to a positive action, especially if it coincides with improvement in market conditions for the aluminum smelters and sustained improvement of FFO to interest and debt metrics to near 2.3x and 8%, respectively, on average.

What Could Change the Rating - Down

Loss of significant load (i.e. the smelters) that is not otherwise compensated for through off system power sales could contribute to a negative action, as would lack of regulatory support for substantial and timely recovery of costs. In terms of credit metrics, if FFO to interest and debt falls below 2x and 6%, respectively, for a sustained period of time, then rating pressure could result.

Other Considerations

Mapping To Moody's U.S. Electric Generation & Transmission Cooperatives Rating Methodology

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative rating Methodology appears below and is based on historical data through December 31, 2008. We plan to further update this mapping and the Credit Opinion once more current data through December 31, 2009 becomes available. Meanwhile, the Indicated Rating for Big Rivers' senior most obligations under the Methodology is Baa2 and relies on the aforementioned historical quantitative data and qualitative assessments. In particular we note that the Baa2 rating is significantly influenced by the weak standing for the factors relating to dependence on purchased power, the percentage of residential sales, and equity as a percentage of capitalization. We hold a more favorable prospective view of some of those factors, especially given the 2009 completion of the unwind transactions. This view will likely generate a higher Indicated Rating for Big Rivers under the Methodology when the more current data is incorporated going forward. Nevertheless, the unique risks relating to Big Rivers load concentration to the smelters will likely persist and continue to constrain its rating level in the future.

Rating Factors						
U.S. ELECTRIC GENERATION & TRANSMISSION COOPERATIVES	Aaa	Aa	A	Baa	Ва	В
Factor 1: % Member Load Served and Regulatory Status (20%)		Х				
Factor 2: Rate Flexibility (20%)						
a) Board Involvement / Rate Adjustment Mechanism (5%)				X		
b) Purchased Power / Sales (5%)						X
c) New Build Capex / Net PP&E (5%)			Х			
d) Rate Shock Exposure (5%)						Х
Factor 3: Member / Owner Profile (10%)						
a) Residential Sales / Total Sales (5%)						х
b) Members' Consolidated Equity / Capitalization (5%)				X		
Factor 4: 3-Year Average Financial Metrics (40%)						
a) TIER (5%)		_ x				
b) DSC (5%)		х				
c) FFO / Debt (10%)				х		
d) FFO / Interest (10%)				х		
e) Equity / Capitalization (10%)						х
Factor 5: Size (10%)						
a) MWh Sales (5%)				Х		
c) Net PP&E (5%)				х		
Rating:						
a) Indicated Rating from Methodology				Baa2		
b) Actual Rating Assigned				(P) Baa1		

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Rating Action: Ohio (County of) KY

Moody's assigns (P)Baa1 to County of Ohio, Kentucky bonds to be issued on behalf of Big Rivers Electric Corp.

Approximately \$83.3 million of securities affected

New York, July 14, 2009 -- Moody's Investors Service assigned a (P)Baa1 senior secured rating to a proposed offering of \$83.3 million of County of Ohio, Kentucky Pollution Control Revenue Refunding Bonds (Big Rivers Electric Corporation Project) to be issued on behalf of Big Rivers Electric Corporation (Big Rivers). The rating outlook for Big Rivers is stable. Proceeds from the issuence of these bonds will be used to refund \$83.3 million in aggregate principal amount of Pollution Control Refunding Revenue Bonds, Series 2001A (Big Rivers Electric Corporation Project) outstanding, which were previously issued on behalf of Big Rivers by the County of Ohio, Kentucky. The prior bonds were Periodic Auction Reset Securities that were insured as to the payment of principal and interest when due by Ambac Assurance Corporation. The proposed offering of bonds will represent standalone senior secured obligations of Big Rivers Electric Corporation, ranking on parity with all of Big Rivers' existing debt under its first mortgage bond indenture.

"The (P)Baa1 rating reflects anticipated financial benefits to Blg Rivers of a series of steps being taken to unwind a lease and other transactions with E.ON U.S. LLC and two affiliates (E.ON), including an expectation that the cooperative's current deficit net worth will turn substantially positive, cash receipts will be utilized to reduce existing debt, and two new committed bank credit facilities aggregating \$100 million will be established to improve liquidity", said Vice President, Kevin Rose. Subject to meeting the remaining required conditions established by the Kentucky Public Service Commission (KPSC), Big Rivers and E.ON expect to complete the unwinding of the transactions by July 16, 2009. Under this scenario, the above proposed financing is expected to occur in late 2009. "Revenues generated from competitively priced power sold under long-term wholesale contracts with the three member owners of Big Rivers should also continue to generate FFO to Interest and debt matrics in support of the (P)Baa1 rating level, while capital expenditures are largely met with internally generated funds", Rose added.

Moody's further notes a significant constraint to Big Rivers' rating is the fact that one of its member owners, Kenergy Corp., makes a high concentration of its sales to two aluminum smelters, both of whom currently face credit challenges due to the significant fall off in both metal prices and demand, which have options to terminate their respective power purchase arrangements beginning on December 31, 2010, subject to one-year notice. Although revisions to certain original agreements between E.ON and one of the two aluminum smelters (Century Aluminum of Kentucky, a wholly owned subsidiary of Century Aluminum Company) that were required to facilitate Century's participation in the unwind transaction actually provide some additional assurances for both Century and Big Rivers at least until December 31, 2010, Moody's remains cautious in monitoring this exposure. In addition, Big Rivers' rating is constrained because it is subject to regulation by the Kentucky Public Service Commission, which is atypical for the cooperative sector and can sometimes pose challenges in implementing timely rate increases when needed to recover higher costs of service.

The principal methodology used in rating Big Rivers Electric Corporation was U.S. Electric Generation & Transmission Cooperatives, which can be found at www.moodys.com in the Credit Policy & Methodologies directory, in the Ratings Methodologies subdirectory. Other methodologies and factors that may have been considered in the process of rating this Issuer can also be found in the Credit Policy & Methodologies directory.

The tast rating action was June 1, 2009 when Moody's withdrew the (P)Baa1 rating initially assigned on March 13, 2009, which represented the first time that Moody's had assigned a rating to bonds representing a standalone obligation of Big Rivers. The June 1, 2009 rating withdrawal followed a decision by Century Aluminum, not to proceed as originally planned with their contractual role in a series of steps to unwind the existing lease agreements between Big Rivers and E.ON U.S. LLC. Since then, the aforementioned contract revisions allowed for Century to re-establish its role and allow the unwind transaction and Big Rivers' planned financing to move forward.

Big Rivers Electric Corporation 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 111,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

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Summary:

Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

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Related Criteria And Research

Summary:

Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

Credit Profile

Big Rivers Electric Corp. ICR

Long Term Rating

BBB-/Negative

Affirmed

Ohio Cnty, Kentucky

Big Rivers Electric Corp., Kentucky

Ohio Cnty (Big Rivers Electric Corp.) poll ctrl rfdg rev bnds (Big Rivers Elec Corp Proj) ser 2010A

Long Term Rating BBB-/Negative

Affirmed

Rationale

Standard & Poor's Ratings Services has revised its outlook on Big Rivers Electric Corp., Ky., (BREC) and Ohio County, Ky.'s \$83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corp. Project) issued for Big Rivers' benefit to negative from stable. At the same time, Standard & Poor's affirmed its 'BBB-' issuer credit rating on the cooperative and the issue-level rating on the Ohio County bonds.

The outlook revision reflects our concerns about the strength and stability of the utility's revenue stream following its leading customer's issuance of a 12-month notice to terminate its power contract with BREC. The notice covers Century Aluminum Co.'s (B/Stable/--) Hawesville, Ky., smelter. During the 12 months, Century is required to pay a base energy charge that covers its share of Big Rivers' fixed and variable costs. If it does not operate the plant during the notice period, it must still pay its share of fixed costs. BREC has accepted the termination notice.

Before sending its termination notice, Century claimed that its Hawesville smelting facilities require significant electric rate concessions to remain viable. Although the smelting plant has been operating at levels that exceeded its threshold electric contract requirements, the company cited sharp declines in aluminum prices and BREC's electric rates as factors that are degrading its Hawesville facilities' profitability. The utility did not accept the requested concessions, because its nonsmelter customers would have to bear the \$110 million in concessions Century sought for itself and the utility's other smelter customer, Rio Tinto Alcan Inc. (Alcan; A-/Stable/A-2). That smelter is not projecting closing its Sebree facilities in BREC's service territory.

Century and Alcan represented two-thirds of BREC's 2011 megawatt-hour (MWh) sales to members, excluding nonmember sales, and about half of energy sales to members and nonmembers. Century accounted for about 30% of the utility's 2011 operating revenues and Alcan, 24%. About 80% of BREC's 2011 electric sales were to members and it sold the balance of its output principally in competitive wholesale markets. We view the pending loss of Century as having the potential to convert substantial amounts of the utility's generation capacity into surplus. Also, the departure could shift to BREC's remaining customers costs that Century historically paid.

Summary: Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

Henderson, Ky.-based Big Rivers is a generation and transmission cooperative that produces and procures electricity for sale to three distribution cooperative members and their 112,900 retail customers. One member, Kenergy Corp.,

serves the two smelters. In 2011, Kenergy's 9.4 million MWh sales were 8x greater than the sum of the other two

members' MWh sales. About 86% of Kenergy's 2011 MWh sales were to industrial customers. Nearly three-quarters of

its sales were to the two smelters. They accounted for more than 70% of the company's operating revenues, BREC's

other member distribution cooperatives--Jackson Purchase Energy and Meade County Rural Electric

Cooperative--principally serve residential customers.

The smelters entered into take-or-pay power contracts with Kenergy. However, the contracts allow the smelters to

terminate their obligations to the distribution utility and BREC without penalty if they provide one-year's notice and

cease operations.

BREC plans to file for rate relief to compensate for Century's loss. The rate filing will request that the Kentucky Public

Service Commission (KPSC) reallocate costs historically borne by Century to BREC's remaining customers by raising their rates. We view the service area's composition as potentially frustrating the ability to reallocate costs, We believe

that Alcan might resist efforts to have it absorb costs its competitor previously covered. Also, many of the counties

that BREC serves have income levels that are 20%-30% below the national median household effective buying income,

which could hinder the reallocation of Century costs to residential customers. In addition, because the KPSC must

approve the request for rate adjustments, the utility and its member distribution cooperatives are distinguishable from

many other cooperative utilities that have autonomous ratemaking authority. Because the cooperative and its members are regulated, it is uncertain whether the rate relief request that BREC is planning will be approved in full or

in part.

During rate negotiations between BREC and Century, the utility reported that applying the smelter's requested rate

concessions to both smelters to maintain parity would have meant raising the system's residential customers' rates

about 37% and its industrial customers' rates about 56%. It now expects to seek more modest rate increases that

reflect the reallocation of Century's costs to remaining customers.

BREC is also evaluating idling power plants as part of its response to losing loads. Closing plants could reduce costs,

reduce market exposure and mitigate the financial impact on remaining customers. The utility might also temper the

burdens of cost reallocation if it can remarket some or all of the generation output that had been sold to the smelters.

However, market or contract demand and prices would need to be sufficient to recoup Century's share of costs or

mitigate the loss of the company's contribution to cost recovery.

Based on historical market sales and Century's share of purchases, we believe that market sales could transform the

utility into a principally merchant generator that faces the risks inherent in being subject to market demand and prices.

The smelters' large share of energy sales could make it difficult to resell so much of the utility's generating capability.

In addition, the utility's very high dependence on coal units might also constrain market sales opportunities. Coal

accounts for close to 90% of its power sales and coal units are not as economical as gas-fired resources that are

benefitting from the fuel's low prices.

BREC sells electricity to the smelters under contracts at prices that are about 30% above the 3.3 cents it earned from

Summary: Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

sales of surplus energy in wholesale markets in 2011. It sold 3 million MWh of surplus wholesale power into the

market for \$100.4 million in 2011.

Coal resources also expose the utility to potentially higher production costs as Environmental Protection Agency (EPA) regulation of power plant emissions progresses. A recent appellate decision that vacated the EPA's Cross-State

Air Pollution rule could provide the utility with at least a temporary reprieve from emissions-related capital spending

while the EPA revisits its rules.

The utility reported \$794 million of debt as of June 30, 2012. Debt consisted of Rural Utilities Service loans and the

Ohio County bonds. Big Rivers closed a \$537 million loan with CoBank ACB and National Rural Utilities Cooperative

Finance Corp. in July. In addition to replenishing \$35 million of transition reserve funds, proceeds restructured a

portion of the utility's RUS borrowing to eliminate some of the spikes in debt service requirements.

The debt portfolio exhibits uneven amortization. BREC repaid \$14.2 million of principal in 2010. In 2011, it was

required to repay \$7.3 million of principal, but also used \$35 million of transition reserve monies to accelerate principal

reduction. The utility replenished the transition reserve in 2012 with proceeds of July's borrowing from CoBank and National Rural Utilities. Loan proceeds also facilitated debt restructuring that reduced 2012's \$72.1 million scheduled

maturity to \$12.1 million, with the remaining \$60 million to be amortized in later years. However, 2013's maturity

remains at \$79.3 million, and that will likely need to be restructured. The utility forecasts about \$22 million of 2014 and

2015 principal payments.

Ohio County sold bonds for the benefit of BREC, which used bond proceeds to refund auction rate securities. We

understand that the financing structure obligates the utility to unconditionally pay the county's bonds' debt service. Big

Rivers issued a note to the county that provides it with a security interest in the utility's assets under its mortgage

indenture. The county's bonds' security interest is on par with the utility's senior-secured debt.

Debt service coverage of 1.45x in 2010 and 1.65x in 2011 was strong for a cooperative utility, in our opinion. We

believe strong excess coverage margins provide a cushion against the potential for revenue stream variability.

The strength of 2011's coverage ratio partially reflects the year's very low scheduled principal payment of \$7.3 million.

We calculated the ratio using scheduled debt service in the denominator, compared to the \$46 million of principal the

utility elected to repay.

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The utility maintains \$152.6 million of reserves that it uses for rate stabilization to reduce rates. Because it already

projects depleting these reserves by the first quarter of 2018 under a steady-state scenario, we do not view these

reserves as adding value under a scenario in which the smelters receive rate concessions or close.

Outlook

The negative outlook reflects our view that the largest customer's decision to close facilities after failing to win rate

concessions could degrade BREC's financial performance and credit quality during our two-year outlook horizon.

Although the utility plans to file for rate relief, we view rate cases as presenting uncertainty vis-à-vis the extent and

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Summary:

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Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

Big Rivers Electric Corp. ICR Long Term Rating BB-/Negative Downgraded Ohio Cnty, Kentucky Big Rivers Electric Corp., Kentucky Ohio Cnty (Big Rivers Electric Corp.) poll ctrl rfdg rev bnds (Big Rivers Elec Corp Proj) ser 2010A Long Term Rating BB-/Negative Downgraded

Rationale

Standard & Poor's Ratings Services has lowered to 'BB-' from 'BBB-' its rating on Big Rivers Electric Corp., Ky., (BREC) and Ohio County, Ky.'s \$83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corp. Project) issued for Big Rivers' benefit. The outlook is negative.

The downgrade reflects our assessments of the issuer's obligations' heightened vulnerability to nonpayment after the following developments that we view as eroding the strength and stability of the utility's revenue stream:

- In August 2012, BREC's leading customer issued a 12-month notice to terminate its contract. The notice covers Century Aluminum Co.'s Hawesville, Ky., smelter. During the 12 months, Century is required to pay a base energy charge that covers its share of Big Rivers' fixed and variable costs. If it does not operate the plant during the notice period, it must still pay its share of fixed costs. The utility has accepted the termination notice. Century accounted for 36% of BREC's 2012 operating revenues.
- After the utility filed a rate case with the Kentucky Public Service Commission (KPSC) Jan. 15, 2013, and requested rate relief that would, among other things, reallocate costs borne by Century to its remaining customers, a second smelter, Rio Tinto Alcan Inc. (Alcan), issued a 12-month notice to terminate its power contract with BREC. Alcan's Jan. 31, is effective January 2014. The notice covers the company's Sebree smelter, which accounted for 28% of BREC's 2012 operating revenues. BREC's rate filing proposed raising Alcan's rates 16%.
- We believe that losing these two loads will deprive the utility of the substantial anchors that have supported much of
 its fixed costs. Moreover, we view the extent to which the KPSC will approve reallocating costs to remaining
 customers as uncertain.
- We believe it might be too onerous for remaining customers to assume the fixed costs that the smelters have
 historically borne, particularly because many of the counties that BREC serves have income levels that are 20%-30%
 below the national median household effective buying income.
- If BREC looks to competitive market sales to mitigate load losses, it is our view that sales in competitive wholesale markets could expose the utility to substantial price and volume uncertainty, which is inconsistent with sound credit quality. Moreover, BREC depends almost exclusively on coal units, which also could constrain market sales opportunities. Coal has accounted for close to 90% of its power sales and its coal units are not as economical as competing natural gas-fired resources that are benefiting from the fuel's low prices.

- Although the utility has about \$60 million of unexpended bond proceeds available to retire its \$58.5 million of
 pollution control bonds that are maturing in June, an eroding customer base might frustrate access to capital
 markets to replenish those funds. The utility reports the speculative grade rating will not lead to an acceleration of
 obligations outstanding.
- Big Rivers reports it deferred maintenance in 2012 to control expenses. Although it does not plan to defer
 maintenance in 2013, it is revisiting its capital program pending more certainty as to the timing and extent of rate
 relief.

Henderson, Ky.-based Big Rivers is a generation and transmission cooperative that produces and procures electricity for sale to three distribution cooperative members and their 112,900 retail customers. One member, Kenergy Corp., serves the two smelters. In 2011, Kenergy's 9.4 million megawatt-hour (MWh) sales were 8x greater than the sum of the other two members' MWh sales. About 86% of Kenergy's 2011 MWh sales were to industrial customers. Nearly three-quarters of its sales were to the two smelters. They accounted for more than 70% of Kenergy's operating revenues. BREC's other member distribution cooperatives—Jackson Purchase Energy and Meade County Rural Electric Cooperative—principally serve residential customers.

The smelters entered take-or-pay power contracts with Kenergy. However, the contracts allow the smelters to terminate their obligations to the distribution utility and BREC without penalty if they provide one-year's notice and cease operations.

Because the KPSC must approve requests for rate adjustments, the utility and its member distribution cooperatives are distinguishable from many other cooperative utilities that have autonomous ratemaking authority. The KPSC also regulates BREC's members' rates.

The utility is evaluating idling power plants as part of its response to losing loads. Closing plants could reduce costs, reduce market exposure and mitigate the financial impact on remaining customers. Big Rivers might also temper the burdens of cost reallocation if it can remarket some or all of the generation output that had been sold to the smelters. However, market or contract demand and prices would need to be sufficient to recoup the smelters' share of costs. We believe that market sales could transform the utility into a principally merchant generator that faces the risks inherent in being subject to market demand and prices.

BREC sells electricity to the smelters under contracts at prices that are about 30% above the 3.3 cents it earned from sales of surplus energy in wholesale markets in 2011. It sold 3 million MWh of surplus wholesale power into the market for \$100.4 million in 2011.

Big Rivers' concentration in coal resources also expose the utility to potentially higher production costs as Environmental Protection Agency (EPA) regulation of power plant emissions progresses. A recent appellate decision that vacated the EPA's Cross-State Air Pollution rule could provide the utility with at least a temporary reprieve from emissions-related capital spending while the EPA revisits its rules.

The utility reported \$794 million of debt as of June 30, 2012. Debt consisted of Rural Utilities Service loans and the Ohio County bonds. Big Rivers closed a \$537 million loan with CoBank ACB and National Rural Utilities Cooperative Finance Corp. in July. In addition to replenishing \$35 million of transition reserve funds, proceeds restructured a portion of the utility's RUS borrowing to eliminate some of the spikes in debt service requirements.

The debt portfolio exhibits uneven amortization. BREC repaid \$14.2 million of principal in 2010. In 2011, it was required to repay \$7.3 million of principal, but also used \$35.0 million of transition reserve money to accelerate principal reduction. The utility replenished the transition reserve in 2012 with proceeds of July's borrowing from CoBank and National Rural Utilities. Loan proceeds also facilitated debt restructuring that reduced 2012's \$72.1 million scheduled maturity to \$12.1 million, with the remaining \$60 million to be amortized later. However, 2013's maturity remains at \$79.3 million, and that will likely need to be restructured. The utility forecasts about \$22 million of 2014 and 2015 principal payments.

Ohio County sold bonds for the benefit of BREC, which used bond proceeds to refund auction rate securities. We understand that the financing structure obligates the utility to unconditionally pay the county's bonds' debt service. Big Rivers issued a note to the county that provides it with a security interest in the utility's assets under its mortgage indenture. The county's bonds' security interest is on par with the utility's senior-secured debt.

Debt service coverage of 1.45x in 2010 and 1.65x in 2011 was strong for a cooperative utility, in our opinion. We believe strong excess coverage margins provide a cushion against the potential for revenue stream variability.

The strength of 2011's coverage ratio partially reflects the year's very low scheduled principal payment of \$7.3 million. We calculated the ratio using scheduled debt service in the denominator, compared to the \$46 million of principal the utility elected to repay.

The utility maintains \$152.6 million of reserves that it uses for rate stabilization to reduce rates. Because it already projects depleting these reserves by the first quarter of 2018 under a steady-state scenario, we do not view these reserves as adding value under a scenario in which the smelters close.

Outlook

The negative outlook reflects our view that the largest customers' termination notices could degrade BREC's financial performance and credit quality during our one-year outlook horizon. We believe there is significant uncertainty vis-à-vis the extent and timeliness of rate relief, particularly as substantial blocks of fixed costs need to be reallocated. We will monitor the progress of the rate case to assess whether further rating action is appropriate. We believe the customers' notice could expose the utility to the vicissitudes of merchant markets and creates the potential for substantial cost shifting to remaining customers, who might resist such efforts or find that reallocated costs are too onerous to absorb. If these risks, whether in isolation or combination, weaken BREC's business risk profile and erode financial metrics, including the strong debt service coverage that compensated for business risks in recent years, we could further lower the ratings. We do not expect to raise the ratings during our outlook period.

Related Criteria And Research

USPF Criteria: Applying Key Rating Factors To U.S. Cooperative Utilities, Nov. 21, 2007

Temporary telephone contact information: David Bodek (917-992-6466); Jeffrey Panger (646-369-4067).

Summary: Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

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Research

Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

18-May-2010

Credit Profile		Current Ratings
US\$83.3 mil poll ctrl rfdg rev bnds (Big Ri	vers Elec Corp Proj) ser 2010A BBB-/Stable	due 07/15/2031 New
ICR Long Term Rating	BBB-/Stable	New

Rationale

Standard & Poor's Ratings Services has assigned its 'BBB-' issuer credit rating to **Big Rivers Electric Corp.** (BREC) and its 'BBB-' long-term rating to **Ohio County**, Ky.'s \$83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corporation Project). The outlook is stable.

Oh: Ounty is selling the bonds for the benefit of BREC, which plans to use bond proceeds to refund auction rate
see as that represent a portion of its \$848 million of debt obligations. We understand that the financing structure
obligates BREC to unconditionally pay the county's bonds' debt service and issue a note to the county providing it with a
security interest in BREC's assets under its mortgage indenture. The Ohio County bonds' security interest will be on par
with the utility's senior-secured debt.

BREC and Ohio County might decide to sell the bonds with a guarantee from National Rural Utilities Cooperative Finance Corp. (A/Negative/A-1). If the bonds carry such a guarantee, we will review the guarantee and the rating on the bonds to reflect any benefits that may follow.

The ratings reflect our view of the following credit weaknesses:

- We believe that BREC's extreme level of customer concentration and its leading customers' credit profiles
 represent meaningful credit exposures. The cooperative relies on two customers for about 68% of energy sales to
 members and 62% of total energy sales. These two customers are aluminum smelters with operations that are
 vulnerable to economic cycles.
- In our opinion, the take-or-pay features of the retail power sales contracts between BREC distribution cooperative, Kenergy Corp., and the smelters are weak because the smelters can terminate their BREC obligations on one-year's notice.
- The cooperative and its member distribution cooperatives are subject to state rate regulation that distinguishes BREC from many other cooperatives that have autonomous ratemaking authority. Rate regulation could potentially expose the utilities' financial performance to delayed rate relief or cost disallowances, particularly if BREC needs to reallocate the smelters' shares of fixed costs to its nonsmelter customers.

The cooperative relies on sales of surplus energy in uncertain wholesale markets to augment its revenue stream and support its financial obligations.

Case No. 2012-00535 Attachment to Response for AG 1-57 Witness: Billie J. Richert

- Although BREC plans to add transmission capacity to increase physical access to wholesale markets, the projects are behind schedule. Moreover, we believe the utility lacks the certainty of firm contractual transmission arrangements, which could frustrate the surplus power sales BREC would need to make if the smelters meaningfully reduce operations or close.
- · Nearly one-third of BREC's debt either does not amortize before maturity or has limited amortization, which skews debt service coverage ratios. Using bullet maturities can inflate debt service coverage compared with cooperatives that use amortizing debt exclusively. Bullet maturities could also present refinancing risk.
- In July 2009, BREC regained operational control over generation assets it had not operated for more than a decade. The absence of a full fiscal year of generation operations creates uncertainties particularly because \$538 million of nonrecurring gains from the E.ON transaction unwind in 2009 were critical to that year's sound financial performance.

We believe these strengths temper the exposures:

- BREC reduced debt to \$848 million from \$1.04 billion using proceeds of the lease unwind transaction and achieved a lower debt balance than the \$872 million of debt it projected before the transaction.
- It applied a portion of the lease unwind proceeds to building equity.
- BREC projects what we view as sound debt service coverage of 1.5x or greater during five years, but we believe the cooperative needs strong coverage levels as a cushion against losing the smelters or reductions in smelter demand that could impair financial performance.
- BREC projects fully funding \$222 million of 2010-2013 capital needs from operating cash flow. However, in our opinion, if sales of surplus power are made at depressed power prices or adverse economic conditions reduce smelter loads that create more surplus energy, the utility could need additional debt to support capital spending requirements.
 - In our opinion, the long-term wholesale power contracts between BREC and its three member distribution cooperatives provide a measure of revenue stream security.
- Members have exclusive rights to sell electricity in defined territories.
- We believe that BREC's members' retail rates are competitive and they could contribute to financial flexibility. However, members' favorable rates depend on the smelters' operating at high load factors that help absorb high fixed costs. Rate levels also benefit from the subsidies that \$200 million of rate mitigation reserves provide.

Henderson, Ky.-based BREC is a generation and transmission (G&T) cooperative that produces and procures electricity for sale to 3 member distribution cooperatives and their more than 111,000 retail customers. It relies on two aluminum smelters for nearly two-thirds of operating revenues, which erodes revenue stream stability and predictability and distinguishes the utility from most cooperative utilities that generally earn high percentages of revenues from residential customers. Moreover, BREC projects that it needs to sell surplus energy into competitive wholesale markets to support its financial obligations. Although the cooperative projects nonmember revenues will represent about 10% of operating revenues during five years, reductions in the smelters' operations and electricity consumption could lead to greater market reliance. Declines in wholesale market electricity prices due to weak natural gas prices or abundant supplies could erode margins from market sales and place upward pressure on the costs that the utility's nonsmelter customers bear.

Outlook

The stable outlook reflects our expectations that the strong debt service coverage BREC projects could provide a financial cushion to service debt obligations under adverse conditions that could arise from the operational, financial and regulatory challenges the utility faces. We believe management needs to actively oversee these challenges to preserve credit quality.

C tomer Concentration Creates Concerns

V. elieve that BREC's extreme level of customer concentration and it leading customers' credit profiles represent meaningful credit exposures. The utility uses its power plants to produce and sell wholesale electricity. Its principal customers are its three member distribution cooperatives that resell the electricity to their nearly 110,000 retail customers. BREC is projecting that only two of the 110,000 customers will account for about 60% of its revenues. These two, Rio Tinto Alcan (Alcan; BBB+/Stable/A-2) and Century Aluminum Co. (B/Negative/--), are aluminum smelters whose operations and financial performance are exposed to extreme commodity price volatility. We believe these companies' economic viability hinges on aluminum prices, and the economy's strength, among other things. BREC expects Century's electricity purchases to provide about 36% of its revenues, which meaningfully exposes the cooperative's financial performance to a single speculative-grade customer's cash flows.

If Alcan or Century ceased operations at their Kentucky facilities, BREC would need to sell surplus electricity in competitive wholesale markets in a bid to recover substantial portions of its fixed costs. If the smelters reduce their operations, the cooperative will need to sell the resulting surplus energy in the market for the smelters' benefit. The several agreements that BREC, its distribution cooperative member, Kenergy, and the smelters signed provide that certain profits from market sales following curtailment inure to the smelters' benefit. The agreements also provide that the smelters must cover the cooperative's losses resulting from market sales following curtailment.

Given Century's weak credit quality, its ability to make up shortfalls is questionable. If the smelters terminate operations, their BREC obligations end. While the cooperative might retain profits from off-system sales in this scenario it will also bear the risk of losses.

We believe that selling electricity in wholesale markets to cover debt service presents meaningful credit challenges because wholesale market sales represent speculative and unpredictable revenue streams. Wholesale markets expose u to volatile prices, competing market participants, operational uncertainties such as acquiring physical access to transplain capacity, and potentially higher liquidity needs.

Retail Power Sales Contracts

We believe that the take-or-pay features of the retail power sales contracts between BREC distribution cooperative, Kenergy, and the smelters are weak.

Kenergy is one of BREC's three member distribution cooperatives. It resells BREC electricity to the smelters under 14-year power supply contracts. These contracts have take-or-pay elements that require the smelters to pay for specific quantities of energy, irrespective of whether they need it. Yet we believe that these contracts' take-or-pay features are weak and do not provide meaningful credit protections. For example, the smelters can terminate their contracts without penalties if they close their Kentucky facilities.

Financial Performance

We believe BREC's financial performance could suffer if the Kentucky PSC does not provide timely rate relief or disallows costs, particularly if BREC needs to reallocate the smelters' shares of fixed costs to its nonsmelter customers.

In our view, if the smelters close their operations and BREC cannot fully recoup the smelters' share of fixed costs through surplus electricity sales in competitive wholesale markets, BREC's nonsmelter retail customers might need to bear substantial additional costs. The cooperative will not have control over revenues if it needs to sell electricity in competitive wholesale markets to compensate for eroded smelter activity. Moreover, it can only recover shortfalls from the nonsmelter retail customers if it and its distribution cooperative members can obtain rate relief from the Kentucky PSC.

Ui. many other cooperative utilities, BREC and its member distribution cooperatives cannot autonomously raise rates

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ond to increasing costs or to reallocate costs. The Kentucky PSC regulates these utilities' wholesale and retail to Lity rates. Rate regulation presents credit concerns because rate proceedings can be lengthy and delay cost ek recovery. Moreover, rate-regulated utilities do not have cost recovery guarantees. Nevertheless, in recent rate proceedings, the Kentucky PSC provided BREC's distribution cooperatives with rate relief that was closely aligned with the utilities' requests. Also, the commission took steps in connection with the lease termination that we view as supporting credit quality, including directing E.ON to fund rate stabilization accounts benefiting the cooperative members' nonsmelter, retail customers.

We believe that BREC's 2010 nonsmelter member wholesale rates of \$36 per megawatt-hour (MWh) indicate there is capacity for further rate increases as necessary to reallocate costs to the cooperative's nonsmelter customers.

Generation Assets Could Pose Problems

We believe that BREC's few, vintage, coal-fired generation assets present operational exposures that can affect financial performance. The cooperative sells the electricity it produces at its seven owned coal plants and the two coal plants it operates that are owned by Henderson's Municipal Power and Light utility. BREC operates and has contractual rights to nearly 1,800 MW of generation capacity. Its and Henderson's power plants range in age from 23 to 40 years, with a weighted average age of 32 years, based on contributions to overall generating capacity.

BREC's wholesale electric rates include automatic fuel and purchased power cost adjustment mechanisms that we believe mitigate some credit concerns surrounding the mature fleet's ability to serve native load customers reliably. These true-up mechanisms shift some of the operational risks of operating older units to the smelter and nonsmelter customers by making them responsible for replacement power costs if units are not running.

While the fuel adjustment is an automatic, formulaic, monthly adjustment, the purchased power cost adjustment is only atic for the smelters. Before they are eligible for recovery in rates, the PSC must review the power purchase costs Bkec incurs on behalf of its nonsmelter customers. All costs recoverable under the adjustment mechanisms are subject to PSC prudence reviews.

There is a two-month lag for the fuel adjustment clause between when costs are incurred and when the cooperative recovers the member portion through rates. Similarly, the purchase power adjustment for the smelters also entails a twomonth cost recovery lag. The purchase power adjustment covering the smelters applies to only approximately two-thirds of the costs. The remaining one-third of the purchase power adjustment cost is deferred as a regulatory account for recovery in base rates in a general rate case. The utility projects that its next general rate application will be during 2011 and rate adjustments from that case will go into effect in 2012.

Some of BREC's plants have high heat rates. Its fleet's heat rates range from 10,600 BTU per kilowatt-hour (kWh) to 13,382 BTU per kWh with a weighted average heat rate of 11,100, reflecting the small percentage of the fleet with the highest heat rates. We are concerned that portions of the fleet might not dispatch to support market sales that compensate for losses of smelter sales.

BREC projects using coal to produce 95% of the electricity it sells, exposing the utility and its customers to potentially higher operating costs as the regulation of carbon and other emissions progresses. The plants' heat rates contribute to carbon intensity in the range of 1.1 tons of coal per MWh. Their ages, heat rates, and carbon intensity raise questions about their ability to compete against potentially more efficient and less carbon-intensive units in wholesale markets if the smelters reduce or end their cooperative electric purchases. In our view, the extent of carbon regulation will determine the effects of this level of carbon intensity on BREC's production facilities' economics.

- ise aluminum smelting is a carbon-intensive process, we believe a combination of costly carbon constraints on
- num production and carbon charges levied on the smelters' electricity purchases could impair their operations and

Case No. 2012-00535 Attachment to Response for AG 1-57 he'n the likelihood that BREC's generating assets might have to compete in wholesale markets.

Transmission Expansion Plans

Although BREC plans to add transmission capacity for physical access to wholesale markets, we believe it lacks the certainty of firm contractual transmission arrangements that can facilitate surplus power sales if the smelters reduce operations or close.

The Kentucky PSC approved transmission capacity additions that will increase capacity by about 51%, or 468 MW. BREC projects its transmission upgrades will cost a moderate \$5.3 million. Yet we believe the cooperative's ability to remarket the smelters' power still presents credit concerns.

BREC's transmission upgrades are behind schedule and until completed, the utility lacks sufficient capacity to market the smelters' power if both sharply reduce or discontinue operations. Even once completed, we believe that the cooperative's lack of firm contractual access rights could frustrate its ability to move power across others' transmission systems, including, the Tennessee Valley Authority (TVA) system. BREC only has contracts for 100 MW of firm transmission capacity across the TVA system. Management views the high cost of securing firm transmission access for a contingent exposure as unwarranted. The utility has physical interconnections with other power markets beyond TVA, such as the Midwest Independent System Operator and the Southwest Power Pool. However, BREC's electricity needs to cross TVA's transmission system to access key markets such as Southern Co. and Entergy Corp. Lack of transmission access due to fully loaded lines during peak periods could frustrate the cooperative's ability to capture the most robust power prices for surplus power it might need to sell if it loses smelter loads.

Potentially Lower Debt

BRFC projects modest declining debt balances as it funds its 2010-2013 capital needs from operating cash flow. The control ative projects \$222 million of capital spending in that period. It plans to fund these projects with internally generated funds. The principal capital projects will add environmental controls to generation plants and enhance the cooperative's transmission system.

However, in our view, if BREC's makes its market sales of surplus power at depressed power prices or if adverse economic or market conditions reduce smelter loads and create more surplus energy, the utility could face additional debt needs. Also, the Kentucky PSC's wholesale and retail rate adjustments for BREC and its member cooperatives will determine the precise amount of debt that could be needed.

Power Contracts Provide Some Revenue Stability

In our opinion, the long-term wholesale power contracts between BREC and its three member distribution cooperatives provide a measure of revenue stream security.

The cooperative and its members extended their wholesale power sales contracts 20 years to 2043 in connection with he E.ON lease unwind transaction. We view this long tenor as contributing to credit quality because we understand that erms of wholesale power contracts between BREC and its members require the cooperative's three members to purchase their electricity needs from BREC. Furthermore, the members have exclusive rights to sell electricity within defined service territories, which shields the cooperative and its members from competition.

3REC's long-term wholesale power contracts also contribute to credit quality because they extend 20 years beyond its lebt's final maturity. Debt outstanding matures by 2023, before the contracts with the smelters expire. However, the utility projects that upcoming refinancings will mature as late as 2039, which is within the term of the wholesale power contracts but well beyond the smelter contracts' expiration. Debt that matures after the smelter contracts roll off could lead to an end wholesale market exposure, which we view as a credit weakness.

Ge ally, lengthy requirements contracts, such as those of BREC, provide meaningful revenue predictability and credit such the cooperative's members' substantial reliance on two industrial loads that are vulnerable to commodity price cycles erodes the contracts' credit support and distinguishes BREC from most other cooperative utilities. Rate regulation also dilutes the benefits of the long-term wholesale power contracts since the cooperative, unlike most others, cannot unilaterally impose additional costs on its captive customers, which could frustrate a reallocation of fixed costs if it loses smelter loads. Also, BREC lacks control over prices for market sales it may need to make if the smelters' operations falter, tempering the wholesale power contracts' benefits.

Highly Competitive Rates

We view BREC's members' retail rates as highly competitive, and they could contribute to financial flexibility.

Energy Information Administration data shows that the cooperative's members' retail rates compare very favorably with average rates for the residential, commercial, and industrial sectors in Kentucky. Members' 2009 average residential and commercial rates were about 11% below the state's average. Their average industrial rates were about 25% below the state's.

We believe the smelters' high load factors are likely contributors to the favorable rate competitiveness because their high electricity consumption provides a robust platform for spreading fixed costs over many MWhs. Here too, the exposure to the smelters can become a liability if commodity prices or economic conditions compromise the smelters' operations.

Rates also benefit from the \$200 million of rate mitigation reserves from the proceeds of the E.ON lease unwind transaction. The utility plans to deploy an average \$24 million of the reserves' balances each year through 2018 to subsidize rate levels. The utility's forecast shows that this will enhance operating revenues by about 5% each year and we believe that there could be meaningful upward rate pressure once the reserves are exhausted.

Dent Service Coverage

BREC projects sound debt service coverage, but we believe losing the smelters could impair financial performance. The cooperative projects robust coverage of 1.5x or greater during five years. These levels are stronger than those of many other generation and transmission cooperatives. Yet they do not enhance the rating because we believe that BREC needs robust coverage as a financial cushion against the potential fluctuations in its aluminum smelter customers' performance.

The cooperative's base case financial forecast assumes stable smelter operations. BREC further assumes that competitive wholesale markets could provide opportunities to earn higher revenues and achieve higher debt service coverage because the negotiated smelter rates yield low margins.

While we agree that wholesale markets may at times provide opportunities to reap windfalls, we believe that, on the whole, competitive wholesale market sales can erode financial margins. BREC faces considerable risks in wholesale market activity. If it must compete in wholesale markets to sell a meaningful amount of its power plants' capability to recover fixed costs, the cooperative, like other merchant generators, will need to find purchasers that can buy sufficient electricity to recoup the smelters' share of fixed costs. BREC must also secure enough transmission access to support such sales. Transmission constraints during peak periods may frustrate the cooperative's ability to obtain the best prices for its electricity. During hours when coal is on the margin, BREC might face depressed market prices. The collapse of natural gas prices also places downward pressure on electricity prices.

We evaluated a number of stress scenarios with regard to potential financial results. These indicate that the cooperative's inancial performance remains vulnerable to depressed market power prices if it loses all or meaningful portions of the small rs' loads. To preserve its rating in such scenarios, the utility would likely need regulatory approval for substantially ates for its non-smelter customers to shore up financial performance. The regulator will play an important role in

Case No. 2012-00535 Attachment to Response for AG 1-57 det ining credit quality if BREC needs to look to its nonsmelter customers to absorb fixed costs that the smelters

pre sly bore

Related Criteria And Research

USPF Criteria: Applying Key Rating Factors To U.S. Cooperative Utilities, Nov. 21, 2007

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To McGrow-Will Companies



Global Credit Portal® RatingsDirect®

July 6, 2011

Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

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Related Criteria And Research

Big Rivers Electric Corp., Kentucky Ohio County; Rural Electric Coop

Credit Profile		
Big Rivers Electric Corp. ICR		
Long Term Rating	BBB-/Stable	Affirmed
Ohio Cnty, Kentucky		
Big Rivers Electric Corp., Kentucky		
Ohio Cnty (Big Rivers Electric Corp.) poll ctrl	rfdg rev bnds (Big Rivers Elec Corp Proj) ser 2010A	
Long Term Rating	BBB-/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services has affirmed its 'BBB-' issuer credit rating on Big Rivers Electric Corp., Ky., and its 'BBB-' long-term rating on Ohio County, Ky.'s \$83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corp. Project). The outlook is stable.

Ohio County sold the bonds for the benefit of Big Rivers, which used bond proceeds to refund auction rate securities. We understand that the financing structure obligates the utility to unconditionally pay the county's bonds' debt service. Big Rivers issued a note to the county that provides it with a security interest in Big Rivers' assets under its mortgage indenture. The county's bonds' security interest is on par with the utility's senior-secured debt. Big Rivers' long-term debt totaled \$817 million as of December 31, 2010.

The ratings reflect our view of the following credit weaknesses:

- We believe that the utility's extreme level of customer concentration and its leading customers' credit profiles represent meaningful credit exposures. The cooperative relies on two customers for about 65% of energy sales to members and 53% of total member and non-member energy sales. These two customers are aluminum smelters whose operations are vulnerable to economic cycles.
- In our opinion, the take-or-pay features of the retail power sales contracts between Big Rivers' distribution cooperative, Kenergy Corp., and the smelters are weak because the smelters can terminate their obligations with one-year's notice.
- The cooperative and its member distribution cooperatives are subject to state rate regulation that distinguishes Big Rivers from many other cooperatives that have autonomous ratemaking authority. Rate regulation could potentially expose the utilities' financial performance to delayed rate relief or cost disallowances, particularly if Big Rivers needs to reallocate the smelters' shares of fixed costs to its nonsmelter customers.
- Surplus energy sales in volatile wholesale markets account for about 16% of energy sales, are important to the utility's revenue stream, and help support its financial obligations.
- The cooperative is adding transmission capacity to increase physical access to wholesale markets. However, even
 with the additions, we believe the utility lacks the certainty of firm contractual transmission arrangements, which
 could frustrate the surplus power sales Big Rivers would need to make if the smelters reduce operations
 meaningfully or close.
- · Nearly one-third of the utility's debt either does not amortize before maturity or has limited amortization, which

- produces highly uneven debt service coverage ratios (DSCRs) and presents refinancing risk.
- In July 2009, Big Rivers regained operational control over generation assets it had not operated for more than a decade and has a limited track record of generation operations.

We believe these strengths temper the exposures:

- The long-term wholesale power contracts between the utility and its three member distribution cooperatives provide a measure of revenue stream security.
- Members have exclusive rights to sell electricity in defined territories.
- We believe that Big Rivers' members' retail rates are competitive and they could contribute to financial flexibility. However, members' favorable rates depend on the smelters' operating at high load factors that help absorb high fixed costs. Rate levels also benefit from the subsidies that more than \$200 million of rate mitigation reserves provide.

Henderson, Ky.-based Big Rivers is a generation and transmission cooperative that produces and procures electricity for sale to three member distribution cooperatives and their more than 112,000 retail customers. It relies on two aluminum smelters for more than half of operating revenues, which erodes revenue stream stability and predictability and distinguishes the utility from most cooperative utilities that generally earn the bulk of revenues from residential customers. Moreover, Big Rivers projects that it needs to sell surplus energy into competitive wholesale markets to support its financial obligations. Nonmember revenues accounted for about 16% of 2010's operating revenues. We believe that reductions in the smelters' operations and electricity consumption could increase market reliance. Also, declines in wholesale market electricity prices due to weak natural gas prices or abundant supplies could erode margins from market sales and place upward pressure on the costs that the utility's nonsmelter customers bear.

Outlook

The stable outlook reflects our expectations that the sound debt service coverage Big Rivers projects could provide a financial cushion to service debt obligations under adverse conditions that could arise from the operational, financial and regulatory challenges the utility faces. We believe management needs to actively oversee these challenges to preserve credit quality. In our view, the ratings' upward potential is limited in the near term because the utility must refinance considerable bullet maturities, depends on volatile smelter loads for substantial revenues, and relies on volatile wholesale energy markets for meaningful portions of its revenue requirements.

Customer Concentration Creates Concerns

We believe Big Rivers faces an extreme level of customer concentration and it leading customers' credit profiles represent meaningful credit exposures. In 2010, two of the more than 112,000 end-use customers accounted for more than half of operating revenues. These two, Rio Tinto Alcan Inc. (Alcan; A-/Stable/A-2) and Century Aluminum Co. (B/Stable/--), are aluminum smelters whose operations and financial performance are exposed to extreme commodity price volatility. We believe these companies' economic viability hinges on aluminum prices and the economy's strength, among other things. Big Rivers expects Century's electricity purchases to provide about 36% of its revenues, which meaningfully exposes the cooperative's financial performance to a single speculative-grade customer's cash flows.

If Alcan or Century reduces or ceases operations at their Kentucky facilities, Big Rivers would need to sell surplus electricity in competitive wholesale markets in a bid to recover substantial portions of its fixed costs. The several agreements that Big Rivers, Kenergy, and the smelters signed provide that certain profits from market sales following curtailment inure to the smelters' benefit. The agreements also provide that the smelters must cover the cooperative's losses resulting from market sales following curtailment.

Given Century's weak credit quality, its ability to make up shortfalls is questionable. If the smelters terminate operations, their Big Rivers obligations end. While the cooperative might retain profits from off-system sales in this scenario it will also bear the risk of losses.

We believe that selling electricity in wholesale markets to cover debt service presents meaningful credit challenges because wholesale market sales represent speculative and unpredictable revenue streams. Wholesale markets expose utilities to volatile prices, competing market participants, operational uncertainties such as acquiring physical access to transmission capacity, and potentially higher liquidity needs.

Retail Power Sales Contracts

We believe that the take-or-pay features of the retail power sales contracts between Kenergy and the smelters are weak.

Kenergy is one of Big Rivers' three member distribution cooperatives. It resells the cooperative's electricity to the smelters under power supply contracts expiring in 2023. These contracts have take-or-pay elements that require the smelters to pay for specific quantities of energy, irrespective of whether they need it. Yet we believe that these contracts' take-or-pay features are weak and do not provide meaningful credit protections. For example, the smelters can terminate their contracts on one year's notice without penalties if they close their Kentucky facilities.

Financial Performance

We believe Big Rivers' financial performance could suffer if the Kentucky Public Service Commission (PSC) does not provide timely rate relief or disallows costs, particularly if the utility needs to reallocate the smelters' shares of fixed costs to its nonsmelter customers.

In our view, if the smelters close their operations and Big Rivers cannot fully recoup the smelters' share of fixed costs through surplus electricity sales in competitive wholesale markets, its nonsmelter retail customers might need to bear substantial additional costs. The cooperative will not have control over revenues from electricity sales in competitive wholesale markets to compensate for eroded smelter activity. Moreover, it can only recover shortfalls from the nonsmelter retail customers if it and its distribution cooperative members can obtain rate relief from the Kentucky PSC.

Big Rivers and its member distribution cooperatives are unlike many other cooperative utilities because they cannot autonomously raise rates to respond to increasing costs or to reallocate costs. The Kentucky PSC regulates these utilities' wholesale and retail electricity rates. Rate regulation presents credit concerns because rate proceedings can be lengthy and delay cost recovery. Moreover, rate-regulated utilities do not have cost recovery guarantees. Nevertheless, in recent rate proceedings, the Kentucky PSC provided Big Rivers' distribution cooperatives with rate relief that was closely aligned with the utilities' requests. Also, the commission took steps in connection with the

E.ON generation asset lease termination that we view as supporting credit quality, including directing E.ON to fund rate-stabilization accounts benefiting the cooperative members' nonsmelter, retail customers.

We believe that Big Rivers' 2010 nonsmelter member wholesale rates of \$36 per megawatt-hour (MWh) indicate capacity for further rate increases as necessary to reallocate costs to the cooperative's nonsmelter customers. Big Rivers applied in March 2011 for rate increases effective Sept. 1, 2011. The filing requests a 5.94% rate increase for large industrial customers and a 5.47% rate increase for the smelters. Big Rivers is requesting a 10.71% increase for the nonsmelter, nonindustrial customers. The blended requests represent a 6.85% rate increase. The utility expects that lower purchase power adjustment factor costs will reduce the blended effective rate increase to 6.17%.

Debt Service Coverage

Based on Big Rivers' fiscal 2010 financial statements, Standard & Poor's calculated accrual and cash from operations debt service coverage of 1.4x, which was strong but about 20 basis points below projected coverage levels. While off-system sales volumes exceeded expectations, the sales were made at lower-than-expected prices due to weak wholesale electricity markets. Big Rivers' experience with low wholesale markets in 2010 underscores the considerable risks of wholesale market activity.

The cooperative achieved 2010's DSCR by reducing expenses, including deferring maintenance. It also applied reserve monies to the prepayment of a portion of its Rural Utility Service debt to reduce interest expense inasmuch as the benefits of maintaining reserves in a low interest rate environment paled in comparison to the cost of servicing debt.

Based on Big Rivers' financial forecast, we have calculated accrual-basis DSCRs that fluctuate considerably through 2013. The variability reflects the cooperative's use of nonamortizing debt that underlies highly uneven 2011-2013 debt service. Our calculations indicate DSCRs of 2.6x in 2011, 1.3x in 2012, and 2013 and 2.3x in 2014. The forecast assumes Big Rivers receives the full rate relief it requested earlier this year.

About one-third of debt is nonamortizing. Scheduled principal repayments for 2011 are a low \$7 million, but jump to \$76 million in 2012 and \$79 million in 2013 before returning to a more moderate \$22 million in 2014 and \$23 million in 2015. Consequently, the imminent bullet maturities highlight the relative importance of market access for refinancing compared to debt service coverage as important credit factors through 2013.

Generation Assets Could Pose Problems

We believe that Big Rivers' few vintage, coal-fired generation assets present operational exposures that can affect financial performance. The cooperative sells the electricity it produces at its seven owned coal plants and the two coal plants it operates that Henderson's Municipal Power and Light utility own. Big Rivers operates and has contractual rights to nearly 1,800 megawatts (MW) of generation capacity. Its and Henderson's power plants range in age from 24-41 years, with a weighted average age of 32 years, based on contributions to overall generating capacity.

Big Rivers' wholesale electric rates include automatic fuel and purchased power cost adjustment mechanisms that we believe mitigate some credit concerns surrounding the mature fleet's ability to serve native load customers reliably. These true-up mechanisms shift some of the operational risks of operating older units to the smelter and nonsmelter

customers by making them responsible for replacement power costs if units are not running.

While the fuel adjustment is an automatic, formulaic, monthly adjustment, the purchased power cost adjustment is only automatic for the smelters. Before they are eligible for recovery in rates, the PSC must review the power purchase costs Big Rivers incurs on behalf of its nonsmelter customers. All costs recoverable under the adjustment mechanisms are subject to PSC prudence reviews.

There is a two-month lag for the fuel adjustment clause between when costs are incurred and when the cooperative recovers the member portion through rates. Similarly, the purchase power adjustment for the smelters also entails a two-month cost recovery lag. The purchase power adjustment covering the smelters applies to only approximately two-thirds of the costs. The remaining third of is deferred as a regulatory account for recovery in base rates in a general rate case.

Some of Big Rivers' plants have what we believe are high heat rates. Its fleet's heat rates range from 10,600-13,382 BTU per kilowatt-hour with a weighted average heat rate of 11,100, reflecting the small percentage of the fleet with the highest heat rates. We are concerned that portions of the fleet might not dispatch to support market sales that compensate for losses of smelter sales.

Big Rivers projects using coal to produce 95% of the electricity it sells, exposing the utility and its customers to potentially higher operating costs as the regulation of carbon and other emissions progresses. The plants' heat rates contribute to carbon intensity in the range of 1.1 tons of coal per MWh. Their ages, heat rates, and carbon intensity raise questions about their ability to compete against potentially more efficient and less carbon-intensive units in wholesale markets if the smelters reduce or end their cooperative electric purchases. In our view, the extent of carbon regulation will determine the effects of this level of carbon intensity on Big Rivers' production facilities' economics.

Because aluminum smelting is a carbon-intensive process, we believe a combination of costly carbon constraints on aluminum production and carbon charges levied on the smelters' electricity purchases could impair their operations and heighten the likelihood that the cooperative's generating assets might have to compete in wholesale markets.

Transmission Expansion Plans

Big Rivers' expects to complete transmission upgrades in the fall of 2011. Until completed, the utility lacks sufficient capacity to market the smelters' power if both sharply reduce or discontinue operations. Even once completed, we believe that the cooperative's lack of firm contractual access rights could frustrate its ability to move power across others' transmission systems, including, the Tennessee Valley Authority (TVA) system.

Big Rivers only has contracts for 100 MW of firm transmission capacity across the TVA system. Management views the high cost of securing firm transmission access for a contingent exposure as unwarranted. The utility has physical interconnections with other power markets beyond TVA, such as the Midwest Independent System Operator and E.ON. However, Big Rivers' electricity needs to cross TVA's transmission system to access key markets such as Southern Co. and Entergy Corp. Lack of transmission access due to fully loaded lines during peak periods could frustrate the cooperative's ability to capture the most robust power prices for surplus power it might need to sell if it loses smelter loads.

Power Contracts Provide Some Revenue Stability

In our opinion, the long-term wholesale power contracts between Big Rivers and its three member distribution cooperatives provide a measure of revenue stream security.

The cooperative and its members extended their wholesale power sales contracts 20 years to 2043 in connection with the E.ON generation asset lease unwind transaction. We view this long tenor as contributing to credit quality because we understand that terms of wholesale power contracts between the utility and its three members require the members to purchase their electricity needs from Big Rivers. Furthermore, the members have exclusive rights to sell electricity within defined service territories, which shields the cooperative and its members from competition.

Big Rivers' long-term wholesale power contracts also contribute to credit quality because they extend beyond its debt's final maturity. Debt outstanding matures by 2031. However, about 11% of debt matures after the contracts with the smelters expire in 2023. Debt that matures after the smelter contracts roll off could lead to heightened wholesale market exposure, which we view as a credit weakness. Furthermore, Big Rivers expects that imminent refinancings of bullet maturities could extend debt even further beyond the smelter contracts' expiration.

Generally, lengthy requirements contracts, such as those of the cooperative, provide meaningful revenue predictability and credit support. However, the members' substantial reliance on two industrial loads that are vulnerable to commodity price cycles erodes the contracts' credit support and distinguishes Big Rivers from most other cooperative utilities. Rate regulation also dilutes the benefits of the long-term wholesale power contracts since the cooperative, unlike most others, cannot unilaterally impose additional costs on its captive customers, which could frustrate a reallocation of fixed costs if it loses smelter loads. Also, Big Rivers lacks control over prices for market sales it may need to make if the smelters' operations falter, tempering the wholesale power contracts' benefits.

Highly Competitive Rates

We view Big Rivers' members' retail rates as highly competitive, and they could contribute to financial flexibility.

Energy Information Administration data shows that the cooperative's members' retail rates compare very favorably with average rates for the residential, commercial, and industrial sectors in Kentucky. Members' 2009 average residential and commercial rates were about 15% below the state's average. Industrial rates for Kenergy, the member with the smelter, and other industrial loads were about 25% below the state's in 2009.

We believe the smelters' high load factors are likely contributors to the favorable rate competitiveness across the system because their high electricity consumption provides a robust platform for spreading fixed costs over many MWh. Here too, the exposure to the smelters can become a liability if commodity prices or economic conditions compromise the smelters' operations.

Rates also benefit from the more than \$200 million of rate mitigation reserves from the proceeds of the E.ON lease unwind transaction. The utility plans to deploy an average \$24 million of the reserves' balances each year through 2017 to subsidize rate levels. The cooperative's forecast shows that this will enhance operating revenues by about 5% each year and we believe that there could be meaningful upward rate pressure once the reserves are exhausted.

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USPF Criteria: Applying Key Rating Factors To U.S. Cooperative Utilities, Nov. 21, 2007

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The McGraw-Hill Companies

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 58) I	Reference the Bailey testimony at p. 12, and the Berry
2	testimony a	t p. 22.
3		
4	a. Ex	cplain why mitigation will take 3 years?
5	b. W	hen was the 3-year mitigation period forecasted? Was it
6	đơ	one in 2009, when the Unwind Transaction took place?
7	c. Ex	cplain fully why the length of time necessary to achieve
8	m	itigation was not factored into the wholesale and retail
9	co	ntracts with Century and Alcan, and why no effort was
10	me	ade to begin mitigation efforts when aluminum prices
11	re	ached any certain threshold amounts.
12		
13	Response)	
14		
15	a. E	Big Rivers believes that mitigating the loss of the smelters will
16	t	ake three years for several reasons. First, Big Rivers believes
17	t	hat the power market will steadily increase over the next three
18	У	rears. When the power market reasonably rebounds, Big Rivers
19	v	vill be able to mitigate much of the lost revenues from the
20	S	smelters. Secondly, Big Rivers feels it will likely mitigate at
21	10	east a portion of the loss of load by attracting new customers.
22		
23		Big Rivers feels a three year time frame for

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

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mitigation is reasonable. If Big Rivers were able to execute a long-term PPA or sell the Wilson facility at an economically feasible sale price, a significant portion of the loss could be mitigated as soon as the transaction is executed.

- b. The three year mitigation period was forecast at the time of the Century notice.
- c. When the Unwind negotiations were underway, the wholesale power market was very strong. At the time of the Unwind, the smelters wanted to be a Big Rivers customer to avoid wholesale market prices, thus the trend was expected to continue and Big Rivers believed it would have a viable outlet for any excess energy in the future. The national recession had a significant impact on electricity consumption throughout the nation. The drastic downturn in the wholesale market was neither expected nor predicted as a reasonable possibility by the industry.

Until the time of the smelters notice of closure, Big Rivers had an obligation to provide wholesale power to Kenergy to serve the smelters under their contracts and was unable to begin mitigation efforts. It was unfeasible for Big Rivers to begin mitigation efforts prior to receiving notice from the smelters; however, Big Rivers was developing a plan to deal with the situation if and when it occurred.

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1	At the time of the Unwind transaction, July 2009, when
2	the smelters executed their current contracts, the LME price of
3	aluminum was \$1,777 per metric ton. Century's notice was
4	received in August 2012 and the LME price of aluminum was
5	\$2,046. December 2012 LME price was \$2,327. Given the
6	variations in LME prices throughout these time periods, Big
7	Rivers feels unable to rely on LME as an indicator of smelter
8	economic viability.
9	

9

Witness) Robert W. Berry 10

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 59) Reference the Bailey testimony at p. 13, lines 5-12. Why 1 was the principle of gradualism abandoned? 2 3 Response) Big Rivers objects to this request to the extent that it seeks 4 5 information that constitutes attorney work product or that is subject to the attorney-client privilege. Notwithstanding this objection, but without 6 waiving it, please see the Response to AG 1-30. 7 8

9 **Witness)** John Wolfram

Case No. 2012-00535 Response to AG 1-59 Witness: John Wolfram Page 1 of 1

BIG RIVERS ELECTRIC CORPORATION

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 60) Reference the Bailey testimony at p. 14, line 10. Has he
2	spoken to Kenergy CEO Starheim and the other member CEOs about
3	the anticipated member retail impacts? Please provide copies of any
4	and all correspondence, reports and/or any related documents in this
5	regard.
6	
7	Response) Yes. Please see the attached documents, some of which is
8	provided pursuant to a petition for confidentiality.
9	
10	Witness) Mark A. Bailey

From:

Mark Bailey

Sent:

Tuesday, January 15, 2013 7:42 AM

To:

Burns Mercer (bmercer@mcrecc.com)

Cc:

Marty Littrel

Subject: Attachments: FW: Quarterly Newsletter Newsletter 12-2012.pdf

Burns, I just wanted to let you know that I found this newsletter extremely refreshing. Our relationship came across as one of a team which coincides with the way I believe it should be. I very much appreciate your team's perspective. THANKS, Mark

From: Kyle Heavrin [mailto:kheavrin@mcrecc.com]

Sent: Tuesday, January 15, 2013 7:33 AM

To: Mark Bailey; Marty Littrel; 'bcorum@kaec.org'; 'ssmfackler817@bbtel.com'; 'barrl@bbtel.com'; curlytop@bbtel.com;

1

'mimih@insightbb.com'; 'Benham09@insightbb.com'; 'eugenia@bbtel.com'

Subject: Quarterly Newsletter

Attached is Meade County RECC's Primary Line.

Kvle Heavrin

Communications Coordinator Meade County RECC 1351 Hwy. 79 PO Box 489 Brandenburg, KY 40108 (270) 422-2162 *Phone* (270) 422-4705 *Fax*



December 2012 By Kyle Heavrin

Your Touchstone Energy Cooperative



President/CEO News

Rate Increase Will Affect All of Us

Big Rivers Electric Corporation (BREC) is now in the final stages of completing a rate increase request to be filed in January 2013. Preliminarily, the retail increase of just a flow-through of the BREC request would amount to approximately a twenty percent increase in our member's bills. If we have to request a small increase for Meade County RECC we could be talking about a twenty-five percent increase on member's bills starting in August 2013.

The primary reason for this increase is the notice of termination effective August 21, 2013 sent by BREC's biggest customer, Century Aluminum. Century Aluminum represents approximately a third of BREC's total production.

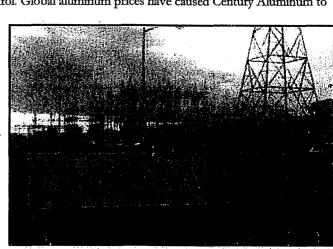
This will obviously be a major factor in 2013. Prior to the increase we will be educating members about the situation and its consequences as well as encouraging them to take advantage of our rebate programs we offer. These rebates are for energy efficient appliances and other energy efficiency improvements that they can install, such as the weatherization program and commercial lighting programs for local businesses. We will also be educating each of you about this increase because you are the people on the front lines who will receive questions and bear the brunt of the criticism of the increase.

There is no doubt about it, 2013 will be a very challenging year. We have been given a situation that is out of our control. Global aluminum prices have caused Century Aluminum to

pursue, what I think is a risky strategy, by going on the open market to supply their electricity needs. However, that is the path they seem to have chosen. It is now up to us to make the best out of a very difficult situation.

In the coming months we will keep you updated.

Burns Mercer, Pres/ CEO



Inside this issue: President/CEO News Safety Committee Notes American Red Cross Reminder 2012 Workers' Compensation Loss Analysis Operations/Engineering Updates AS400 Replacement Member Satisfaction Surveys Breckinridge County Farm Safety Day Kimball International Participates in DSM Program 8 "Caught in the Act" Photos Employee Service Awards 2013 Retirees 10 Community News Employee News Meade County RECC

A Translatore Energy Constructive Activity CEO

"Providing professional and reliable service from people our members know and trust."

"Safety is not expensive — it is priceless..."

A quarterly safety committee meeting was held on Friday, November 30, 2012 @ 8:30 a.m. at the Brandenburg office. Committee members present were: David Poe, David Pace, Mr. Mercer, Cassie Basham, Anna Swanson, Keith Ditto, Kyle Heavrin, John Crosier, Jim Miller, Todd Board, Todd Lucas, Greg Morgan with Big Rivers, and Robert Thornton with KAEC.

Old Business Highlights:

- —N95 masks will be purchased and can be worn on a voluntary basis for frontline workers in the office.
- —New rubber sleeves will be purchased for the linemen with rebate money.
- --The new radio system has been installed. If there are any issues, please contact Mr. Poe.
- —A motion was passed to purchase a "bird chaser" for the radio tower at the Brandenburg office.
- —At our last safety meeting, a concern was raised regarding stand-by workers and their requirement to work and take stand

-by after working a full day of work the previous day and being out on outages overnight. Mr. Mercer suggested we have a meeting after the first of the year with all serviceman and supervisors regarding our unofficial policy.

New Business Highlights:

- —After the break-in at the Hardinsburg office, we are making security upgrades for both offices. They will consist of installing motion detection lights, possible alarm systems; etc.
- —We are still experiencing theft of copper neutrals. Mr. Poe stated we all need be conscious of our lines and equipment and also keep an eye out for missing pole grounds.
- —Mr. Pace has been in charge of gathering information and creating a new Emergency Restoration Plan for any catastrophic outage events Meade County RECC may experience. With this new plan each employee will have a responsibility. Each position will also have a backup. There will be a meeting, to include all employees, at the beginning of 2013 to go over this new plan.

With no further business to discuss, the meeting was adjourned.

The safety committee maintains an active interest in safety. It does not dictate policy, but it involves fellow employees in furthering the cause of accident prevention. As an employee, can you answer the questions below?

- 1. Define safety:
- What is our safety slogan?



Make A Difference Be A Hero

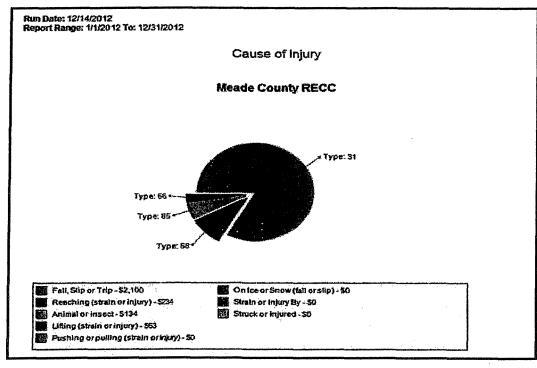


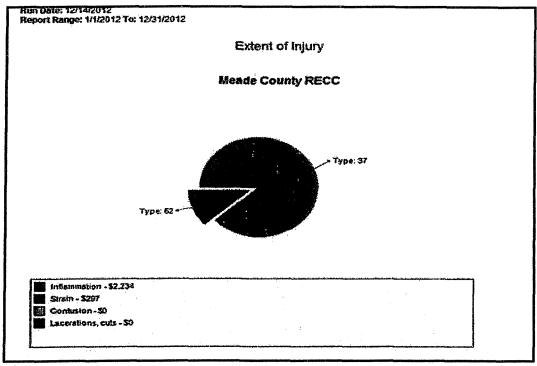
American Red Cross Just a reminder that Meade County RECC supports any employee willing to donate blood to the American Red Cross. Employee policy #538 states that an employee is entitled to two (2) hours' time off with pay on the day they donate blood.

Benefits of Donating

- It feels great to donate!
- You get free juice and delicious Keebler® cookies.
- It's something you can spare most people have blood to spare... yet, there is still not enough to go around.
- You will help ensure blood is on the shelf when needed most people don't think they'll ever need blood, but many do.
- You will be someone's hero in fact, you could help save more than one life with just one donation

2012 Workers' Compensation Loss Analysis





Falls, slips, and trips have ultimately been our biggest issue in the year of 2012. Obviously, that has affected the extent of injury with inflammation being the number 1 result from these falls, slips, and trips. We must make sure to work safely to help reduce our loss-time accidents!

Operations and Engineering Update

Construction Work Plan

The 2013-2015 Construction Work Plan (CWP) has been approved by RUS and the Ky PSC, and work associated with this new plan will begin next month. Highlights of the plan include replacing the remaining 300 miles (approximate) of old copper primary wire that is still in our system. Again, it will be another three years of intense, busy work to accomplish this. There is also less than 5 miles of general circuit upgrades slated to improve voltage or current carrying capabilities.

We do have two substation projects included. A new substation will be constructed at the Meade County Riverport site in order to supply new industrial loads slated to locate there in 2013. This station will also help to relieve increased loading on the Brandenburg and Doe Valley substations. This station is to be completed by the end of 2013. Big Rivers will be working during the next few months to acquire the easements and build the transmission line to the site which is going to be a challenge. The other substation project involves doubling the capacity of the Irvington substation. The station is to be a 'split-bus' one like the Brandenburg and Garrett subs. It will be built on the same property immediately adjacent to the existing structure.

Big Rivers Transmission Upgrade

You may have seen a construction crew working on a transmission near the Guston/Ekron area. This crew has been upgrading the existing line supplying the Garrett and Flaherty substations. The line is being upgraded to a point just south of Ekron; from there a new line will be built to the Flaherty feed just west of Stith Valley Road. This upgrade will provide both stations with better voltage support and reliability.

New Radio System

The new radio system is in and working and we are now compliant with the new FCC narrow banding regulations. As I stated in previous newsletters, it is a digital trunking system operating in the VHF band (150-160 MHz to be more specific). Big Rivers

owns the infrastructure while Meade County RECC owns the mobiles, portables, and desk units. This system provides us with much better coverage and allows us to use it outside of our system and into the other areas of Big Rivers' territory. When, and if, we were to assist Kenergy or Jackson Purchase in restoring power, we simply switch to the appropriate talk group(s) and we can communicate with them directly. This system also provides us with direct communication to Big Rivers in the instance of switching or checking things for them.

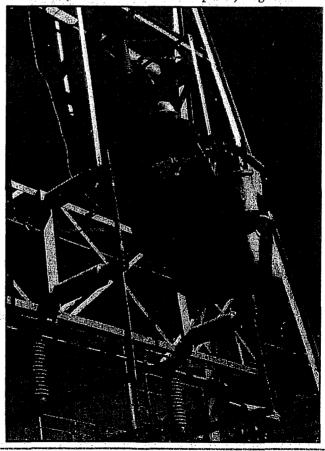
In 2013, we will be installing a PC-based dispatch program that will interface directly to the radio system and allow the dispatchers to better track calls and trucks. The radios also incorporate a GPS tracking system that will allow the dispatchers to see where the trucks are for dispatching purposes along with the user in the truck to be able to identify their location on the system map.

ROW Contractors

Townsend Tree Service has been awarded the contract for the Custer and Cloverport substation trimming and also for service orders and spraying during next year. Anderson Tree Service will be performing the trim work in the Falls of Rough substation service area. Both have worked on our system for several years and provide good results for us.

DRP

V.P. Operations and Engineering



AS400 to be Replaced with SEDC Software

Trimble Utility Center to be Replaced by Futura GIS



liciforaty 2012 news, determined that In February 2012 itwas determined that THM would nor support the ISeries planstorm hat content properties use to operate beyond 2018; Alliproprams would need to be returned which was beyond the scope of Bis Rivers per orride Also the Big Rivers per orride Also the Big Rivers per orride Also the Big Rivers need and content and would need that properties to the standard special properties to the standards battern panels like SEDG & NISC content with evide. archity provide. gguse NINCond SEDC currently pro-de services to over 80% of the coops in a country of was decided early on toalitate only these two cooperatives. Cole (Com) was established consisting of allowers from Weade Condity, Kenergy, Jackson Philchase and Big Rivers. illid ream stid "subject matter experts" mendled numerous bleetings and web ioelfof 26 empkyees have heen in Ked in 18 meetiles Ps svere sent on October 21, 2012 to

ISC and SEDIC with a response due back November 20, 2012

ployees; but the tost appearing was signif-cant enough to resilt mare commendation of the selection of SEDIO for our converge vandor. The Board of Directors a long the recommendation in their meeting on November 28/2012

In Addition to GIS, General Accounting and Consumer Accounting SEDC offers some Value Added Items:

- Kentucky User's Group 2 fifteen. Kennigky members
- Member Advocates:
 - Meenwith MCRECG regularly
 - Report directio SEDC's CEO
- Produce a Report Card on products available versus what we use.
- Monthly Newsletter and frequent com
- which MCRECC can participate:
 - CIS/Billing#
 - -Accounting

- Technologies Web Based Training Classicomia
- ull pay patronage capital incash cae

Contracts will be executed by year end and after the first of the year we expect to start the preliminary work. Expectitions are that GIS/OMS will be first first module converted late in 2013 with General Accounting and Consumer Accounting talk lowing in 2014.



Karen Brown

V. P. Administration & Finance



TSE Services

Your Touchstone Energy® Partner

MEMBER SATISFACTION SURVEYS

Since 1995, we partnered with Preston Research—based in Lexington, KY-To perform and collect data for our member satisfaction surveys. In January, 2012 we decided to move in another direction and partner up with Touchstone Energy and TSE Services. In cooperation with Touchstone Energy, TSE Services fields four core questions from the American Customer Satisfaction Index (ACSI). Responses to these core questions are submitted to the ACSI for scoring, allowing participating cooperatives to compare their performance with the leading corporations across the economic spectrum. Each cooperative receives an overall ACSI Satisfaction Score and Customer Retention Index from ACSI.

For the past four years, the overall ACSI numbers for Meade County RECC were as follows:

2008 88 2009 87 2010 88 2011 89

These results place Meade County RECC in the top 25% of cooperatives in the TSE group of over 30 cooperatives. And, TSE coops score higher than those coops not currently using the TSE survey tool.

For the Meade County RECC incentive program, it has been decided to use the following target numbers for each level of payout:

Level one 87 Level two 88 Level three

Meade County RECC and Big Rivers Team Up for Progressive

Agriculture Safety Day



On Thursday, September 20th and Friday, September 21st, Breckinridge County conducted its Farm

Safety Day at the fairgrounds for fourth graders from all the county schools. The itinerary for the day included sessions for sun, lawn mower, water, ATV, grain bin, small hand tools, and gun safety. During lunch, there was an hour-long electrical safety demonstration conducted by Big Rivers Electric (BREC) and Meade County RECC (MCRECC) officials. BREC provided a high voltage trailer that demonstrated several scenarios of what could happen when certain objects get caught in a power line. The arc flashes and loud noises kept students very engaged throughout the demonstration. Students learned that the cooperative is willing to help in any way when any objects get caught in the line. All one has to do is pick up the phone and call. Whether it's something as small and light as a kite or something as large as a tree limb, it can be very dangerous and requires personal protective equipment that only the trained linemen have. Overall, the day was a huge success and each section provided very insightful demonstrations.



The lemon demonstration showed students that electricity occurs in nature.



BREC's Greg Morgan and MCRECC's Tim Gossett demonstrate what happens when a large branch gets caught in a line. It can take the power out and create a very dangerous arc—which could result in a fire.

Due to scheduling conflicts, MCRECC was not able to schedule the electrical trailer for Meade County's Farm safety day, which tookplace on Thursday, September 27th.

K. Heavrin, Communications Coordinator

Kimball International Reaps Benefits of Meade County RECC/Big Rivers DSM Program

Meade County RECC and Big Rivers have teamed up to provide a demand side management program (DSM) that offers rebates to commercial members for improving energy efficiency in various categories.

One of these is a commercial and industrial lighting upgrade. Meade County RECC provides an incentive to commercial or industrial members who improve the energy efficiency of their lighting system in a payment of \$350 per kW of measurable improvement.

The National Office Furniture Plant, a unit of Kimball International, is located in Fordsville, KY. They offer a complete line of value-oriented office furniture products, including freestanding and modular casegoods, seating, conference tables, bookcases and lateral files. They recently reaped the benefits of the DSM Program by retaining environmental goals, through energy savings, and by improving safety and morale.

Kimball International's Facilities Project Manager, Arnold Tempel worked closely with Big Rivers' Russ Pogue, Marty Littrel, and Meade County RECC's Tim Gossett in what he called "a seamless process compared to working with other incentive programs." Once all the necessary steps were taken, a rebate check in excess of \$10,000 was delivered by Tim Gossett to Facilities Manager, Parvin Phillips.

Kimball International is an ISO 14001 certified plant and has set a high standard of environmental goals to reduce greenhouse emissions. Mr. Phillips stated, "this is another step in the right direction, environmentally. It was the right thing to do. If we can save money

and do what's right, we can also save jobs."

A total of 120 new 6-bulb T8 fixtures were installed and replaced the old 400 watt metal halide fixtures. It cut the kilowatt hour usage in half

Mr. Phillips stated that it's much brighter in the plant now. Before the T8's were installed, the plant varied anywhere from 5 lumens up to 37 lumens in some spots. Now, it is a consistent 37 lumens throughout the plant.

The brightness of the lights has drastically

improved safety and employee morale. If the plant were to have a power outage or a blink occur with the new lights, they will instantly re-illuminate. With the old metal halide fixtures, it usually took up to fifteen minutes for them to come back on.

We would like to thank Kimball International for the initiative taken to ensure improvement in energy efficiency and for their comradery during the entire process.

K. Heavrin, Communications Coordinator



L-R: Arnold Tempel - Facilities Project Manager (Kimball International), Tommy Laws -- Facilities & Maintenance Manager (NOF-Fordsville), Parvin Phillips -- Senior Safety & Facilities Manager (NOF), Tim Gossett -- Meade County RECC, John Ramburger -- Plant Manager (NOF-Fordsville), Greg Meunier -- Director of Operations (NOF Casegoods)



We now have 215 Followers!



MCRECC employees, as we continue to move into the future, social media is growing at a rapid rate and playing a much larger role in our lives each day. It is a great way to keep our members informed during outages, give updates on our rebate program, news releases, etc. Please ask your Facebook friends who are MCRECC members to "Like" us on Facebook and follow us on Twitter.

www.facebook.com/mcrecc and www.twitter.com/meadecountyrecc

a kalapitkini inggisti. Tengalangasa Nigolis

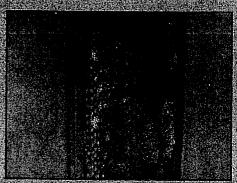


Not know within the flysheld is when you see I will be a thing counting out in the front, a looply of the France blues out to



In Miller does his hess Sanzampersonation while fring the makeshift chimney over the bucket fiftithe.

Ciristinus Dalition



CamPMatungly gers in the Christmas spirit every year and decorates her office door at the Hardinsburg District

This insert features of employees hard at work during office hours. Becare of the control

Employees Awarded for Years of Service



...Jue Padgett — 20 vear



riall value accus



Glenn Williams—5 years



Jamie Beavin — 5 years



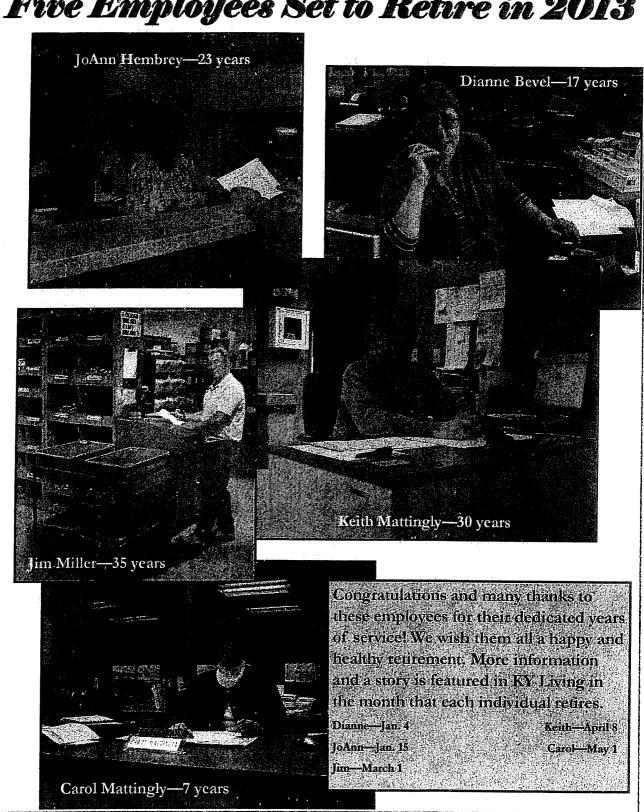
Todd Lucas - 10 years



Greg Dockery — 10 years

Case No. 2012-00535 Attachment for Response to AG 1-60 Witness: Mark A Bailey

Five Employees Set to Retire in 2013



Community News

Irvington Christmas Parade

11/17/12—In nearly perfect temperatures in the low 50's the city of Irvington held its 11th annual Christmas Parade. Irvington and Muldraugh Police and Breckinridge County Sheriff's officials led the parade while Meade County RECC followed directly behind. There was an estimated 34 volunteers of employees and family members that helped pass out candy for Meade County RECC. Entered in the parade was a flat bed truck carrying volunteers as well as a bucket truck with a handmade chimney featuring Santa Clause built by Jim Miller and painted by Kyle Heavrin. Employees and family members met at fellow co-worker, JoAnn Hem-

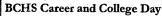


brey's house in Irvington a couple hours before for a tasty spread of soups, sandwiches, and deserts. Special thanks to Jim and JoAnn for all their help and thanks to everyone who showed up for what turned out to be a wonderful day!



Christmas By the River

11/24/12—Brandenburg lights up the Ohio River shore from the Saturday after Thanksgiving until January 1st in a yearly "Christmas by the River" festival. Opening day hosted vendors, a parade, fireworks, and Santa and Mrs. Clause. There are over 50 lighted displays sponsored by area businesses, and it is open from dusk to midnight, free. Don't forget to stop by the donation box at the exit though!



11/27/12—Meade County RECC's Tim Gossett, Joe

Brown, and Kyle Heavrin participated in the BCHS Career and College Day. Juniors and Seniors visited booths of different businesses offering information about their services and what types of career paths they have to offer. Students like Amber Mingus, pictured to the left, had fun trying on the personal protective equipment that linemen have to wear daily.



Sarah Hinton



Grandchildren of Mark and Kim Bruner. 3 year old, Bella, and her new brother, Caleb.

Employee News

New employee:

Sarah Hinton starts fulltime on January 2nd, 2013 in the Member Accounts Department as a resource clerk

Congratulations:

to Mark "BruPa" and Kim "Grammy" Bruner, on the birth of their grandson, Caleb Burkhead. Proud parents are Chris and Bridget Burkhead.

In Sympathy:

for JoAnn Hembrey and

her family, on the death of her husband, Charlie Hembrey. for **Karen Brown** and her family, on the death of her brother-in-law, Steven Sayers.

for **Stephen Barr** and his family, on the death of his brother-in-law, Dan Snodgrass.

for Susan Basham and her family, on the death of her grandmother-in-law, Inez Jolly.

for **Jamie Beavin** and his family, on the death of his father, Sonny Beavin.

for **David Pace** and his family, on the death of his uncle, Garland Brown.

for **Todd Lucas** and his family, on the death of his grand-father, Walter A. "Chuck" Lucas.

Case No. 2012-00535 Attachment for Response to AG 1-60 Witness: Mark A Bailey Page 11 of 38

Joseph Garland Brown Sr.



Mr. Brown, 86, passed away Monday, December 17, 2012.

"Garland" was born October 3, 1926 in Concordia, KY to the late. Nelle Heaven and Judge W. E. "Ned" Brown.

He was a devoted family man, avid outdoorsman, charter member of the Meade County Sportsman Club, member of St. John's Catholic Charch, member of Ducks Unlimited, founding member of Yellowbank Wild Turkey Federation; member of the first Meade County High School basketball team to win a trophy, a Navy veteran of World War II, and a fetired employee of Meade County REGG after 42 years of employment.

A District Superintendent for Meade County RECC, Mr. Brown retired on January 6, 1989, after more than 42 years of service. Garland was employed by the cooperative in 1946. At this time, many of the power lines were being constructed throughout the entire service territory. Mr. Brown continued to work in construction and maintenance until 1973, when he was promoted to District Superintendent, His primary responsibilities included line construction, maintenance, metering, and substations in the Brandenburg territory.

Expressions of sympathy may be made in the form of donations to the Cale Brown Scholarship Fund or the charity of your choice. Online condolences may be left at www.bjsfunerals.com



Garland discusses what should be done with other RECC workers after the 1974 tornado destroyed the office.

Ralph Jackson Pumphrey



Mr. Pumphrey, 88, was born on July 20, 1923 and passed away on Saturday, September 3, 2011. A retiree of Meade County RECC, he served 37 years of employment.

He began his electrification career in March of 1949, securing right-of-ways for new line construction. Mr. Pumphrey served in that capacity and others until November 1956, when he left for personal business reasons.

In 1958, Ralph was again employed by the cooperative and assigned to the Power Use Department. In 1971, he was named Director of that department. Mr. Pumphrey became Director of Operations in 1974, with his primary responsibilities being new line construction, general maintenance, substation equipment and right-of-way contracts. He retired on January 6, 1989.



Mr. Pumphrey takes a picture with a door-prize winner at one of the Annual Meetings.

From:

Mark Bailey

Sent:

Tuesday, January 15, 2013 11:15 AM

To:

'Bill Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden'; 'Paul Edd Butler'; 'Wayne Elliott'; 'Al

Yockey'; Billie Richert; Bob Berry; 'David Crockett'; Eric Robeson (Eric.Robeson@bigrivers.com); 'James Haner'; Marty Littrel; 'Paula Mitchell'

(Eric.Robeson@bigrivers.com); 'James Rate Case Filing Facts & Figures

Subject: Attachments:

General Facts 2013 Rate Increase.docx

Attached is a summary I prepared of pertinent facts related to the Rate Case filing to be made later today that I will have with me in case I receive any media calls. I thought perhaps you might find it helpful as well. Regards, Mark

General Facts

Overall Revenue Increase		~ \$74.5 million			
Wholesale Percentage Increase		~ 21.4%			
Retail Percentage Increase		~ 16.4%			
Portion of Increase Attributable to Century	(85% of Total)	~ \$63 million			
Monthly Dollar Impact on Avg. Rural Customer (1,300 kwh per month) ~ \$21.84					
Monthly Dollar Impact on Customer (1,000 kg	vh per month)	~\$16.80			

Revenue/Rates

Customer Class	2012 Revenue	Rev. Increase	Whls rate	Whls rate	Whls %	Retail %
			(Before)	(After)	(Before	MRSM)
Rural	\$138 million	\$40.7 million	5.67 cents	7.35 cents	29.4%	19%
Industrial	\$46 million	\$8.2 million	4.88 cents	5.76 cents	17.9%	17%
Alcan	\$156 million	\$25.6 million	5.18 cents	5.99 cents	15.6%	15.6%
Overall	\$340 million	\$74.5 million	5.32 cents	s 6.46 cents	21.4%	16.4%

Individual Member Rura	dder Retail	Retail		
(After Increase – cents/kw	<u>(Before)</u>	MRSM)	(Before MF	RSM) (After MRSM)
Kenergy	7.3	3.36	10.67	9.77
JP	7. 3	3.01	10.37	9.47
Meade	7.4	3.42	10.87	9.97
Industrial Rates	Wholesale	Distr. Adder	Retail	Retail
(After Increase -cents/kwh)	(Before MRSM)	! .	(Before MRSM)	(After MRSM)
Kenergy/JP	5.76	0.2	5.96	5.06

MRSM Impact: ~ 0.9 cents/kwh for Rurals and non-smelter Industrials

	Before Increase		After Increase		
Monthly Rural Bill	Before MRSM	After MRSM	Before MRSM	After MRSM	
Using 1,000 kwh	\$89.70	\$80.70	\$106.50	\$97.50	
Using 1,300 kwh	\$116.61	\$104.91	\$138.45	\$126.75	

Increase Driving Factors

Century Lost Revenue: 2012 Gross Revenue \$206 million ~ \$63 million net

Continued Weakening of the Wholesale Power Markets ~ \$15 million

Increased Depreciation Rates ~ \$2 million

Adjusting Cost of Service (Between Smelter & Rural) ~ \$8 million

(Doesn't drive overall rate increase but causes Rural Rates to increase more than otherwise)

Cost Reduction/Mitigation Efforts

Idling Generation	~ \$121 million
Renegotiation of Fuel & Reagent Agreements	\sim \$20 million
Refinanced Debt	\sim \$4 million
Improved Plant Efficiency	\sim \$5 million
Deferred Filling Job Vacancies	\sim \$2 million
Reduced Employee Benefit Costs	~\$4 million

Aggressively Pursuing Replacement Power Sales

In addition to these actions, Big Rivers is offering through its Members up to \$1 million per year in customer financial incentives to reduce their electric consumption and electric bills.

Reduced Plant Maintenance

~ \$19.5 million

(Doesn't affect rate increase, but did help Big Rivers make its 2012 earnings requirement)

Case No. 2012-00535 Attachment for Response to AG 1-60 Witness: Mark A Bailey Page 15 of 38

From: Sent:

Mark Bailey

Sent

Wednesday, January 23, 2013 5:03 PM 'Burns Mercer'; Greg Starheim; 'Kelly Nuckols'

Subject: Attachments: Summary Sheet re: Rate Increase General Facts 2013 Rate Increase.docx

Attached as a potential source of reference is a "fact sheet" I put together to help me answer questions related to our rate increase. Perhaps you will find it of some use as well. Mark

General Facts

Overall Revenue Increase		\sim \$74.5 million		
Wholesale Percentage Increase		~ 21.4%		
Retail Percentage Increase		~ 16.4%		
Portion of Increase Attributable to Century	(85% of Total)	\sim \$63 million		
Monthly Dollar Impact on Avg. Rural Customer (1,300 kwh per month) ~ \$21.84				
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Alcan	\$156 million	\$25.6 million	5.18 cents	5.99 cents	15.6%	15.6%
Overall	\$340 million	\$74.5 million	5.32 cent	s 6.46 cent	s 21.4%	16.4%

Individual Member Rural	Rates Whol	esale Distr. A	<u>dder</u> <u>Retail</u>	Retail
(After Increase – cents/kwh	(Before)	MRSM)	(Before MR	SM) (After MRSM)
Kenergy	7.3	3.36	10.67	9.77
JP	7.3	3.01	10.37	9.47
Meade	7.4	3.42	10.87	9.97
Industrial Rates	Wholesale	Distr. Adder	Retail	Retail
(After Increase -cents/kwh)	Before MRSM)	1	(Before MRSM)	(After MRSM)
Kenergy/JP	5.76	0.2	5.96	5.06

MRSM Impact: ~0.9 cents/kwh for Rurals and non-smelter Industrials

Case No. 2012-00535 Attachment for Response to AG 1-60 Witness: Mark A Bailey Page 17 of 38

	Before Increase		After Increase		
Monthly Rural Bill	Before MRSM	After MRSM	Before MRSM	After MRSM	
Using 1,000 kwh	\$89.70	\$80.70	\$106.50	\$97.50	
Using 1,300 kwh	\$116.61	\$104.91	\$138.45	\$126.75	

Increase Driving Factors

Century Lost Revenue: 2012 Gross Revenue \$206 million ~ \$63 million net

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(Doesn't drive overall rate increase but causes Rural Rates to increase more than otherwise)

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Reduced Employee Benefit Costs	~\$4 million

Aggressively Pursuing Replacement Power Sales

In addition to these actions, Big Rivers is offering through its Members up to \$1 million per year in customer financial incentives to reduce their electric consumption and electric bills.

Reduced Plant Maintenance

~ \$19.5 million

(Doesn't affect rate increase, but did help Big Rivers make its 2012 earnings requirement)

From:

Mark Bailey

Sent:

Wednesday, November 28, 2012 2:54 PM

To:

'Burns Mercer'

Subject:

RE: Today's Meeting w/ Alcan

I indicated the contract would need to be redone and that was why expense reimbursement was important, but did not get into specifics today.

From: Burns Mercer [mailto:bmercer@mcrecc.com] Sent: Wednesday, November 28, 2012 2:51 PM

To: Mark Bailey

Subject: RE: Today's Meeting w/ Alcan

Did you talk about redoing the contract? Bandwidth, etc.

From: Mark Bailey [mailto:Mark.Bailey@bigrivers.com] Sent: Wednesday, November 28, 2012 3:38 PM

To: Bill Denton; Jim Sills; Larry Elder; Lee Bearden; Paul E. Butler; Wayne Elliott; Burns Mercer; Greg Starheim; Kelly

Nuckols

Subject: Today's Meeting w/ Alcan

As a FYI, I wanted to let you know that Jim Miller, Bob Berry, Billie Richert, Greg Starheim, Kelly Nuckols and I met with Alcan officials a short time ago to respond to

Many of their questions dealt with They were also curious what we meant by I noted that I also said we would expect to obtain lalso tried to

The meeting lasted about a half an hour. I believe it ended positively. They intend to crunch the numbers and get back to us.

We'll keep you posted. Mark

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> Case No. 2012-00535 Attachment for Response to AG 1-60

From:

Mark Bailey

Sent:

Tuesday, October 02, 2012 11:05 AM

To:

jmiller@smsmlaw.com; Bob Berry; John Talbert

Cc:

Billie Richert; Greg Starheim

Subject:

Meeting w/RTA Thursday Afternoon

I just received a call from Serge Gosselin from RTA and confirmed we will meet with them at John Cooper's office (225 Capital Ave.) at 2 PM Thursday. He asked

what we planned to discuss, and what I knew about the Legislative Committee

report to be made Thursday. I told him

He said he didn't have a feel

for Thursday's report (that they had just seen pieces), but was told it would list options and that state officials would have to decide which, if any, they might pursue. Mark

Mark Bailey From: Mark Bailey Wednesday, December 05, 2012 9:44 AM Sent: 'Burns Mercer'; 'Kelly Nuckols'; jmiller@smsmlaw.com; 'Bill Denton'; 'James Sills'; 'Larry To: Elder'; 'Lee Bearden'; 'Paul Edd Butler'; 'Wayne Elliott' Cc: Greg Starheim Subject: FW: Update on Sebree Works FYI. Mark From: Gosselin, Serge (RTA) [mailto:Serge.Gosselin@riotinto.com] Sent: Wednesday, December 05, 2012 9:39 AM To: Mark Bailey Subject: FW: Update on Sebree Works Sorry Mark, I used a wrong email address. Please see below. Have a good day. Serge From: Gosselin, Serge (RTA) Sent: Wednesday, December 05, 2012 9:37 AM To: Greg Starheim; Bailey, Mark (RTAYARWUN) Cc: Miller, Jack (Cable); Seberger, Donald (RTSS) Subject: Update on Sebree Works

Good morning Mark, good morning Greg,

I want to make a quick follow up with you following But first, I want to thank you again for your work and openness to reach a solution for sustainability of our plant.

We will, in the coming days, meet Rio Tinto people involved into business evaluation and development

Thanks again.

Regards,

Serge

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From:

Mark Bailey

Sent:

Wednesday, December 19, 2012 10:21 AM

To:

Burns Mercer (bmercer@mcrecc.com); 'Bill Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden';

'Paul Edd Butler'; 'Wayne Elliott' Greg Starheim; 'Kelly Nuckols'

Cc:

Subject:

As an FYI, you may recall that our team (Billie Richert, Bob Berry, Jim Miller, Kelly Nuckols, Greg Starheim and me) Regards, Mark

1

From:

Greg Starheim < GStarheim@kenergycorp.com>

Sent:

Friday, December 21, 2012 3:58 PM

To: Co: Mark Bailey
Larry Elder; Bill Denton; Burns Mercer; 'Kelly. Nuckols@jpenergy. com'

(Kelly.Nuckols@ipeneray.com): Greg Starheim

Subject:

Mark,

Kenergy board just met.

Call with any questions.

Greg

Sent from my iPhone

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From:

Mark Bailey

Sent:

Friday, December 21, 2012 4:07 PM

To:

Greg Starheim

Subject:

Thanks. Have a safe trip and wonderful holidays. Mark

Sent from my iPhone

On Dec 21, 2012, at 3:58 PM, "Greg Starheim" < GStarheim@kenergycorp.com> wrote:

> Mark,

> Kenergy board just met.

> Greg

> Sent from my iPhone

> Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, copy, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

1

From:

Mark Bailey

Sent:

Thursday, December 27, 2012 2:09 PM

To:

Billie Richert

Subject:

RE: Big Rivers Cost of Service & Rates data

Billie, I am having trouble determining where the change was made. Perhaps when it is convenient (no hurry at all) you can come by and show me. I know you are on vacation so no need to interrupt it any more than necessary for this at this time. Thanks, Mark

From: Billie Richert

Sent: Thursday, December 27, 2012 10:16 AM

To: 'Kelly.Nuckols@jpenergy.com' (Kelly.Nuckols@jpenergy.com) (Kelly.Nuckols@jpenergy.com)

(Kelly.Nuckols@jpenergy.com); bmercer@mcrecc.com; Greg Starheim (gstarheim@kenergycorp.com); Karen Brown;

Steve Thompson; Chuck Williamson

Cc: Mark Bailey

Subject: FW: Big Rivers Cost of Service & Rates data

All,

Kelly called this morning to report that on Page 32 of the Cost of Service Study

and is now reflected in the revised attached

report. Please let me know if you have questions.

Thanks, Billie

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From:

Mark Bailey

Sent:

Thursday, January 03, 2013 11:27 AM

To:

Greg Starheim

Cc:

Burns Mercer (bmercer@mcrecc.com); Kelly Nuckols (kelly.nuckols@jpenergy.com); 'Bill

Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden'; 'Paul Edd Butler'; 'Wayne Elliott'

Subject:

FW: Mark Bailev

Greg, Happy New Year. FYI. I am scheduled to meet with the Jackson Purchase Board the evening of January 7th. Hope your meetings at ACES are going well. Regards, Mark

From: Mark Bailey

Sent: Thursday, January 03, 2013 11:25 AM

To: 'Gosselin, Serge (RTA)'
Subject: RE: Mark Bailey

Hi Serge,

Thanks for the New Year wishes. I wish you the same as well as the hope you are having and will continue to have a good vacation. Thanks too, for the offer to make yourself available for a conversation. I don't believe that will be necessary as I attempted a contact just to provide a status report.

During our last gathering, Big Rivers was asked (my interpretation – please let me know if I have missed the mark) whether Big Rivers could agree on

Since our last meeting, we have been having internal discussion on this matter with additional discussion scheduled for Monday, January 7th. I contacted you to pass this information along and to say that I expect to have answers by Tuesday January 8th. I will plan to contact you at that time if that is OK. I hope your return trip to Kentucky is a safe and uneventful one.

Regards, Mark

From: Gosselin, Serge (RTA) [mailto:Serge.Gosselin@riotinto.com]

Sent: Thursday, January 03, 2013 10:57 AM

To: Mark Bailey

Subject: Fw: Mark Bailey

Hello Mark,

First, I want to wish you an great year 2013.

I'm informed by Donna that you tried to reach me. I'm still in vacation but for sure I can make myself available if you want to talk to me. I'm back in KY saturday PM but if you want to talk before, please let me know at what time you are available and I'll call you on your cell.

Regards,

Serge

Serge Gosselin

From: Freitag, Donna (RTA)

Sent: Thursday, January 03, 2013 09:56 AM

To: Gosselin, Serge (RTA) Subject: Mark Bailey

Hi Serge,

Has Mark Bailey been able to reach you in the past half hour? I received a call from Paula a little while ago and she said he had tried your cell phone but got no answer. If he hasn't reached you, you may want to give him a call. His office phone is 270-844-6101. Paula's number is 270-844-6102.

Hope you're enjoying your vacation. See you next Monday.

Donna Freitag Administrative Assistant

Rio Tinto 9404 State Route 2096, Robards, KY, 42452, USA

T: +1 (270) 521 7302 F: +1 (270) 521 7341 donna.freitag@riotinto.com

http://www.sebreeworks.com

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From:

Mark Bailey

Sent:

Tuesday, January 08, 2013 12:54 PM

To:

jmiller@smsmlaw.com; 'Al Yockey'; Billie Richert; Bob Berry; 'David Crockett': Eric Robeson

(Eric.Robeson@bigrivers.com); 'James Haner'; Marty Littrel; 'Paula Mitchell'

Subject:

FW: Alcan

FYI. I also have heard definitively from all Members (other than Kenergy) that they will intervene in our rate case, but not oppose it. Kenergy is just not certain what their position will be at this time although I understand they do plan to intervene. Mark

From: Mark Bailey

Sent: Tuesday, January 08, 2013 12:23 PM

To: 'Bill Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden'; 'Paul Edd Butler'; 'Wayne Elliott'

Cc: 'Burns Mercer'; Greg Starheim; 'Kelly Nuckols'

Subject: Alcan

As a FYI and in follow-up to our discussion during the last Board meeting regarding where each Member stands on

all Members have weighed in. Kenergy and Meade are supportive with JP maintaining a position consistent with the Resolution they passed a number of months ago opposing any relief (my paraphrasing; not necessarily those in the JP Resolution) for the smelters. I plan to contact

. Regards, Mark

From:

Mark Bailey

Sent:

Tuesday, January 15, 2013 8:52 AM

To:

'Burns Mercer'; 'Kelly Nuckols'; 'Al Yockey'; Billie Richert; Bob Berry; 'David Crockett'; Eric Robeson (Eric.Robeson@bigrivers.com); 'James Haner'; Marty Littrel; 'Paula Mitchell'; 'Bill

Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden'; 'Paul Edd Butler'; 'Wayne Elliott'

Cc:

Greg Starheim

Subject:

FW: Follow-up on BREC offer for energy supply

FYI. Mark

From: Gosselin, Serge (RTA) [mailto:Serge.Gosselin@riotinto.com]

Sent: Tuesday, January 15, 2013 8:36 AM

To: Mark Bailey

Cc: Greg Starheim; Miller, Jack (Cable); Seberger, Donald (RTSS)

Subject:

Good day Mark,

This email is intended to follow-up with

From my understanding and to summarize,

As you know Mark,

Again, and I mean this sincerely, I appreciate the time you have spent trying to accommodate the situation of our business.

We are currently looking at our options, and there are not a lot of these to be quite frank.

In any case, I hope that we will be able to continue to maintain the good communication channels we have built whatever the road we may need to take for the sustainability of the business.

Regards,

1

Serge

Serge Gosselin General Manager

Rio Tinto / Sebree Works 9404 State Route 2096, Robards, Kentucky, 42452-9735, USA

T: +1 (270) 521 7300 M: +1 (270) 577 4162 F: +1 (270) 521 7305 serge.gosselin@riotinto.com / www.sebreeworks.com

Assistant: Donna Freitag 270-521-7302

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From:

Mark Bailey

Sent:

Wednesday, January 16, 2013 11:51 AM

To:

'Burns Mercer'; 'Kelly Nuckols'; 'Bill Denton'; 'James Sills'; 'Larry Elder'; 'Lee Bearden'; 'Paul

Edd Butler'; 'Wayne Elliott'

Cc:

Greg Starheim

Subject:

FW: Follow-up on BREC offer for energy supply

FYI. Mark

From: Mark Bailey

Sent: Wednesday, January 16, 2013 11:50 AM

To: 'Gosselin, Serge (RTA)'
Cc: Greg Starheim

Subject:

Halla Caren Thanks for your manages

Hello Serge, Thanks for your message.

Regards,

Mark

From: Gosselin, Serge (RTA) [mailto:Serge.Gosselin@riotinto.com]

Sent: Tuesday, January 15, 2013 8:36 AM

To: Mark Bailey

Cc: Greg Starheim; Miller, Jack (Cable); Seberger, Donald (RTSS)

Subject: Follow-up on BREC offer for energy supply

Good day Mark,



As you know Mark, we have worked with BREC, Kenergy, legislators and local leaders for few years now in order to solve this long term and deteriorating issue related to energy price. Century's notice accelerated the issue.

Again, and I mean this sincerely, I appreciate the time you have spent trying to accommodate the situation of our business.

In any case, I hope that we will be able to continue to maintain the good communication channels we have built whatever the road we may need to take for the sustainability of the business.

Regards,

Serge

Serge Gosselin General Manager

Rio Tinto / Sebree Works 9404 State Route 2096, Robards, Kentucky, 42452-9735, USA

T: +1 (270) 521 7300 M: +1 (270) 577 4162 F: +1 (270) 521 7305 serge.gosselin@riotinto.com / www.sebreeworks.com

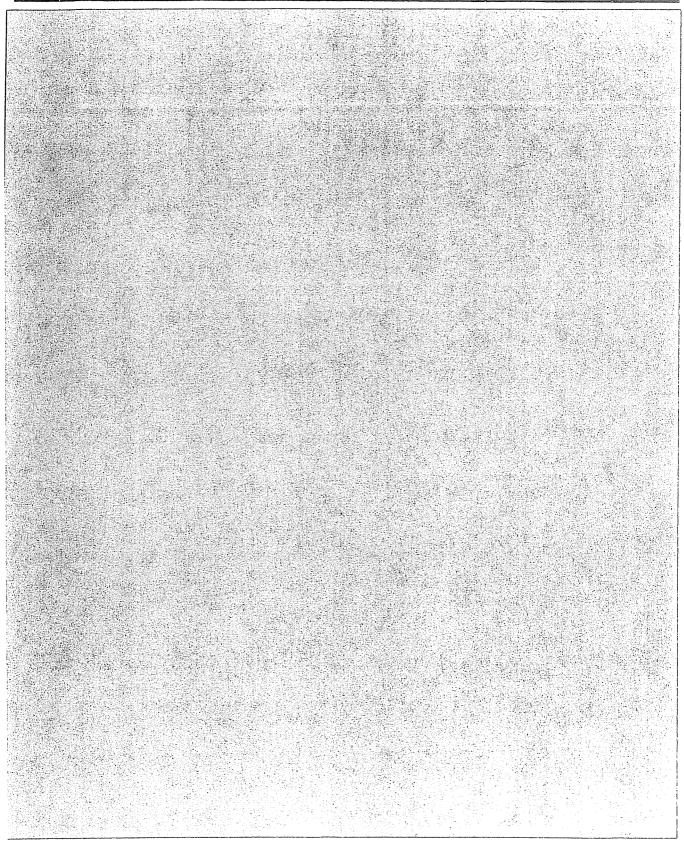
Assistant: Donna Freitag 270-521-7302

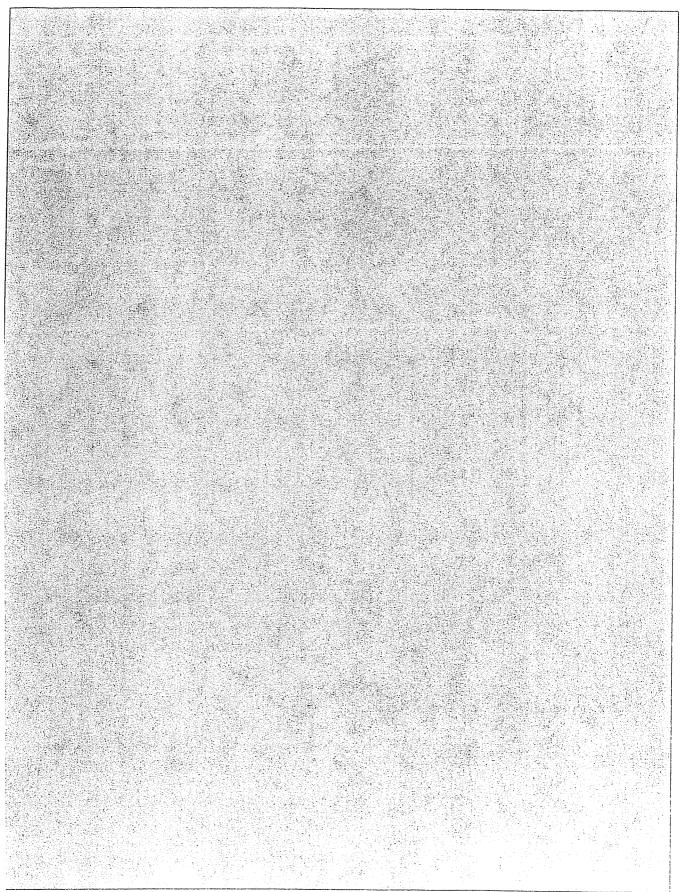
Avis:

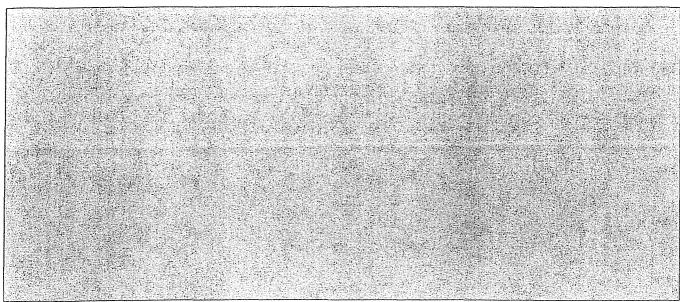
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From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Friday, February 15, 2013 10:57 AM

To: All Employees

Cc: Marty Littrel; Tim Gossett; Izell White

Subject: Public notice - Kenergy's flow-through filing

Importance: High

Good morning, all!

The attached information will run in ads in area newspapers before March 1, which is the date of our flow-through rate filing. That rate filing is needed to flow through Big Rivers' proposed rate increases, which were filed with the PSC on Jan. 15.

We wanted you to be aware of these ads before they appear in local newspapers.

These attached proposed increases are to cover lost revenue caused by Century Aluminum's departure from Big Rivers' system.

Big Rivers will file a separate rate case later this year to cover revenue lost from Alcan's expected departure from the system in January 2014.

(ou will notice a difference in the percentages on this attachment (next-to-last page where it says "The effect of the proposed rates on the average monthly bill by rate class is as follows:") as opposed to the percentages we've presented of our members since Jan. 15. For example, we have used 19 percent for residential. Our rate case proposes 21.4 percent for residential.

What caused the difference? Big Rivers' rate filing/number crunching deals with all three cooperatives. However, lenergy's rate filing is specific to Kenergy members.

'you have questions, please contact me!

enee Beasley Jones energy Communications and PR Managér 300) 844-4832, extension 6103 (270) 316-4335

PUBLIC NOTICE CASE NO. 2013-00035

THE APPLICATION OF KENERGY CORP. FOR AN ADJUSTMENT IN EXISTING RATES

Kenergy Corp., 6402 Old Corydon Road, Henderson, KY 42420, will file an application for an adjustment in existing rates with the Kentucky Public Service Commission in Case No. 2013-00035. The proposed changes are designed to flow-through to Kenergy's customers the wholesale power expense increase of \$53,657,265, which will result from the rate increase Big Rivers Electric Corporation proposes in Case No. 2012-00535. The rates contained in this notice are the rates proposed by Kenergy Corp.; however, the Kentucky Public Service Commission may order rates to be charged that differ from the proposed rates. Such action may result in rates for members other than the rates proposed by Kenergy and contained in this notice.

The present and proposed rates are as follows:

	Prese	nt Rate Schedule		Prop	osed Rate Schedule	
lesidential Service (Single & Three-Phase):						
Sustomer Charge per Delivery Point	\$	12.00	per month	\$	14.40	per month
nergy Charge per KWH		\$0.077904			\$0.0938	50
.ll Non-Residential Single Phase:						
ustomer Charge per Delivery Point	\$	17.00	per month	\$	20.40	per month
nergy Charge per KWH		\$0.076587			\$0.0919	92
hree-Phase Demand						
on-Dedicated Delivery Points (0 - 1,000 KW):						
ustomer Charge per Delivery Point	\$	35.00	per month	\$	42.01	per month
emand Charge:						
\ll KW During Month	\$	4.44		\$	5.33	
iergy Charge:						
irst 200 KWH per KW, per KWH	\$	0.067279		\$	0.08075	
lext 200 KWH per KW, per KWH	\$	0.051605		\$	0.06194	
II Over 400 KWH per KW, per KWH	\$	0.045679		\$	0.05482	
rimary Service Discount ree-Phase Demand n-Dedicated Delivery Points (1,001 KW & Over):	\$.50	per KW	\$.60	per KW
tion A - High Load Factor (above 50%)						
ustomer Charge per Dellvery Point	\$	750.00	per month	\$	900.15	per month
mand Charge:						
I KW During Month	\$	9.38		\$	11.26	
∍rgy Charge:						
rst 200 KWH per KW, per KWH	\$	0.040129		\$	0.04816	
ext 200 KWH per KW, per KWH	\$	0.036866		\$	0.04425	
Over 400 KWH per KW, per KWH	\$	0.034895		\$	0.04188	
imary Service Discount	\$.50	per KW	\$.60	per KW
ion B - Low Load Factor (below 50%)						
stomer Charge per Delivery Point	\$	750.00	per month	\$	900.15	per month
nand Charge:						
KW During Month	\$	5.28		\$	6.34	
rgy Charge:						
st 150 KWH per KW, per KWH	\$	0.055613		\$	0.06675	
er 150 KWH per KW, per KWH	\$	0.04872		\$	0.05845	
mary Service Discount	\$.50	per KW	\$	Case No.	2012400535
					. " T	1 1 1 1 1 1

Attachment for Response to AG 1-60 Witness: Mark A Bailey Page 38 of 38

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 61) Provide a comparison of the October 2008 Unwind
2	Financial Model filed with the Commission as Exhibit 79 in Case No
3	2007-00455 (Commission approval of "Unwind Transaction") and per
4	Commission's November 17 Order in the 2011 rate case (per Ms
5	Richert testimony, p. 8, lines 3 to 7) to the information including in
6	this current rate case proceeding (and related projected financia
7	results, adjustments, transactions, credit ratings, TIER/MFIR and
8	other factors) and address the following:
9	
LO	a. Identify and explain all differences between Big Rivers
11	"Unwind Transaction" model in the prior proceeding to
1.2	related amounts and projections included in this rate
13	proceeding, and provide supporting calculations and
L4	assumptions for all differences.
15	b. Provide all updates to the original "Unwind Transaction
16	model, from the prior proceeding through 2013 YTD, and
١7	provide supporting documentation.
18	c. Identify material changes to the Financial Model and its
19	structure, comparing the model filed in this rate case to
20	the financial model presented in the "Unwind" case.
21	
22	Response) Big Rivers objects that this request is unduly burdensome and
23	not reasonably calculated to lead to the discovery of admissible evidence

Case No. 2012-00535 Response to AG 1-61 Witness: Travis A. Siewert Page 1 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Notwithstanding these objections, and without waiving the same, Big Rivers states as follows.

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- a. There are numerous differences that have occurred since the "Unwind Transaction" model was developed and it would be time consuming and difficult to make a meaningful comparison. These changes include, but are not limited to: environmental regulations, fuel pricing, off-system pricing, interest rates, staffing levels, depreciation rates and debt financings. With that in mind, the two models referenced are being provided for analysis. The Unwind model is being provided in response to AG 1-7. The Financial Model used in this rate case is the Microsoft Excel file titled "PSC 1-57 Financial Forecast (2013-2016) Filed CONFIDENTIAL.xlsx" provided on the confidential CD accompanying the response to PSC 1-57.
- b. No updates to the "Unwind Transaction" model have occurred since the Unwind Transaction. Please see the response to item (c) below.
 - c. The financial model in this rate case and the financial model used in the "Unwind" case are not comparable. The financial model in this rate case was developed "in-house" after the

Case No. 2012-00535 Response to AG 1-61 Witness: Travis A. Siewert Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Witness)	Travis A. Siewert
3		
2		forecasting and budgeting purposes.
1		Unwind in an RUS financial statement format to be used for

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

Fahrmary 28 2012

	reordary 28, 2013
1	Item 62) Ms. Richert's testimony (p. 12, lines 4 to 14) explains the
2	decline in off-system sales as contributing to Big Rivers' precarious
3	financial condition, noting the 2011 Rate Case test period off-system
4	sales net sales margin was \$19.4 million (for twelve months ending
5	October 31, 2010), and the similar net sales margin is projected at
6	\$4.4 million for the projected twelve months ending August 31, 2014
7	in this proceeding. Address the following and provide updates on a
8	continuing basis:
9	
10	a. Provide calculations and supporting documents of the
11	\$19.4 million net sales margin from the prior proceeding
12	and show gross sales (by source), offsets, and net sales
13	margin by month.
14	b. For the period November 31, 2010 through 2013 YTD
15	provide actual amounts (and provide projections from
16	2013 through calendar year 2015 and 2016 included in
17	this proceeding) for gross sales (by source), offsets, and net
18	sales margin for each month. In all cases, explain and
19	show the reasons for significant changes from month to
20	month.
21	
22	Response) To the extent this request seeks continuous or ongoing updates.

23

Response) To the extent this request seeks continuous or ongoing updates,

Big Rivers objects on the grounds that it is overbroad and unduly

Case No. 2012-00535 Response to AG 1-62 Witness: Billie J. Richert Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

burdensome. Notwithstanding this objection, but without waiving it, Big Rivers states that it will only update its response as required by law, as ordered by the Commission, or as it otherwise deems appropriate.

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a. The requested information is provided in the CONFIDENTIAL attachment to this response.

b. Big Rivers objects to this request on the grounds that the use of the word "significant" is unduly vague and ambiguous. Notwithstanding this objection, but without waiving it, the requested information is provided in the attachment to this response. Big Rivers' makes every effort to maximize the offsystem margin with its available generation to reduce the revenue requirement from its Members. The explanation for month to month changes can be attributed to a variety of reasons including, but not limited to: available generation, market conditions, number of on-peak and off-peak hours, variable expenses, weather and member load.

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19 Witness) Billie J. Richert

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 63) Ms. Richert's testimony (p. 12, lines 22 to 24) states that
2	the July 2012 refinancing of RUS debt will provide expense savings
3	that will offset the annual revenue deficiency by about \$4 million.
4	Address the following and provide updates on a continuing basis:
5	
6	a. Provide all documentation and calculations supporting the
7	July 2012 RUS debt refinance.
8	b. Provide documentation and calculations supporting the
9	change in interest expense, principal payments, debt
10	outstanding and other costs related to the July 2012 RUS
11	refinance.
12	c. Explain and provide all calculations regarding the \$4 million
13	savings cited by Ms. Richert.
14	d. Explain how the refinance of debt impacted the calculation
15	of TIER and MFIR.
16	e. Identify and describe all consulting and other costs that Big
17	Rivers incurred related to the refinancing of debt, and
18	provide amounts by expense/capital account number (and
19	identify the names of all outside consultants). Explain and
20	show all of these costs that are included in this rate
21	proceeding.
22	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Response) To the extent this request seeks continuous or ongoing updates,
- 2 Big Rivers objects on the grounds that it is overbroad and unduly
- 3 burdensome. Notwithstanding this objection, but without waiving it, Big
- 4 Rivers states that it will only update its response as required by law, as
- 5 ordered by the Commission, or as it otherwise deems appropriate.
 - a. Please reference Case No. 2012-00119, Application of Big Rivers Electric Corporation for Approval to Issue Evidences of Indebtedness, for all documentation and calculations supporting the July 2012 RUS Series A Note refinance.
 - b. Please see item a above.
 - c. A calculation of the approximately \$4 million in savings related to the RUS Series A Note refinance is attached to this response.
 - d. TIER is calculated as follows: (Margins + Interest Expense on Long-Term Debt) / Interest Expense on Long-Term Debt). MFIR is calculated as follows: (Margins + Interest Expense on Long-Term Debt + Income Taxes) / Interest Expense on Long-Term Debt. The approximately \$4 million in refinance savings serves to increase the Margins component of each calculation and decrease the Interest Expense on Long-Term Debt component of each calculation, thereby reducing the revenue required to achieve a 1.24 TIER in the fully forecasted test period.
 - e. Please see attached schedule.

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1 Witness) Billie J. Richert

Case No. 2012-00535 Response to AG 1-63 Witness: Billie J. Richert Page 3 of 3

Big Rivers Electric Corporation Case No. 2012-00535 Attachment to Response for AG 1-63c RUS Series A Note Refinance Savings

Series A Note Refinance(\$440,771,549 * 1.43%) ¹	(6,303,033)
Additional Borrowing (\$96,228,451 * 4.41%)	4,243,675
Interest Expense CTC Loan	2,214,409
Interest Income CTC Investment	(1,771,527)
Estimated Patronage Allocation	(2,706,448)
Amortize Loss on Reacquired RUS Series A Note	60,482
Amortize Refinancing Cost	73,359
Net Decrease in Expenses	(4,189,083)

¹ RUS Series A Note Interest Rate is 5.84% versus CoBank/CFC interest Rate of 4.41%

Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-63(e) Costs Incurred in Refinancing of RUS Debt

Month				
Booked	Vendor	Invoice #	 181.300	Description
01/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	111,190	\$ 3,135	Legal
	Total January 2012		\$ 3,135	
02/12	Orrick, Herrington & Sutcliffe	1348821	\$ 47,139	Legal
02/12	Orrick, Herrington & Sutcliffe	1348823		Legal
02/12	Orrick, Herrington & Sutcliffe	1348825	152	Legal
02/12	Orrick, Herrington & Sutcliffe	1353146	58,133	Legal
02/12	Orrick, Herrington & Sutcliffe	1353168		Legal
02/12	Orrick, Herrington & Sutcliffe	1353178	340	Legal
02/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	111,659	6,769	Legal
	Total February 2012		\$ 112,533	
03/12	Orrick, Herrington & Sutcliffe	1359204	\$ 22,031	Legal
03/12	Orrick, Herrington & Sutcliffe	1359205		Legal
03/12	Shipman and Goodwin	410650	7,714	Legal
03/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	112,228	15,500	Legal
03/12	Total March 2012		\$ 45,245	
	Total Practice Done		 	
04/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	112,554	\$ 16,914	Legal
01/12	Total April 2012		\$ 16,914	
05/12	Orrick, Herrington & Sutcliffe	1363410	\$ 15,947	Legal
05/12	Orrick, Herrington & Sutcliffe	1363411		Legal
05/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	113,000	11,668	Legal
03/12	Total May 2012		\$ 27,615	
	10th Fitty 2012		 	
06/12	KPMG LLP	44452493	\$ 3,625	Legal
06/12	Latham & Watkins	120307044	69,158	Legal
06/12	Orrick, Herrington & Sutcliffe	1368390	51,174	Legal
06/12	Orrick, Herrington & Sutcliffe	1368392	,	Legal
06/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	113,455	15,972	Legal
00/12	Total June 2012		\$ 139,929	
	1 Out June 2012			

Case No. 2012-00535 Response to AG 1-63(e) Witness: Billie J. Richert

Page 1 of 2

Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-63(e) Costs Incurred in Refinancing of RUS Debt

Month	Vendor	Invoice #	A/C	181.300	Description
Booked		12772	\$	983,289	Arrangement & Upfront Fees
01112	CoBank ACB	0000001		3,775	Legal
	KPMG LLP	120308155/120308154		13,822	Legal
	Latham & Watkins	1373599		43,912	Legal
07/12	Orrick, Herrington & Sutcliffe	1373606			Legal
07/12	Orrick, Herrington & Sutcliffe	1373612		9,474	Legal
07/12	Orrick, Herrington & Sutcliffe	415193		17,206	Legal
07/12	Shipman and Goodwin	113,893		15,157	Legal
07/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.		\$	1,086,635	
	Total July 2012				
		1378732	\$	29,347	Legal
08/12	Orrick, Herrington & Sutcliffe	1378776			Legal
08/12	Orrick, Herrington & Sutcliffe	114,297		1,397	Legal
08/12	Sullivan, Mountjoy, Stainback & Miller P.S.C.	11,,	\$	30,744	
	Total August 2012				
		1383756	\$	2,234	Legal
09/12	Orrick, Herrington & Sutcliffe	1383757	-		Legal
09/12	Orrick, Herrington & Sutcliffe	1383762		49	Legal
09/12	Orrick, Herrington & Sutcliffe	1303,02	\$	2,283	
	Total September 2012				The state of the s
		1386035	\$	2,649	Legal
10/12	Orrick, Herrington & Sutcliffe	1380033	<u>\$</u>	2,649	
	Total October 2012				
			\$	1,467,682	
	Grand Total		-		

NOTE: The cost of refinancing the RUS Series A Note was recorded in Account 181 Unamortized Debt Expense and is being amortized over the life of the CoBank and CFC Term Loans.

The total amortized cost included in this rate proceeding is \$73,359.

Case No. 2012-00535 Response to AG 1-63(e) Witness: Billie J. Richert

Page 2 of 2

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Reference the Richert testimony at p. 14, lines 2-3, Item 64) 1 2 wherein it is stated that Big Rivers "has secured some additional net cost savings" since the 2011 rate case. Please fully identify and 3 quantify any and all such savings. 4 5 **Response)** The statement on page 14, lines 2-3 of the Richert testimony 6 concerning additional net cost savings refers to the approximately \$4 million 7 in savings related to the July 2012 refinancing of the RUS Series A Note, as 8 noted on page 12, lines 22-24 of the Richert testimony. For more details 9 concerning the RUS Series A Note refinance, please see the response to AG 10 1-63. 11
- 13 Witness) Billie J. Richert

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 65) Ms. Richert's testimony (p. 14, line 8 to 16) states that the forecasted test period of September 1, 2013 through August 31, 2014 was selected because it is the first full twelve calendar months following the termination of the Century contract and is representative of Big Rivers' expected operations and financial condition after that date. Address the following and provide updates on a continuing basis:

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a. Identify all amounts and adjustments in this forecasted test period ending August 31, 2014 that Big Rivers considers to be "known and measurable", and identify all amounts and adjustments that are not considered to be "known and measurable", and explain why Big Rivers believes such amounts and adjustments are, or are not, "known and measurable."

16 17 b. Provide Big Rivers' definition of "known and measurable" and provide citation to prior Commission rate cases that supports this definition.

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- **Response)** Big Rivers objects to this request on the grounds that it seeks information that is protected by the attorney-client and attorney work product privileges. Notwithstanding this objection, but without waiving it,
- 23 Big Rivers states as follows.

Case No. 2012-00535 Response to AG 1-65 Witness: John Wolfram Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1	The "known and measurable" standards are applicable to the use of a
2	12-month historical test period but are not applicable to the use of a fully
3	forecasted test period. See Section 10 of 807 KAR 5:001 pursuant to which
4	this application was filed. For this reason, Big Rivers has neither defined
5	the phrase nor considered the distinction referenced in the question for the
6	amounts and adjustments in this case.
7	To the extent this request seeks continuous or ongoing updates, Big
8	Rivers also objects on the grounds that it is overbroad and unduly
9	burdensome. Notwithstanding this objection, but without waiving it. Big

burdensome. Notwithstanding this objection, but without waiving it, Big

Rivers states that it will only update its response as required by law, as

ordered by the Commission, or as it otherwise deems appropriate.

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Witness) John Wolfram

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 66) Ms. Richert's testimony (p. 17, lines 7 to 15) addresses the
2	use of Burns & McDonnell as the vendor for the depreciation study.
3	Address the following and provide updates on a continuing basis:
4	
5	a. Provide the consulting costs/fees paid to Burns &
6	McDonnell for the depreciation study in the 2011 Rate
7	Case and for the depreciation study in this rate case, and
8	show amounts expensed and capitalized by account
9	number and description, and explain the reasons for
LO	differences in these consulting costs/fees.
11	b. Provide copies of invoices from Burns and McDonnell for
L2	the depreciation studies in the 2011 Rate Case and in the
L3	current proceeding.
L4	c. Identify the amounts of Burns & McDonnell consulting fees
L 5	included in the current rate proceeding by account
16	number, explain if these amounts are amortized, and
L7	provide supporting calculations.
18	
19	Response)
20	
21	a. Please see the attached schedule showing the consulting
22	costs/fees paid to Burns & McDonnell for the depreciation
23	study in the 2011 Rate Case and for the depreciation study in Case No. 2012-00535 Response to AG 1-66

Witness: Billie J. Richert

Page 1 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

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this rate case. The \$37,800 reduction in Burns & McDonnell consulting costs/fees reflects the close proximity in time in which each study was performed allowing work performed in the earlier study ("2011 Study") to be used to expedite the completion of the recent study ("2012 Study"). For example, the depreciation model developed in the Burns & McDonnell 2011 Study was already available, requiring only the appropriate updates for use in performing the analyses required for the 2012 Study. On-site inspections that were completed for the 2011 Study were recent enough to eliminate a repeat of this requirement - requiring only a review and update of operation and maintenance activities performed at the generation and transmission facilities since the completion of the 2011 Study. In general, the 2011 Study provided much of the framework needed to allow for an expedited completion of the 2012 Study resulting in the reduction of required consulting costs/fees.

b. Please refer to PSC 1-54 for copies of Burns & McDonnell invoices related to this rate case proceeding. Big Rivers objects to providing the Burns & McDonnell invoices from the 2011 rate case as being not reasonably calculated to lead to the discovery of admissible evidence and, further, as being unduly burdensome insofar as the invoices were already provided to the

Case No. 2012-00535 Response to AG 1-66 Witness: Billie J. Richert Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1		parties (including the Office of the Attorney General) in that
2		case.
3	c.	Big Rivers is requesting approval to recover, through rates, the
4		costs it incurs in this case and the authority to amortize these
5		costs over 36 months (see Direct Testimony of Ms. DeAnna M.
6		Speed-Tab No. 68). The Burns & McDonnell expenses included
7		in the Forecasted Test Period of \$33,432 represent one-third of
8		the total budgeted expenses for Burns & McDonnell associated
9		with this rate case proceeding and are expensed in account
10		number 923.
11		
12	Witness)	Billie J. Richert

12

Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-66(a) Burns & McDonnell-Depreciation Study Costs

			20	Deferred Debit 12 Rate Case Exp	Em	le Services aployed /C 723	Et	de Services mployed A/C 923
	<u></u>	Total 46,700	\$	A/C 186 46,700	\$	-	\$	-
Rate Case 2012-00535 Estimated Costs Rate Case 2011-00036	\$	84,500	•		\$	853	\$	83,647
Difference	\$	(37,800)						
Rate Case 2012-00535 Actual Costs through January 2013	\$	42,300	\$	42,300				

Case No. 2012-00535

Attachment to Response for AG 1-66(a)

Witness: Billie J. Richert

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 67)	Reference Richert Exhibit-3.
2		
3	α.	How do depreciation rates approved by RUS compare to
4		industry standards for a prudent utility?
5	b .	How long has RUS been concerned about deferrals on
6		major inspections and maintenance?
7	c.	Please produce all relevant communications and related
8		documents to/from RUS.
9	d.	Please indicate whether the plan for deferring
10		maintenance was the result of action by Big Rivers' board
11		of directors. If so, please provide a copy of all relevant
12		documents including minutes and resolutions. If it was not
13		the result of action by the board of directors, please
14		identify who was responsible for making the decision(s).
15	e.	Please indicate whether the company would agree to allow
16		an expert working on behalf of the Attorney General, and
17		any other intervenor or PSC staff, to inspect Big Rivers'
18		facilities.
19		
20	Response)	
21		

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

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a. Burns & McDonnell's approach used to develop the Big Rivers 1 depreciation rates approved by RUS incorporates generally accepted 2 depreciation study procedures and actuarial analyses widely used by 3 the utility industry. The Depreciation Study submitted to RUS for Big 4 Rivers is consistent with depreciation studies that a number of other 5 rural electric cooperatives have filed with RUS and RUS has approved. 6 However, individual requirements and rates will vary based on each 7 cooperative's specific depreciation situation and what RUS and 8 different state regulatory commissions require and approve. 9

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- b. RUS first expressed its concern about deferral of major inspections and maintenance in its letter of approval of the depreciation rates supported by the Depreciation Study dated November 2012, prepared by Burns & McDonnell Engineering Company, Inc. Big Rivers' letter dated February 6, 2013, to Mr. Chris Tuttle, Acting Deputy Assistant Administrator of the Rural Utilities Service (RUS), in response to RUS's concern is included with the attachments provided in response to Item 67(c) below.
- c. All relevant communications and related documents to/from RUS related to Richert Exhibit-3 are provided in response to KIUC 1-1.
- d. The plan for deferring maintenance to achieve minimum TIER was not a Big Rivers Board of Directors action. Big Rivers' senior management and its Internal Risk Management Committee reviewed the

Case No. 2012-00535 Response to AG 1-67 Witnesses: a-c. Billie J. Richert d-e. Robert W. Berry Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	maintenance deferral plans that were devised by the production
2	management staff and determined it was the best course of action to
3	assure minimum TIER with least possible risk. The maintenance
4	deferral plans were presented to the Board of Directors as a matter of
5	information, not as a request for Board approval.
6	e. Big Rivers will allow such inspections as required by law and other
7	inspections by Public Service Commission Staff as agreed to between
8	Public Service Commission Staff and Big Rivers.
9	
10	Witnesses)
11	a-c. Billie J. Richert
12	d-e. Robert W. Berry

Case No. 2012-00535 Response to AG 1-67 Witnesses: a-c. Billie J. Richert d-e. Robert W. Berry Page 3 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 68) Please refer to line 10, page 17 of the Richert testimony,
2	where it refers to "process issues" related to Burns & McDonnell's
3	performance of the previous depreciation study for Big Rivers.
4	
5	a. List and describe each of the "process issues that arose
6	during the development and completion of the
7	[depreciation] study".
8	b. Describe in detail how each of those "process issues" have
9	since been resolved.
10	
11	Response) The process issues referred to in this data request were fully
12	explained in Case No. 2011-00036.
13	
14	Witness) John Wolfram

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 69) Provide complete copies of all correspondence and
2	documents related thereto between Big Rivers and Burns &
3	McDonnell, since the selection of Burns & McDonnell to perform the
4	depreciation study for the 2011 rate case.
5	
6	Response) Please refer to the attachment, which includes correspondence
7	and documents between Big Rivers and Burns & McDonnell related to the
8	2012 depreciation study for the instant Case No. 2012-00535.
9	Please also refer to attachments provided to Kentucky Industrial
10	Utility Customers, Inc. ("KIUC") Data Requests Item 1-1, 1-2 and 1-3 in
11	Case No. 2011-00036 for correspondence and documents provided between
12	Big Rivers and Burns & McDonnell related to the depreciation study for the
13	2011 rate case.
14	
15	Witness) Billie J. Richert

Case No. 2012-00535 Response to AG 1-69 Witness: Billie J. Richert Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 70) Provide copies of all employment contracts with Big Rivers
2	officers/executives, along with employment contracts of predecessor
3	officer/executives from 2010 through 2013 YTD and provide updates
4	on a continuing basis.
5	
6	Response) To the extent this request seeks continuous or ongoing updates,
7	Big Rivers objects on the grounds that it is overbroad and unduly
8	burdensome. Notwithstanding this objection, but without waiving it, Big
9	Rivers states that it will only update its response as required by law, as
10	ordered by the Commission, or as it otherwise deems appropriate.
11	
12	There are no employment contracts with Big Rivers officers/executives
13	or their predecessors YTD 2013, nor were there any in 2010, 2011, or 2012.
14	
15	Witness) James V. Haner

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 71) Provide copies of "golden parachute" agreements and
2	contracts with current Big Rivers officer/executives and for
3	predecessor officer/executives from 2010 through 2013 YTD for each
4	employee and show amounts paid by account number and year and
5	provide updates on a continuing basis.
6	
7	a) Provide copies of any other agreement(s), or cite to any
8	verbal agreements that indicate any compensation or
9	remuneration of any type or sort that would or could be
10	paid to Big Rivers' executives in the event Big Rivers files
11	bankruptcy.
12	
13	Response) Big Rivers objects to this request on the grounds that the use of
14	the term "golden parachute" is unduly vague and ambiguous.
15	Notwithstanding this objection, but without waiving it, Big Rivers states that
16	there are no "golden parachute" agreements or contracts with Big Rivers'
17	officers/executives or their predecessors from 2010 through 2013 YTD.
18	There are no other agreements indicating compensation or remuneration
19	that would or could be paid to Big Rivers' executives in the event Big Rivers
20	files bankruptcy.
21	To the extent this request seeks continuous or ongoing updates, Big
22	Rivers objects on the grounds that it is overbroad and unduly burdensome.
23	Notwithstanding this objection, but without waiving it, Big Rivers states that Case No. 2012-00535

Response to AG 1-71 Witness: James V. Haner Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- it will only update its response as required by law, as ordered by the
- 2 Commission, or as it otherwise deems appropriate

4 Witness) James V. Haner

3

Case No. 2012-00535 Response to AG 1-71 Witness: James V. Haner Page 2 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 72)	Address the following regarding all payments to outside
2	attorneys	and legal representation.
3		
4		a. Provide all legal costs expensed and capitalized by
5		account number and vendor name for each year 2010,
6		through 2013 YTD and for all forecasted periods.
7		Explain the services provided by each attorney.
8		b. Provide copies of invoices for all payments to attorneys
9		from 2011 through 2013 YTD.
10		c. Regarding (a) and (b), identify all recurring and
l1		nonrecurring legal fees.
12		d. Regarding (a) and (b), identify all amounts paid as
L3		retainers or under a fixed-fee arrangement and provide
14		supporting documents.
15		
16	Response)	Big Rivers objects to this request as overly broad, unduly
L7	burdensom	e, and not reasonably calculated to lead to the discovery of
18	admissible	evidence. Big Rivers further objects to the extent that this
19	request see	eks information that is subject to the attorney-client and attorney
20	work prod	uct privileges. Notwithstanding these objections, and without
21	waiving the	em, Big Rivers responds as follows.
22		

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

a. Please see the attached schedule for 2010 through 2012, the 1 Base Period April 30, 2013 and the Forecasted Test Period 2 August 31, 2014. Detail by vendor and account number is not 3 available for 2013 YTD at this time. b. Please see the objection, above. c. Please refer to subpart (a), above. d. There are no amounts paid as retainers or under a fixed-fee 7 arrangement. 8 9 Billie J. Richert Witness) 10

> Case No. 2012-00535 Response to AG 1-72 Witness: Billie J. Richert Page 2 of 2

Attachment to Response for AG 1-72(a) (c) Payments to Outside Attorneys and Legal Representation (Excludes Expenses Associated With This Rate Proceeding)

Vendor	Total	A/C 101	A/C 107	A/C 143	A/C 181	A/C 182	A/C 183	A/C 555	A/C 723	A/C 923	A/C 928
2010 (GROSS of CITY SHARE) Chapman & Cutler LLP \$ Dorsey, King, Gray, Norment & Hopgood Hogan & Lovells, LLP	36,390 3,583 1,288,868	\$ -	\$ - 3,583 55,555	\$ - 141,818	\$ 36,390	\$ -	\$ - 6,838	\$ -	\$ - 5,049	\$ - 464,026	\$ - 615,582
Kerrick, Stivers, Coyle Orrick, Herrington, Sutcliffe	185 543,069			4,409	521,748				446	185 16,466 10,537	
Arnold Porter - RUS Counsel Shipman & Goodwin Sullivan, Mountjoy, Stainback & Miller P.S.C. Ziemer, Stayman, Wietzel Total 2010	10,537 22,260 819,115 18,485 \$ 2,742,492	198	79,266		22,260 87,481 \$ 667,879	<u>\$</u> -	32,904	\$ -	27,750 1,985 \$ 35,230	440,805 16,500 \$ 948,519	125,395 \$ 740,977

Case No. 2012-00535 Response to AG 1-72(a) (c) Witness: Billie J. Richert

Page 1 of 4

Attachment to Response for AG 1-72(a) (c) Payments to Outside Attorneys and Legal Representation (Excludes Expenses Associated With This Rate Proceeding)

·	Total	A/C 101	A/C 107	A/C 143	A/C 181	A/C 182	A/C 183	A/C 555	A/C 723	A/C 923	A/C 928
Vendor 2011 (GROSS of CITY SHARE) Hogan & Lovells, LLP		\$ -	\$ -	\$ 26,228	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 128,937	\$ 928,707
Orrick, Herrington, Sutcliffe	45,156			13,460						29,255	2,441
Steptoe & Johnson LLP Sullivan, Mountjoy, Stainback & Miller P.S.C. Ziemer, Stayman, Wietzel Total 2011	7,240 979,893 29,349 \$ 2,145,510	\$ -	\$ 50,744	89,228 \$ 128,916		\$ -	41,873 \$ 41,873	\$ -	\$ -	7,240 377,184 29,349 \$ 571,965	420,864 \$1,352,012

Case No. 2012-00535 Response to AG 1-72(a) (c) Witness: Billie J. Richert

Page 2 of 4

Attachment to Response for AG 1-72(a) (c) Payments to Outside Attorneys and Legal Representation (Excludes Expenses Associated With This Rate Proceeding)

Vendor	Total	A/C 101	A/C 107	A/C 143	A/C 181	A/C 182	A/C 183	A/C 555	A/C 723	A/C 923	A/C 928
2012 (GROSS of CITY SHARE) Dinsmore & Shohl LLP DLA Piper LLP Hogan & Lovells, LLP	127,099 1,012 641,072	\$ -	\$ -	\$ 78,785 759 326,289	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 48,314 253 220,046	94,737
Hunton & Williams LLP Latham and Watkins LLP Orrick, Herrington, Sutcliffe	49,862 165,961 1,165,919			244,337	165,961 717,603					49,862 203,979	
Shipman & Goodwin Sullivan, Mountjoy, Stainback & Miller P.S.C. Ziemer, Stayman, Wietzel Total 2012 =	29,194 1,212,998 24,453 \$ 3,417,570		29,846	186,389 \$ 836,559	29,194 153,053 \$1,065,811	224,726			\$ -	467,154 24,453 \$1,014,061	160,020 \$ 254,757

Case No. 2012-00535 Response to AG 1-72(a) (c) Witness: Billie J. Richert

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Attachment to Response for AG 1-72(a) (c) Payments to Outside Attorneys and Legal Representation (Excludes Expenses Associated With This Rate Proceeding)

Vendor	Total	A/C 101	A/C 107	A/C 143	A/C 181	A/C 182	A/C 183	A/C 555	A/C 723	A/C 923	A/C 928
Base Period TME April 30, 2013 (NET of CITY SHARE) DLA Piper LLP Hogan & Lovells, LLP Hunton & Williams LLP Orrick, Herrington, Sutcliffe Sullivan, Mountjoy, Stainback & Miller P.S.C. Ziemer, Stayman, Wietzel	\$ 253 136,833 49,862 148,688 428,495 10,327 \$ 774,458	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - <u>\$</u> -	\$ - 3,581 1,109 \$ 4,690	\$ -	\$ 253 136,833 49,862 148,688 419,002 9,218 \$ 763,856	\$ - 5,912 \$ 5,912
Forecasted Test Period August 31, (NET of CITY SHARE) Orrick, Herrington, Sutcliffe Sullivan, Mountjoy, Stainback & Miller P.S.C.	\$ 24,000 174,000 \$ 198,000		\$ - <u>\$</u> -	\$ - <u>\$ -</u>	\$ - \$ -	\$ - <u>\$</u> -	\$ -	- \$ -	\$ - <u>\$</u> -	\$ 24,000 174,000 \$ 198,000	\$ - <u>\$ -</u>

Case No. 2012-00535 Response to AG 1-72(a) (c) Witness: Billie J. Richert

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Regarding the Company adjustment related to rate case Item 73) 1 costs, address the following and provide updates on a continuing 2 basis. 3 4 a. For all rate case costs included in this rate case, show 5 actual amounts expensed, deferred, and capitalized by the 6 year they were actually incurred or paid, and show actual 7 versus projected amounts included in this rate proceeding. 8 Provide amounts for each specific consultant and 9 attorney. 10 b. For all actual amounts in (a) for each consultant, and for 11 all subsequent actual amounts paid provide copies of the 12 consultants invoices. Show each consultant's hourly 13 billing rate and number of hours for all services 14 performed. 15 c. In addition to amounts included in rate case costs in this 16 proceeding, provide amounts expense and capitalized by 17 account number and by consultant/attorney for each of the 18 uears 2010, 2011, 2012, and 2013 YTD. And provide 19 copies of actual invoices and show each consultant's 20 hourly billing rate and number of hours for all services 21 performed. 22

> Case No. 2012-00535 Response to AG 1-73 Witness: Travis A. Siewert Page 1 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

	Towns and the second se
1	d. Regarding (a), show the number of years that rate case
2	costs are amortized by consultant or in total, explain the
3	reason for this amortization period, and reconcile to the
4	Company's rate case expense adjustment.
5	e. For (a) to (d) above, identify the amounts related to fixed
6	fee arrangements and retainers.
7	
8	Response) Big Rivers objects to this request as overly broad, unduly
9	burdensome, and not reasonably calculated to lead to the discovery of
10	admissible evidence. Big Rivers further objects to the extent that this
11	request seeks information that is subject to the attorney-client and attorney
12	work product privileges. Notwithstanding these objections, and without
13	waiving them, Big Rivers responds as follows.
14	
15	a. Please see schedule attached.
16	b. Please refer to PSC 1-54.
17	c. Please see the attached schedule and the response to AG 1-72.
18	d. The rate case costs are being amortized over a three year period
19	Big Rivers requested, and received, a three year amortization
20	period for its rate case costs in its previous rate case, consistent
21	with Commission practice. There was no adjustment for rate
22	case costs related to the current rate case because the current
23	rate case costs are being deferred and amortized over a three

Case No. 2012-00535 Response to AG 1-73 Witness: Travis A. Siewert Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1		year period for budgeting purposes. Therefore, one third of the
2		current rate case cost is being expensed in the forecast test
3		period. Any adjustment concerning rate case expenses relates
4		to the unamortized cost from Big Rivers' previous rate case, as
5		noted in Reference Schedule 1.09 of Exhibit Wolfram-2. Please
6		see the response to PSC 2-36 concerning changes in the rate
7		case expense adjustment resulting from the Rehearing Order in
8		Case No. 2011-00036.
9	e.	There were no amounts related to fixed-fee arrangements and
10		retainers.
11		
12	Witness)	Travis A. Siewert

Case No. 2012-00535 Response to AG 1-73 Witness: Travis A. Siewert Page 3 of 3

Big Rivere Electric Corporation C 2012-00535

Attachment to Response for AG 1·73(a) Rate Case Costs Actual vs. Projected By Year Incurred

ACES Power Marketing
American Management LLC
Burns & McDonnell
Catalyst Consulting LLP
Dinsmore & Shohl, LLP
Orrick, Herrington, Sutcliffe
Sullivan, Mountjoy, Stainback & Miller, P.S.C.
Walker/Daniel M.
Other Expert Witnesses

Actual		2 0 1 2 Actual Projected		Variance (F)/U		
s	_	\$	17,280	\$ (17,280)		
Ф	2,065	Ψ	-	2,065		
	42,301		46,704	(4,403)		
	103,103		163,428	(60,325)		
	44.067		74,440	(30,373)		
	14,785		-	14,785		
	80,760		107,400	(26,640)		
	5,750			5,750		
	-		28,965	(28,965)		
\$	292,831	\$	438,217	\$ (145,386)		

 	Y	D January 2	0 1	3
Actual		Projected		Variance (F)/U
\$ -	\$	3,460	\$	(3,460)
_		-		•
-		4,991		(4,991)
23,830		29,000		(5,170)
11,639		29,120		(17,481)
460				460
41,981		48,860		(6,879)
-				-
-		7,260		(7,260)
\$ 77,910	\$	122,691	\$	(44,781)

NOTE: Actual costs are booked to account number 186. Big River is requesting approval to recover, through rates, the costs it incurs in this case and the authority to amortize those costs over 36 months (see Tab No. 68).

Big Rive Flectric Corporation C 4 2012-00535

Attachment to Response for AG 1-73(a) Rate Case Costs Actual vs. Projected By Year Incurred

ACES Power Marketing
American Management LLC
Burns & McDonnell
Catalyst Consulting LLP
Dinsmore & Shohl, LLP
Orrick, Herrington, Sutcliffe
Sullivan, Mountjoy, Stainback & Miller, P.S.C.
Walker/Daniel M.
Other Expert Witnesses

 A/C 186 Grand Total Projected Rate Case Costs	Description of Services Provided
\$,.	Consultant fees/Testimony
	Consultant fees
	Depreciation Study/Testimony
411,256	Cost of Service Study/Rate Design/Testimony
521,080	Legal fees
-	Legal fees
454,620	Legal fees
	Consultant fees/Testimony
55,784	Testimony
\$ 1,585,977	_

6		

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 74)	For all	outside	services	consultants	and	professional	fess

- 2 not previously addressed (regulatory, legal, accounting, research and
- 3 development, customer service, broker fees, rating agencies, financial,
- 4 auditing, management studies, compensation studies, special studies,
- 5 economic, software, service quality, safety, lobbying, public relations,
- 6 training, etc.) provide the following information for 2011, 2012, and
- 7 2013 YTD and provide updates on a continuing basis:
 - a. Provide the name of the vendor, a brief description of services or products provided, and the amount expensed and capitalized by account number.
- b. Provide copies of applicable contracts, purchase orders, and engagement letters.
- 13 c. Provide a copy of all invoices when the total paid to each
 14 vendor equals or exceeds \$25,000 per year or if the total
 15 contract exceeds \$50,000.
- d. Provide copies of studies, reports, and recommendations
 provided by outside consultants.
 - e. Identify all amounts by vendor that are nonrecurring and describe the nonrecurring nature of such costs.
- f. Identify those amounts impacted by Company proposed adjustments in this rate case, and identify and quantify the related adjustment.

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Response) Big Rivers objects to this request as overly broad, unduly
- 2 burdensome, and not reasonably calculated to lead to the discovery of
- 3 admissible evidence. Notwithstanding this objection, and without waiving
- 4 it, Big Rivers responds as follows.
- a. Please refer to PSC 1-54 and AG 1-54, 1-63, 1-66, 1-72, 1-73, 1-
- 6 246, 1-263, 1-271, and 1-272 for outside services consultants and
- 7 professional fees previously addressed.
- b. See objection and subpart a, above.
 - c. See objection and subpart a, above.
- d. See objection and subpart a, above.
- e. See objection and subpart a, above.
- f. See objection and subpart a, above.

13

9

14 Witness) Billie J. Richert

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

February 28, 2013

- 1 Item 75) Regarding company proposed adjustments related to salary
- 2 and wage increases: show all components of the Company's payroll
- 3 adjustment and provide information in the following format along
- 4 with supporting documentation). Show all payroll information
- 5 separately for "exempt" and "non-exempt" labor; and, show all
- 6 information separately for both "expensed" and "capitalized"
- 7 amounts.
- 8 a. Show actual unadjusted payroll (per books before Company
- adjustment), payroll adjustment increases, and adjusted payroll
- for both exempt and non-exempt on an "expensed" and
- 11 <u>"capitalized" basis</u>. Identify the percent of payroll expensed
- versus capitalized in all cases.
- b. Show the amount of <u>overtime versus regular time</u> labor included
- in the actual test period unadjusted payroll, payroll adjustment
- increases, and adjusted payroll for both exempt and non-exempt
- 16 (and show expensed versus capitalized amounts).
- 17 c. Show the amount of short-term and long-term incentives
- included in actual test period 2012 unadjusted payroll, payroll
- adjustment increases, and adjusted payroll for both exempt and
- 20 non-exempt (and show expensed versus capitalized amounts).
- 21 d. Show the amount of Supplemental Executive Retirement Plan
- 22 ("SERP") pay included in actual test period unadjusted payroll,
- payroll adjustment increases, and adjusted payroll for both

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

February 28, 2013

exempt and non-exempt (and show expensed versus capitalized amounts).

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- e. Show the amount of <u>deferred compensation pay</u> included in actual test period unadjusted payroll, payroll adjustment increases, and adjusted payroll for both exempt and non-exempt (and show expensed versus capitalized amounts).
- f. Show the amount of <u>bonuses</u> included in actual test period unadjusted payroll, payroll adjustment increase, and adjusted payroll for both exempt and non-exempt (and show expensed versus capitalized amounts).
- g. Show the amount of severance pay (and similar type pay)
 included in actual test period unadjusted payroll, payroll
 adjustment increases, and adjusted payroll for both exempt and
 non-exempt (and show expensed versus capitalized amounts).
- 15 h. Show the amount of pay for <u>outside temporary services and</u>
 16 <u>contract labor</u> (and similar type pay) included in actual test
 17 period unadjusted payroll, payroll adjustment increases, and
 18 adjusted payroll for both exempt and non-exempt (and show
 19 expensed versus capitalized amounts).
- i. Show all other <u>non-recurring or one-time labor amounts</u> (and identify and explain each of these components) included in actual test period unadjusted payroll, payroll adjustment

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

February 28, 2013

- increases, and adjusted payroll for both exempt and non-exempt

 (and show expensed versus capitalized amounts).
 - j. Show all amounts related to <u>storm damage</u> (separately identify how much of regular and overtime payroll is related to storm damage) included in actual test period unadjusted payroll, payroll adjustment increases, and adjusted payroll for both exempt and non-exempt (and show expensed versus capitalized amounts).
 - k. Show the amount of <u>any one-time union payments</u> included in actual test period unadjusted payroll, payroll adjustment increases, and adjusted payroll for both exempt and non-exempt (and show expensed versus capitalized amounts).
 - 1. Show the amount of <u>all other categories of payroll</u> (for each category greater than \$100,000) included in actual test period unadjusted payroll, payroll adjustment increases, and adjusted payroll for both exempt and non-exempt (and show expensed versus capitalized amounts).

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Response) Actual calendar year 2010 detail is unavailable due to inaccessibility of the Oracle 11i information system environment provided by E.ON pursuant to a contract that terminated January 15, 2011, at which time Big Rivers transitioned to Oracle 12.

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

February 28, 2013

- 1 Payroll information requested in Item 75 is shown on the following
- schedules 75(a), 75(b), 75(c), 75(d), and 75(f). The following additional
- 3 information is submitted for Item 75(a) through 75(l).

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- a. Please see attached schedule.
- b. Please see attached schedule.
- 7 c. Please see attached schedule.
- 8 d. Please see attached schedule.
- 9 e. Big Rivers' deferred compensation pay is a Supplemental Executive 10 Retirement Plan. See Item 75(d).
- 11 f. Please see attached schedule.
- g. There was no severance pay paid in the actual periods, nor was any
- severance pay allocated in the forecasted/budgeted periods.
- Severance pay of \$4.6 million is deferred and amortized over 60
- months in the budget beginning September 2013, and is not reflected
- as part of payroll costs.
- 17 h. There are no outside temporary services or contract labor in any of
- the periods' payroll costs.
- i. There are no other non-recurring or one-time labor amounts in the
- actual periods, the base period, or the 2015 budget periods' payroll
- costs. A pro forma adjustment was prepared to remove non-recurring
- wage and salary costs related to the Wilson Station lay-up from the
- forecasted test period ending August 2014. The adjustment removed

Case No. 2012-00535 Response to AG 1-75 Witness: James V. Haner Page 4 of 5

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

February 28, 2013

1		the labor costs of 92 employees for the period September 2013
2		through November 2013. The amount of the wage and salary expense
3		removed was \$1,558,742.
4	j.	There are no separately identifiable storm damage costs in any of the
5		periods' payroll costs.
6	k.	There are no one-time union payments in any of the periods' payroll
7		costs.
8	1.	This is not applicable for any of the periods' payroll costs.
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12 Witness) James V. Haner

Attachment to Response for AG 1-75(a) Statement of Unadjusted Payroll 2011, Base Period Ending 4/13/13, Forecasted Test Period Budget 08/31/14, 2015 Budget

Type of Filing: Original	_X;	Updated -	;	Revised	
Workpaper Reference No(s).					

		Annual Actual Payroll						
Year	Classification	Expensed	Capitalized	Total	% of Payroll Expensed	% of Payroll Capitalized		
YTD 2011 YTD 2011	Exempt Labor Non-Exempt Labor	19,817,638 28,277,648 48,095,286	259,834 483,535 743,369	20,077,472 28,761,183 48,838,655	98.48%	1.52%		
Base Period Base Period	Exempt Labor Non-Exempt Labor	21,419,119 28,437,329 49,856,448	255,530 638,926 894,456	21,674,649 29,076,255 50,750,904	98.24%	1.76%		
Forecast Test Period Budget Forecast Test Period Budget	Exempt Labor Non-Exempt Labor	19,549,570 25,860,574 45,410,144	146,223 212,580 358,803	19,695,793 26,073,154 45,768,947	99.22%	0.78%		
2015 Budget 2015 Budget	Exempt Labor Non-Exempt Labor	19,704,977 25,417,624 45,122,601	149,621 208,916 358,537	19,854,598 25,626,540 45,481,138	99.21%	0.79%		

In the forecasted test period, budget labor is unadjusted for the Wilson labor pro forma.

Case No. 2012-00535

Attachment to Response for AG 1-75(a)

Witness: James V. Haner

Page 1 of 5

Attachment to Response for AG 1-75(b) Statement of Overtime versus Regular Time Labor 2011, Base Period Ending 4/13/13, Forecasted Test Period Budget 08/31/14, 2015 Budget

Type of Filing: Original	_X;	Updated -	;	Revised -	
Workpaper Reference No(s)					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

		Annual Actual Payroll				
Year	Classification	Expensed	Capitalized	Total		
YTD 2011	Exempt Labor	18,972,606	231,438	19,204,044		
YTD 2011	Exempt Labor Overtime	845,032	28,396	873,428		
YTD 2011	Non-Exempt Labor	23,013,264	411,871	23,425,135		
YTD 2011	Non-Exempt Labor Overtime	5,264,384	71,664	5,336,048		
***		48,095,286	743,369	48,838,655		
Base Period	Exempt Labor	20,602,004	228,652	20,830,656		
Base Period	Exempt Labor Overtime	817,115	26,878	843,993		
Base Period	Non-Exempt Labor	23,779,844	532,184	24,312,028		
Base Period	Non-Exempt Labor Overtime	4,657,485	106,742	4,764,22		
	•	49,856,448	894,456	50,750,90		
Forecast Test Period Budget	Exempt Labor	18,589,101	146,223	18,735,324		
Forecast Test Period Budget	Exempt Labor Overtime	960,468	-	960,46		
Forecast Test Period Budget	Non-Exempt Labor	21,787,033	212,580	21,999,61		
Forecast Test Period Budget	Non-Exempt Labor Overtime	4,073,542		4,073,54		
, and the second	·	45,410,144	358,803	45,768,94		
2015 Budget	Exempt Labor	18,749,239	149,621	18,898,860		
2015 Budget	Exempt Labor Overtime	955,738	-	955,73		
2015 Budget	Non-Exempt Labor	21,403,470	208,916	21,612,38		
2015 Budget	Non-Exempt Labor Overtime	4,014,154	-	4,014,15		
5	-	45,122,601	358,537	45,481,13		

In the forecasted test period, budget labor is unadjusted for the Wilson labor pro forma.

Case No. 2012-00535 Attachment to Response for AG 1-75(b) Witness: James V. Haner Page 2 of 5

Attachment to Response for AG 1-75(c)

Statement of Incentives

2011, Base Period Ending 4/13/13, Forecasted Test Period Budget 08/31/14, 2015 Budget

Type of Filing:	Original	_X;	Updated -	;	Revised -	
Workpaper Ref	ference No(s).	-				

		Annual Actual Payroll			
Year	Classification	Expensed	Capitalized	Total	
YTD 2011	Exempt Labor	926,107		926,107	
YTD 2011	Non-Exempt Labor	45,531		45,531	
	•	971,638	_	971,638	
Base Period	Exempt Labor	1,365,000		1,365,000	
Base Period	Non-Exempt Labor	135,000		135,000	
2450 1 01104		1,500,000	-	1,500,000	

Incentives are not allocated in the forecasted test period budget or the 2015 budget.

Case No. 2012-00535 Attachment to Response for AG 1-75(c)

Witness: James V. Haner

Page 3 of 5

Attachment to Response for AG 1-75(d) Statement of Supplmental Executive Retirement Plan 2011, Base Period Ending 4/13/13, Forecasted Test Period Budget 08/31/14, 2015 Budget

Type of Filing: Original	_X	;	Updated -	;	Revised	· · · · · · · · · · · · · · · · · · ·
Workpaper Reference No(s).						

Annual Actual Payroll Capitalized Classification Expensed Total Year Exempt Labor 20,858 YTD 2011 20,858 YTD 2011 Non-Exempt Labor 20,858 20,858 **Base Period** Exempt Labor 20,890 20,890 Non-Exempt Labor **Base Period** 20,890 20,890

SERP pay is not allocated in the forecasted test period budget or the 2015 budget.

Case No. 2012-00535 Attachment to Response for AG 1-75(d) Witness: James V. Haner

Page 4 of 5

Attachment to Response for AG 1-75(f) Statement of Bonuses

2011, Base Period Ending 4/13/13, Forecasted Test Period Budget 08/31/14, 2015 Budget

Type of Filing:	Original	_X;	Updated -	;	Revised	
Workpaper Ref	ference No(s).	-				

			Actual Bonuses	
Year	Classification	Expensed	Capitalized	Total
YTD 2011	Exempt Bonuses Pay	33,586	-	33,586
YTD 2011	Non-Exempt Bonus Pay	63,230	-	63,230
		96,816	-	96,816
Base Period	Exempt Bonuses Pay	-	-	-
Base Period	Non-Exempt Bonus Pay	-	-	_

Bonuses are not allocated in the forecasted test period budget or the 2015 budget.

Case No. 2012-00535

Attachment to Response for AG 1-75(f)

Witness: James V. Haner

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 76) Provide all of the payroll information requested in the
2	previous data request (#74, above) on an actual per book basis for
3	each of the calendar periods 2011 through 2013 YTD, including
4	showing exempt and non-exempt payroll separately and showing
5	expensed versus capitalized payroll separately. If all detailed
6	information is not readily available, provide as much detail as
7	possible. For each category of payroll costs above (overtime, short-
8	term incentives, long-term incentives, bonuses, SERP,
9	temporary/contract labor, severance pay, deferred compensation,
10	etc.), when the amount from year-to-year varies by either 5% or
11	\$200,000, explain the reason for the change and provide supporting
12	documentation.

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- **Response)** Actual calendar year 2010 detail is unavailable due to inaccessibility of the Oracle 11i information system environment provided by E.ON pursuant to a contract that terminated January 15, 2011, at which time Big Rivers transitioned to Oracle 12.
- Payroll information requested in Item 76 is shown on the attached schedules 76(a), 76(b), 76(c), 76(d), and 76(f) on an actual per book basis.
- For each category of payroll costs, when the amount from year-to-year varies by either 5% or \$200,000, explanations of changes are as follows:
 - Schedule 76(a) Total exempt labor increased from 2011 to 2012 due to salary structure adjustments.

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Schedule 76(b) Exempt regular time labor increased from 2011 to 2012 due to salary structure adjustments.
 - Schedule 76(c) Incentive pay decreased from 2011 to 2012 due to a decrease in the incentive payout rate.

6 Witness) James V. Haner

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Attachment to Response for AG 1-76(a) Statement of Unadjusted Payroll YTD 2011, YTD 2012, Jan 2013

Type of Filing:	Original	_X;	Updated -	·;	Revised -	
Workpaper Re	ference No(s).	,	- un annumer			

Annual Actual Payroll % of Payroll % of Payroll Capitalized **Total Expensed** Year Classification Capitalized Expensed 20,077,472 259,834 19,817,638 Exempt Labor YTD 2011 483,535 28,761,183 28,277,648 Non-Exempt Labor YTD 2011 1.52% 98.48% 743,369 48,095,286 48,838,655 272,067 20,442,204 20,170,137 Exempt Labor YTD 2012 729,945 28,842,372 28,112,427 Non-Exempt Labor **YTD 2012** 97.97% 2.03% 48,282,564 1,002,012 49,284,576 1,803,579 1,782,048 21,531 Exempt Labor Jan 2013 38,514 2,464,519 2,426,005 Non-Exempt Labor Jan 2013 1.41% 98.59% 4,268,098 60,045 4,208,053

^{*}Labor including paid time off

Attachment to Response for AG 1-76(b) Statement of Overtime versus Regular Time Labor YTD 2011, YTD 2012, Jan 2013

Type of Filing:	Original	_X;	Updated -	;	Revised -	_
Workpaper Ref	ference No(s).					

		Annual Actual Payroll			
Year	Classification	Expensed	Capitalized	Total	
<u>, cai</u>					
YTD 2011	Exempt Labor	18,972,606	231,438	19,204,04	
YTD 2011	Exempt Labor Overtime	845,032	28,396	873,42	
	Non-Exempt Labor	23,013,264	411,871	23,425,13	
YTD 2011	Non-Exempt Labor Overtime	5,264,384	71,664	5,336,04	
YTD 2011	Non-Exempt Labor Gvertime	48,095,286	743,369	48,838,65	
		19,328,496	227,698	19,556,19	
YTD 2012	Exempt Labor	841,642	44,369	886,01	
YTD 2012	Exempt Labor Overtime	22,979,602	558,659	23,538,26	
YTD 2012	Non-Exempt Labor	5,132,824	171,286	5,304,11	
YTD 2012	Non-Exempt Labor Overtime	48,282,564	1,002,012	49,284,57	
	Francis I alien	1,717,081	20,100	1,737,18	
Jan 2013	Exempt Labor	65,029	1,368	66,39	
Jan 2013	Exempt Labor Overtime	2,037,807	30,593	2,068,40	
Jan 2013	Non-Exempt Labor	388,136	7,983	396,1	
Jan 2013	Non-Exempt Labor Overtime	4,208,053	60,045	4,268,09	

^{*}Labor including paid time off

Case No. 2012-00535 Attachment to Response for AG 1-76(b) Witness: James V. Haner

Page 2 of 5

Attachment to Response for AG 1-76(c) Statement of Incentives YTD 2011, YTD 2012, Jan 2013

Type of Filing:	Original	_X;	Updated -	·;	Revised -	-
Workpaper Ref	ference No(s).					

Actual Bonuses Total Capitalized Expensed Classification Year 926,107 926,107 Exempt Bonuses Pay YTD 2011 45,531 45,531 Non-Exempt Bonus Pay YTD 2011 971,638 971,638 644,193 644,193 **Exempt Bonuses Pay YTD 2012** 60,562 60,562 Non-Exempt Bonuses Pay **YTD 2012** 704,755 704,755 **Exempt Bonuses Pay** Jan 2013 Non-Exempt Bonuses Pay Jan 2013

Case No. 2012-00535 Attachment to Response for AG 1-76(c) Witness: James V. Haner Page 3 of 5

Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-76(d) Statement of Supplemental Executive Retirement Plan YTD 2011, YTD 2012, Jan 2013

Type of Filing: (Original	X;	Updated -	<u> </u>	Revised -	
Workpaper Refe	rence No(s)					

			Actual Bonuses	
Year	Classification	Expensed	Capitalized	Total
YTD 2011 YTD 2011	Exempt Bonuses Pay Non-Exempt Bonus Pay	20,858	- - -	20,858
YTD 2012 YTD 2012	Exempt Bonuses Pay Non-Exempt Bonuses Pay	20,890	- - -	20,890
Jan 2013 Jan 2013	Exempt Bonuses Pay Non-Exempt Bonuses Pay	2,410 - 2,410	- - -	2,410

Case No. 2012-00535 Attachment to Response for AG 1-76(d) Witness: James V. Haner

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Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-76(f) Statement of Bonuses Paid YTD 2011, YTD 2012, Jan 2013

Type of Filing:	Original	_X;	Updated -	;	Revised -	
Workpaper Ref	ference No(s).					

Actual Bonuses Expensed Capitalized Total Year Classification 33,586 **Exempt Bonuses Pay** 33,586 YTD 2011 63,230 63,230 Non-Exempt Bonus Pay YTD 2011 96,816 96,816 32,648 32,648 **YTD 2012 Exempt Bonuses Pay** 61,828 Non-Exempt Bonuses Pay 61,828 **YTD 2012** 94,476 94,476 Exempt Bonuses Pay Jan 2013 Jan 2013 Non-Exempt Bonuses Pay

Case No. 2012-00535

Attachment to Response for AG 1-76(f)

Witness: James V. Haner

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 77) Regarding the prior data request (#74, above), provide supporting documentation and an explanation for the changes in the amount and percent of payroll expensed versus capitalized for each of the years 2010 through 2012 (explain if this has a correlation to the amount of construction activity or identify reasons causing the change). Provide supporting documentation to show and explain the anticipated expensed versus capitalized percentage in 2013.

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Response) Please refer to the schedules showing expensed and capitalized labor attached to AG 1-76. Those schedules show the percent of payroll capitalized to be 1.5%, 2.0%, and 1.4% for 2011, 2012, and 2013 YTD, respectively. The percent of payroll capitalized each year depends on the level of internal labor expended in regard to non-O&M work. See the Direct Testimony of David G. Crockett, Tab 67, pages 5 and 6, for the derivation of capital costs included in the budgets.

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Witness) James V. Haner

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 78) For the period January 1, 2007 through and including 2013 1 YTD, explain if the Company has ever changed its practice or policy 2 regarding method of payment, amount of payment, or mix of payment 3 between base salary, short and long term incentives, SERP, and 4 If applicable, list each and every such deferred compensation. 5 practice or policy that was changed, the year in which that practice 6 or policy was changed, and provide accurate and complete copies of 7 any and all documentation related to each change. 8

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Response) Effective May 1, 2008, Big Rivers adopted the Big Rivers Electric Corporation Deferred Compensation Plan ("Plan"), the purpose of which is to allow participants to receive contributions they could not receive under the Big Rivers Electric Corporation Salaried Employees' Retirement Savings Plan ("Qualified Plan") as a result of the non-discrimination rules and other limitations under the Internal Revenue Code applicable to the Qualified Plan. A copy of the Plan document is attached.

Big Rivers implemented a retention program in anticipation of the closing of the unwind transaction, and in recognition of the importance that continuity of operations would play in Big Rivers' success after the unwind. The program provided for a bonus to those WKE employees receiving and accepting Big Rivers' offer of employment, who were actively employed at Big Rivers during the 12-month period following the close of the unwind transaction and remained actively employed on the one-year anniversary of

Case No. 2012-00535 Response to AG 1-78 Witness: James V. Haner Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- that date. For exempt employees, the bonus was a percentage of starting
- 2 base pay. For non-exempt employees, it was a percentage of cash
- 3 compensation for hours worked during that first 12-month period. The
- 4 bonus percentage was graded according to position or job level. The
- 5 payment was a lump sum, net of taxes.

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7 Witness) James V. Haner

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Big Rivers Electric Corporation Deferred Compensation Plan

Effective Date

May 1, 2008

Big River Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-78

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Attachment to Response for AG 1.78

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Introduction

Effective May 1, 2008, the Board of Directors of Big Rivers Electric Corporation ("Employer") adopted the Big Rivers Electric Corporation Deferred Compensation Plan ("Plan"), as hereinafter set forth, in order to provide additional supplemental benefits for its eligible employees who are members of a select group of management or highly compensated employees as defined under Department of Labor regulations and pronouncements. The purpose of the Plan is to allow Participants to receive contributions or make deferrals that they could not receive or make under the Big Rivers Electric Corporation Salaried Employees' Retirement Savings Plan ("Qualified Plan") as a result of the non-discrimination rules and other limitations under the Code applicable to the Qualified Plan.

Article 1 Definitions

Section 1.1 Beneficiary

Beneficiary means any person designated by a Participant to receive such benefits as may become payable hereunder after the death of such Participant.

Section 1.2 Board

Board means the Board of Directors of the Employer.

Section 1.3 Bookkeeping Account

Bookkeeping Account means the detailed record kept of Employer Contributions under Section 3.1, and Employee Deferrals under Section 3.2, and interest under Section 4.2 credited to each Participant, less benefit payments to such Participant under Article 5.

Section 1.4 Code

Code means the Internal Revenue Code of 1986, as amended and revised.

Section 1.5 Committee

Committee means the Board or such group of persons it appoints to administer the Plan.

Section 1.6 Company

Company means Big Rivers Electric Corporation and all of the legal entities which are part of a controlled group or affiliated service group with Big Rivers Electric Corporation, pursuant to the provisions of Code Sections 414(b), (c), (m), or (o).

Section 1.7 Compensation

Compensation means compensation as defined under the Qualified Plan (which in the case of Employee Deferrals means the compensation under the Qualified Plan used for determining elective deferrals) without regard to the limitations under Code Section 401(a)(17) and without regard to Employee Deferrals.

Section 1.8 Effective Date

Effective Date means May 1, 2008.

Section 1.9 Employee

Employee means any person employed by the Employer who is a member of a select group of management or highly compensated employees, as defined under Department of Labor regulations and pronouncements, and (i) whose base contribution under the Qualified Plan was limited as a result of the Code's non-discrimination rules, or the limitations under Code Sections 401(a)(17) and 415, or (ii) whose matching contribution under the Qualified Plan was limited by the non-discrimination rules under Code Sections 401(k) and 401(m) and limitations under Code Sections 401a)(17) and 415 applicable to matching contributions under the Qualified Plan. The definition of Employee shall exclude any person whose contributions have been limited solely because of retention, transition, or other bonuses paid by the Employer under a program implemented only to address specific business needs and objectives in the circumstances surrounding the unwind of the lease transaction with Western Kentucky Energy Corp.

Section 1.10 Employee Deferrals

Employee Deferrals means deferrals credited to the Participant's Bookkeeping Account pursuant to Section 3.2.

Section 1.11 Employer

Employer means Big Rivers Electric Corporation.

Section 1.12 Employer Contributions

Employer Contributions means contributions credited to the Participant's Bookkeeping Account by the Employer pursuant to Section 3.1.

Section 1.13 Entry Date

Entry Date means May 1, 2008 and any subsequent date, as determined by the Committee in its sole discretion, after an Employee is employed by the Employer.

Section 1.14 Interest Credit Rate

Interest Credit Rate means a rate equal to the yield under the Investment Fund or Funds established by the Employer and elected by the Employee as the Interest Credit Rate(s).

Section 1.15 Investment Funds

Investment Fund shall mean such mutual funds selected by the Employer which the Employee may elect as his Interest Credit Rate. The Employer may, but is under no obligation to, actually invest the Participant's Bookkeeping Account in such Investment Funds.

Section 1.16 Participant

Participant means any Employee who commences participation in the Plan pursuant to Article 2 hereof.

Section 1.17 Plan

Plan means the Big Rivers Electric Corporation Deferred Compensation Plan.

Section 1.18 Plan Year

Plan Year means the twelve (12) month period beginning on January 1st and ending on the following December 31st. The first Plan Year shall run from May 1, 2008 through the following December 31st.

Section 1.19 Qualified Plan

Qualified Plan means the Big Rivers Electric Corporation Salaried Employees' Retirement Savings Plan.

Section 1.20 Valuation Date

Valuation Date means such date or dates within the Plan Year that the Committee shall cause the Bookkeeping Account to be valued.

Section 1.21 Construction

Capitalized words and phrases used in this Plan shall have the meanings specified in this Article, unless a different meaning is clearly required by the context. Any words herein used in the masculine shall be read and construed in the feminine where they would so apply. Words in the singular shall be read and construed as though used in the plural in all cases where they would so apply.

Article 2 Participation

Section 2.1 Eligibility Requirements

Each Employee shall become a Participant on the Entry Date, provided participation in the Plan has been approved by the Committee.

Section 2.2 Plan Binding

Upon becoming a Participant, a Participant shall be bound then and thereafter by the terms of this Plan, including all amendments to the Plan made in the manner herein authorized.

Section 2.3 Beneficiary Designation

Upon commencing participation, each Participant shall designate a Beneficiary on forms furnished by the Committee. Such Participant may then from time to time change his Beneficiary designation by written notice to the Committee and, upon such change, the rights of all previously designated Beneficiaries to receive any benefits under this Plan shall cease. If, at the time of a Participant's death while benefits are still outstanding, his named Beneficiary does not survive him, the benefits shall be paid to his named contingent Beneficiary. If a deceased Participant is not survived by either a named Beneficiary or contingent Beneficiary (or if no Beneficiary was effectively named), the benefits shall be paid in a single sum to the estate of the deceased Participant.

Article 3 Contributions

Section 3.1 Employer Contributions

As of the last day of each Plan Year, the Employer shall credit to the Bookkeeping Account of each Participant an Employer Contribution equal to the sum of the amounts determined pursuant to Subsections (a) and (b) of this Section.

- (a) The base contribution the Participant would have received determined pursuant to the Qualified Plan, for the plan year of the Qualified Plan ending within the Plan Year of this Plan, without regard to the Code non-discrimination rules and limitations under Code Sections 401(a)(17) and 415 applicable to the base contributions under the Qualified Plan, reduced by actual base contributions under the Qualified Plan.
- (b) The matching contribution that could not be allocated to the Participant under the Qualified Plan, for the plan year of the Qualified Plan ending within the Plan Year of this Plan, as a result of the non-discrimination rules under Code Sections 401(k) and 401(m) and limitations under Code Sections 401(a)(17) and 415 applicable to matching contributions under the Qualified Plan. For purposes of determining the matching contribution under this Plan the Participant is assumed to have deferred the maximum amount of pre-tax deferrals permitted under the Qualified Plan for each Plan Year.

The Employer may credit the Participant's Bookkeeping Account with the above Employer Contribution on a monthly basis with the Employer Contribution it projects it will need to credit on the Participant's behalf and finalize the Employer Contribution as of the end of the Plan Year.

In addition to the contributions provided for above, the Bookkeeping Account of Mark Bailey will be credited with an additional \$27,818.53 on the Effective Date.

Section 3.2 Employee Deferrals

As of the end of each payroll period beginning as of the Effective Date, the Employer shall defer and credit to the Bookkeeping Account of each Participant who makes an election pursuant to this Section an Employee Deferral. The amount of the Employee Deferral shall be the percentage of the Employee's Compensation as elected by the Employee in writing prior to the first day of each Plan Year. In the case of the first Plan Year, the election must be made prior to May 1, 2008 and shall apply to Compensation for payroll periods ending on and after June 1, 2008. Any election made for a Plan Year shall continue to apply to subsequent Plan Years unless the election is changed in writing prior to the Plan Year.

Article 4 Allocations to Bookkeeping Accounts

Section 4.1 Bookkeeping Accounts

The Committee shall establish and maintain a Bookkeeping Account in the name of each Participant to which the Committee shall credit all amounts allocated to each such Participant pursuant to Article 3 and the following Sections of this Article.

Section 4.2 Crediting of Interest to Bookkeeping Accounts

As of each Valuation Date, the Committee shall cause to be credited to the Participant's Bookkeeping Account interest at the Interest Credit Rate until the benefit under the Plan is distributed pursuant to Article 5.

Section 4.3 Committee Judgment Controls

In determining the fair market value of the Bookkeeping Accounts, the Committee shall exercise their best judgment, and all such determinations of value (in the absence of bad faith) shall be binding upon all Participants and their Beneficiaries.

Section 4.4 General Assets of Employer

In order to meet its contingent obligations under this Plan, the Employer may, in its sole discretion, set aside or earmark funds in any amount determined by the Committee. Funds set aside or earmarked to meet its contingent obligations hereunder may be kept in cash and/or securities, and may be invested and reinvested at the sole discretion of the Committee. Such funds shall remain general assets of the Employer and the Participant shall have no secured interest in such funds. The Employer, in its sole discretion, may place the Employer Contributions into an irrevocable grantor trust; however, the assets of the grantor trust and any earnings thereon shall remain an asset of the Employer.

Article 5 Distributions

Section 5.1 Amount of Distributions

Upon separation from service (as defined under Code Section 409A) from the Employer, a Participant shall be entitled to a benefit equal to the entire balance in his Bookkeeping Account as of the date of the Participant's separation from service plus any interest credited to the Bookkeeping Account pursuant to Section 4.2 after the Participant's separation from service.

Section 5.2 Distribution of Benefits upon Separation from Service

A Participant shall receive benefits under this Article in a single lump sum no later than two and one-half months (2½) following the separation from service date pursuant to Section 5.1.

Section 5.3 Distribution of Benefits upon Death

If the Participant should die prior to receiving his entire benefit under this Plan, his Beneficiary shall receive benefits equal to any unpaid balance in the Bookkeeping Account, payable in a single lump sum as soon as practical after the date of the Participant's death.

Section 5.4 Benefits to Minors and Incompetents

- (a) In case any person entitled to receive payment under the Plan shall be a minor, the Committee, in its discretion, may dispose of such amount in any one or more of the ways specified in items (1) through (3) of this subsection.
 - (1) By payment thereof directly to such minor;
 - (2) By application thereof for benefit of such minor;
 - (3) By payment thereof to either parent of such minor or to any adult person with whom such minor may at the time be living or to any person who shall be legally qualified and shall be acting as guardian of the person or the property of such minor; provided only that the parent or adult person to whom any amount shall be paid shall have advised the Committee in writing that he will hold or use such amount for the benefit of such minor.
- (b) In the event that it shall be found that a person entitled to receive payment under the Plan is physically or mentally incapable of personally receiving and giving a valid receipt for any payment due (unless prior claim therefore shall have been made by a duly qualified committee or other legal representative), such payment may be made to the spouse, son, daughter, parent, brother, sister or other person deemed by the Committee to have incurred expense for such person otherwise entitled to payment.

Article 6 Administration

Section 6.1 Employer

The Employer established and maintains the Plan for the benefit of its Employees and of necessity retains control of the operation and administration of the Plan. The Employer, in accordance with specific provisions of the Plan, may delegate to a Committee certain rights and obligations and the Committee shall be solely responsible for these, and only these, delegated rights and obligations.

The Employer shall supply such full and timely information for all matters relating to the Plan as the Committee may require for the effective discharge of their respective duties.

Section 6.2 Committee

- (a) The Board of the Employer shall appoint a Committee of not less than three (3) persons to hold office at the pleasure of the Board, such committee to be known as the Administrative Committee or Committee. No compensation shall be paid members of the Committee for service on such Committee. The Committee shall choose from among its members a chairman and a secretary. Any action of the Committee shall be determined by the vote of a majority of its members. Either the chairman or the secretary may execute any certificate or written direction on behalf of the Committee.
- (b) Every decision and action of the Committee shall be valid if concurrence is by a majority of the members then in office, which concurrence may be had without a formal meeting.
- In accordance with the provisions hereof, the Committee has been delegated (c) certain administrative functions relating to the Plan with all powers necessary to enable it to properly carry out such duties. The Committee shall have no power in any way to modify, alter, add to or subtract from, any provisions of the Plan. The Committee shall have the power and authority in its sole, absolute and uncontrolled discretion to control and manage the operation and administration of the Plan and shall have all powers necessary to accomplish these purposes. The responsibility and authority of the Committee shall include, but shall not be limited to, (i) determining all questions relating to the eligibility of employees to participate; (ii) determining the amount and kind of benefits payable to any Participant or Beneficiary; (iii) establishing and reducing to writing and distributing to any Participant or Beneficiary a claims procedure and administering that procedure, including the processing and determination of all appeals thereunder; and (iv) interpreting the provisions of the Plan including the publication of rules for the regulation of the Plan as in its sole, absolute and uncontrolled discretion are deemed necessary or advisable and which are not inconsistent with the express terms hereof and applicable law. All disbursements

as provided herein shall be made upon, and in accordance with, the written directions of the Committee. When the Committee is required in the performance of its duties hereunder to administer or construe, or to reach a determination, under any of the provisions of the Plan, it shall do so on a uniform, equitable and nondiscriminatory basis.

- (d) The Committee shall establish rules and procedures to be followed by the Participants and Beneficiaries in filing applications for benefits and for any other matters required in order to establish their rights to benefits in accordance with the Plan. Additionally, the Committee shall establish accounting procedures for the purpose of making the allocations, valuations and adjustments to a Participant's Bookkeeping Account. The Committee may modify its procedures for any allocation as it may deem necessary or desirable.
- (e) The Committee may employ such counsel, accountants, and other agents as it shall deem advisable. The Employer shall pay the compensation of such counsel, accountants, and other agents and any other expenses incurred by the Committee in the administration of the Plan. The Committee may also delegate any of its duties hereunder to any other person or persons as it deems appropriate.

Section 6.3 Records

All acts and determinations of the Committee shall be duly recorded by the secretary thereof and all such records together with such other documents as may be necessary in exercising his duties under the Plan shall be preserved in the custody of such secretary. Such records and documents shall at all times be open for inspection and for the purpose of making copies by any person designated by the Employer. The Committee shall provide such timely information, resulting from the application of its responsibilities under the Plan, as needed by the accountant or other persons engaged on behalf of the Plan by the Employer, for the effective discharge of their respective duties.

Section 6.4 Indemnification

The Employer shall indemnify and hold the Board, officers of the Employer, the Committee and each of its members, and any person who is an employee of the Employer acting on behalf of the Board, officers or Committee, harmless from and against any and all expense, claim, cause of action, or liability it or any of them may incur in the administration of the Plan. This shall include the advancement of any legal or other expenses incurred in connection with the claim, cause of action or liability.

Article 7 Amendment and Termination of the Plan

Section 7.1 Amendment of the Plan

The Employer shall have the right at any time by action of the Board to modify, alter or amend the Plan in whole or in part. Any amendment, at the sole discretion of the Board, may be retroactive.

Section 7.2 Termination of the Plan

The Employer reserves the right at any time by action of the Board to terminate the Plan. The termination of the Plan, at the sole discretion of the Board, may be retroactive.

Article 8 Miscellaneous

Section 8.1 Governing Law

The Plan shall be construed, regulated and administered according to the laws of the Commonwealth of Kentucky, except in those areas preempted by the laws of the United States of America.

Section 8.2 Participant's Rights

No Participant in the Plan shall acquire any right to be retained in the Employer's employ by virtue of the Plan, nor, upon his dismissal, or upon his voluntary termination of employment, shall he have any right or interest in and to any assets of the Employer other than benefits under this Plan.

Section 8.3 Spendthrift Clause

To the extent permitted by law, none of the benefits, payments, proceeds, or distributions under this Plan shall be subject to the claim of any creditor of the Participant or any Beneficiary hereunder or to any legal process by any creditor of such Participant or any such Beneficiary; and neither shall such Participant or any such Beneficiary have any right to alienate, commute, anticipate, or assign any of the benefits, payments, proceeds or distributions under this Plan.

Section 8.4 Counterparts

The Plan may be executed in any number of counterparts, each of which shall constitute but one and the same instrument and may be sufficiently evidenced by any one counterpart.

Section 8.5 Effect on Other Benefits

Any deferred compensation payable under this Plan shall not be deemed salary or other compensation to the Participant for purposes of computing benefits to which he may be entitled under any pension plan or other arrangement of the Employer for the benefit of its employees.

Signatures

of March	er has caused this Plan to be executed this 14th day 2008, but effective May 1, 2008.
Witness:	Big Rivers Electric Corporation
Paula mitchell	By Wilh Chat
	Title Chair of the Board

g:\tsa\tas_ms\big rivers serp.doc 03130

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 79) Please refer to the Barron Direct Testimony at page 5,
2	lines 11-18: Provide the latest load forecast performed by outside
3	consultant for Big Rivers, and identify the outside consultant.
4	Information should be provided in electronic file format compatible
5	with Microsoft Office programs.
6	
7	a. Provide documents and workpapers which show if and
8	how the loss of employment from closure of the Century
9	and Alcan smelting facilities is taken into consideration in
10	performing the load forecast, especially as it pertains to
11	forecasted residential and small business demand.
12	
13	Response) The latest load forecast performed by an outside consultant for
14	Big Rivers is contained in the file "2011 Load Forecast_BigRivers_09-07-
15	11.pdf" on the CDs accompanying these responses. Big Rivers does not
16	have the forecast in a file format compatible with Microsoft Office programs.
17	The file is in the format provided to Big Rivers by GDS Associates.
18	The last load forecast performed by an outside consultant was
19	performed by GDS Associates.
20	
21	a. The loss of employment from the closure of the Century and Alcan
22	smelting facilities was not taken into consideration in performing
23	the load forecast used in this proceeding.
	Case No. 2012-00535

Response to AG 1-79
Witness: Lindsay N. Barron
Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1

2 Witness) Lindsay N. Barron

Case No. 2012-00535 Response to AG 1-79 Witness: Lindsay N. Barron Page 2 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 80) Please refer to the Barron Direct Testimony at page 5,
2	lines 11-18: Provide the latest load forecast updated by Big Rivers'
3	Staff. Information should be provided in electronic file format
4	compatible with Microsoft Office programs.
5	
6	a. Provide documents and workpapers which show if and how
7	the loss of employment from closure of the Century and Alcan
8	smelting facilities is taken into consideration in performing
9	the load forecast, especially as it pertains to forecasted
10	residential and small business demand.
11	
12	Response) The latest load forecast updated by Big Rivers' staff is provided
13	with a petition for confidential treatment on the CONFIDENTIAL CDs
14	accompanying these responses.
15	
16	a. The loss of employment from the closure of the Century and Alcan
17	smelting facilities was not taken into consideration in performing
18	the load forecast referenced above.
19	
20	Witness) Lindsay N. Barron

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 81) Please refer to the Barron Direct Testimony beginning a
2	page 6, line 14: Provide, on a monthly basis, the number o
3	residential customers, number of small commercial customers, smal
4	commercial energy use per customer and residential energy
5	consumption per customer for each subcategory used to develop load
6	forecast. Information should be provided in electronic file forma
7	compatible with Microsoft Office programs.
8	
9	Response) Please see response to AG 1-79. The forecast provided was the
10	basis for the load forecast used in this proceeding.
11	
12	Witness) Lindsay N. Barron

Case No. 2012-00535 Response to AG 1-81 Witness: Lindsay N. Barron Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1	Item 82) Please refer to the Barron Direct Testimony beginning at
2	page 6, line 14: Provide the actual number of residential customers,
3	number of small commercial customers, small commercial energy use
4	per customer and residential energy consumption per customer for
5	each subcategory for the years of 2010, 2011 and 2012 on a monthly
6	basis. Information should be provided in electronic file format
7	compatible with Microsoft Office programs.
8	

Response) Big Rivers currently only has data at the requested level of 9 disaggregation prior to 2011, which may be found in the load forecast 10 document provided in the response to AG 1-79. 11

12

Lindsay N. Barron Witness) 13

		4

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Item 83) Provide all load forecast documentation submitted to the RUS that was used by the RUS in their July 16, 2012 approval.

 Information should be provided in electronic file format compatible with Microsoft Office programs.

 Response) Please see the document provided in response to AG 1-79 which was provided to RUS for their approval.
- 9 **Witness)** Lindsay N. Barron

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 84) Provide documents which show Big Rivers' then-planned
- uses of revolving credit facilities from CoBank and CFC in 2009,
- 3 **2010, and 2011.**

4

5 **Response)** Please see documents attached.

6

7 **Witness)** Billie J. Richert

Ralph Ashworth

From:

Mark Hite

Sent:

Thursday, March 04, 2010 11:09 AM

To:

Donna Windhaus

Cc:

Ralph Ashworth; Mark Davis

Subject:

Advance under the CoBank Revolver

Plan to draw an amount equal to 1 or 2 quarters of RUS debt service on 4/1 under the CoBank revolver and pay back half back to CoBank 7/1 and the other half 10/1. The 5.75% RUS Series A Note debt service is \$12.2 million per quarter. So, seems a 3 month and 6 month CoBank borrowing term is appropriate, although the ideal option would be for Big Rivers to repay CoBank 1/6th each month. But, as our revenues do have some seasonality to them, perhaps quarterly is the way to go. I've spoke with Mark Bailey and this matter has been placed on the 3/19 board agenda. We may not require board approval, but believe it's something we should discuss with them. Presuming the use of Big Rivers' highest senior secured long-term rating from Moody's of Baa1, the unsecured level would be one notch lower, or Baa2 for purposes of the Applicable Margin under the revolver. The Libor rate can be estimated from going to the Internet, although it's probably about .25%. Would you be able to provide a brief PowerPoint summary and economic analysis for the board meeting?

As the board agenda and agenda item documentation typically goes out no later than the Friday prior to the board meeting date, this is desired not later than 3/12. Perhaps short notice, and for that I apologize. In the event you are don't have the time to put this brief summary together, please let me know.

As debt responsibilities are being transferred to Mark Davis, is this something he can do. It's not rocket science.

Thanks, Mark

Mark A. Hite, CPA, MBA VP Accounting Big Rivers Electric Corporation 201 Third Street Henderson, KY 42420 Corporate: 270-827-2561 Office Direct: 270-844-6149

Cell: 270-577-6815 Fax: 270-827-2558 Home: 812-853-0405

Page 1 of 5

Prepay RUS Series A Note 4-1-10

								85,985		572,420	486,435
General Fund	n/a	0.250%	10,000,000	n/a	n/a	n/a		12,534 \$	5.75%	286,210 \$	273,676
CoBank	6 months		10,000,000 \$	2.390%	-0.275%	-0.650%	1.465%	73,451 \$	5.75%	286,210 \$	212,759 \$
			()					ક્ક	ate	↔	69
iur Touchstone Energy Casperative KA	Term	MM Investment Rate	Amount	Borrowing Rate	CoBank Unused Fee	CoBank Patronage	Effective Rate	Cost	RUS Series A Note Rate	Interest Benefit	Net Benefit

Ralph Ashworth

From:

Mark Hite

Sent:

Monday, September 13, 2010 5:46 AM Mark Davis; Travis Siewert; Darrius Vaughn

To: Cc:

Donna Windhaus; Ralph Ashworth

Subject:

FW: 10/1/10 RUS Series A Note voluntary prepayment, including CoBank line of credit

advance

FYI...

Looks like Mark and Bill are o.k. with the recommendation below. Should you conclude otherwise, please let me know. Otherwise, let's bring to conclusion, and ready the paperwork. By the way, Jeff Childs of CoBank will be here 11am Tuesday, tomorrow. Should you have any questions for him, it'll be a good opportunity to discuss. Let me know. Thanks for your work on this item.

Mark

From: Bill Blackburn

Sent: Saturday, September 11, 2010 9:27 AM

To: Mark Bailey; Mark Hite

Subject: RE: 10/1/10 RUS Series A Note voluntary prepayment, including CoBank line of credit advance

Mark,

I had a couple of questions for Mark H., which he was able to answer so I am ok with moving forward as well.

From: Mark Bailey

Sent: Friday, September 10, 2010 3:54 PM

To: Mark Hite; Bill Blackburn

Subject: RE: 10/1/10 RUS Series A Note voluntary prepayment, including CoBank line of credit advance

Sounds solid to me, Mark. I'm OK unless Bill raises some concern. Mark

From: Mark Hite

Sent: Friday, September 10, 2010 3:44 PM

To: Bill Blackburn; Mark Bailey

Subject: 10/1/10 RUS Series A Note voluntary prepayment, including CoBank line of credit advance

After reviewing Big Rivers' cash position between now and 7/1/2011, the recommendation regarding this board agenda item is that on 10/1/10, Big Rivers roll-over the \$10 million CoBank advance for another 6 months and pay \$11.6 million of general funds on the 5.75% RUS Series A Note on 10/1/10. The net benefit of this recommendation is \$207,000 through 4/1/11, excluding the CoBank patronage allocation, resulting from the interest rate differential on the \$10 million (5.75% vs. 2.50%) and the temporary investment rate differential on the \$1.6 million (5.75% vs. .20%).

Upon following this recommendation, Big Rivers' voluntary prepayment status will be \$23.9 million and the next required payment is \$12.2 million on 7/1/2011 (the regular quarterly payment amount).

While Big Rivers' cash balance is now approximately \$15 million higher than was forecast, it's due to a temporary reduction in fuel inventory and below budget O&M and CapX, also forecast to be temporary. Accordingly, the cash "squeeze" we've previously spoke of remains forecast beginning the latter part of 2nd quarter 2011. Therefore, we don't recommend voluntarily prepaying beyond 4/1/2011.

Please let me know if you concur or wish to speak further about this recommendation. Jeff Childs will be here 9/14/10, and I'll further clarify the mechanics of the CoBank advance with him. I'll then put a slide together for the 9/17/10 Board meeting.

Thanks, Mark

Mark A. Hite, CPA
VP Accounting
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42420
Corporate: 270-827-2561
Office Direct: 270-844-6149
Cell: 270-577-6815
Fax: 270-827-2558

Home: 812-853-0405

ELECTRIC CORPORATION

Your Touchstone Energy Chapenitive Kill

Prepay RUS Series A Note 10-1-10

2
General
Coman K

General Fund	

			112,
	·		↔
	n/a 0.200%	1,600,000 n/a n/a	1,596 \$
			↔
	6 months	10,000,000 2.500% -0.275% 2.225%	110,945
Water State and State of State		€9-	s c
Tarm	MM Investment Rate	Amount Borrowing Rate CoBank Unused Fee Effective Rate	lsoo

	332,586	220,045
	↔	€
5.75%	45,874	44,278

5.75%

286,712

69

Interest Benefit

Net Benefit

175,767

* Does not consider CoBank patronage.

RUS Series A Note Rate Case No. 2012-00535 Attachment to Response for AG 1-84 Witness: Billie J. Richert Page 5 of 5

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 85) Provide all documents which contain analysis supporting
2	Big Rivers' conclusion that it "had to defer maintenance outages in
3	each of the years 2010, 2011, and 2012 because that was the only
4	option for Big Rivers to meet the minimum margins for interest ratio
5	('MFIR')", as stated at page 8 lines 12-14 of the Berry testimony
6	(emphasis added).
7	
8	Response) Please see attached documents that are being provided
9	pursuant to a petition for confidentiality.
10	

11 Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 86) Provide copies of all "previous third party inspection
2	reports", per Berry testimony at page 17, line 8.
3	
4	Response) Please see the attached PUBLIC CD for copies of third party
5	inspection reports.
6	
7	Witness) Robert W. Berry
8	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 87) Please refer to the Berry Direct Testimony at page 7, line
1	item 87) Please rejer to the Berry Direct Testimony at page 7, time
2	1: Provide five year benchmarking study completed in August 2012
3	for period from April 2007 through March 2012.
4	
5	Response) Big Rivers utilizes Navigant Generation Knowledge Services
6	(GKS) for benchmarking. Navigant provides a website where different unit
7	criteria can be selected to identify a peer group so a utility can benchmark
8	against similar (peer) units. The latest 5 year period (April, 2007 through
9	March, 2012) that was referenced in the direct testimony of Robert W. Berry
LO	at page 7, line 1 is being provided in the attachment to this response.
11	
	WY David

12 **Witness)** Robert W. Berry

Case No 12-00535 Attachment to Rc onse for AG 1-87 Big Rivers Benchmarking Report

BREC System - 2007 Q2 thru 2012 Q1											
Unit Name	EAF	EFOR	NCF	Oper. w/o Fuel	Maint.	Fuel	Non-Fuel O&M \$	O&M \$ inc. Fuel	Unit Capacity		
		4.55	74.17	3.16	7.53	24.73	10.69	35.43 37.57	150 138		
COLEMAN UNIT 1 COLEMAN UNIT 2	88.80 90.81	2.99	74.21	3.32	7.39	26.85 24.50	10.71 8.71	33.21	155		
COLEMAN UNIT 3	93.04	3.44	78.68	3.23 4.60	5.48 7.28	18.29	11.88	30.17	231		
GREEN UNIT 1	93.05	2.56 1.74	86.47 85.24	4.59	7.88	18.20	12.48	30.67	223 153		
GREEN UNIT 2 HMPL UNIT 1	93.70 86.59	9.65	79.93	5.50	9.34		14.84 13.97	37.76 36.77	159		
HMPL UNIT 2	88.61	5.15	77.79	5.47 3.94	8.50 9.69	22.80 16.96	13.63	1774	417		
WILSON UNIT 1	87.40	4.54	85.03	3.94					7		

BREC System vs. Peer Group - 2007 Q2 thru 2012 Q1 Non-Fuel O&M \$ inc.													
BR	REC Syst	em vs. P	eer Gro	up ·	200	7 C	<u> </u>	u 2	012	<u>ハ</u>	n-Fuel	0&1	VI \$ inc.
	EAF, %	EFOR, %	NCF, %	Ope	r. w/o uel	Maint.		Fuel		O&M \$		Fuel	
Big Rivers System	90.07	4.18	81.55	\$	4.23	\$	8.15	\$	20.73	\$	12.38	\$	33.11
Capacity Weighted	86.11	7,60	72.71	\$	3.60	\$	8.86	\$	24.50	\$	12.84	\$	35.47
Peer Group Median Peer Group			78.24	\$	4.42	\$	10.24	\$	29.86	\$	14.09	\$	44.00
Upper Quartile	88.70	9.16	78.24	+				_	40.37	Ś	10.21	Ś	31.43
Peer Group Lower Quartile	82.07	4.55	67.11	\$	2.69	\$	7.27	\$	19.37	}	10.21		

Lower Quartile		المستسيل						
Doo	r Groun	Data (1	30-600 N	/W) - 20	007 Q2 t	hru 2012	<u> 2 Q1</u>	
Pee	Group		70 74	3,60	8.86	24.50	12.84	35.47
Median	86.11	7.60	72.71		10.24	29,86	14.09	44.00
Upper Quartile	88.70	9.16	78.24	4.42			10.21	31.43
	82.07	4.55	67.11	2.69	7.27	19.37	17.12	49,44
Lower Quartile	91.53	14.21	82.35	5.28	13.76	33.22		
Upper Decile			62.58	1.77	5.58	14.78	7.93	25.72
Lower Decile	75.76	2.63						
Total Units	47	Peer Group	Definition S	Summary		1044		

Total Units

Cost Data Units are \$/MWh, Calculate Cost Data Unit as Period Average Monthly Net Maximum Capacity between 130 and 600 MW Primary Fuel Average Heat Content between 10000 and 13000

Scrubber was initially operated on or after 01/01/1900 Total Period Equivalent Availability Factor between 60 and 100 % Total Period Net Capacity Factor between 60 and 100 % Primary GADS As-Burned Fuel is Coal

Case No. 2012-00535 Attachment for Response to AG 1-87 Witness: Robert W. Berry

Page 1 of 2

Best Quartile XX.XX Worse than Median

Case No 12-00535 Attachment to R onse for AG 1-87 Big Rivers Benchmarking Report

Unit Name	EAF	EFOR	NCF	- 2011 Q2 Oper. w/o Fuel	Maint.	Fuel	Non-Fuel O&M \$	O&M \$ inc. Fuel	Unit Capacity
	92.84	4.03	82.89	3.55	6.43	24.31	9.97	34.28	150
COLEMAN UNIT 1		3.30	83.93	3.56	4.95	26.27	8.50	34.78	138
COLEMAN UNIT 2	94.73	51632	84.17	3.53	5.62	24.11	9.15	33.26	155
COLEMAN UNIT 3	93.46	1.86	76.15	4.70	13.22	22.55	17.93	40.47	231
GREEN UNIT 1	92.33		78.65	4.64	10.08	22.17	14.72	36.89	223
GREEN UNIT 2	98.66	1.54		Extra value of the second seco	10.23	27.89	16.90	44.79	153
HMPL UNIT 1	90.52	4.88	81.05	6.67	State Shipping and the state of	28.50	15.41	43.91	159
HMPL UNIT 2	87.08	7.07	74.97	6.65	8.76		13.27	31.88	417
WILSON UNIT 1	92.51	3.42	89.44	4.40	8.87	18.61	13.27	31.00	1

BR	EC Syst	em vs. P	eer Gro	up ·	- 201	1 C	22 thr	u 2	2012	<u>ų1</u>		
	EAF, %	EFOR, %	NCF, %	Ope	er. w/o uel		/laint.		Fuel	MO	n-Fuel &M \$	VI\$inc Fuel
Big Rivers System Capacity Weighted	92.92	3.69	82.29	\$	4.68	\$	8.90	\$	23.20	\$	13.58	\$ 36.7
Peer Group Median	86.19	5.53	66.75	\$	4.40	\$	9.51	\$	28.28	\$	14.72	\$ 44.1
Peer Group Upper Quartile	92.04	10.38	76.15	\$	6.28	\$	14.44	\$	34.34	\$	19.76	\$ 53.5
Peer Group Lower Quartile	78.18	3.84	57.09	\$	3.08	\$	7.41	\$	24.31	\$	10.22	\$ 34.7

Best Quartile	XX.XX
Worse than Median	XX.XX

Poo	r Group	Data (13	30-600 N	/W) - 20)11 Q2 t	hru 201:	2 Q1	
		5.53	66.75	4.40	9.51	28.28	14.72	44.14
Median	86.19		76.15	6.28	14.44	34.34	19.76	53.50
Upper Quartile	92.04	10.38			7.41	24.31	10.22	34.78
Lower Quartile	78.18	3.84	57.09	3.08			25.47	64.33
Upper Decile	93.46	11.98	82.15	6.72	19.93	37.20		}
Lower Decile	74.80	1.93	50.45	2.02	4.71	17.03	6.85	30.22

Total Units 45 Peer Group Definition Summary

Cost Data Units are \$/MWh, Calculate Cost Data Unit as Period Average Monthly Net Maximum Capacity between 130 and 600 MW Primary Fuel Average Heat Content between 10000 and 13000 Primary GADS As-Burned Fuel is Coal

Scrubber was initially operated on or after 01/01/1900
Total Period Equivalent Availability Factor between 60 and 100 %
Total Period Net Capacity Factor between 40 and 100 %
Unit Types selected are: Coal

Case No. 2012-00535

Attachment for Response to AG 1-87

Witness: Robert W. Berry

Page 2 of 2

	•	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 88) Please refer to the Berry Direct Testimony at page 15, line
- 2 7: Provide all referenced Staff assessments and risk evaluations.

3

- 4 Response) Big Rivers objects that this request is overly broad, unduly
- 5 burdensome, and not reasonably calculated to lead to the discovery of
- 6 admissible evidence. Notwithstanding this objection, and without waiving
- 7 the same, please see Big Rivers' attachments to this response for examples
- 8 of staff assessment and risk evaluations. These attachments are being
- 9 provided with a petition for confidential treatment on the CONFIDENTIAL
- 10 CDs accompanying these responses.

11

12 **Witness**) Robert W. Berry

Case No. 2012-00535 Response to AG 1-88 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 89) Ple	ase provide a complete and current copy of Big Rivers'
2	"Load Concer	ntration Analysis and Mitigation Plan" ["Mitigation
3	Plan"], togethe	er with any and all supplements thereto.
4		
5	a. Ple	ase describe with specificity each and every step Big
6	Rit	vers has taken to date in implementation of that plan.
7	b. Ple	ase identify and describe each and every action taken
8	by	BREC since January 1, 2012 which could reasonably be
9	vie	wed as mitigating against risks associated with load
LO	COI	ncentration.
l1	c. Ple	ease provide any and all analyses, studies, including
12	rel	ated financial, market and economic forecasts and
13	ass	sociated planning models, utilized to develop the
L4	Mit	tigation Plan.
L 5	d. De	scribe whether the company has engaged the services of
16	an	y consultants to address the financial losses and load
L7	los	ses that will occur from the pending departures of both
18	Ce	ntury and Alcan. If any, please provide any and all
19	rep	oorts, plans or analyses and any and all documents
20	rel	ated thereto produced by any such consultants.
1		

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Response)	Big Rivers objects to this request on the grounds that it is overly
2	broad and	unduly burdensome. Notwithstanding this objection, but
3	without wai	ving it, Big Rivers states as follows.
4	Pleas	e see the attached document filed under petition for confidential
5	treatment.	
6		
7	a.	Big Rivers has filed this rate application and budgeted for the
8		idling of a generating unit. Please also see Big Rivers' response
9		to PSC 2-18.
10	b.	Big Rivers objects to this request on the grounds that the use of
11		the phrase "could reasonably be viewed as mitigating against
12		risks associated with load concentration" is unduly vague and
13		ambiguous. Notwithstanding this objection, but without
14		waiving it, Big Rivers states as follows. In addition to
15		completing the Load Concentration Analysis and Mitigation Plan
16		prior to termination notification from Century, Big Rivers has
17		spent a significant effort on replacing Century's load since
18		Century's notice was received. Please see the Response to PSC
19		2-18 for additional details.
20	C.	Please see electronic files on the attached CONFIDENTIAL CD,
21		filed under petition for confidential treatment.
22	d.	Big Rivers has not specifically engaged the services of any
23		consultants to address the financial losses and load losses that
		Case No. 2012-00535
		Response to AG 1-89 Witness: Robert W. Berry

Page 2 of 3

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	may occur as a result of the Century and Alcan termination
2	notices. However, Big Rivers continues to utilize ACES to
3	provide wholesale marketing support. ACES continues to work
4	closely with Big Rivers' Energy Services group to identify
5	potential market solutions for this issue. Please see the
6	response to PSC 2-18 for a detailed explanation of Big Rivers
7	and ACES combined efforts to mitigate the loss of smelter load.
8	

9 Witnes:

Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 90) Please reference the Berry testimony at p. 20, beginning at
- line 17. Please provide copies of all responses to RFPs. These
- 3 documents may be provided under seal of confidentiality, if
- 4 necessary.

5

7

6 **Response)** Please see the response to PSC 2-18.

8 Witness) Robert W. Berry

Case No. 2012-00535 Response to AG 1-90 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 91) Please refer to the Berry Direct Testimony at page 22, line
- 2 10: Provide all studies, analyses, reports, evaluations, etc. developed
- 3 and presented and used in the management decision to justify the
- 4 selection of the Wilson Station to be idled.

5

- 6 Response) When Wilson Station was selected to be idled for the 2013 -
- 7 2016 Budgets, it was known that a station would need to be idled in order
- 8 to mitigate the Century load loss due to the low forecasted power market. In
- 9 Berry Direct Testimony at page 22, line 13, it states that "Big Rivers
- assumed Wilson Station would be idled" and that Big Rivers would continue
- to evaluate the most cost-effective alternative possible. Big Rivers continues
- its evaluation and the evaluation will be made available when completed.
- 13 Also, Wilson Station was chosen over Coleman Station because Big Rivers
- was sympathetic to Century's desire to continue operation by purchasing
- power on the open market, and it is Big Rivers' expectation that MISO will
- require Coleman Station to operate if Century continues to operate beyond
- 17 August 20, 2013.
- 18 **Witness)** Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Item 92) Please refer to the Berry Direct Testimony at page 22, line 1 2 10: Provide Charles River Associates Analysis of Big Rivers' Contingency Reserve Options. 3 4 **Response)** A copy of the Charles River Associates report entitled "Economic 5 Assessment of Big Rivers' Contingency Reserve Options" is attached to this 6 response. 7 8
- 9 Witness) David G. Crockett



Prepared For:

Big Rivers Electric Corporation

Economic Assessment of Big Rivers' Contingency Reserve Options

Prepared By:

Charles River Associates

Date: March 22, 2010

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1. EXECUTIVE SUMMARY

On behalf of Big Rivers Electric Corporation ("Big Rivers"), Charles River Associates ("CRA") has conducted an economic assessment of the options available to Big Rivers for the supply of Contingency Reserve¹ given that the Midwest Contingency Reserve Sharing Group ("MCRSG") to which Big Rivers belonged was terminated as of December 31, 2009. Big Rivers is currently obtaining Contingency Reserve under Attachment RR of the Midwest ISO Open Access Transmission Tariff ("OATT"), and can continue to do so until September 30, 2010.

Balancing Authorities, like Big Rivers, must operate their electrical systems according to NERC reliability standards.² Contingency Reserve is used by a Balancing Authority to balance resources and demand and restore interconnection frequency within defined limits following a disturbance on the electrical system, typically an unexpected generation outage. Contingency Reserve may be supplied from generation, controllable load resources, or coordinated adjustments to interchange schedules. To meet NERC reliability standards, Big Rivers faces not only the requirement to apply its Contingency Reserve within 15 minutes of a disturbance on its system in the case of an outage event taking place, but also to restore the Contingency Reserve to the NERC standard within 90 minutes thereafter.

On a stand-alone basis, Big Rivers would require approximately 417 MW of Contingency Reserve based on its largest single generating unit, the D.B. Wilson plant. Under the MCRSG, which allowed for members to share reserves across the Midwest, Big Rivers had to provide only 32 MW of Contingency Reserve.

Based on a review of Big Rivers' available options for meeting its Contingency Reserve requirements, we conclude that, in the near term, Big Rivers has no viable options other than stand-alone self-supply or joining the Midwest ISO. There are no other reserve sharing

The North American Electric Reliability Corporation ("NERC") defines Contingency Reserve as the provision of capacity deployed by the Balancing Authority to meet the Disturbance Control Standard ("DCS") and other NERC and Regional Reliability Organization contingency requirements. A Balancing Authority is the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time. The DCS is the reliability standard that sets the time limit following a Disturbance within which a Balancing Authority must return its Area Control Error to within a specified range. A Regional Reliability Organization is an entity that ensures that a defined area of the Bulk Electric System is reliable, adequate and secure. The Balancing Authority Area is the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. Interconnection refers to any one of the three major electric system networks in North America: Eastern, Western, and ERCOT. A Disturbance refers to 1) An unplanned event that produces an abnormal system condition, 2) Any perturbation to the electric system, or 3) The unexpected change in Area Control Error that is caused by the sudden failure of generation or interruption of load. Area Control Error is the instantaneous difference between a Balancing Authority's net actual and scheduled interchange. The Bulk Electric System is the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. NERC, Glossary of Terms Used in Reliability Standards, April 20, 2009.

NERC, Reliability Standards for the Bulk Electric Systems of North America, November 2009.

groups ("RSGs") currently available to Big Rivers. A stand-alone self-supply alternative is only feasible in the near-term if the smelters on the Big Rivers system are able to provide a significant amount (e.g., 200 MW) of interruptible load to Big Rivers that meets NERC standards.

An analysis of the Midwest ISO alternative indicates that it would provide \$32 million in net benefits to Big Rivers over the five-year period from 2011 to 2015 in comparison to a standalone alternative, excluding any cost for the 200 MW of qualifying Contingency Reserve assumed to be supplied by the smelters in the stand-alone alternative. If the cost of the 200 MW of additional reserves in the stand-alone alternative is based on the cost of new peaking capacity, the net benefit of the Midwest ISO alternative is \$133 million. See Table 1, which shows benefits as positive numbers and costs as negative numbers.

Table 1: Summary of Benefits (Costs) of Joining the Midwest ISO in Comparison to Stand-alone (Millions of nominal as-spent dollars)

_	2011	2012	2013	2014	2015	Present Value
Decreased Cost to Serve Big Rivers Load	11.0	12.1	13.3	14.4	14.8	56.7
Midwest ISO Administrative Charges	(4.6)	(4.1)	(3.9)	(3.9)	(4.1)	(17.9)
FERC Charges	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(3.1)
Internal Staffing/Equipment Costs	(0.8)	(8.0)	(0.8)	(0.8)	(0.8)	(3.4)
Subtotal	5.0	6.6	7.9	9.0	9.2	32.3
Cost Avoided for 200 MW of New Reserves	22.0	22.6	23.1	23.7	24.3	100.5
Net Benefits	27.0	29.2	31.1	32.7	33.5	132.8

While other qualitative-type considerations regarding joining the Midwest ISO may result in additional impacts to Big Rivers, these issues have been addressed for many years by a number of existing Midwest ISO generation and transmission ("G&T") cooperatives and there are risks associated with a reserve self-supply option as well. In sum, joining the Midwest ISO is the best available option for Big Rivers to meet its Contingency Reserve requirements at this time.

2. INTRODUCTION AND BACKGROUND

CRA, on behalf of Big Rivers, has conducted an economic assessment of the options available to Big Rivers for the supply of Contingency Reserve given that the MCRSG to which Big Rivers belonged was terminated as of December 31, 2009. Big Rivers is currently obtaining Contingency Reserve under Attachment RR of the Midwest ISO OATT, and can continue to do so until September 30, 2010.

Balancing Authorities, like Big Rivers, must operate their electrical systems according to NERC reliability standards. Contingency Reserve is used by a Balancing Authority to balance resources and demand and restore interconnection frequency within defined limits following a disturbance on the electrical system, typically an unexpected generation outage. Contingency Reserve may be supplied from generation, controllable load resources, or coordinated adjustments to interchange schedules.

A Balancing Authority may elect to fulfill its Contingency Reserve obligations by participating as a member of a reserve sharing group. At a minimum, the Balancing Authority or reserve sharing group must carry at least enough Contingency Reserve to cover the most severe single contingency. The Contingency Reserve must be able to be applied within 15 minutes of the start of the disturbance. After the 15-minute disturbance period, the Contingency Reserve must be restored within 90 minutes thereafter. It is important to recognize that the NERC requirement is that Big Rivers comply with this Contingency Reserve obligation when the need arises, not just that Big Rivers have in place a plan that is reasonably calculated to work when it is called upon.

On a stand-alone basis, Big Rivers would require approximately 417 MW of Contingency Reserve based on its largest single generating unit, the D.B. Wilson plant. Big Rivers had been a member of the MCRSG which allowed for members to share reserves across the Midwest. Under this group membership, Big Rivers had to provide only 32 MW of Contingency Reserve. The MCRSG arrangement terminated December 31, 2009. Under the present Midwest ISO tariff, Big Rivers is no longer able to obtain Contingency Reserve service from the Midwest ISO without becoming a member

2.1. CRA EXPERIENCE WITH RTO COST BENEFIT STUDIES

One option available to Big Rivers for meeting its Contingency Reserve Requirements is joining the Midwest ISO. The CRA team pioneered some of the original Regional Transmission Operator ("RTO") Cost Benefit analytical approaches and modeling tools and has applied them in a series of significant regional RTO Cost Benefit Studies, to include:

- 2002 RTO West Study of Pacific Northwest
- 2002 Southeast Regulatory Utility Commissions Conference ("SEARUC")
 Study of Southeast Region

•	2003	Dominion Virginia Power's PJM Study
6	2003	U.S. Department of Energy's SMD Study
0	2004	ERCOT Stakeholders Cost Benefit Study
6	2005	SPP Cost Benefit Study, led by SPP Regional State Committee
•	2007	Aquila Missouri Cost Benefit Study (Midwest ISO and SPP)
6	2007	AmerenUE Cost Benefit Study (Midwest ISO, SPP, ICT)

In addition, the CRA team utilized similar analytical approaches and modeling tools in the conduct of the 2006 U.S. Department of Energy Congestion Study prepared pursuant to the 2005 Energy Policy Act for the purpose of designating National Interest Electric Transmission Corridors.

In each of these studies, CRA has made use of its extensive knowledge of regional generation and transmission systems and electricity market structures and rules to specify a model representation of the regional electricity market. The computer simulation market model was used to project generation dispatch, production costs, inter-regional flows, and spot prices under various RTO-related scenarios. The results of the electricity modeling, supplemented with relevant RTO operating cost estimates, were then used to evaluate net benefits to individual regions and companies.

CRA used the General Electric Multi-Area Production Simulation Model ("GE MAPS") to perform the energy modeling in each of these studies. GE MAPS is a detailed economic dispatch and production costing model that simulates the operation of the electric power system taking into account transmission topology. The GE MAPS model determines the security-constrained commitment and hourly dispatch of each modeled generating unit, the loading of each element of the transmission system, and the locational marginal price (LMP) for each generator and load area. The GE MAPS model was used by CRA in all of the prior RTO market cost benefits studies it has performed as well as to support the U.S. Department of Energy in conducting the August 2006 National Electric Transmission Congestion Study.

2.2. REPORT STRUCTURE

The following sections describe the study methodology, results and assumptions. In Section 3, the potential options available to Big Rivers for meeting its Contingency Reserve requirements are analyzed. Section 4 describes the framework applied in performing an economic assessment of the available Big Rivers options. In Section 5, the results of the economic assessment are summarized and discussed. Section 6 provides an assessment of qualitative-type issues. Appendix A provides additional detail on the study results, and Appendix B provides a detailed discussion of the GE MAPS input assumptions.

3. BIG RIVERS' OPTIONS FOR MEETING CONTINGENCY RESERVE REQUIREMENTS

Big Rivers has a number of possible ways of meeting its Contingency Reserve requirements, either through supplying the reserve needed up to the 417 MW stand-alone requirement or by reducing the amount of reserve required by entering into a reserve sharing arrangement. The Big Rivers options include:

- 1. Supplying Contingency Reserve from Big Rivers' existing generating capacity,
- 2. Purchasing Contingency Reserve from neighboring entities,
- 3. Constructing new generating units capable of supplying Contingency Reserve,
- 4. Entering into demand-side arrangements with Big Rivers' customers to decrease load when a system disturbance takes place,
- Entering into a reserve sharing arrangement with a neighboring entity other than the Midwest ISO to decrease the amount of Contingency Reserve needed on the Big Rivers system, and
- Joining the Midwest ISO or another RTO/ISO, which will reduce the amount of Contingency Reserve needed on the Big Rivers system as well as allow Big Rivers to obtain Contingency Reserve through participation in the Ancillary Services Market.

Each of these options is evaluated in turn below.

3.1. OPTION 1: SUPPLYING CONTINGENCY RESERVE FROM BIG RIVERS' EXISTING GENERATING CAPACITY

Big Rivers' Reid Combustion Turbine ("Reid CT") can ramp from cold condition to full operating capacity within 15 minutes, and thus is able to supply 65 MW of Contingency Reserve whenever the plant is not generating and is not out of service for maintenance. However, the Big Rivers' coal plants cannot ramp from a cold start to full operating output within the 15 minutes required to qualify as Contingency Reserve. To supply Contingency Reserve, a coal plant has to be generating at an output level less than its maximum level. The amount of additional MW that the unit then could provide within 15 minutes would qualify as Contingency Reserve, and depends on the unit's ramp rate.

Based on data supplied by Big Rivers, the Big Rivers' coal units, excluding D.B. Wilson, could supply as much as 222 MW of Contingency Reserve within 10 minutes (conservatively allowing 5 minutes for the units to commence increasing output in response to a disturbance). Thus, as much as 287 MW (65 + 222) of Contingency Reserve could be physically supplied by the Big Rivers existing generating units. At 287 MW in total, this option cannot meet the Big Rivers 417 MW stand-alone Contingency Reserve requirement by itself.

The Big Rivers generating units generally will be generating energy in an hour if their fuel and variable O&M costs are lower than the prevailing market price of energy. If the power generated is not needed by Big Rivers, it is sold off-system at the prevailing market price. Thus, the cost of using a Big Rivers unit to provide Contingency Reserve is the market price of energy for the energy that otherwise would have been generated by the unit net of the fuel and variable O&M cost avoided by not generating. The Reid CT has historically not generated often (i.e., its fuel costs are generally higher than prevailing market prices for energy), and thus is available to supply Contingency Reserve fairly economically.

However, supplying Contingency Reserve from the Big Rivers coal plants can be costly, particularly during peak demand periods. In these periods, the plants would generally be operating at full output. Holding the units at lower output levels to supply Contingency Reserve will result in additional cost to Big Rivers to purchase power at market prices or a loss in revenue by Big Rivers from selling less power at market prices. Moreover, the units burn fuel less efficiently when operating at less then full output, making the fuel costs higher on a per MWh generated basis. Finally, a unit may have to be committed to operate at minimum load at times when the prevailing market prices for power would normally dictate that the unit not be generating at all. For all of these reasons, it is generally optimal to limit the need for Contingency Reserve and to supply as much as possible from peaking-type capacity.

With respect to the 417 MW D.B. Wilson plant, this unit could be operated at a reduced output level as low as 280 MW. This would limit Big Rivers' stand-alone Contingency Reserve needs to 280 MW, as its next largest single contingency is 231 MW (Green Unit 1). However, losing 137 MW (417 – 280), or 33%, of the output of the low-cost D.B. Wilson plant would be prohibitively expensive. In 2008, the plant produced 3,026 GWH of energy at an average fuel/variable O&M cost of \$20.9 per MWh.³ At, for example, market energy prices of \$50 per MWh, not having 33% of the output of the unit would cost nearly \$30 million per year in additional purchase costs net of avoided fuel costs. The cost would be even higher since the plant would operate less efficiently at a lower output level. Moreover, Big Rivers would still need to find a way to supply the 280 MW of Contingency Reserve needed. As such, CRA has not further considered reduced output of D.B. Wilson in this study.

³ Energy Velocity Power Database.

3.2. OPTION 2: PURCHASING CONTINGENCY RESERVE FROM NEIGHBORING ENTITIES

Big Rivers personnel investigated whether Contingency Reserve was available for purchase from neighboring entities. No reserve capacity is currently available for purchase from a neighboring system. While such capacity potentially could become available, it is likely to be available only under short-term arrangements as neighboring entities would be constructing generating capacity to meet their own needs, and generally would be selling capacity only when their needs have not yet materialized.

3.3. OPTION 3: CONSTRUCTING NEW GENERATING UNITS CAPABLE OF SUPPLYING CONTINGENCY RESERVE

Constructing new capacity on the Big Rivers system is a potential option for supplying Contingency Reserve to the Big Rivers system in the longer-term. For this purpose, peaking-type capacity would be the choice. New peaking capacity likely would take 1 to 2 years to put in place. However, building a new generating unit simply to provide Contingency Reserve is likely to be a fairly expensive option, particularly given that the unit would not be allowed to generate energy at the time of peak demand.

For example, PJM derives an estimate of the cost to construct new peaking capacity as part of its capacity market operations. The latest estimate is for a new CT to incur \$113/kW-year in fixed costs (capital and fixed O&M).⁴ The new unit would be expected to offset this fixed cost with \$16/kW-year in energy margins when generating. However, holding the unit back to supply Contingency Reserve would not allow for this offset to take place.

3.4. OPTION 4: ENTERING INTO DEMAND-SIDE ARRANGEMENTS WITH BIG RIVERS' CUSTOMERS TO DECREASE LOAD DURING A SYSTEM DISTURBANCE

Entering into demand-side arrangements with its customers to decrease load when a disturbance takes place is a potential option for Big Rivers. It is CRA's understanding that there have been discussions between Big Rivers and two aluminum smelter customers served by one of its members about idling a pot line temporarily during a Contingency Reserve event. There has been some indication that perhaps 200 MW of smelter demand would be interruptible within 15 minutes, at a price as yet undetermined.

Given that Big Rivers would need to restore its Contingency Reserve 90 minutes after the initial 15-minute disturbance period, the interrupted smelter load may need to stay off-line for an extended period of time if the original cause of the disturbance cannot be remedied or

PJM RPM Cone and E&AS Values for 2012/2013 Base Residual Auction, Based on FERC Order of 3-26-09, April 8, 2009. RTO-wide values cited.

replacement power cannot be purchased within 90 minutes. It is unclear whether the smelter load may be interruptible to this extent.

3.5. OPTION 5: ENTERING INTO A RESERVE SHARING ARRANGEMENT WITH A NEIGHBORING ENTITY OTHER THAN THE MIDWEST ISO

Along with the Midwest ISO, Big Rivers is directly interconnected with Tennessee Valley Authority ("TVA"), E.ON, and Henderson Municipal Power and Light. It is CRA's understanding that E.ON and East Kentucky Power Cooperative ("EKPC"), previously members of the MCRSG, have entered into reserve sharing arrangements with TVA. It is CRA's understanding that entering into a reserve sharing arrangement with TVA is legally not an option for Big Rivers. Thus, entering into reserve sharing arrangements with TVA, E.ON and EKPC is currently not an option available to Big Rivers. Big Rivers personnel contacted the VACAR Reserve Sharing Group, which encompasses utilities in the states of Virginia, North Carolina and South Carolina, but this group was not willing to offer membership to Big Rivers.

Big Rivers also contacted the SPP Reserve Sharing Group, and determined that joining the SPP group is a potential option. For this option to be viable, Big Rivers would need to obtain firm transmission across TVA to an SPP Reserve Sharing Group member interconnected with TVA, namely Entergy or Associated Electric Cooperative, Inc. ("AECI"). Joining the SPP Reserve Sharing Group would require substantial firm transmission, as much as 390 MW, from Entergy/AECI in SPP across TVA to Big Rivers. A much smaller amount of firm transmission (only Big Rivers' assigned share of the SPP Contingency Reserve requirement) would be needed from Big Rivers to SPP. Given the likelihood of only limited firm transmission rights being available from SPP across TVA to Big Rivers, joining the SPP Reserve Sharing Group was considered by Big Rivers as potentially only supplying a portion of Big Rivers' Contingency Reserve requirements.

To assess transmission availability, Big Rivers requested firm point-to-point transmission across TVA in September 2009. The request was for 200 MW (2 x 100) of firm transmission from Entergy or AECI to Big Rivers and 10 MW (2 x 5) of transmission from Big Rivers to Entergy or AECI. Including ancillary charges, the TVA point-to-point transmission rate is \$23,556/MW-year. For 210 MW, the cost would be \$4.9 million per year. TVA considered the two 100 MW requests separately, and determined in December 2009 that to provide 100 MW of transmission to Big Rivers would require an additional \$4.9 million in transmission upgrades on the TVA system, and the transmission service would not be available until mid-2012 at the earliest. The 10 MW of transmission from Entergy/AECI to Big Rivers was potentially available. However, TVA further noted that a System Impact Study with the Midwest ISO, E.ON and Entergy/AECI would be required before any transmission service could be obtained.

Given that the firm transmission across TVA, if available at all, would not be available until mid-2012 at the earliest, the SPP Reserve Sharing Group is not a near-term option for Big Rivers.

3.6. OPTION 6: JOINING THE MIDWEST ISO

If Big Rivers joins the Midwest ISO, the Midwest ISO would manage the Contingency Reserve required by the entire Midwest ISO, including Big Rivers, through its Ancillary Services Market ("ASM"). Under this option, Big Rivers would purchase Contingency Reserve service for its load through the ASM and could sell Contingency Reserve capacity from its generating units into this market.

Joining the Midwest ISO market would have a number of impacts on Big Rivers. On the benefits side, Big Rivers would be able to integrate the commitment and dispatch of its units with the Midwest ISO market and to import energy from the Midwest ISO without incurring wheeling charges. This should serve to increase sales revenues and/or reduce purchase costs for Big Rivers and thereby reduce the cost to serve native load. On the cost side, there would be administrative charges assessed by the Midwest ISO, which include payments to the Federal Energy Regulatory Commission, and Big Rivers' internal costs for interfacing with the Midwest ISO. In addition, there are a number of other important qualitative-type issues, the impact of which cannot be easily quantified. These costs and benefits will be analyzed in detail in the following section.

3.7. SUMMARY OF OPTIONS AVAILABLE TO BIG RIVERS FOR MEETING CONTINGENCY RESERVE REQUIREMENTS

Based on the above evaluation, in the near term, Big Rivers has no viable options for meeting its Contingency Reserve requirements other than stand-alone self-supply or joining the Midwest ISO. As discussed above, there are no other RSGs currently available to Big Rivers. A stand-alone supply is feasible if the smelters are willing to supply significant interruptible load that meets NERC standards. An economic analysis of the cost to Big Rivers of joining the Midwest ISO in comparison to the stand-alone supply of Contingency Reserve is analyzed in the next section.

4. ECONOMIC ASSESSMENT FRAMEWORK

CRA performed an economic assessment of the cost to serve Big Rivers' load under these two viable Big Rivers' options, namely:

1. Big Rivers supplying Contingency Reserve on a stand-alone basis ("Stand-alone Case").

2. Big Rivers as a transmission owner in the Midwest ISO ("Midwest ISO Case").

Stand-alone Case: In this scenario, it was assumed that Big Rivers would not join an RTO or an RSG and would need 417 MW of Contingency Reserve. It was assumed that Big Rivers would obtain 65 MW of Contingency Reserve from the Reid CT and 200 MW of reserve through arrangements with the smelters or the construction of new peaking units, or both. The remaining 152 MW of Contingency Reserve needed was assumed to be supplied by Big Rivers' coal units operating at less than their maximum output.

Midwest ISO Case: In this scenario, it was assumed that Big Rivers joins the Midwest ISO as a transmission owner and full member of the Midwest ISO market. Consistent with the former Midwest ISO Contingency Reserve Sharing Group arrangement, Big Rivers' load was assumed to require 32 MW of Contingency Reserve, of which 40% must be spinning.

CRA performed this analysis using the GE MAPS model. The GE MAPS analyses were performed for the calendar years 2011 and 2014, with the results for the five-year period from 2011 to 2015 interpolated from these runs. For purposes of this analysis, the results were derived for the Big Rivers Balancing Authority in the aggregate, which includes Henderson Municipal Power and Light.

The key cost/benefit measures assessed in this study are changes in:

- Power supply costs. These comprise Big Rivers' production costs (fuel, variable
 O&M and emission costs) and purchased power costs net of energy sales revenue.
- Midwest ISO Administrative Charges. Charges assessed by the Midwest ISO to its members.
- Big Rivers Internal Costs. Internal costs incurred by Big Rivers for staffing and equipment to be able to participate in the Midwest ISO markets.
- Capacity Charges. Cost incurred by Big Rivers to obtain 200 MW of additional Contingency Reserve in a Stand-Alone Case.

The methodological steps and the corresponding results are summarized in further detail below.

4.1. GE MAPS MODEL

GE MAPS is a detailed economic dispatch and production cost model that simulates the operation of the electric power system taking into account transmission topology. The GE MAPS model determines the security-constrained commitment and hourly dispatch of each modeled generating unit, the loading of each element of the transmission system, and the locational marginal price ("LMP") for each generator and load area. The GE MAPS model was used by CRA in all of the prior RTO market cost-benefit studies it has performed, as well

as to support the U.S. Department of Energy in conducting the August 2006 National Electric Transmission Congestion Study. In this study, GE MAPS was set up to model the Eastern Interconnection of the United States and Canada. CRA used its GE MAPS data base to perform the analysis.

The GE MAPS was modeled to reflect different impediments to Big Rivers' trade with neighboring entities under of the two scenarios. The GE MAPS model includes dispatch seams charges to reflect impediments to trade between control areas that take place on a real-time basis, including wheeling charges and imperfect knowledge regarding flows outside of the control area. In the Stand-alone Case, Big Rivers' dispatch seams charges were included in GE MAPS with each of its neighboring entities (e.g., TVA, Midwest ISO, and E.ON). In the Midwest ISO Case, dispatch seams charges between Midwest ISO and Big Rivers in GE MAPS are eliminated and the Midwest ISO dispatch seams charge is applied between Big Rivers and non-Midwest ISO members.

Along with real-time dispatch impediments, there are also impediments with respect to day-ahead commitment. A Balancing Authority area with responsibility for reliably committing generating units for operation the next day cannot fully rely on units outside of the control area over which the control area has no direct control, and thus must often commit its own units to ensure reliability. In an RTO, the commitment economics can be integrated across a larger footprint. In the Midwest ISO scenario in GE MAPS, the Big Rivers units are committed jointly with Midwest ISO units reflecting Big Rivers' entry into the Midwest ISO market.

A listing of the GE MAPS modeling input data is provided in Appendix B.

4.2. ESTIMATING THE COST OF SERVING BIG RIVERS' LOAD USING GE MAPS

The cost to serve Big Rivers' load was derived using the GE MAPS analysis using the same type of analysis CRA applied for each of its RTO cost-benefit studies. As noted above, the GE MAPS cases analyzed reflect varying degrees of impediments to trade between Big Rivers and the Midwest ISO. Reductions in the impediments to trading should result in production cost savings. Generation production costs are actual out-of-pocket costs for operating generating units that vary with generating unit output; these comprise fuel costs, variable O&M costs, and the cost of emission allowances. By decreasing impediments to trading, additional generation from utility areas with lower cost generation replaces higher cost generation in other utility areas.

Increases or decreases in production cost in any particular utility area, by themselves, do not provide an indication of benefits for that area, because that area may simply be importing or exporting more power than it did under base conditions. For example, a utility that increases its exports would have higher production costs (because it generates more power that is exported) and would appear to be worse off if the benefits from the additional exports were not considered. Similarly, a utility that imports more would have lower production costs, but higher purchased power costs. In either circumstance — an increase in imports or exports —

an accounting of the trade benefits between buyers and sellers must be made in order to assess the actual impact on utility area benefits. Increased trading activity provides benefits to both buying parties (purchases at a lower cost than owned-generation cost) and selling parties (sales at a higher price than owned-generation cost). In practice, the benefits of increased trade are divided between buying and selling parties. For example, the "split-savings" rules that governed traditional economy energy transactions between utilities under cost-of-service regulation resulted in a 50-50 split of trading benefits.⁵

Traditional cost-of-service regulation differs from a fully deregulated retail market, in which individual customers and/or load-serving entities buy all their power from unregulated generation providers at prevailing market prices. In such a deregulated market, benefits to load can be ascertained mostly in terms of the impact that changes to prevailing market prices have on power purchase costs. For Big Rivers, in which cost-of-service rate regulation is in effect, the energy portion of utility rates reflects the production cost for the utility's owned generating units, plus the cost of "off-system" purchased energy, net of revenues from "off-system" energy sales (i.e., Adjusted Production Costs). In turn, utility customers under cost-of-service regulation pay for the fixed costs of owned-generating units through base rates. Thus, in this analysis, both the production cost of operating the Big Rivers generating plants and the associated Big Rivers trading activity (purchases and sales) must be assessed.

The production cost of the generating units is derived directly from the GE MAPS outputs for each case. Note that a simple calculation of regional Adjusted Production Costs using LMPs will miss the economic impact of price differentials between buying and selling regions (i.e., trade benefits). As such, for purposes of deriving the impact of trading with adjoining regions, CRA applies a methodology developed in consultation with Missouri stakeholders during CRA's work in the 2007 RTO cost-benefit studies performed for Aquila and AmerenUE. In the absence of existing Financial Transmission Rights ("FTRs") to help evaluate the value received by trading parties resulting from these price differentials, CRA captures these impacts through a split-savings methodology.

Under this methodology, the net hourly GE MAPS tie-line flows into and out of Big Rivers are used as a proxy for purchase and sale transactions by Big Rivers. In each hour, the net interchange is derived using tie-line flows to assess whether Big Rivers is a net importer (purchaser) or exporter (seller) of power. If Big Rivers is a net purchaser in the hour, the net purchase amount is multiplied by the weighted average split-savings price for tie-lines with

Consider a simple two-company example. Assume there is a \$16 marginal cost to generate in Company A's control area and a \$20 marginal cost to generate in Company B's control area and there is no trade. Now assume through a reduction in trade impediments that 1 MW can be traded from A to B over the inter-tie between A and B. Company A will generate 1 MW more at a production cost of \$16, while Company B will generate 1 MW less at a production cost savings of \$20. Thus, the total saving in production cost is \$4 (i.e., \$20 – \$16). If the trade price is set, for example, at a 50/50 split savings price, Company A will receive \$18, for a trade benefit of \$2 (\$18 – \$16), and Company B will pay \$18, for a trade benefit of \$2 (\$20 – \$18). The total trade benefit of \$4 (\$2 + \$2) will match the total production cost saving of \$4.

flows into the control area. Similarly, if Big Rivers is a net exporter (seller) in the hour, the net sale amount is multiplied by the average split-savings price for tie-lines with outgoing flows.

RESULTS OF ECONOMIC ASSESSMENT

5.1. COST TO SERVE BIG RIVERS LOAD

Based on the GE MAPS analysis described above, the costs to serve the Big Rivers' load under the Stand-alone and Midwest ISO Cases are summarized in Table 2. As shown, in the Midwest ISO Case, the generation of the Big Rivers' units increases, while the quantity of purchases decreases and the quantity of sales increases. The increase in the generation of the Big Rivers' units in the Midwest ISO Case is unsurprising given that 152 MW of Big Rivers coal units are providing Contingency Reserve in the Stand-alone Case, and cannot be called upon to generate. The increased generation by Big Rivers' units in the Midwest ISO Case allows for fewer purchases and increased sales to be made by Big Rivers.

Table 2: Sources and Costs to Serve Big Rivers Load Stand-alone Case vs. Midwest ISO Case (GWH or Millions of nominal as-spent dollars)

	Stand-Alone			Midwe	st ISO	Increase	
	2011	2014		2011	2014	2011	2014
GWH			·			-	
+ Generation	10,729	10,719		11,464	11,433	735	714
+ Purchases	1,670	1,903		1,075	1,348	(595)	(555)
- Sales	184	332		324	492	140	159
= Total	12,215	12,290		12,215	12,290	0	0
M\$							
+ Generation Costs	\$347	\$364		\$371	\$389	\$24	\$25
+ Purchase Costs	\$58	\$80		\$30	\$49	(\$29)	(\$32)
 Sales Revenue 	\$7	\$14		\$14	\$22	<u>\$6</u>	\$7
= Total	\$398	\$430		\$387	\$416	(\$11)	(\$14)

In terms of costs, moving to the Midwest ISO increases the production cost (fuel, variable O&M and emission allowances) of the Big Rivers' generating units as the units generate

See Table 7 in Appendix A for individual unit generation impacts. As shown in that table, each of the Big Rivers' generating units increases output in the Midwest ISO Case except for Reid Steam. Reid Steam, a less-efficient coal unit, operates more in the Stand-alone case as it is committed more often to provide reserves in this case.

significantly more, but the savings in terms of Big Rivers' purchase costs more than offset this increase.⁷ The additional sales in the Midwest ISO Case also further offset the increase in generation costs.

Overall, the cost to serve the Big Rivers load decreases by \$11 million in 2011 and \$14 million in 2014 in the Midwest ISO case. The present value of the decrease in cost over the five-year period from 2011-2015 is \$56.7 million.⁸ See Appendix A for further detail.

5.2. ADMINISTRATIVE CHARGES ASSESSED BY THE MIDWEST ISO

The Midwest ISO assesses administrative charges under Midwest ISO OATT Schedules 10, 16 and 17. The billing determinants are a mixture of demand and energy use by each transmission owner. As part of its budgeting process, the Midwest ISO prepares a five-year projection of these charges on a \$/MWh basis, which we have used to estimate the annual charges to Big Rivers.⁹ These charges range from \$0.373 to \$0.329 per MWh over the 2011 to 2015 period.

For 2011, the estimated Midwest ISO administrative charges incurred by Big Rivers are \$4.6 million, and the present value over the five-years from 2011 to 2015 is \$17.9 million. See Appendix A for further detail.

5.3. PAYMENTS TO THE FERC UNDER MIDWEST ISO MEMBERSHIP

As a cooperative, Big Rivers is currently exempt from paying FERC administrative charges. However, as a member of an RTO, Big Rivers would be obligated to pay these charges based on transmission system use. The Midwest ISO assesses FERC charges under its Schedule 10-FERC.

Using the Midwest ISO projection for this charge in 2010, the estimated Big Rivers payments to FERC are \$0.7 million in 2011, with a present value over the five-year 2011-2015 period of \$3.1 million. See Appendix A for further detail.

The GWH of purchases includes Southeastern Power Administration ("SEPA") generation, but for purposes of this analysis the cost to Big Rivers of the SEPA generation is not considered as it would be identical in both cases.

Present value figures cited herein are as of January 1, 2011, and reflect a discount rate of 5.83%.

⁹ Midwest ISO Five Year Forecast 2010-2012 Final Budget, December 8, 2009.

5.4. BIG RIVERS CAPITAL AND STAFFING REQUIREMENTS FOR INTERFACING WITH THE MIDWEST ISO AS A MEMBER

Big Rivers would need to interface with the Midwest ISO market, and this could include additional staffing, professional services, travel, computer software, computer hardware and other costs. Because the Midwest ISO would be performing certain functions now performed or contracted for by Big Rivers, there may be offsetting savings as well. It is CRA's understanding that Big Rivers has begun reviewing these costs, but does not have specific budget numbers available at this time.

Western Farmers Electric Cooperative ("Western Farmers"), a G&T cooperative located in Oklahoma, estimated these types of internal costs as part of the SPP Cost Benefit Study prepared by CRA. In that study, Western Farmers estimated that interfacing with the SPP RTO market would require four additional full-time equivalents ("FTE"), and \$260,000 per year in professional services and travel. Western Farmers also estimated that it would save some O&M and ongoing capital investment costs through SPP providing standard reliability/transmission provider functions.

Given that Western Farmers is a G&T cooperative like Big Rivers, these internal cost estimates have been applied in the Big Rivers analysis. For conservatism, the Western Farmers estimated offsetting savings through the reliability/transmission provider functions that the RTO performs were not netted. Under this assumption, the estimated internal cost to Big Rivers in the Midwest ISO Case would be \$0.8 million in 2011, and a present value over the five-year 2011-2015 period of \$3.4 million. See Appendix A for further detail.

5.5. Cost of Obtaining 200 MW of Additional Reserves in the Stand-Alone Case

As noted above, it was assumed in the Stand-alone Case that Big Rivers would obtain 65 MW of Contingency Reserve from the Reid CT and 200 MW of reserves through arrangements with the smelters or the construction of new peaking units, or both. For purposes of this analysis, the annual cost of this additional 200 MW of reserves is estimated to be equal to the annualized cost of new peaking power.

Under this assumption, the cost of obtaining the 200 MW of additional reserves for the Standalone case is \$22.0 million in 2011 and \$100.5 million in present value over the five-year 2011-2015 period. See Appendix A for further detail.

5.6. SUMMARY OF NET BENEFITS OF THE MIDWEST ISO CASE RELATIVE TO THE STAND-ALONE CASE

Results are summarized in Table 3. In the table, benefits are shown as positive numbers and costs as negative numbers. As shown, the overall benefits to Big Rivers of the Midwest ISO case are \$132.8 million in present value over the five-year 2011-2015 period.

Table 3: Summary of Benefits (Costs) of Joining the Midwest ISO in Comparison to Stand-alone (Millions of nominal as-spent dollars)

	2011	2012	2013	2014	2015	Present Value
Decreased Cost to Serve Big Rivers Load	11.0	12.1	13.3	14.4	14.8	56.7
Midwest ISO Administrative Charges	(4.6)	(4.1)	(3.9)	(3.9)	(4.1)	(17.9)
FERC Charges	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(3.1)
Internal Staffing/Equipment Costs	(0.8)	(0.8)	(0.8)	(8.0)	(0.8)	(3.4)
Subtotal	5.0	6.6	7.9	9.0	9.2	32.3
Cost Avoided for 200 MW of New Reserves	22.0	22.6	23.1	23.7	24.3	100.5
Net Benefits	27.0	29.2	31.1	32.7	33.5	132.8

Because the cost that may be incurred for 200 MW of additional reserves in the Stand-alone Case if it were to be obtained from the smelters is not yet known, a subtotal is calculated excluding this cost. As shown, the benefits of joining the Midwest ISO relative to the Stand-alone Case would be \$32.3 million in present value excluding any cost incurred for the 200 MW of additional reserves.

Aside from the items quantified above, there are a number of other issues with respect to Big Rivers joining the Midwest ISO, including the impact on Big Rivers of transmission expansion in the Midwest ISO, the Midwest ISO Ancillary Services Market, transmission rates and revenues and transmission planning.

5.7. QUALITATIVE ISSUES

5.7.1. Sharing of the Cost of High-voltage Transmission Expansion on the Midwest ISO System

To integrate Great Plains wind power, significant investment in new high-voltage transmission may be made in the Midwest ISO region over the next decade. The transmission investment amount that may be made is uncertain. If Big Rivers' supply contracts with its customers qualify as grandfathered agreements ("GFAs") under the Midwest ISO OATT, this load currently would be exempt from paying for these expansion costs.

Further, cost allocation procedures are under discussion in the Midwest ISO and currently do not require a full spreading of transmission costs across the region for high-voltage overlays. Moreover, additional transmission expansion, if it does take place, would allow for greater wind power to be exported across the Midwest ISO, thus likely decreasing over time the prevailing cost to purchase power in the Midwest ISO. As a member of the Midwest ISO, Big Rivers would benefit under an integrated market from this increased wind power access. To

the extent that transmission improvements may be approved for the Big Rivers transmission system, other Midwest ISO members may share in the cost of those improvements as well.

Given these uncertainties in how much transmission will be built, how much it will cost, how the costs will be allocated, the GFA status of the Big Rivers load, and the resulting offsetting benefits from increased access to wind power, CRA has not quantified the net impact of this issue. ¹⁰ Ultimately, transmission costs are likely to be spread region-wide only with a showing that there are region-wide benefits.

5.7.2. Participation in the Midwest ISO's Ancillary Services Market.

The Midwest ISO implemented an Ancillary Services Market in January 2009, which integrates the procurement and use of Regulation and Contingency Reserve with the energy market. All else being equal, an ASM should serve to make the supply of these ancillary services more economic. Under the ASM, Big Rivers' load would incur costs to purchase regulation and Contingency Reserve. However, Big Rivers' generating units would receive revenues for providing these ancillary services.

Self-scheduling of the required reserve is permitted, meaning that the Big Rivers generating units could be used to supply the required reserves for the Big Rivers load. Self-scheduling would be generally consistent with Big Rivers' operation in the past as a member of the Midwest Contingency Reserve Sharing Group. Given this self-scheduling option, it is likely that Big Rivers would be no worse off under the ASM and possibly better off if it is able to sell additional ancillary services from its generating units to others in the Midwest ISO.

5.7.3. Other Midwest ISO Qualitative Considerations.

Other qualitative considerations of Big Rivers' joining the Midwest ISO include:

• There are a number of other G&T cooperatives that are members of the Midwest ISO, including Great River Energy, Hoosier Energy, Southern Illinois Power Cooperative, Wabash Valley Power Association, and Wolverine Power Supply Cooperative. Dairyland Power Cooperative is becoming a full member of the Midwest ISO market in June 2010. The experience of other G&T cooperatives with their Midwest ISO membership and in confronting these qualitative issues should be helpful in Big Rivers' transitioning to being a member of the Midwest ISO market.

For example, if \$3 billion is spent on high-voltage transmission in the Midwest ISO, 80% of the transmission cost is spread on a load-ratio basis at an investment carry cost of 15%, Big Rivers' load ratio share is 1.7%, and 50% of the Big Rivers' load does not qualify as GFA status, the annual cost to Big Rivers would be (\$3 billion * 80% * 15% * 1.7% * 50%), or \$3.1 million per year. However, this does not address the offsetting benefits from greater access to the Great Plains wind power.

¹¹ Midwest ISO FERC Electric Tariff, Fourth Revised Volume No. 1, Original Sheet Nos. 1829 and 1844.

- Transmission revenues for wheeling "through or out" of the Midwest ISO are shared among Midwest ISO entities according to formulations in the Midwest ISO tariff. 12 Given that the Big Rivers transmission system is surrounded by the TVA, E.ON and Midwest ISO transmission systems, it currently can often be "bypassed" by entities seeking to transport power to/from TVA, SPP and the Midwest ISO. Thus, inclusion in the Midwest ISO may permit Big Rivers to collect additional transmission revenues under the Midwest ISO OATT than it would otherwise as a non-Midwest ISO member.
- There are a number of uplift payments and charges assessed by the Midwest ISO to market participants that take place as part of the Midwest ISO market process, including revenue sufficiency guarantee payments, revenue neutrality uplift amounts, and excess congestion disbursements. These uplifts are designed to leave the Midwest ISO in a revenue-neutral position. From Big Rivers' perspective, these uplifts may largely offset one another, but ultimately could impact Big Rivers in a positive or negative direction.
- Big Rivers will nominate and hold Financial Transmission Rights and Auction Revenue Rights ("ARRs") as a member of the Midwest ISO that will be expected to cover its internal congestion costs (the difference in locational prices between Big Rivers' load withdrawals and power supply injections). However, in practice, the value of the FTRs and ARRs may be more or less than actual congestion costs.
- As a member of the Midwest ISO, Big Rivers would also benefit from having its transmission planning process conducted along with the Midwest ISO planning process. This should provide more complete information to guide expansions of the Big Rivers transmission system.
- Further, being a member of the Midwest ISO market also provides a means for Big Rivers to sell power from its generating stations into this market if the Big Rivers' smelter load declines from current projected levels.

5.7.4. Stand-alone Qualitative Considerations

As discussed above, the short-term availability of the stand-alone option depends on the smelters being able to supply significant amounts of qualifying reserves that may need to be interrupted for a significant amount of time. Big Rivers would have to rely on the smelters being able to provide these reserves over a number of years.

In addition, the ability to obtain emergency reserves is potentially more difficult in a Standalone Case. It is CRA's understanding that Big Rivers would have certain rights under

¹² Midwest ISO FERC Electric Tariff Rate Schedule 1, Appendix C.

emergency conditions under an RSG or Midwest ISO option that would not be in place under a stand-alone alternative.

6. CONCLUSIONS

In the near term, Big Rivers has no viable options for meeting its Contingency Reserve requirements other than stand-alone self-supply or joining the Midwest ISO. There are no other reserve sharing groups currently available to Big Rivers. A stand-alone self-supply alternative is feasible if the smelters on the Big Rivers system are able to provide a significant amount (e.g., 200 MW) of interruptible load to Big Rivers that meets NERC standards.

An analysis of the Midwest ISO alternative indicates that it would provide \$32 million in net benefits to Big Rivers over the five-year period from 2011 to 2015 in comparison to a Standalone Case, excluding any cost for the 200 MW of qualifying Contingency Reserve supplied by the smelters in the Stand-alone Case. If the cost of the 200 MW of additional reserves in the Stand-alone Case is based on the cost of new peaking capacity, the net benefit of the Midwest ISO alternative is \$133 million.

While other qualitative-type considerations regarding joining the Midwest ISO may result in additional impacts to Big Rivers, these issues have been addressed for many years by a number of existing Midwest ISO G&T cooperatives and there are risks associated with a reserve self-supply option as well. In sum, joining the Midwest ISO is the best available option for Big Rivers to meet its Contingency Reserve requirements at this time.

APPENDIX A: RESULTS -- FURTHER DETAIL

The cost to serve the Big Rivers load in the Stand-Alone Case and Midwest ISO Case are captured in Table 4.

Table 4: Costs to Serve Big Rivers Load (Millions of nominal, as-spent dollars)

						Present
	2011	2012	2013	2014	2015	Value
Stand-alone Case						
+ Production Costs	347.2	352.7	358.3	363.9	373.0	
+ Purchase Costs	58.4	65.4	72.7	80.3	82.3	
- Sales Revenue	7.4	9.5	11.8	14.1	14.5	
= Total	398.2	408.8	419.4	430.1	440.8	
Midwest ISO Case						
+ Production Costs	371.0	376.8	382.7	388.6	398.3	
+ Purchase Costs	29.9	35.8	42.1	48.6	49.8	
- Sales Revenue	13.7	16.2	18.9	21.6	22.1	
= Total	387.2	396.7	406.1	415.6	426.0	
Reduced Cost of Energy Supply in Midwest ISO						
+ Production Cost Savings	(23.9)	(24.2)	(24.4)	(24.7)	(25.3)	(106.5)
+ Purchase Cost Savings	28.6	29.6	30.6	31.7	32.5	132.6
- Sales Revenue	(6.3)	(6.7)	(7.1)	(7.5)	(7.6)	(30.5)
= Total	11.0	12.1	13.3	14.4	14.8	56.7

The Contingency Reserve available from the Big Rivers coal-fired units, excluding D.B. Wilson, is shown in Table 5.

Table 5: Contingency Reserve Available from Big Rivers Coal Units

	Capacity MW	Min Load MW	Max Swing MW	MW	Rates min Down	Max Swing in 10 min (MW)
HMPL 1	153	128	25	3	3	25
HMPL 2	159	127	32	3	3	30
Coleman 1	145	110	35	3	3	30
Coleman 2	145	100	45	3	3	30
Coleman 3	151	120	31	3	3	30
Reid Steam	50	33	17	2	2	17
Green 1	231	162	69	3	3	30
Green 2	223	161	62	3	3	30
Total	1,257	941	316			222

The administrative and other costs associated with the Midwest ISO and Stand-alone alternatives are captured in Table 6.

Table 6: Calculation of Administrative and Other Costs (Millions of nominal, as-spent dollars)

	2011	2012	2013	2014	2015	PV 1/1/2011
Big Rivers Administrative Charges in Midwest ISO						
BREC Energy for Load (GWh) (a) Midwest ISO Admin Charges (\$/MWh) (b)	12,215	12,188	12,240	12,290	12,346	
Schedule 10	0.151	0.146	0.137	0.143	0.147	
Schedule 16	0.025	0.019	0.018	0.018	0.018	
Schedule 17	0.197	0.170	0.160	0.160	0.164	
Total	0.373	0.335	0.315	0.321	0.329	
Big Rivers Midwest ISO Admin Fees (M\$)	4.6	4.1	3.9	3.9	4.1	17.9
Big Rivers FERC Charges in Midwest ISO						
BREC Energy for Load (GWh) (a)	12,215	12,188	12,240	12,290	12,346	
Midwest ISO FERC Fees (\$/MWh) (c)	0.055	0.056	0.057	0.059	0.060	
Big Rivers FERC Fees in Midwest ISO (M\$)	0.67	0.68	0.70	0.72	0.75	3.1
Standalone Capacity/Demand Purchases						
Amount Purchased (MW)	200	200	200	200	200	
Cost (\$/kW-year) (d)	110.1	112.9	115.7	118.6	121.5	
Cost (M\$)	22.0	22.6	23.1	23.7	24.3	100.5
Big Rivers Midwest ISO Interface Costs (e)	0.76	0.77	0.79	0.81	0.83	3.44

⁽a) BREC FERC Form 714

⁽b) Midwest ISO Five Year Forecast 2010-2012 Budget; midwestiso.org/documents/financial & credit information/budgets & forecasts

⁽c) Sch. 10 FERC Rate for 2009_2010.pdf; midwestiso.org/documents/cost recovery adder/2009 midwest ISO rates Estimated FERC Charge for FY2010 divided by Schedule 10 Energy MWh from (b), thereafter escalated at inflation

⁽d) PJM RPM Cone and E&AS Values for 2012/2013 Base Residual Auction, Based on FERC Order of 3-26-09 RTO-wide Levelized Revenue Requirement for 2012, adjusted for inflation for other years

⁽e) Western Farmers Data from CRA SPP Cost Benefits Analysis, Appendix 4-2 and 4-3

The GWh of generation from the Big Rivers units in the GE MAPS runs are captured in Table 7.

Table 7: Big Rivers Generation by Unit -- Stand-alone Case vs. Midwest ISO Case

	2011		2014			
Generation (GWh)						
,	Stand Alone	in-MISO	Increase	Stand Alone	in-MISO	Increase
Coleman 1	838	964	126	849	1,019	170
Coleman 2	831	948	117	831	976	145
Coleman 3	853	963	110	856	935	78
Wilson	3,068	3,086	17	3,065	3,086	21
Green 1	1,624	1,743	119	1,619	1,706	87
Green 2	1,609	1,699	90	1,613	1,663	49
Reid Steam	197	83	(115)	183	99	(84)
Reid CT	_	-	`- ′	**	-	- '
HMPL 1	874	993	119	873	993	120
HMPL 2	834	985	151	830	958	127
	10,729	11,464	735	10,719	11,433	714
Capacity Factor (na	menlate)					
oupdoity ractor (iid	Stand Alone	in-MISO	Increase	Stand Alone	in-MISO	Increase
Coleman 1	66%	76%	10%	67%	80%	13%
Coleman 2	65%	75%	9%	65%	77%	11%
Coleman 3	64%	73%	8%	65%	71%	6%
Wilson	84%	84%	0%	84%	84%	1%
Green 1	80%	86%	6%	80%	84%	4%
Green 2	82%	87%	5%	83%	85%	3%
Reid Steam	35%	15%	-20%	32%	17%	-15%
Reid CT	0%	0%	0%	0%	0%	0%
HMPL 1	65%	74%	9%	65%	74%	9%
HMPL 2	60%	71%	11%	60%	69%	9%
Production Costs (M\$)					
	Stand Alone	in-MISO	Increase	Stand Alone	in-MISO	Increase
Coleman 1	32.0	36.6	4.6	33.5	40.0	6.4
Coleman 2	31.4	35.7	4.2	32.5	37.9	5.4
Coleman 3	32.6	36.6	4.0	34.7	37.7	3.0
Wilson	77.8	78.2	0.4	81.2	81.8	0.6
Green 1	49.8	53.4	3.6	52.1	54.8	2.7
Green 2	49.2	51.9	2.7	51.8	53.4	1.6
Reid Steam	9.6	4.0	(5.6)	9.6	5.2	(4.5)
Reid CT	0.0	0.0	0.0	0.0	0.0	`0.0
HMPL 1	32.9	37.1	4.3	34.8	39.4	4.6
HMPL 2	31.8	37.4	5.6	33.6	38.5	4.9
	347.2	371.0	23.9	363.9	388.6	24.7

APPENDIX B: MODELING ASSUMPTIONS

This appendix summarizes the key inputs to the GE MAPS locational price forecasting model. As formulated for this study, the model's geographic footprint encompasses the U.S. portion of the Eastern Interconnect with the major focus being on the Big Rivers Electric Cooperative, the Midwest Independent System Operator (Midwest ISO)/Tennessee Valley Authority (TVA) footprint and surrounding regions. The GE MAPS simulations were run for the years 2011 and 2014. Two scenarios were analyzed: 1) Big Rivers stand-alone and 2) Big Rivers as a member of the Midwest ISO.

Primary data sources for the GE MAPS model include the NERC Multiregional Modeling Working Group (MMWG), the General Electric generation and transmission databases for the Eastern Interconnect, the NERC Electricity Supply and Demand (ES&D) database, NERC regions and Independent System Operators/Regional Transmission Organizations, FERC submissions by generation and transmission owners, and CRA analysis of plant operations and market data. Major data components are listed below.

All financial assumptions specified in this document are expressed in real 2008 US dollars, unless otherwise noted.

B.1 Transmission

The CRA model is based on load flow cases provided by the NERC MMWG. This analysis uses the modified MMWG 2005 series load flow case for the summer of 2010. The MMWG load flow case encompasses the entire Eastern Interconnect system, including lines, transformers, phase shifters, and DC ties. CRA further analyzed the original load flow against regional transmission planning documents and a number of changes were made to the load flow to reflect future transmission projects (those under construction or having a high probability to be implemented, but not included in the original MMWG models). These include the addition of the Cross-Sound and Neptune high voltage DC cables, the Linden VFT, and various updates in the PJM region.

Reducing the number of constraints monitored in the study reduces the time required for GE MAPS to solve the optimal commitment and dispatch. Therefore, CRA filters out non-significant constraints far away from the study areas to speed up the process. In this study, all non-duplicate constraints from the above sources within Midwest ISO, TVA and western PJM regions are included. For other study areas, a constraint is included only if it has been binding in our previous studies, it represents a major interface or it monitors facilities at 500KV or above.

B.2 LOAD INPUTS

For each load serving entity, GE MAPS requires an hourly load shape and an annual forecast of peak load and total energy. CRA uses the latest FERC-714 load forecast data available (2009) for each company where available. Ontario data is drawn from the 10-Year Outlook: Ontario Demand Report published by the Independent Electricity Market Operator of Ontario.

Load shapes are drawn from hourly actual demand for 2006, as published in FERC Form 714 submissions and on the websites of various Independent System Operators (ISOs) and NERC reliability regions. These hourly load shapes, combined with forecasts for peak load and annual energy for each company, are used by GE MAPS to develop a complete load shape by company for each forecast year.

B.3 THERMAL UNIT CHARACTERISTICS

GE MAPS includes a detailed model of thermal generation, in order to accurately simulate operational characteristics, and project realistic hourly dispatch and prices. Modeled characteristics include unit type, unit fuel type, heat rate values and shape (based on unit technology), summer and winter capacities, fixed and variable non-fuel operation and maintenance costs, startup fuel usage, forced and planned outage rates, minimum up and down times, and quick start and spinning reserve capabilities. ¹³

The CRA generation database reflects unit-specific data for each unit based on a wide variety of sources. In cases where unit-specific data is not available, representative values based on unit type, fuel and size are used. Table 8 and Table 9 document these generic assumptions. Unit specific heat rate and capacity data was applied for the Big Rivers generating units.

Note that certain data types are specified on a plant-specific basis in CRA's database and therefore do not require corresponding generic data. These include but are not limited to summer/winter capacity, full load heat rates and emissions data.

FLHR, 50% capacity @ 90% FLHR,

75% capacity @ 96% FLHR,and

100% capacity @ 100% FLHR

Minimum Minimum Fixed O&M Unit Type and Size O&M Uptime Downtime Heat Rate Shape (\$/kW-year) (\$/MWh) (hours) (hours) 4 blocks: 50% capacity at 113% FLHR, 67% capacity @ 75% FLHR. Combined Cycle \$ \$ 21.00 2.50 6 8 83% capacity @ 86% FLHR, and 100% capacity @ 100% FLHR Combustion Turbine (<50MW) Single block, 100% capacity at 100% \$ 10.00 \$ 10.00 Combustion Turbine (50MW<) 1 FLHR Steam Turbine Coal (<100MW) 5.00 3 blocks: 50% capacity at 106% 4.00 Steam Turbine Coal (100MW<200MW) 24 12 FLHR, 75% capacity @ 90% FLHR, Steam Turbine Coal (200MW<600MW) 3.00 \$ and 100% capacity @ 100% FLHR Steam Turbine Coal (600MW<) 2.00 \$ 35.00 Steam Turbine Gas/Oil (<100MW) 6.00 4 blocks: 30% capacity at 110%

Table 8: Generic Characteristics for Thermal Units, Part 1

Steam Turbine Gas/Oil (100MW<200MW)

Steam Turbine Gas/Oil (200MW<600MW)

Steam Turbine Gas/Oil (600MW<) *4

5.00

4.00

3.00

10

8

	Forced	Planned	Typical Forced
Unit Type and Size	Outage Rate	Outage Rate	Outage Length
	(%)	(%)	(Days)
Combined Cycle	1.75%	7.78%	2
Combustion Turbine (<50MW)	2.46%	4.92%	1
Combustion Turbine (50MW<)	2.49%	6.66%	1
Steam Turbine Coal (<100MW)	3.32%	8.73%	7
Steam Turbine Coal (100MW<200MW)	3.93%	8.26%	7
Steam Turbine Coal (200MW<600MW)	4.36%	9.20%	7
Steam Turbine Coal (600MW<)	4.36%	9.20%	7
Steam Turbine Gas/Oil (<100MW)	2.35%	6.78%	2
Steam Turbine Gas/Oil (100MW<200MW)	3.14%	11.96%	2
Steam Turbine Gas/Oil (200MW<600MW)	3.05%	13.01%	2
Steam Turbine Gas/Oil (600MW<)	3.03%	14.97%	2

The primary data source for generation units and characteristics is the NERC Electricity, Supply and Demand (ES&D) 2006 database, which contains unit type, fuel type (primary and secondary), and capacity data for existing units. Heat rate data is drawn from prior ES&D databases where available. For newer plants, heat rates are based on industry averages for the technology of the unit. The NERC Generation Availability Data System (GADS) 2003 database, released January 2005, is the source for forced and planned outage rates, based on plant type, size, and vintage. Fixed and variable operation and maintenance costs are

^{*1} Includes start up cost

^{*2} Min Up / Min Down will be 16/8 for newer sliding pressure super critical units.

^{*3} Heat rate shapes will be 4 blocks: 30% capacity at 110% FLHR, 50% capacity @ 93% FLHR, 75% capacity @ 95% FLHR, and 100% capacity @ 100% FLHR for newer sliding pressure super critical units.

^{*4} Heat rate shapes will be 4 blocks: 20% capacity at 110% FLHR, 50% capacity @ 95% FLHR, 75% capacity @ 98% FLHR, and 100% capacity @ 100% FLHR for newer sliding pressure super critical units.

estimates based on plant size, technology, and age. These estimates are supplemented by FERC Form 1 submissions where available. The fixed O&M values include an estimate of \$1.50/kW-yr for insurance and 10% of base fixed O&M (before insurance) for capital improvements.

Plants that are known to be cogeneration facilities are either modeled with a low heat rate (6000 Btu/kWh), or set as must-run units in the dispatch, to reflect the fact that steam demand requires operation of the plant even when uneconomical in the electricity market.

B.4 NUCLEAR UNITS

CRA assumes that nuclear plants run when available, and that they have minimum up and down times of one week. Forced outage rates for each unit are drawn from the Energy Central database of unit outages. Nuclear plants do not contribute to quick-start or spinning reserves. The model includes refueling and maintenance outages for each nuclear plant. Outages in the near future posted on the NRC website or announced in the trade press are included. For later years, refueling outages are projected on the basis of the refueling cycle, typical outage length, and last known outage dates of each plant. Since these facilities are treated as must run units, CRA does not specifically model their cost structure. Within the timeframe of this study, no nuclear retirements are applied, since it is likely that most current plants will obtain extensions to their operating licenses.

B.5 HYDRO UNITS

GE MAPS has special provisions for modeling hydro units, and requires specification of a monthly pattern of water flow, i.e. the minimum and maximum generating capability and the total energy for each plant. Plant capacity data is drawn from the NERC ES&D database. Plant monthly energy data is drawn from an average of Form EIA-860 submissions for 1992-1998. CRA assumes that the plant is able to provide spinning reserves of up to 50% of plant capacity. ¹⁴

B.6 RENEWABLE RESOURCES

Individual existing wind resources were modeled either as low-cost (\$1/MWh) dispatchable energy resources based on the hourly profiles from 2006 (for wind within the focused area), or with a fixed annual capacity factor of 30% (for wind located far from the focused area). Solar generators (photovoltaic units) are run at 24% annual capacity factor, and restricted to daytime hours.

For example, if a plant with 100MW capacity was generating 60MW at a given hour, it can provide up to 20MW [(100 – 60) / 2] of spin for that hour.

B.7 CAPACITY ADDITIONS AND RETIREMENTS

CRA adds new generation based on projects in development or advanced stages of permitting, as indicated by trade press announcements, trade publications, environmental permit applications, and internal knowledge. CRA also adds generic capacity where economically justified, or as required to maintain resource adequacy per installed capacity reserve margins published by various NERC regions. CRA tracks planned and announced retirements from power pool publications and trade press announcements, and will retire units accordingly with the exception of nuclear units.

B.8 ENVIRONMENTAL REGULATIONS

For thermal generating units, variable operating and maintenance costs associated with installed scrubbers (SO_2 reduction) or with Selective Catalytic Reduction (SCR) processes for NO_x reduction are included in the marginal production cost and the unit energy bids. No fixed or capital costs of these emission control technologies are included in the calculation of marginal cost. CRA tracks industry announcements of units that are planning to install NO_x or SO_2 abatement technologies in the near future and models the resulting changes in emission rates and the variable and fixed costs associated with the new installations.

To account for SO_2 trading under EPA's Acid Rain Program, the model incorporates the opportunity cost of SO_2 tradable permits into the marginal cost bids, based on unit emission rates and forecast allowance trading prices for the time period of the simulation. NO_x emission rates are drawn from the CEMS data filed with the US Environmental Protection Agency. Emission allowance prices for NOx and SO_2 are based on market data from Evolution Market brokerage. CRA modeled NO_x and SO_2 allowances based on the Clean Air Interstate Rule (CAIR), 15 and CO_2 emission based on the Regional Greenhouse Gas Initiative (RGGI) for northeastern states only. Given the current status of the Clean Air Mercury Rule (CAMR), no mercury emissions were modeled. Emission allowance prices for NO_x and SO_2 are based on market data from Evolution Market brokerage.

B.9 EXTERNAL REGION SUPPLY

CRA explicitly models the US portion of the Eastern Interconnect and the Canadian provinces of Ontario, Manitoba and Saskatchewan. Regions outside this study area are modeled as either supply profiles or scheduled interchanges. CRA uses historic flows, combined with expectations of future conditions in these areas to project quantities and prices of power exchanged with the model footprint. In this analysis, flows from New Brunswick to New England, and from Hydro Quebec to Ontario are modeled as scheduled flows, based on 12

¹⁵ CAIR requires participating states to submit two allowances per ton of SO₂ emission, rather than one allowance as per the Title IV Acid Rain Program. CAIR states are most states east of MN, IA, MO, AR, LA and TX.

months of historical data. Flows from Hydro Quebec to New York and New England are modeled as price sensitive supply curves.

The DC ties with the WECC and ERCOT interconnections are modeled as price sensitive supply curves. CRA uses historical electricity prices and gas prices near these DC ties to calculate implied market heat rates ¹⁶ for on-peak and off-peak periods.

B.10 DISPATCHABLE DEMAND (INTERRUPTIBLE LOAD)

The presence of demand response is important to energy and installed capacity prices. The value of energy to interruptible loads caps the energy prices, and the capacity of interruptible load effectively replaces installed reserves and lowers the capacity value. CRA uses values for interruptible load, and demand side management reduction in peak for Florida from the NERC ES&D database. This interruptible load is spread among load areas based on their load share of the total system load. The dispatchable demand is implemented as generators with a dispatch price of \$600/MWh for the first block (50% of area dispatchable demand) and \$800/MWh for the second block. These units rarely run, as the high prices they require indicate a supply shortfall and prompt economic new entry. Thus, they play an insignificant role in the energy market, but they play an important role in the capacity market. If these loads can be interrupted during peak hours, they will be paid the capacity market-clearing price. Thus, they have strong incentives to make themselves available during peak hours. When interruptible demand is included in the calculation of the required reserve margin, it reduces the requirement of installed capacity and thus reduces new entry and helps increase energy prices, consistent with market behavior.

B.11 Market Model Assumptions

Marginal Cost Bidding. All generation units are assumed to bid marginal cost (opportunity cost of fuel plus non-fuel VOM plus opportunity cost of tradable emissions permits). To the extent that markets are not perfectly competitive, the modeling results will reflect the lower bound on prices expected in the actual markets.

Operating Reserves Requirement (spinning reserves). Operating reserves are based on requirements instituted by each reliability region. These requirements are based on the loss of the largest single generator, or the largest single generator and half the second largest generator, or a percentage of peak demand. The spinning reserves market affects energy prices, since units that spin cannot produce electricity under normal conditions. Energy prices are higher when reserves markets are modeled.

Implied market heat rate is calculated as electricity prices (\$/MWh) divided by natural gas prices (\$/MMBtu) and thus assumes natural gas to be the marginal fuel. Thus, if electricity prices were \$72/MWh and natural gas prices were \$9/MMBtu, the implied heat rate would be 8000 Btu/kWh.

In modeling supply for operating reserves, the spinning capabilities of generating units are specified on a unit type basis. For spinning reserves, the maximum level of spinning reserve capability of a thermal unit is set as a lesser of the unit's ramp rate (in MW/min) times 10 (reserves supplied within 10 minutes) and its capacity above minimum block. Assumed ramp rates are: 10 MW/min for combine cycle units, 6 MW/min for gas and oil steam units, 3 MW/min for coal units. For hydro plants, spinning reserve capability is set on a monthly basis at 50% of the difference between plant's capacity in that month and its average for that month hourly output. No spinning capability was assigned to nuclear generators.

With respect to the two scenarios conducted in GE MAPS, for the Stand-alone Case, 100% of the largest contingency, the DB Wilson 417 MW coal unit, is required to be held as Contingency Reserve by Big Rivers. From this requirement, 200 MW of assumed contracted aluminum smelter capacity and/or new peaking capacity and 65 MW of capacity from Reid CT were subtracted. The remaining 152 MW becomes the required reserve requirement from the Big Rivers coal units, and were modeled using unit ramp rate data supplied by Big Rivers. In the Midwest ISO Case, the Big Rivers reserve requirement, 32 MW, is taken from the former Midwest Contingency Reserve Sharing Group Agreement.

For both study years, First Energy is assumed to leave the Midwest ISO, however, the largest contingency in the Midwest ISO remains the DC tie with Manitoba. To account for First Energy leaving the Midwest ISO, the requirement for each remaining member is scaled up in proportion to their current contribution. For the Stand Alone scenario, the reserve requirement for each remaining member is again scaled proportionally.

Transmission Losses. Transmission losses are modeled at marginal rates over the entire Eastern Interconnection.

B.12 SEAMS CHARGES AND TRANSMISSION (WHEELING) RATES

Seams charges are "per MWh" charges for moving energy from one control area to another in an electric system. In GE MAPS, seams charges are applied to net interregional power flows and are used by the optimization engine in determining the most economically efficient dispatch of generating resources to meet load in each model hour. The commitment process is performed in GE MAPS for a defined set of major pools in the Eastern Interconnection. Within these pools, there can be commitment seams charge between control areas to reflect that the commitment process is not performed on a fully integrated basis within that pool. The seams charge modeled for dispatch includes both wheeling rates from tariffs and a second value, which is referred to as friction, representing the impediments to trade between control areas that take place on a real-time basis.

Table 10 gives an overview of the seams charges between Big Rivers (BREC), MISO, TVA and other neighboring control areas used for this study. As shown, in the Stand-alone Case, Big Rivers is committed within the LG&E/EKPC/BREC pool, with a commitment seams charge and dispatch seams charge between each of these three entities. In the Midwest ISO Case, Big Rivers becomes part of the Midwest ISO and is committed jointly with the Midwest

ISO, with no dispatch seams charge between Big Rivers and the rest of the Midwest ISO, and Midwest ISO dispatch seams charges applying between Big Rivers and non-Midwest ISO entities.

Table 10: Seams Charges (\$/MWh)

	From	То	Dispatch	Seams Ch	arge
	Commitment	Commitment	-		
	Pool	Pool	Wheel	Friction*	<u>Total</u>
	Day 2:				
1	MISO***	PJM	0	2	2
	MISO	All Other	5	3	8
2	PJM	MISO	0	2	2
	PJM	All Other	3	3	6
3	SPP **	Ali	2	3	5
4	NE	NY	0	3	3
	NE	All but NY	7	3	10
5	NY	NE	0	3	3
	NY	HQ	2	3	5
	NY	OH	4	3	7
	NY	PJM	5	3	8
	Non-Day 2:				
6	AECI	All	3	5	8
7	VACAR-Duke/CPL	All	2	5	7
8	Entergy	All	3	5	8
9	FRCC	All	3	5	8
10	KY	All		See Below	
11	SOCO	All	5	5	10
12	TVA	All	3	5	8
13	OH	All	1	5	6
14	HQ	All	8	5	13
15	NB/Maritimes	All	3	5	8

Intra-Commitment Po	ool Seams Charges				
	•	Dispatch	Seams Cl	narge	Commitment
		Wheel	Friction*	Total	Seams Charge
Cleco Power	SPP	3	3	6	10
SPP	Cleco Power	2	3	5	10
Cleco Power	Entergy	3	5	8	NA
Intra-FRCC	Intra-FRCC	3	5	8	10
Duke/CPL/SCG	Duke/CPL/SCG	2	5	7	10
NWE	MISO	4	3	7	10
NWE	WAPA	4	5	9	10
WAPA	MISO	4	3	7	10
WAPA	NWE	4	5	9	10
MISO	NWEWAPA	5	3	8	10
MISO	SASK	5	3	8	10
SASK	MISO	6	5	11	10
Intra-Maritimes	Intra-Maritimes	3	5	8	10
BIG RIVERS STAND-	ALONE CASE:				
LG&E	BREC & EKPC				10
BREC	LG&E & EKPC				10
EKPC	LG&E & BREC				10
LG&E	All	2	5	7	
BREC	All	3	5	8	
EKPC	All	5	5	10	
BIG RIVERS MIDWE	ST ISO CASE:				
LG&E	EKPC				10
EKPC	LG&E				10
LG&E	All	2	5	7	
EKPC	All	5	5	10	

^{*\$3} dispatch friction hurdle for flows out of active managed markets
*Non market areas not expected to be as efficient hence higher dispatch friction of \$5
*Average of on- and off-peak non-firm hourly rate used in addition to friction

^{*}PJM to/from MISO friction set at \$2 given extensive seams management process
**Day 2 planned
*** Includes BREC in Midwest ISO Case

B.13 FUEL PRICES

GE-MAPS uses monthly fuel prices for each thermal unit. The fundamental assumption of behavior in competitive markets is that generators will bid their marginal cost into the energy market. The marginal cost for a gas plant is the opportunity cost of fuel purchased (in addition to non-fuel variable O&M and environmental adders), or the spot price of gas at the location closest to the plant. CRA therefore uses forecasts of spot prices at regional hubs, and refines these on the basis of historical differentials between price points and their associated hubs. For fuel oil, CRA uses estimates of the price delivered to generators on a regional basis.

The coal price forecast are developed by the CRA NEEM model, which is described in a following section. Table 11 shows the NEEM produced coal prices for plants in the Big Rivers footprint.

Nuclear plants are assumed to run whenever available, so nuclear fuel prices do not impact commitment and dispatch decisions in the market simulation model. CRA therefore does not do a detailed analysis of nuclear fuel prices.

Specific oil and gas price forecasts proposed to be used in this study are provided in the next section. They take into account NYMEX futures prices from June 6, 2009.

Unit Name	2011 (\$/MMBtu)	2014 (\$/MMBtu)
Coleman 1	2.94	2.81
Coleman 2	2.94	2.81
Coleman 3	2.94	2.89
D.B. Wilson	2.00	1.93
Green 1	2.15	2.08
Green 2	2.15	2.08
Reid	2.96	2.97
HMP&L Station 1	2.94	2.89
HMP&L Station 2	2.94	2.89

Table 11: Coal Prices for Big Rivers Units

B.14 NATURAL GAS AND FUEL OIL PRICE FORECAST

B.14.1 Natural Gas Forecast

Principal Drivers: The principal drivers are the projected prices for natural gas at Henry Hub. Base Case Forecast: For both study years the Base Case forecast is set equal to NYMEX futures prices for natural gas at Henry Hub

Regional Prices: CRA forecasts natural gas prices on a regional basis following major pipeline traded pricing points. Regional forecasts are derived by adding two factors, the basis differential by region and local delivery charge by state, to the Henry Hub gas price.

Basis Differentials by Region: CRA recognizes multiple pricing points within each census region, all of which are actual pipeline trading points surveyed and reported by Platt's Gas Daily. Some of these pricing points coincide with the NYMEX Clearport hubs, which include Henry Hub. For the other points, CRA uses a regression model to one or several NYMEX Clearport hubs, calibrated with historical data, to derive a forecast. The NYMEX Clearport hub futures settlement data are only available for a short period, typically between 12 and 24 months. Within this time frame, CRA derives monthly differentials to these hubs using NYMEX data. Beyond this period, CRA scales the basis differentials in proportion to the Henry Hub forecast. Forecast prices at each hub are derived using the Henry Hub forecast and the scaled basis differential for that hub. The pricing points used and their relation to the NYMEX Clearport futures are shown in Table 12.

Local Delivery Charges: Burner tip prices for natural gas are the sum of the basis differentials by region as derived above and a local component that captures pipeline lateral charges and/or charges to local distribution companies. CRA estimates this local component at \$0.07/MMBtu for all units. For older units CRA estimates extra LDC charges derived from AGA statistics.

Seasonal Pattern: Natural gas prices are varied seasonally based on NYMEX futures data in the near term. In the long term, the seasonal pattern for the last available year is repeated for each year.

The natural gas forecast prices used in this study are shown in Table 13.

Table 12: NYMEX Clearport Hubs used for Natural Gas Forecast

, Region	States	Natural Gas Pricing Point	Weights	Deriving Source - Summer (NYMEX Clearport hubs)
Eastern New York	NY (East)	Transco Zone 6 (NYC)	1	Direct NYMEX Clearport Hub
Western New York	NY (West)	Dominion (Appalachia)		Direct NYMEX Clearport Hub
vvesterrivew fork	IVI (VVESI)	Iroquois	0.5	Regressed to Michigan and Transco Zone 6 NYC
PJM	MD, NJ, PA (East)	Tennessee Zone 6		Direct NYMEX Clearport Hub
PJIVI	IVID, IVO, FA (Last)	Dracut	0.5	Regressed to Texas Eastern Zone M 3 and Transco Zone 6 NYC
		Columbia Gas Appalachia	0.25	Direct NYMEX Clearport Hub
Appalachia	KY, OH, PA (West), WV	Leidy Hub	0.25	Regressed to Transco Zone 6 NYC
		Dominion (Appalachia)	0.5	Direct NYMEX Clearport Hub
Southern New England	CT, MA, RI	Algonquin City Gates		Regressed to Transco Zone 6 NYC
Madham Nay England	ME, NH, VT	Tennessee Zone 6	0.5	Regressed to Texas Eastern Zone M 3 and Transco Zone 6 NYC
Northern New England	IVIC, IVI, VI	Dracut	0.5	Regressed to Dominion (Appalachia)
Iowa-Missouri-Nebraska	IA, MO, NE	Ventura	1	Direct NYMEX Clearport Hub
Florida	FL	Florida CityGate	1	Direct NYMEX Clearport Hub
Mid-Continent	KS, OK	NGPL Mid-Continent Basis	1	Direct NYMEX Clearport Hub
16.4	IL, IN, MI, MN, ND, SD, WI	Chicago Basis	0.5	Direct NYMEX Clearport Hub
Midwest	IL, IIV, IVII, IVIIV, IVIIV, SD, VVI	Michigan Basis	0.5	Direct NYMEX Clearport Hub
Ontario-East	ON (East)	Niagara	1	Regressed to Dominion (Appalachia) and Michigan Basis
Ontario-West	ON (West)	Dawn, Ontario	1	Regressed to Michigan Basis
		Texas Eastern Zone M-3	0.167	Direct NYMEX Clearport Hub
		Transco Zone 6 Non-NYC	0.167	Regressed to Transco Zone 6 NYC
South Atlantic East	DC, DE, GA, NC, SC, VA	Transco Zone 4	0.167	Regressed to Transco Zone 3
		Texas Eastern Zone M-1	0.167	Regressed to East LA Basis
		Florida Gas Mobile Bay		Regressed to Transco Zone 3
South Atlantic South	AL, AR, LA, MS, TN	Henry Hub	1	Direct NYMEX Clearport Hub

Table 13: Natural Gas Prices for 2011 and 2014 (2008\$/MMBtu)

2011	Newer Units (No LDC)		Older Units (With LDC)	
Month		KY	KY	
Jan	\$	6.82	\$	7.48
Feb	\$	6.81	\$	7.47
Mar	\$	6.60	\$	7.26
Apr	\$	6.11	\$	6.77
May	\$	6.07	\$	6.73
Jun	\$	6.14	\$	6.79
Jul	\$	6.21	\$	6.87
Aug	\$	6.27	\$	6.92
Sep	\$	6.29	\$	6.94
Oct	\$	6.36	\$	7.01
Nov	\$	6.58	\$	7.24
Dec	\$	6.87	\$	7.52
Annual				
Average	\$	6.43	\$_	7.08

2014	Newer Units (No LDC)		Older Units (With LDC)	
Month		KY	KY	
Jan	\$	7.04	\$	7.67
Feb	\$	7.02	\$	7.65
Mar	\$	6.78	\$	7.40
Apr	\$	6.12	\$	6.74
May	\$	6.07	\$	6.69
Jun	\$	6.13	\$	6.75
Jul	\$	6.21	\$	6.83
Aug	\$	6.26	\$	6.88
Sep	\$	6.28	\$	6.89
Oct	\$	6.34	\$	6.96
Nov	\$	6.56	\$	7.17
Dec	\$	6.82	\$	7.43
Annual				
Average	\$	6.47	\$	7.09

B.14.2 Fuel Oil Price Forecast

Principal Drivers: The principal drivers underlying this forecast are the projected price for light sweet crude oil at Cushing, Oklahoma.

Base Case Forecast: For both study years the Base Case forecast is derived from the NYMEX futures prices for light sweet crude oil.

Regional Prices: CRA forecasts prices for fuel oil #2 and #6 by US census region. This forecast is prepared in two steps. First CRA uses a regression model calibrated on historical data to derive prices for fuel oil #2 and #6 at New York Harbor from the forecast of crude oil prices. Second, we apply historical basis multipliers for each census regions against the mid-Atlantic Census region (includes New York Harbor)

Seasonal Pattern: Both fuel oil #2 and fuel oil #6 prices are varied monthly based on NYMEX futures data in the near term, and based on historical monthly patterns in the longer term.

The fuel oil forecast prices used in this study are shown in Table 14.

2011 FO₆ F₀2 KY Month KY Jan \$ 6.38 \$ 15.11 Feb \$ 6.39 \$ 15.12 Mar \$ 6.39 \$ 15.13 \$ Apr 6.39 \$ 15.14 \$ 6.40 \$ 15.15 Mav \$ 6.40 15.16 Jun \$ 6.41 15.17 Jul \$ 15.18 6.41 Aug \$ Sep 6.42 15.19 Oct \$ 6.42 \$ 15.19 Nov \$ 6.42 15.20 Dec \$ 6.43 \$ 15.21 Annual Average \$ 6.41 \$ 15.16

Table 14: Fuel Oil Prices for 2011 and 2014 (2008\$/MMBtu)

2014	FO6	FO2	
Month	KY		KY
Jan	\$ 8.62	\$	21.46
Feb	\$ 8.63	\$	21.46
Mar	\$ 8.63	\$	20.52
Apr	\$ 8.63	\$	20.40
May	\$ 8.64	\$	19.48
Jun	\$ 8.64	\$	19.25
Jul	\$ 8.64	\$	19.29
Aug	\$ 8.65	\$	19.62
Sep	\$ 8.65	\$	20.17
Oct	\$ 8.66	\$	20.41
Nov	\$ 8.66	\$	20.63
Dec	\$ 8.66	\$	20.95
Annual			
Average	\$ 8.64	\$	20.30

B.15 NEEM FORECAST

Output from CRA's North American Electricity and Environment Model (NEEM) is used to populate the MAPS model's with plant-specific coal price inputs. The NEEM model is a long-term planning model that optimizes fuel and environmental compliance decisions based on the environmental scenario considered. Given that coal-fired generation is the target of many pending and proposed environmental initiatives, the future coal selection at generating stations and quantity of coal consumed nationally is heavily dependent on the scenario modeled and the resultant retrofit decisions, generation levels and new capacity additions. The quantities of coal consumed, by region, are likely to shift over time in response to environmental considerations and that shift will, in-turn, affect coal pricing and fuel choice at generation stations across the United States.

The NEEM model itself is supported by 21 individual supply curves spread across major US coal producing regions and the primary international production areas exporting to the United States. These curves are built up from mine level data on production costs and annual production capability. Each curve shifts over time as a result of the interaction between three effects – resource depletion, new mine development/expansion and changes in mine costs.

Resource depletion and expansion is done at the mine level, changing the shape of each coal type's supply curve over time. For example, lower cost mines may be depleted over time with expansion occurring at the higher end of the cost curve. Such a pattern of depletion and expansion would result in an increase in the weighted average coal costs for a given coal type. Resource depletion is a significant consideration for Central Appalachian production areas and low Btu Northern Appalachian coals where the total available resources decline

over time in the NEEM inputs. The most significant production expansion capability is in Northern Appalachian and Illinois Basin high sulfur coals, the Powder River Basin (PRB) and imports.

Changes in mine costs are applied at the supply curve level, allowing for parallel shifts in the costs for each coal type over time. The changes in cost can be viewed as a function of a number of underlying components such as mine productivity and changes in labor or materials and supplies costs. The supply curve structure allows for changes in the relative costs for coal by coal type and region. Costs do not change at the individual mine level. Thus, the costs for coals of a given type exhibit the same pattern of price changes over time.

Table 15 includes the quality parameters associated with each of the 21 coals included in the NEEM model. The NEEM model allows coal-burning units to select a coal based on its quality profile and the delivered price. As demand for a given coal type increase or decreases, its FOB mine price rises or falls consistent with the underlying supply curve. NEEM optimizes coal selection by plant based on power demand and all environmental constraints.

MMBfu SO2 Hg (lbs./MMBtu) (lbs./TBtu) Description (per Ton) Northern Appalachia High Btu Low Sulfur 2.47 99 25.7 25.8 Northern Appalachia High Btu High Sulfur 3.95 11.2 Northern Appalachia Low Btu Low Sulfur 1.72 14.6 24.2 Northern Appalachia Low Btu High Sulfur 3.42 19.5 23.6 Central Appalachia Compliance 25.5 1.12 5.4 Central Appalachia High Btu Non-Compliance 1.5 7.4 25.3 Central Appalachia Low Btu Non-Compliance 1.8 8.5 24.1 Southern Appalachia 1.97 8 24.4 Illinois Basin - ILBS Hi (High sulfur) 5.2 6.3 22.8 Illinois Basin - ILBS Med (Medium sulfur) 2.8 6.5 22.8 Illinois Basin - ILBS Hi (Low sulfur) 1.7 4.5 22.8 4.82 21.4 24.2 Central Basin Lignite 2.62 12.8 13.5 Montana Powder River Basin 1 19 5.2 18.1 Northern (WY) Powder River Basin 0.89 7.1 16.8 Central (WY) Powder River Basin 0.75 5.4 17.1 Southern (WY) Powder River 0.65 5.8 17.7 22.9 Rocky Mountain Colorado 0.93 35 Rocky Mountain Utah 1.04 23.1 Four Corners 1.44 6.1 19.3 0.98 5.2 24 Import

Table 15: Coal Quality Parameters

B.15.1 Transportation Matrices

Not all plants are allowed to select from the full range of coals available in the model.

Limitations on coal selection are a function of coal rank (bituminous, subbituminous, lignite) – NEEM requires a capital cost to change from bituminous to subbituminous. Limitations are

also a function of transportation access. Coal selection is regulated within the model through a set of plant-specific coal transportation cost matrices that match plants to coals. The matrices are mode specific, barge, rail, truck and mixed mode. The plant/coal-type entries are populated based on the following methodology:

For plants that have selected a given coal in the past, the transportation cost matrix is populated using actual transportation costs for that coal/plant/mode combination.

If a plant has not purchased a given coal in the past but has the physical capability to transport and burn the coal, the transport cost is estimated based on the weighted average delivery cost for the coal-type/NERC region/transport mode combination.

In some limited cases, when no regional data exists, CRA estimated a delivery cost for coal/plant combinations. These cases include increasing the eastern access of PRB and some additional penetration of Illinois Basin coal into the southeast. These cost estimates were developed based on the \$/ton-mile cost of long-haul shipments of the coal in question and the distance between the plant and the producing region.

Aside from the PRB and Illinois exceptions noted above, if there is no history of a coal being consumed in a given NERC region, the plants in that NERC region are not allowed to select that coal.

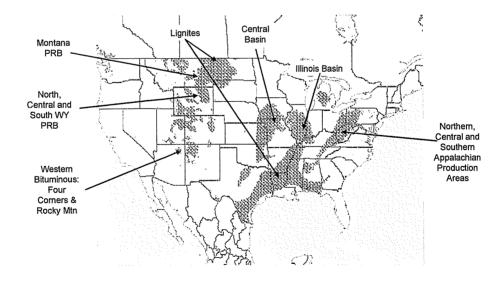


Figure 1: Key Producing Regions in the United States

B.15.2 NEEM Output

The output from the NEEM model is a revised set of coal choices by the plants in the model, a schedule of environmental retrofit decisions, prices for environmental allowances and a plant-specific delivered coal price for each NEEM unit. Due to the dynamics of the NEEM

solution - a multi-year cost optimization given changes in domestic environmental policy - the coals assigned to individual units and used for MAPS inputs may change versus history.

CRA has put the NEEM outputs through an extensive review to ensure that the aggregate coal consumption comports with EIA projections on production capability by coal producing region, historic production levels by coal type and to ensure that the annual changes in coal production by region are feasible. Several input variables, however, have an influence the NEEM solution. Principal among them is the coal availability and pricing/cost in the PRB. The PRB is not constrained by the amount of coal in the ground, but other constraints limit the growth in PRB production and the overall level of production achieved from the basin. Air permit capacity sets a theoretical limit on the amount of coal that can be produced from each of the four PRB regions included.

Table 16: PRB Air Permit Limits

Region	Tons (millions)
Montana	77.0
North Gillette	122.9
South Gillette	168.0
Wright Area	327.0
Total	694.9
Total WY	617.9

While the air permit considerations may limit the ultimate production out of the basin, these limits have been raised in the past and recent production levels have not come close to challenging these limits. Once production begins to approach the limits, the limits may be expanded or alternatives such as increased paving of roads in the region may be considered to alleviate air quality concerns.

Year to year production in the PRB has achieved a 5.5% CAGR between 1989 and 2005. In order to maintain production growth at that rate, substantial infrastructure investment will be required to improve transport access. Production increases will require WY PRB mining activity further to the west, accessing deeper portions of the Wyodak-Anderson coal zone. In addition, federal bonus bids have been steadily increasing since 1998. All of these factors will put pressure on PRB production costs relative to today.

The Montana PRB production has been relatively static at between 35 and 40 MM tons per year over the period due in large measure to sodium levels, transportation access and production tax rates versus Wyoming PRB. To the extent that Montana production continues to remain static, there will be limits on the ultimate production from the basin as a whole.

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to Attorney General's First Request for Information Dated February 14, 2013

February 28, 2013

- Item 93) Please refer to the Berry Direct Testimony at page 29, line
 5: Provide historical and projected MISO costs used to develop Big
 Rivers forecast in electronic format compatible with Microsoft Office
 program.

 Response) Please see the provided MISO Transmission Forecast provided
- with a petition for confidential treatment on the CONFIDENTIAL CDs accompanying these responses.

10 **Witness)** Robert W. Berry

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 94) Please refer to the Berry Direct Testimony at page 29, line
2	10: Provide historical values associated with MISO FTR Market
3	settlements used to develop Big Rivers forecast in electronic format
4	compatible with Microsoft Office programs.
5	
6	Response) Please see the attached document provided with a petition for
7	confidential treatment on the CONFIDENTIAL CDs accompanying these
8	responses.
9	
_	With a see Delegat W. Dense

10 Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 95) Please refer to the Berry Direct Testimony at page 29, line 2 16: Provide historical values used to develop Big Rivers' forecast for
- 3 MISO non-administrative and non-transmission related costs in
- 4 electronic format compatible with Microsoft Office programs.

5

- 6 Response) Please see the document provided pursuant to a petition for
- 7 confidentiality in response to AG 1-94.

8

9 Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Please refer to the Berry Direct Testimony at page 30, line Item 96) Provide calculations and results used to determine "realized 2 revenues" from the TVA transmission path in 2012 as well as the 3 calculations and assumptions that were used to use this 2012 4 "realized revenue" to forecast projected revenues. Provide information 5 in electronic format compatible with Microsoft Office programs. 6 7 Response) Please see the attached spreadsheet submitted under petition 8 for confidential treatment which shows the realized revenues on the TVA 9 transmission in 2012. For budgeting purposes, Big Rivers assumed it 10 would sell the full capacity of the TVA transmission reservation in 2013 for 11 \$ /MWh. The resulting revenues were rounded to \$ (100 MW 12 times 8,760 hours times \$ = \$). These numbers have been 13 provided under petition for confidential treatment. 14 15

16 Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 97) Please refer to the Berry Direct Testimony at page 31, line
2	13: Provide the generating operating characteristics (capacity, heat
3	rates, outage rates, ramp rates, fuel contract information, demand
4	and energy forecasts and other production cost model input) that Big
5	Rivers supplied ACES to run the production cost model used in the
6	application in electronic format compatible with Microsoft Office
7	programs.
8	
9	Response) Please see the attachments to this response for the requested
10	information. Two of these attachments are provided pursuant to a petition
11	for confidentiality.

12

13 Witness) Robert W. Berry

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

- Item 98) Please refer to the Berry Direct Testimony at page 31, line 1 13: Provide the ACES production model output used in the Big Rivers 2 financial model used in the application in electronic format 3 compatible with Microsoft Office programs. 4 5 **Response)** Please see the Excel file titled "PSC 1-57 - Big Rivers 2013-2016 6 PCM - CONFIDENTIAL.xlsx" provided on the confidential CD accompanying 7 the response to PSC 1-57. 8 9
- Witness)

10

Travis A. Siewert

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1	Item 99) Please refer to the Berry Direct Testimony at page 31, line
2	
3	application by Mr. Siewert in electronic format compatible with
4	Microsoft Office programs.
5	
6	Response) Please see the excel file titled "PSC 1-57 - Big Rivers 2013-2016
7	PCM - CONFIDENTIAL.xlsx" provided on the confidential CD accompanying
8	the response to PSC 1-57.
9	
n	Witness) Travis A Siewert



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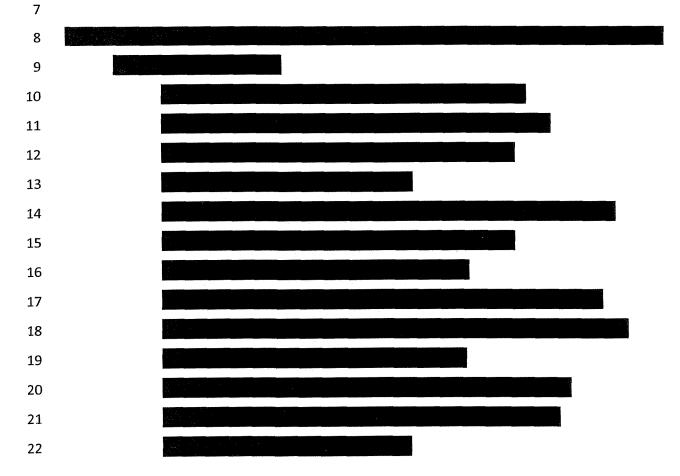
February 28, 2013

- 1 Item 100) Please refer to Exhibit Berry 1: Provide list of planned
- 2 major outage activities for each unit for each outage for 2013 and
- 3 **2014**.

4

5 **Response)** The major activities for each planned outage in 2013 and 2014

6 are as follows:

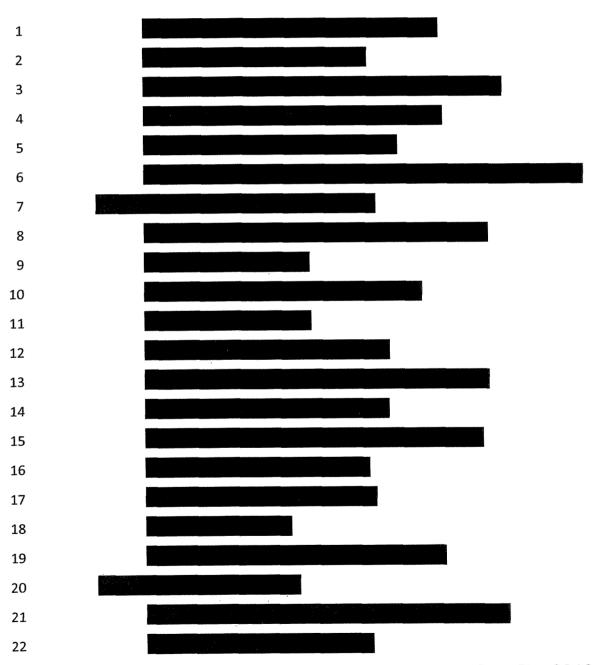


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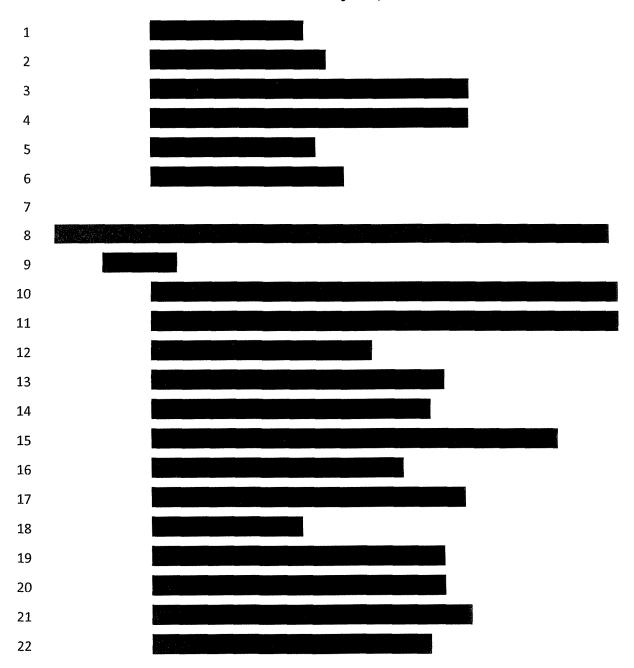


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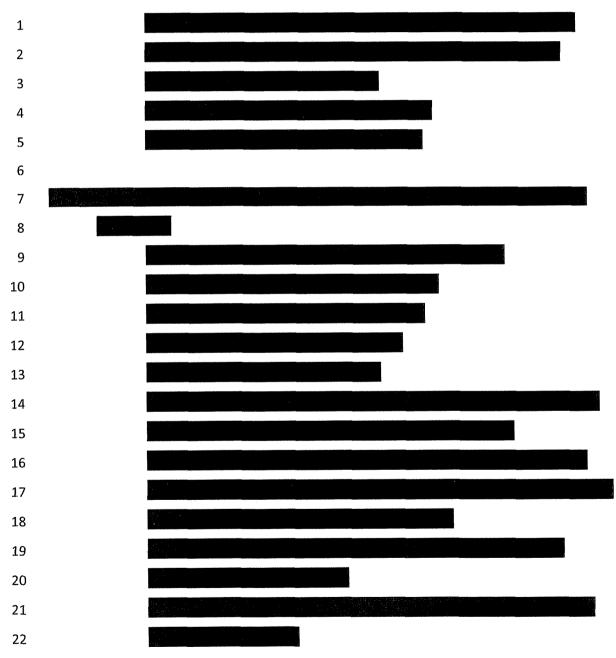


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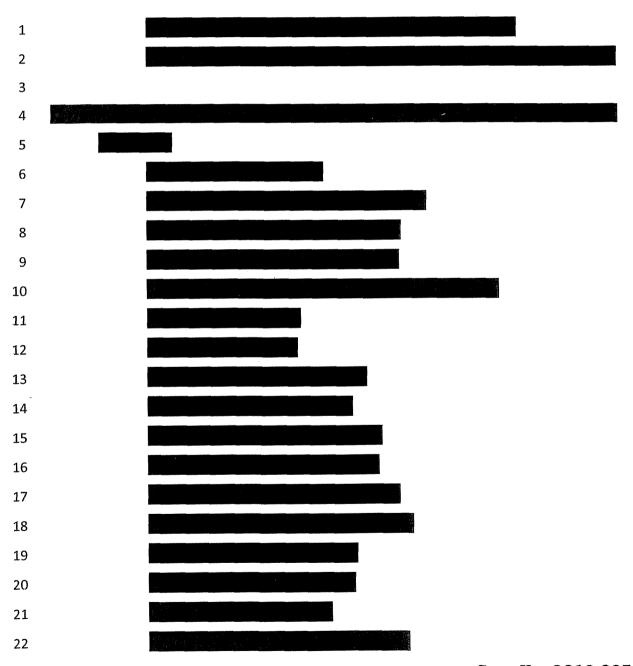


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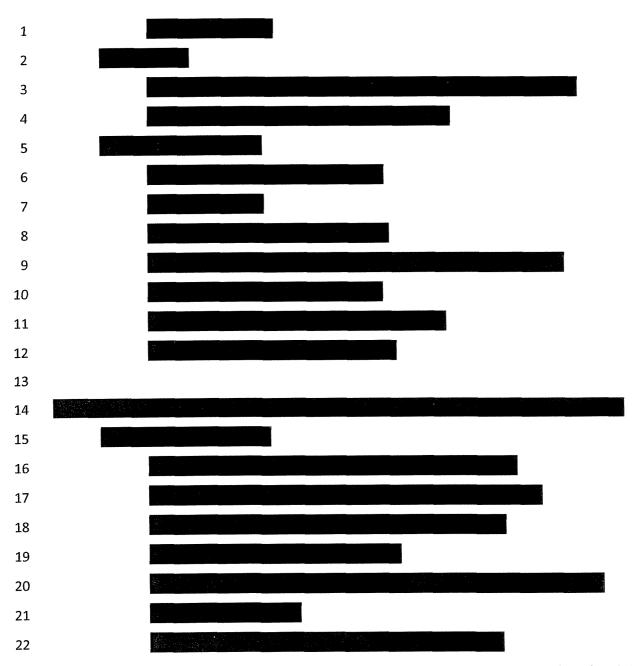


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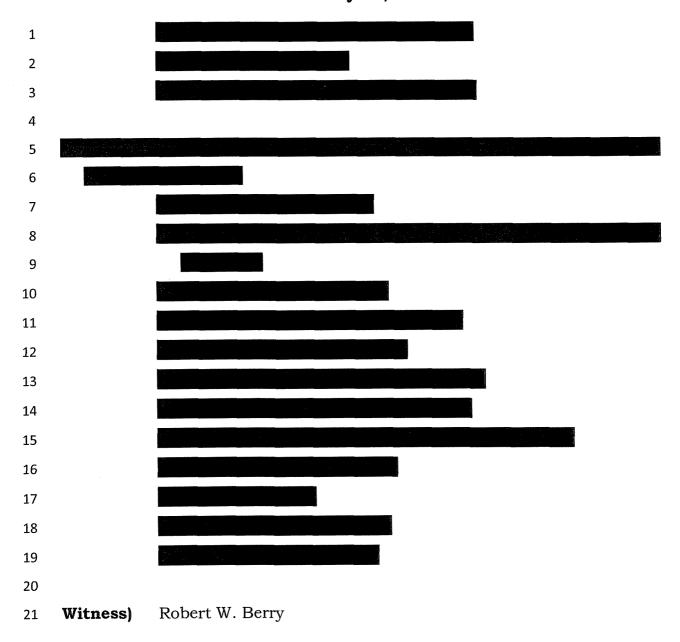


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February 28, 2013

- 1 Item 101) Please refer to Exhibit Berry 1: Provide any changes to the
- 2 2013 and 2014 outage schedule from implementation of the Load
- 3 Concentration Mitigation Plan. Detail should include all major
- 4 outage activities for each unit and each outage.

5

6

- Response) Exhibit Berry 1 depicts changes in the outage schedule from
- 7 closing of the "Unwind Proceeding" in July, 2009 to October, 2012. Changes
- 8 in Exhibit Berry 1 due to implementation of the Load Concentration
- 9 Mitigation Plan are limited to the cancellation of Wilson's scheduled outages
- in 2013 and 2014. As part of its Load Concentration Mitigation Plan, Big
- 11 Rivers expects to temporary idle its Wilson Station until the wholesale
- 12 market improves or until Big Rivers can replace the load vacated by
- 13 Century's exit. Since Big Rivers is temporary idling the Wilson Station it
- will defer the outages until it returns the unit to service.
- 15 See Table below:

	Unit	Net MW	2013	Change	2014	Change	Overall Change
Outage Schedule at Closing	Wilson	417					
Current Outage Schedule	Wilson			(28)		(7)	(35)
Total Changes			·	(28)		(7)	(35)

16

- 17 The major outage activities that were cancelled due to implementation of the
- 18 Load Concentration Mitigation Plan are listed below:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

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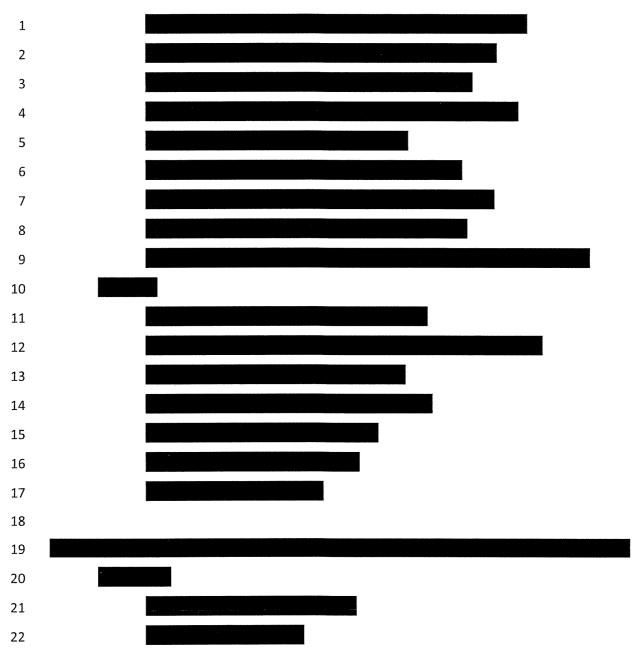


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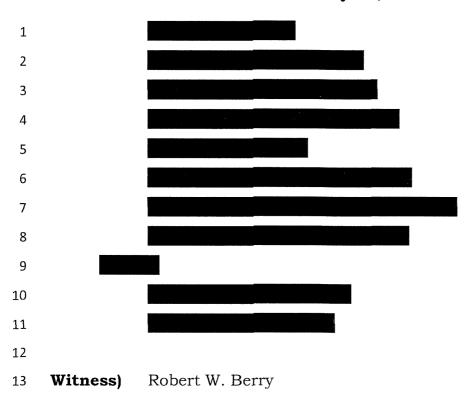


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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 102) Please refer to Exhibit Berry 2: Provide detailed Fixed
2	Departmental Expenses for all units by year and by routine and
3	outage.
4	
5	Response) Attached pursuant to a petition of confidentiality is the detailed
6	Fixed Departmental Expenses for all stations/units by year for 2013-2016
7	by routine and outage. All information excludes the City of Henderson's
8	share of Station Two city's share.
9	

10 **Witness)** Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 103) Please refer to Exhibit Berry 2: Provide any changes to the

2	detailed Fixed Departmental Expenses for all units by year and by
3	routine and outage from implementation of the Load Concentration
4	Mitigation Plan.
5	
6	Response) There are no changes from Exhibit Berry 2 for the Load
7	Concentration Analysis and Mitigation Plan. The Mitigation Plan scenario
8	assumes with notice of Century departure Wilson Station will lay-up the
9	unit starting September 1, 2013 and will remain in layup status throughout
1.0	the 2014-2016 financial plan. The 2013 budget and 2014-2016 financial
11	plan reflects the same lay-up information.

13 Witness) Robert W. Berry

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 104) Please refer to Exhibit Berry 3: Provide detail of each item
2	in capital construction budget 2013-2014 by unit and year. Include
3	description of implementation and if and why an outage or derate is
4	required for implementation (as well as expected duration of outage
5	or derate), reason for performance of activity (environmental
6	requirement, recommended maintenance, industry issue, etc.), and
7	whether activity is scheduled based on expected run hours, age,
8	commitment or expected inspection results or other basis for
9	schedule.

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Response) Please see the attached schedule provided with a petition for confidential treatment for a list of Big Rivers' capital projects for budget years 2013 and 2014 with the following additional information: outage or derate requirement with required duration, reason for project, and project justification.

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17 Witness) Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

1	Item 105) Please refer to Exhibit Berry 3: Provide all details of any
2	changes to each item in capital construction budget 2013-2014 by
3	unit and year caused by implementation of Load Concentration
4	Mitigation Plan. Information should include details previously
5	provided including changes to implementation (as well as expected
6	duration of outage or derate), changes to reason for performance of
7	activity (environmental requirement, recommended maintenance,
8	industry issue, etc.), and changes to whether activity is scheduled
9	based on expected run hours, age, commitment or expected inspection
10	results or other basis for schedule.
11	
12	Response) Wilson capital construction budget 2013-2014 is the only unit
13	affected by the Load Concentration Analysis and Mitigation Plan. Details of

changes are identified on the attachment to this response. The attachment is being provided pursuant to a petition for confidentiality.

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17 Witness) Robert W. Berry

> Case No. 2012-00535 Response to AG 1-105 Witness: Robert W. Berry Page 1 of 1



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Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1 2 3	Item 106) Please refer to Exhibit Berry 4: Provide Wilson Lay-Up plan as well as all scheduled activities to occur during Wilson Lay-Up as well as details regarding Wilson Lay-Up plan security, operating,
4	maintenance and administration staff necessary to implement the
5	plan.
6	
7	Response) Please see Big Rivers response to PSC 2-21 (b) for the Wilson lay
8	up plan.
9	The current plan is to utilize existing workforce to implement initial
10	unit layup. Wilson Station will utilize 16 positions during the layup period
11	• Auxiliary Operators 5 each
12	• Control Room Operators 5 each
13	• Lab Technician 1 each
14	• Senior Electrician 1 each
15	Senior Instrument Technician 1 each
16	• Senior Mechanic 1 each
17	• Plant Manager 1 each
18	• Functional Manager 1 each
19	Bargaining unit personnel will perform layup activities as follows:

• Intermittent equipment operation

• Routine inspection

• Rotating idled equipment

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Case No. 2012-00535 Response to AG 1-106 Witness: Robert W. Berry Page 1 of 2

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1	• Site security
2	See "Guards Conduct of Business" document for details in pdf
3	file. The guard duties described in the pdf file will be
4	performed by Wilson Station operations personnel
5	General equipment maintenance
6	Non-Bargaining personnel will perform all administrative activities
7	Administrative Activities:
8	Coleman Station Procurement Agents will support Wilson Station
9	procurement needs
10	
11	Witness) Robert W. Berry

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February 28, 2013

Item 107) If Big Rivers decides to idle the Wilson plant, which

2	carries the lowest variable costs on Big Rivers' system, describe how
3	this will change MISO's economic dispatch of Big Rivers' generation
4	units.
5	a. Does Big Rivers agree that if Wilson is idled, its sales to
6	MISO will be reduced? If not, why not?
7	b. Provide an analysis of Big Rivers' expected sales to MISO
8	through all of the forecasted test period, both with Wilson
9	being idled, and with Wilson not being idled.
10	c. In the event Big Rivers idles the Wilson plant, please confirm
11	that the plant will remain in the company's rate base and
12	that ratepayers will continue to pay for various costs
13	associated with the plant.
14	d. Please confirm that the budget included in the filing, which
15	forms the basis for Big Rivers' fully forecasted test period
16	assumes Wilson is idled.
17	e. Please provide a summary depicting the expected net total
18	projected savings of shuttering the plant, for as long of a
19	time period as such projections have been made.
20	f. Please provide the specific amount of cost that Big Rivers'
21	ratepayers will bear for keeping the Wilson plant in the

company's rate base in the event the plant is idled.

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

reliability and economics. MISO's process will remain unchanged by the

1	
2	Response) If Big Rivers decides to idle the Wilson plant, MISO will continue
3	to dispatch Big Rivers' remaining generation units to optimize system

5 idling of Wilson.

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- a. If Wilson is idled, Big Rivers' sales to MISO will decrease because it will have 417 MW less generation online to sell into the market.
 - b. In the MISO market, Big Rivers sells all its generation to MISO and purchases all of its load from MISO. Big Rivers estimates that if it runs all of its units, its net position (sales purchases) to MISO after Century's departure would be roughly MWh. If Wilson Station were idled, Big Rivers estimates its net position to MISO would be MWh.
- c. If Big Rivers chooses to temporarily idle the Wilson plant, in an effort to minimize cost to its Members, the plant will remain in the company's rate base. Temporary idling of the Wilson Station will save its Members in the short run, and it will be available in the future, when the asset will be able to add more value to Big Rivers' Members.
- d. Confirmed.
- e. Big Rivers' analysis estimates that idling the Wilson Station will save its Members a total of approximately \$72.6 Million in fixed costs during the 2014-2016 timeframe.

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

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1	f. As a result of remaining in rate base, Big Rivers Members will
2	continue to pay the interest, depreciation, insurance, and property
3	taxes on the Wilson Station, as well as the cost of maintaining the
4	unit in an idled state.
5	Depreciation \$20,031,373
6	Property Tax \$ 1,084,660
7	Property Insurance \$ 1,209,356
8	Interest Expense* \$22,544,718
9	Fixed Departmental Expense
10	Labor/Labor Overhead** \$ 1,579,646
11	Total for Test Period
12	*Interest allocation for test period is based on method for allocating
13	2012 actuals.
14	**Proforma adjustment for Wilson labor has been applied.
15	It's important to note that Big Rivers' Members will continue to
16	pay the fixed cost of this unit not only for the three years the plant is
17	idled, but for the remaining useful life of the asset, estimated in the
18	Depreciation Study at 33.5 years.
19	The \$72.6 Million dollar savings referenced in Item E, above, is
20	savings above and beyond the estimated \$7.5 Million needed to
21	maintain the unit in idled state from 2014-2016.
22	

Witness) Robert W. Berry

Big Rivers Energy Corporation Case No. 2012-00535 Attachment to Response AG 1-107(f) Idled Wilson Plant Costs in Rate Base

TEST PERIOD DEPRECIATION	20,031,373
TEST PERIOD PROPERTY TAX	1,084,660
TEST PERIOD PROPERTY INSURANCE	1,209,356
TEST PERIOD INTEREST EXPENSE*	22,544,717
TEST PERIOD FDE	
TEST PERIOD LABOR/LOH**	1,579,646
TOTAL FOR TEST PERIOD	

^{*}Interest allocation for test period is based on method for allocating 2012 actuals. In 2012 the allocation to Wilson was 48%. Actuals are based on gross plant.

^{**}Proforma adjustment for Wilson labor has been applied

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

1	1 Item 108) Please provide a con	by of any and all economic analysis(es)
2	2 upon which Big Rivers bases	or will base its decision to close the
3	3 Wilson generation unit, and/or	any other generation unit(s).
4	4	
5	5 a. Explain fully why	idling Wilson is better and more cost-
6	6 effective than sellin	g it.
7	7	
8	8 Response) The economic analy	sis is not complete and will be made
9	9 available when completed.	
10	a. Big Rivers does not	necessarily believe that idling the Wilson
11	Station is better or m	nore cost-effective than selling the unit. If
12	Big Rivers were able	to sell the asset at a price greater than or
13	equivalent to its Ne	t Book Value on the asset, Big Rivers
14	Members would be a	ble to save the \$72.6 Million (2014-2016)
15	referenced in AG-10'	7(e), as well as the annual depreciation,
16	interest, insurance,	property taxes, and layup maintenance.
17	17 Please see Big Rivers	response to PSC 2-18 for a discussion of
18	its current efforts reg	arding the sale of Wilson Station.
19	19	
20	20 Witness) Robert W. Berry	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 109) Please refer to Crockett Direct at page 5, line 6: Provide
- quantitative and qualitative description of benefits Big Rivers has
- 3 received from reductions of transmission congestion and off system
- 4 sales and purchase since joining MISO.

Please also refer to the response to AG 1-145, where Big Rivers indicates that it successfully sold 92 percent of its available generation in fiscal year 2011, representing a 4 percent increase from 2010 as a result of its membership in MISO. This was the first full year of membership in MISO and was made to provide the most cost-effective alternative for meeting NERC-mandated emergency reserve requirements.

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Witness) David G. Crockett

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 110) Has MISO performed any studies upon which Big Rivers
- 2 will or may rely in making any decision regarding the idling of any
- 3 particular plant? If so, please provide a copy of any and all such
- 4 studies, and any other documents related thereto.
- 6 **Response**) Please see the response to PSC 2-21(a).
- 8 Witness) Robert W. Berry

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 111) If Big Rivers implements the proposed plan to idle one or
2	more generation plants, describe or discuss fully the following items:
3	a. if Big Rivers does not yet know which plant(s) will be idled,
4	how can it be certain that its severance expense will total
5	\$4.6 million, as indicated in the Speed and Haner
6	testimonies? Given the uncertainty as to which plant(s) could
7	be idled, is it appropriate to include \$4.6 million of projected
8	severance costs in its budget?
9	b. discuss how the timing of the idling will coincide with any
10	severance of employees;
11	c. discuss how the severance will affect Big Rivers'
12	unemployment insurance costs, and whether that cost will be
13	passed on to ratepayers, and if so, how;
14	d. discuss the complete plans Big Rivers has regarding any
15	potential re-hiring of the employees necessary to operate the
16	generating plant(s) in the event that off-system sales should
17	increase enough to justify re-starting the idled plant(s);
18	e. discuss the projected length of time required to re-fire any
19	previously idled coal-fired plants and to prepare them to
20	generate power;
21	f. provide estimates of the projected length of time required for
22	all preparations that would be required for Big Rivers'
	O N 0010 00H0H

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Т		transmission system to nanate and transport power,
2		including but not limited to the measures MISO would have to
3		take to make transmission available to handle the re-started
4		generation load;
5	g.	provide the projected costs of re-firing and restarting
6		previously idled coal-fired plants;
7	h.	provide any and all projected costs of freeing up and
8		obtaining transmission rights when any idled plants are re-
9		fired and generation is restarted;
10	i.	in the event Big Rivers re-starts the idled plants, describe
11		whether the company may have to re-idle them again
12		depending on the need for off-system sales, whether in the
13		MISO footprint or elsewhere. If so, provide the projected total
14		costs of doing so, including the severance of employees.
15	j.	If Big Rivers maintains contracts with any union employees,
16		describe whether the contract would allow for: (i) a potential
17		permanent severance of employees; (ii) a potential temporary
18		severance of employees; and/or (iii) a potential series of lay-
19		offs and re-hiring of employees.
20	k.	given the nation-wide shortage of skilled electrical workers,
21		how does Big Rivers propose to recruit the employees

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

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1	necessary to re-start and run any idled generation plant(s) in
2	the event re-starting becomes cost-effective?
3	Response)
4	a. Big Rivers expects to idle either the Wilson Plant or the Coleman Plant
5	due to Century's termination notice. Both of these plants employ
6	approximately the same number of individuals and both plants would
7	require approximately the same staffing levels in an idled state
8	Reduction in bargaining unit staffing is defined in the Collective
9	Bargaining Agreement (CBA). The bargaining unit employees utilize
10	their company wide seniority during a workforce reduction, thus
11	essentially the same employees will be affected regardless of which
12	plant is idled. The severance plan would be offered to all individuals
13	in the classifications selected for reductions. Again, essentially the
14	same individuals would separate their employment regardless of
15	which plant is idled.
16	Furthermore, the premise that costs must be known and
17	certain to be eligible for recovery from ratepayers is not correct; in this
18	case, Big Rivers is relying upon a fully forecasted test period, not a
19	historic test period, as the basis for the proposed rates. Please see the
20	response to AG 1-65.

Big Rivers plans on idling the plant on or before September 1, 2013.

During the time between September 1, 2013 and December 1, 2013

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b.

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the current staff will assist in implementing the layup procedure. All 1 2 staffing reductions are expected to be complete on December 1, 2013. Unemployment benefits paid to severed employees will affect Big 3 c. Rivers' unemployment insurance costs to the extent the cumulative 4 amount paid reduces the reserves to a level that results in an increase 5 in the insurance rate. Any such increase attributable to the 6 severance of employees contemplated in this case would occur in the 7 insurance rate for 2015. No such increase has been factored into the 8 adjustment in rates applied for in this case. 9 10 d. It is Big Rivers intent to retain the current Control Room Operators to maintain the idled plant. When the market increases the experienced 11 operating staff will already be onsite. In the event of a re-start of the 12 idled plant, we would begin the process as early as possible in 13 advance of the anticipated re-start, and would reassign personnel to 14 attain a mix of experienced personnel and personnel in-training at all 15 plants sufficient to accomplish the re-start and run of the idled plant 16 and the continued operation of all other plants. 17 In this filing Big Rivers has assumed it would idle its Wilson 18 generating plant. The Wilson plant was selected because Big Rivers 19 was in discussions to allow Century Aluminum the ability to obtain 20 21 their power from the wholesale market. Load flow studies indicate that if Century continues to operate, the Coleman plant would be 22

> Case No. 2012-00535 Response to AG 1-111

Witnesses: Robert W. Berry, John Wolfram, James V. Haner, David G. Crockett Page 4 of 9

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required to operate due to system reliability. Since Wilson was the plant selected to be idled, Big Rivers deferred the maintenance outage that was scheduled for the fall of 2013. In addition to restoring the unit for service, Big Rivers will need to perform the maintenance outage that was deferred in 2013. Please see the table below which identifies the tasks necessary to restore the unit from an idled status.

Task	Man-Hours
Labor to remove dehumidification equipment	400
Labor to restore equipment modifications	1,800
Labor to restore electrical/instrumentation equipment	850
Labor to remove bird protection devices	800
Contingency for unanticipated start-up problems	1,000
Total Man-Hours	4,850
Duration in Days (based on 14 people, 8 hr/day)	43

Duration to restore (days) can be reduced by working additional 8 shifts, hours per day and with additional manpower 9 10

Assumptions:

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- Restart time notification allows for temporary transfer of manpower from the other operating facilities
- Minimum staffing requirements are available for transfer

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Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

1		• Outage will be performed working a minimum of 2 shifts, 6 days x
2		10 hours/day with critical path work being performed around the
3		clock as required
4		 Outage duration 1,008 hours or six weeks, working schedule as
5		described in paragraph (4)
6		Big Rivers commences hiring process immediately upon restart
7		notification.
8		• Staffing levels are at full complement within 3 months of unit
9		startup
10	f.	The transmission system will not be impacted by idling or restarting
11		the Wilson facility.
12	g.	Big Rivers has only evaluated the projected costs for restarting Wilson
13		Station. The labor cost for the tasks listed in AG 1-111(e) is estimated
14		to be \$315,250. Excluding coal, the cost for restoring consumable
15		commodities to operational levels is \$1,155,242 as shown in table
16		below.

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1

Cost to Restore Consumable Commodities to Operational Levels			
Commodity	Qty	\$/qty	Cost, \$
Ignition Oil (gal)	120,000	5	600,000
Limestone (ton)	3,834	12	46,008
DBA (gal)	4,500	5	22,500
Acid (gal)	4,500	3	13,500
Caustic (gal)	4,500	2.5	11,250
Ammonia (ton)	40	800	32,000
Aqua Ammonia (55 gal drum)	2	550	1,100
Chlorine (1-ton cylinder)	4	466	1,864
Hydrogen (trailer)	2	3500	7,000
Polisher Resin (cu/ft)	680	121.5	82,620
Deminerilizer Anion Resin (cu/ft)	456	150	68,400
Deminerilizer Cation Resin (cu/ft)	640	150	96,000
Deminerilizer Mixed Bed Resin (cu/ft)	220	150	33,000
New oil for major equipment			100,000
Remove temporary cover from landfill			40,000
		Total	\$1,155,242

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The labor cost to re-staff the Wilson plant has not been estimated. As stated in response to AG 1-111(e), much of the initial staffing will be shared personnel from the other stations. Therefore, the bare minimum cost to restart Wilson Station is \$1,470,492 with the aforementioned labor cost still to be added. It should be noted that Wilson Station has deferred maintenance from 2013 that amounts to \$11,891,000 (\$7,139,000 in Capital and \$4,752,000 in fixed O&M).

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1		Big Rivers plans to complete this outage work before restarting Wilson
2		Station.
3	h.	Big Rivers is not aware of any costs of freeing up and obtaining
4		transmission rights associated with returning any idled plants to
5		operation within the MISO market.
6	i.	Big Rivers will utilize all market intelligence, including ACES, to verify
7		the wholesale market will support the re-start of the Wilson facility.
8		Due to the cost and time constraints to idle and re-start a plant, Big
9		Rivers would not restart the plant unless it was relatively certain the
10		wholesale market would support the long term operation of the plant.
11	j.	Big Rivers' labor agreements with IBEW Local 1701 contain a layoff,
12		displacement, and recall section. See response to PSC 1-38.
13	k.	Big Rivers would follow the recruitment process it currently uses to fill
14		vacant positions in its generation plants. In the event of a re-start of
15		any idled plant, we would begin the process as early as possible in
16		advance of the anticipated re-start, and would reassign personnel to
L7		attain a mix of experienced personnel and personnel in-training at all
18		plants sufficient to accomplish the re-start and run of the idled plant
l9		and the continued operation of all other plants.
20		
21	Witn	esses) Robert W. Berry (all but subsection c)
22		John Wolfram (subsection a, para. 2)
		G W- 2012 2050

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1	James V. Haner (subsections c, j)
2	David G. Crockett (subsection h)

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Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 112) Reference the Haner testimony, p. 11, wherein he states
2	that severance benefits for bargaining unit employees are subject to
3	collective bargaining. If so, describe why Big Rivers' estimated
4	severance costs are known and certain, and thus eligible for recovery
5	from ratepayers?

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Response) Big Rivers objects to this request to the extent that it calls for legal conclusions or seeks information that is protected by the attorney-client and attorney work product privileges. Notwithstanding this objection, but without waiving it, Big Rivers states as follows.

The premise that costs must be known and certain to be eligible for recovery from ratepayers is not correct. In this case, Big Rivers is relying upon a fully forecasted test period, not a historic test period, as the basis for the proposed rates. Please see the response to AG 1-65.

Big Rivers' estimated severance costs reflect Big Rivers' expectations based on a conservative allocation of two weeks of pay for each year of service (within limitations) with continuation of medical and dental benefits during the severance period. The derivation of the cost estimate is described in the Direct Testimony of Mr. James V. Haner.

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21 Witness) John Wolfram

Case No. 2012-00535 Response to AG 1-112 Witness: John Wolfram Page 1 of 1



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information dated February 11, 2013

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- 1 Item 113) Provide a cost-benefit analysis which illustrates the total of
- 2 all costs associated with idling generation plant(s) (including but not
- limited to stranded costs), contrasted with the costs of leaving the
- 4 plant(s) running.
- 5 **Response)** Wilson Station has a useful life of 33.5 years; laying up this
- 6 asset will allow Big Rivers' Members to save this asset for a time when it will
- 7 add additional value to the Members. Based on current market projections
- 8 and Big Rivers' cost estimates, Big Rivers currently believes it is more cost
- 9 effective for Big Rivers' Members to lay up Wilson Station than to run the
- plant until 2019. Wilson Station will, however, be available to operate as
- 11 needed to cover outages at other stations and to maintain its current
- 12 environmental permits.
- 13 **Witness)** Robert W. Berry

Case No. 2012-00535 Response to AG 1-113 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

- Item 114) Given the fact that Kentucky Utilities Co. ("KU") recently 1 announced publicly that it will retire several generation facilities (at 2 least one of which is located close to Big Rivers' service territory), has 3 Big Rivers explored the possibility of selling the Wilson plant, or other 4 generation / transmission facilities to KU? If so, please describe fully 5 the company's efforts in this regard, and the results, if any. 6 7 **Response**) Please see the response to PSC 2-18. 8 9
- 10 Witness) Robert W. Berry



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 115) Please refer to Crockett Direct beginning at page 5, line
2	18: Provide detail on the Engineering supervision cost estimates on
3	each line and substation construction project identified on the latest
4	Big Rivers three-year construction plan. Information should include
5	final spreadsheets, project descriptions, etc. in electronic format
6	compatible with Microsoft Office programs.
7	

- 8 Response) An electronic copy of the final spreadsheet prepared by
- 9 Engineering department supervision for inclusion in the 2013 Capital
- 10 Budget and the 2014 Financial Plan is provided on the CONFIDENTIAL CDs
- 11 accompanying these responses.

12

13 Witness) David G. Crockett

Case No. 2012-00535 Response to AG 1-115 Witness: David G. Crockett Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

1	Item 116) Please refer to Crockett Direct at page 5, line 18: Provide
2	any changes to the Engineering supervision cost estimates on each
3	line and substation construction project identified on the latest Big
4	Rivers three-year construction plan from implementation of the Load
5	Concentration Mitigation plan.
6	
7	Response)
8	
9	
10	
11	Witness) David G. Crockett

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

- Item 117) Please refer to Crockett Direct beginning at page 5, line 1 21: Provide detail on the 2013 and 2014 cost estimates recommended 2 for communication system additions and replacements as well as 3 background information supporting recommendations. Information 4 should include final spreadsheets, project descriptions, etc. in 5 electronic format compatible with Microsoft Office programs. 6 7 8 **Response)** See the response to AG 1-115. 9
- 10 Witness) David G. Crockett

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

1	Item 118) Please refer to Crockett Direct at page 5, line 21: Provid
2	any changes to the 2013 and 2014 cost estimates recommended fo
3	communication system additions and replacements from
4	implementation of the Load Concentration Mitigation plan.
5	
6	Response)
7	
8	
9	
10	
11	Witness) David G. Crockett

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 119) Please refer to Crockett Direct beginning at page 5, line
2	21: Provide detail on the 2013 and 2014 estimated cost estimates
3	from the transmission maintenance program capital construction
4	projects and "capital equipment purchases involving little or no labor
5	expenses" as well as background information supporting
6	recommendations. Information should include final spreadsheets,
7	project descriptions, etc. in electronic format compatible with
8	Microsoft Office programs.
9	
10	Response) An electronic copy of the final spreadsheet prepared by
11	Transmission department supervision for inclusion in the 2013 Capital
12	Budget and the 2014 Financial Plan is provided on the CONFIDENTIAL CDs
13	accompanying these responses.
14	
15	Witness) David G. Crockett

Case No. 2012-00535 Response to AG 1-119 Witness: David G. Crockett Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

1	Item 120) Please	e refer to Crockett Direct at pag	ge 5, line 21: Provide					
2	any changes to t	the 2013 and 2014 estimated co	est estimates from the					
3	transmission maintenance program capital construction projects and							
4	"capital equipme	ent purchases involving little o	or no labor expenses"					
5	from implementa	ttion of the Load Concentration i	Mitigation plan.					
6	;							
7	Response)							
8								
9								
10	·							
11								
12	Witness) David	G. Crockett						

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 121) Please refer to Crockett Direct beginning at page 8, line 3:
Provide system drawings and diagrams depicting Big Rivers'
transmission facilities, their interties to other transmission owners,
as well as depicting phase 1 and phase 2 transmission projects.
Information may be provided in accessible viewable electronic format
(PDF, etc.).

Response) A CONFIDENTIAL copy of Big Rivers' system map is being

provided as an attachment to this response. It includes all Big Rivers'

- transmission facilities, interties, and the phase 1 and 2 transmission projects.
- 13 **Witness)** David G. Crockett

9

12

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 122) Please refer to Crockett Direct beginning at page 8, line 3:
2	Provide any changes to system drawings and diagrams depicting Big
3	Rivers' transmission facilities, their interties to other transmission
4	owners, as well as depicting phase 1 and phase 2 transmission
5	projects from implementation of the Load Concentration Mitigation
6	plan.
7	
8	Response) No changes to Big Rivers' system drawings and diagrams have
9	been made as a result of the implementation of the Load Concentration
10	Analysis and Mitigation plan.
11	

12 Witness) David G. Crockett

Case No. 2012-00535 Response to AG 1-122 Witness: David G. Crockett Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Item 123) Please refer to Crockett Direct beginning at page 8, line 3: 1 drawings Provide system and diagrams depicting regional 2 transmission facilities to which Big Rivers is interconnected (overview 3 of interconnected MISO and TVA systems, etc.). Information may be 4 provided in accessible viewable electronic format (PDF, etc.). 5
- 7 Response) Please see Response to AG 1-121.
- 9 **Witness)** David G. Crockett

6

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 124) Please refer to Crockett Direct beginning at page 8, line 3:
- 2 Provide cost detail of phase 2 transmission project. Information
- 3 should include final spreadsheets, project descriptions, etc. in
- 4 electronic format compatible with Microsoft Office programs.

5

- 6 **Response)** The phase 2 new transmission line project's final cost
- 7 information is provided as an attachment to this response.

8

9 Witness) David G. Crockett

Case No. 2012-00535 Response to AG 1-124 Witness: David G. Crockett Page 1 of 1

Big Rivers Electric Corporation Case No. 2012-00535

Attachment to Response for AG 1-124 Phase II Transmission Project Final Cost

WILSON 161 kV LINE 19-F W.O. 919, UW 2654

Completed: 9/2012

ADDITIONS:	\$
(1 lot) ROWs	669,958.81
Line costs transferred to AC 106	3,375,147.17
Total Project Costs 9/30/12	4,045,105.98



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 125) Please refer to Crockett Direct beginning at page 8, line 3:
- 2 Provide any changes to cost detail of phase 2 transmission project
- 3 from implementation of the Load Concentration Mitigation plan.

4

- 5 **Response)** No changes to the cost of the phase 2 transmission project have
- 6 been made as a result of the implementation of the Load Concentration
- 7 Analysis and Mitigation plan.

8

9 Witness) David G. Crockett

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 126) Please refer to Crockett Direct beginning at page 8, line 3:
- 2 Provide copy of all reports, spreadsheets, etc. provided as part of the
- 3 MISO assessment of transfer capability from the Big Rivers
- 4 transmission zone into other MISO zones and TVA.

5

- 6 **Response**) Please see the attached document. Please also see the response
- 7 to PSC 2-24.

8

9 Witness) David G. Crockett

Case No. 2012-00535 Response to AG 1-126 Witness: David G. Crockett Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

Barron-3

in

electronic

- format. 2 Spreadsheet should include all related formulas and other 3 worksheets linked to cells printed in the Exhibit in an electronic
- format compatible with Microsoft Office programs. 4

Exhibit

- 6 **Response)** Please see the document responsive to AG 1-127 on the PUBLIC
- 7 CDs accompanying these responses.
- 9 Witness) Lindsay N. Barron

Item 127) Provide

1

5

8



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Item 128) Please refer to Exhibit Barron 3: Provide Actual 2010, 2011, 2012 Billing Demands and Energy on a monthly basis for comparison to Exhibit Barron-3, in electronic format. Spreadsheet should include all related formulas and other worksheets linked to cells printed in the Exhibit in an electronic format compatible with Microsoft Office programs.
- 8 **Response)** Please see the 2010-2012 spreadsheets provided with a petition
- 9 for confidential treatment on the CONFIDENTIAL CD accompanying these 10 responses.
- 12 **Witness)** Lindsay N. Barron

7

11

Case No. 2012-00535 Response to AG 1-128 Witness: Lindsay N. Barron Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

to Big Rivers' budgeting for costs associated with HMPL, has Big Rivers included all costs associated with the rulings arising out of the litigation / arbitration with HMPL? a. Please identify all costs associated with pursuing this litigation/ arbitration, state whether the company is seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	1	Item 129) Reference the Siewert testimony at pp. 11, lines 15-22. As
litigation / arbitration with HMPL? a. Please identify all costs associated with pursuing this litigation/ arbitration, state whether the company is seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	2	to Big Rivers' budgeting for costs associated with HMPL, has Big
a. Please identify all costs associated with pursuing this litigation/ arbitration, state whether the company is seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	3	Rivers included all costs associated with the rulings arising out of the
a. Please identify all costs associated with pursuing this litigation/ arbitration, state whether the company is seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	4	litigation / arbitration with HMPL?
litigation/ arbitration, state whether the company is seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	5	
seeking to recover any portion or all of those costs in the instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	6	a. Please identify all costs associated with pursuing this
instant rate filing, and if so, state where those costs are identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	7	litigation/ arbitration, state whether the company is
identified in the application. Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	8	seeking to recover any portion or all of those costs in the
Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	9	instant rate filing, and if so, state where those costs are
Response) By agreement dated July 16, 2009, Western Kentucky Energy Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	10	identified in the application.
Corp. agreed to indemnify Big Rivers against certain adverse consequences of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	11	
of failing to prevail in the arbitration with HMP&L. The obligations of Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	12	Response) By agreement dated July 16, 2009, Western Kentucky Energy
Western Kentucky Energy Corp. are guaranteed by its parent company, E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	13	Corp. agreed to indemnify Big Rivers against certain adverse consequences
E.ON U.S. LLC, and its successor in interest. Accordingly, there are no costs related to the ruling arising out of the litigation / arbitration with HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	14	of failing to prevail in the arbitration with HMP&L. The obligations of
17 costs related to the ruling arising out of the litigation / arbitration with 18 HMP&L included in Big Rivers' fully forecasted test period. Please also see 19 the response to AG 1-208.	15	Western Kentucky Energy Corp. are guaranteed by its parent company,
HMP&L included in Big Rivers' fully forecasted test period. Please also see the response to AG 1-208.	16	E.ON U.S. LLC, and its successor in interest. Accordingly, there are no
19 the response to AG 1-208.	17	costs related to the ruling arising out of the litigation / arbitration with
*	18	HMP&L included in Big Rivers' fully forecasted test period. Please also see
20	19	the response to AG 1-208.
	20	
a. There are no costs associated with pursuing this litigation /	21	a. There are no costs associated with pursuing this litigation /
arbitration included in Big Rivers' fully forecasted test period.	22	arbitration included in Big Rivers' fully forecasted test period.

Case No. 2012-00535 Response to AG 1-129 Witnesses: Travis A. Siewert Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

4	Witness)	Travis A. Siewert
3		
2		to the HMPL litigation / arbitration in the instant rate filing.
1		Therefore, Big Rivers is not seeking to recover any cost related

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- Item 130) Reference the Siewart testimony, p. 12. The modeling inputs appear to adopt assumptions about debt service on the pollution control bonds/financing case 6% interest rate. Given that Big Rivers has filed a modified application in Case No. 2012-00492, does any of this testimony need to be revised to reflect the modified plan filed in that case

 Response) Please see the responses to PSC 2-13 and PSC 2-36.
- 10 Witness) John Wolfram



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 131) Provide spreadsheets linked to formulas in Big Rivers
Financial Model in Exhibit Siewert-2 electronically in format
compatible with Microsoft Office programs. Spreadsheets should
include all formulas and links and include any spreadsheets linked
to Big Rivers Financial Model in Exhibit Siewert-2.

6

Response) An electronic version of Exhibit Siewert-2 is provided on the accompanying CONFIDENTIAL CD. Data contained in Exhibit Siewert-2 was populated using the Big Rivers Financial Model, which was provided in response to the PSC 1-57.

11

12 Witness) Travis A. Siewert

Case No. 2012-00535 Response to AG 1-131 Witness: Travis A. Siewert Page 1 of 1



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1 Item 132) Please refer to Wolfram Direct p.23 l.3 through l.22 and
2 Wolfram Exhibit 3: Please explain in detail the logic behind using the
3 PROFIX functional vector to allocate costs of FERC accounts 500, 502,
4 505, 506, 514, 548, and 557 and how this relates to the FERC
5 Predominance Methodology. Please include in the response exactly
6 how costs in these accounts are unrelated to kilowatt hour levels of

8

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output.

Response) The PROFIX vector is used to classify the costs for these accounts as related to Production Demand. This is consistent with the FERC Predominance Methodology and with precedent employed in other electric rate cases before this Commission. FERC's Staff for a number of years has used the Predominance Method for classifying production O&M accounts. Under this method, if an account is predominantly (51-100%) demand-related, it will be classified as demand. The same concept applies to energy-related costs. Under this method, FERC notes that the specific accounts listed above are predominantly demand-related. FERC has accepted this method in a number of cases and it has become a generally-accepted method for classifying production costs over the last few decades.

20

21

Witness) John Wolfram

Case No. 2012-00535 Response to AG 1-132 Witness: John Wolfram Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 133) Reference the Wolfram testimony at pp. 38-39. Please
- 2 produce copies of any and all communications regarding the cost
- 3 impact estimates between Big Rivers, its consultants and its member-
- 4 owners.

5

- 6 Response) Big Rivers objects to the extent that this request seeks
- 7 communications that are subject to the attorney-client and attorney work
- 8 product privileges. Notwithstanding this objection, and without waiving it,
- 9 please see the attached documents.

10

11 **Witness)** Mark A. Bailey

Case No. 2012-00535 Response to AG 1-133 Witness: Mark A. Bailey Page 1 of 1

Marty Littrel

From:

Marty Littrel

Sent:

Friday, December 14, 2012 4:05 PM

To:

'Renee Jones'

Subject:

RE: Rate case materials - Kenergy

Thanks Renee...

From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Friday, December 14, 2012 3:56 PM

To: Marty Littrel

Subject: RE: Rate case materials - Kenergy

Marty, I can't open that sitx attachment. Can you create a PDF or Word doc and resend?

I haven't read this stuff yet, but it surely is pretty looking. Great job!

Thanks!

R

From: Marty Littrel [mailto:Marty.Littrel@bigrivers.com]

Sent: Friday, December 14, 2012 2:52 PM

To: Renee Jones

Cc: David Hamilton; Greg Starheim **Subject:** Rate case materials - Kenergy

Renee:

This email contains the following attachments:

- 1. A confidential fact sheet for use in-house by co-op personnel **NOT** to be used publically until or after the <u>January 15, 2013</u> rate filing.
- 2. Three versions of a letter to distribution members:
 - Text-only Word document
 - PDF set-up for in-house printing
 - PDF set-up for printing in 2 spot colors by a commercial print vendor
- 3. Zip file with InDesign source files (of the member letter) for use by an outside vendor

Attached are drafts to assist in your communication efforts relating to the upcoming 2012 rate case. The attached "fact sheet" should provide key information to your employees, Board of Directors and consumer-membership to assist from passing along incorrect information. In addition, the "fact sheet" provides greater detail than the "Letter to your Members" should you need more specific information.

1

Please don't forget the detailed data listed within the drafts are not to be disclosed publically until <u>January 15, 2012</u>. Also, please make sure your employees/Board Members are aware this data is for internal purposes only <u>until</u> the rate case filing is made. As you know, we are very cautious with our external communications to avoid harming the rate case efforts before the filing is made.

If you have any questions please don't hesitate to contact me.

Thank you, Marty

MARTY LITTREL

Communications & Community Relations Manager
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42420
Direct (270)844-6153
Marty.Littrel@bigrivers.com

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Kenergy members: Electric rates will rise in 2013

To all members of Kenergy Corp.,

This past August, Century Aluminum notified Kenergy and Big Rivers, our power supplier, of its intent to terminate its power purchase contract on August 20, 2013.

I am writing to you to keep you updated on recent developments regarding Century's termination notice, because it will impact your electric rates this coming August in 2013.

Members of Kenergy enjoy some of the lowest electric rates in the nation.

As these rate increases move forward, we will continue our mission of distributing safe, reliable, and affordable power to the homes and businesses of Breckinridge, Daviess, Caldwell, Crittenden, Hancock, Henderson, Hopkins, Livingston, Lyon, McLean, Muhlenberg, Ohio, Union and Webster counties.

Sincerely, Gregory Starheim, President & CEO



Why should Kenergy members care about Century Aluminum?

Century Aluminum's termination of its power purchase contract will affect your electric rates beginning in August 2013.

Century Aluminum is an aluminum smelter located in Hawesville, Kentucky. They buy power generated by Big Rivers Electric Corporation, the not-for-profit electric generation and transmission cooperative that supplies power to Kenergy.

Century uses approximately 39% of the power generated by our supplier, Big Rivers. Due to Century's termination of its contract, Big Rivers will need to increase electric rates to offset this reduction in power use until replacement buyers are found or other ways are found to compensate for that loss.

As a result of the Century loss, Big Rivers must replace annual electric revenues slightly over \$74 million per year to maintain its financial obligations and continue to reliably and safely provide electricity to our members.

What are Kenergy and Big Rivers doing to help?

Kenergy will work with Big Rivers to aggressively seek new industrial customers through economic development initiatives, to mitigate this rate increase in the long run.

Currently, Big Rivers is actively pursuing opportunities to sell power to other utilities to lessen this rate impact. In addition, Big Rivers is considering idling a power plant to reduce production costs.

If we attract new industrial customers and find other entities to buy the surplus power that was used by Century, we can likely lower rates in the future.

When will this rate increase take effect?

Big Rivers is working now to ask the Kentucky Public Service Commission for permission to raise rates. The request is to be filed January 2013. Assuming Big Rivers receives approval, increased rates would take effect on August 20, 2013.

What's the bottom line change to my electric bill?

Based on the current situation, electric rates are expected to increase by the following amounts, beginning August 2013:

- Residential member estimated 19% increase
- Business and industry estimated 17% increase

Where can I get more information about this?

For more information, visit the Kentucky Public Service Commission website located at **psc.ky.gov**. Case number **2012-00535** will be available for viewing after January 15, 2013.

Case No. 2012-00535 Attachment for Response to AG 1-133 Witness: John Wolfram Page 3 of 28

Kenergy members: Electric rates will rise in 2013

To all members of Kenergy Corp.,

This past August, Century Aluminum notified Kenergy and Big Rivers, our power supplier, of its intent to terminate its power purchase contract on August 20, 2013.

I am writing to you to keep you updated on recent developments regarding Century's termination notice, because it will impact your electric rates this coming August in 2013.

Members of Kenergy enjoy some of the lowest electric rates in the nation.

As these rate increases move forward, we will continue our mission of distributing safe, reliable, and affordable power to the homes and businesses of Breckinridge, Daviess, Caldwell, Crittenden, Hancock, Henderson, Hopkins, Livingston, Lyon, McLean, Muhlenberg, Ohio, Union and Webster counties.

Sincerely, Gregory Starheim, *President & CEO*

Why should Kenergy members care about Century Aluminum?

Century Aluminum's termination of its power purchase contract will affect your electric rates beginning in August 2013.

Century Aluminum is an aluminum smelter located in Hawesville, Kentucky. They buy power generated by Big Rivers Electric Corporation, the not-for-profit electric generation and transmission cooperative that supplies power to Kenergy.

Century uses approximately 39% of the power generated by our supplier, Big Rivers. Due to Century's termination of its contract, Big Rivers will need to increase electric rates to offset this reduction in power use until replacement buyers are found or other ways are found to compensate for that loss.

Largely due to the Century loss, Big Rivers must increase annual electric revenues of slightly over \$74 million per year to maintain its financial obligations and continue to reliably and safely provide electricity to our members.

What are Kenergy and Big Rivers doing to help?

Kenergy will work with Big Rivers to aggressively seek new industrial customers through economic development initiatives to mitigate this rate increase in the long run.

Currently, Big Rivers is actively pursuing opportunities to sell power to other utilities to lessen this rate impact. In addition, Big Rivers is considering idling a power plant to reduce production costs.

If we attract new industrial customers and find other entities to buy the power that was used by Century, we can likely lower rates in the future.

When will this rate increase take effect?

Big Rivers is working now to ask the Kentucky Public Service Commission for permission to raise rates. The request is to be filed January 2013. Assuming Big Rivers receives approval, increased rates would take effect on August 20, 2013.

What's the bottom line change to my electric bill?

Based on the current situation, electric rates are expected to increase by the following amounts, beginning August 2013:

- Residential member estimated 19% increase
- Business and industry estimated 17% increase

Where can I get more information about this?

For more information, visit the Kentucky Public Service Commission website located at **psc.ky.gov**. Case number **2012-00535** will be available for viewing after January 15, 2013.

Rate Case Fact Sheet December 14. 2012

Big Rivers provides the following background information and comments in connection with potential distribution cooperative press releases/media queries about the upcoming Big Rivers rate case filing:

- 1. This material is **NOT** to be used for public information until or after the **January 15, 2013** rate case filing.
- 2. Big Rivers filed a Notice of Intent with the Kentucky Public Service Commission in December 2012 to file an application for a general adjustment of rates that will be filed on January 15, 2013.
- 3. The 2012 Rate Case has been assigned Case No. 2012-00535.
- 4. The Century notice was notice that it had terminated its retail electric service agreement with Kenergy effective August 20, 2013.
 - a. It's likely the rate increase will take effect on August 20, 2013 and retail consumers will probably first see the effects of the rate increase in the bills they receive in September.
- 5. Big Rivers strongly discourages <u>public disclosure</u> of estimates **not** approved by Big Rivers for public disclosure that may change before the filing is made on January 15, 2013.
- 6. Based on the current situation, electric rates are expected to increase by the following amounts, beginning August 2013:
 - a. Residential member estimated 19% increase
 - b. Business and industry estimated 17% increase
 - c. Smelter (RTA) estimated 16% increase
- 7. Total Annual Revenue Request → \$74,476,120

<u>Approximate Breakdown in Annual Revenue Request</u>

- \$62 Million Century Revenue Loss
- \$15 Million Off System Sales Margins
- \$2 Million Depreciation Study Rate Change
- (\$4) Million Savings from 2012 Refinancing of existing RUS debt

- 8. The rate increase proposed by Big Rivers is not driven **solely** by the Century contract termination.
 - a. Although the Century contract termination impact represents a significant portion of the revenue increase, Big Rivers is also seeking additional revenue that is necessary for Big Rivers to comply with its credit agreement requirements, and to properly maintain the facilities that produce the power delivered to Big Rivers' members.
- 9. It is Big Rivers' and its Members' plan to reduce expenses and replace system load, combined with an eventual recovery of prices in the wholesale power market, will enable Big Rivers to reduce its rates in the future. However, because we cannot know if and when and under what circumstances these favorable events will occur, Big Rivers cannot characterize its proposed rate increase as "temporary."
 - a. The increase can be characterized as an increase in electric rates that could be reduced if and when power sales to replace the Century load are obtained through either successful **Economic Development** activities and/or through **Energy Services'** efforts in the wholesale power market (increase in wholesale market energy sales and/or selling power to other utilities).
 - b. Keep in mind, the rate increase requested in the January 15, 2013 rate case filing is still lower than the combined bailout originally requested by both smelters *(\$110 million combined)*. But this filing ONLY deals with the contract termination of one smelter (Century Aluminum).
- 10. Big Rivers and its three distribution member owners are working hard to attract new load (Economic Development and Energy Services) to mitigate the rate increase required to fill the void encountered by Century leaving the system.
 - a. In addition, Big Rivers has undertaken multiple cost cutting measures to help alleviate the increase required to fiscally operate the business such as:
 - i. Deferral of over \$19.5 million in plant maintenance expense in 2012.
 - ii. Re-negotiations for fuel and reagent contracts occurred in 2012 along with continuous improvements to reduce unit heat rates to result in lower operational expenses.
 - iii. Deferred filling a number of job vacancies.
 - iv. Decreased company vehicle inventory and associated expenses.
 - v. Reduced employee benefit costs by adjusting the plan design for medical coverage, revising the eligibility requirements for post-retirement medical coverage (after 2013) and moving to a self-insured medical plan.
 - vi. Refinanced \$442 million in debt that reduced annual interest expense, AND...
 - vii. Could idle or sell one of its power plants to further reduce operational expenses.

Marty Littrel

From:

Marty Littrel

Sent:

Tuesday, December 18, 2012 3:49 PM

To:

'Renee Jones'

Cc:

Roger Hickman; johnwolfram@insightbb.com

Subject:

RE: Questions

Hey Renee:

In an effort to expedite your questions, please forward any questions to me to make sure we are consistent with the message Big Rivers provides you. That would improve the communication flow while allowing me to make sure the right people (Roger, Al, Nick, Jim, Tyson, John, Billie) are responding to your needs. Some of the individuals associated with the rate case are typically out of the office due to the grunt work associated with rate filing.

Here are some answers to your questions.

- 1. One, the increase is estimated based on the total wholesale bill not just kWh. We are not impacting your customer charge that's a retail item not wholesale.
- 2. Each distribution cooperative should be able to perform the specific increases to the retail bill (e.g. yard lights, C&I street lighting, customer charge, etc.) For example, if Kenergy is increasing the leased lighting tariff's that's a distribution decision NOT wholesale (Big Rivers). BTW, I don't know the specifics to Kenergy's rate hike I heard Kenergy was just having a "pass through rate increase" but you could be adding some items within the rate case. Again, you need to discuss with David or Greg.
- 3. In my discussion with the rate consultant (John Wolfram) we assumed the impact of Big Rivers' wholesale rate increase was to add in an approximate distribution charge of 3.3 cents/kWh to the total wholesale bill. (We do not get into the specifics of how the distribution cooperative recovers these costs from its members.)
- 4. Each distribution cooperative will conduct their side of the percentage increase based in their situation and pass along the wholesale rate increase in that mechanism.

Again, here is the rate increase at the retail level (assuming Kenergy is performing a "pass through rate increase")

- a. Residential member estimated 19% increase
- b. Business and industry estimated 17% increase
- c. Smelter (RTA) estimated 16% increase

Any increase beyond this amount would be up to Kenergy.

Thanks, Marty

From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Tuesday, December 18, 2012 3:21 PM

To: Marty Littrel
Subject: Questions

Yesterday, I sent an e-mail to Roger Hickman, asking a few questions about the proposed rate hike. Roger forwarded the questions to someone else. I still haven't heard from anyone, and it's been close to 24 hours.

I hope you can help:

When I took the percentages over to Member Accounting so they could tell me how much the proposed increase would affect the average homeowner, Kathy Gebhard asked if the customer charge was going up by the same percentage rate?
low about the demand charge for 3-phase?
'ard lights?
treet lights?
he said it's rarely a kwh-only increase. It's far more complicated, especially with the C&I rates that are tiered.
an you find out these answers for me?
hanks!

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Marty Littrel

From:

Marty Littrel

Sent:

Wednesday, January 09, 2013 9:25 AM

To:

'Renee Jones'

Subject:

RE: Board decision on joint press conference

No problem. Just call me when you are free this afternoon and we can discuss. Thanks, Marty

From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Wednesday, January 09, 2013 9:24 AM

To: Marty Littrel

Subject: RE: Board decision on joint press conference

Marty,

I just got out of a meeting and am headed to another. I will return to the office this afternoon.

Can you call me then?

Thanks!

R

From: Marty Littrel [mailto:Marty.Littrel@bigrivers.com]

Sent: Wednesday, January 09, 2013 8:06 AM

To: Renee Jones Cc: Greg Starheim

Subject: RE: Board decision on joint press conference

Renee:

Thanks for the update. I'll be there on the 16th.

Also, I'll call you to discuss all the items within your email. I'll begin work on gathering your immediate question regarding proposed rate increase. However, I'm dependent on the rate case team to provide that answer which could take more time than you've allowed ("right now"). In an effort to help expedite the answer to your question, I would advise you to ask Jack Gaines, Kenergy's rate consultant on what Kenergy's rate will be.

Once I receive a response from BREC's rate case team, we can see if our response and his (Jack Gaines) matches up.

Again, I'll call you to discuss within the next 30 minutes.

Thanks, Marty

From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Wednesday, January 09, 2013 7:30 AM

To: Marty Littrel **Cc:** Greg Starheim

Subject: Board decision on joint press conference

M:

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The board decided it would be in our best interest to host a joint press conference so you can answer questions that may be asked about BREC.

When would you like to discuss the logistics of a joint press conference? I'm assuming we can do this over the phone. I can outline how it will happen. But if you want to meet in person, we can do that.

I'm assuming you would be fine with talking to Chuck and Joy on the afternoon of the 15th so they can run their stories on the 16th. The rate case will be filed on the 15th. I assume you will have it hand delivered by messenger, as was the case in the last rate case.

We need to host the joint press conference on Wednesday the 16th at 2 p.m. because Greg has a schedule conflict with the 17th. Please verify that this is OK with your schedule.

Also, in its meeting yesterday, the board wants a few minor changes to the Q&A. They'd like some Illinois and Tennessee utilities added to the list that compares our prices to others.

They want to add this question: Why was Century allowed to leave the system and then come back at a lower rate?

ONE THING I NEED FROM YOU: Right now, our residential rate is 7.75 cents per kilowatt hour. What does BREC calculate our rate will be if the proposed rate increase goes through the PSC?

I will send you a final copy of the Q&A before I send it to Apogee to be uploaded. That will likely be next week.

Thanks!

R

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Marty Littrel

From: Marty Littrel

Sent: Tuesday, January 15, 2013 1:49 PM

To: 'Tim Gossett'; 'dpace@mcrecc.com' (dpace@mcrecc.com)

Cc: Kyle Heavrin (kheavrin@mcrecc.com)

Subject: BREC Rate Case

FYI – The rate case filings have already been sent to Frankfort – they should arrive at the PSC's office later this afternoon (anytime). Below is a quick email concerning the rate case that I've sent to a few individuals giving them a "heads-up" on the rate filing. Feel free to use it with Chambers, EDC's, local politicians, etc. Thanks, Marty

In an effort to keep you updated, Big Rivers Electric Corporation, the wholesale power supplier to Jackson Purchase Energy Corporation (JPEC), Kenergy and Meade County Rural Electric Cooperative (MCRECC) will file an electric rate increase with the Kentucky Public Service Commission (PSC) today (January 15, 2013) requesting the proposed retail rate increases:

	Overall Rate Increase	16.4 percent
6	Smelter	15.6 percent
6	Large Business and Industry	17 percent
6	Residential Members	19 percent

Big Rivers is filing this electric rate increase primarily due to Century Aluminum notifying Big Rivers of its intent to terminate its power purchase contract on August 20, 2013. As background, Century uses approximately 40 percent of the power generated by Big Rivers. As a result of the Century loss, Big Rivers will lose approximately \$200 million in annual electric revenues, therefore even after significant cost cutting measures are enacted – Big Rivers must replace annual revenues slightly over \$74 million per year — to maintain its financial obligations and continue to reliably and safely provide electricity to our members. Based on the current situation, the electric rate increase noted above is expected to occur this coming August in 2013.

In the meantime, Big Rivers and its three members are working aggressively to seek new industrial customers through economic development initiatives to mitigate this rate increase in the long run. In addition, Big Rivers is actively pursuing opportunities to sell power to other utilities to lessen this rate impact.

For more detailed information, you can visit the Kentucky Public Service Commission website located at psc.ky.gov and search for case number 2012-00535 to view the entire filing.

MARTY LITTREL

Communications & Community Relations Manager

Big Rivers Electric Corporation 201 Third Street Henderson, KY 42420 Direct (270)844-6153 Marty.Littrel@bigrivers.com

Marty Littrel

From:

Marty Littrel

Sent:

Friday, January 25, 2013 9:22 AM

To:

'Tim Gossett'; 'dpace@mcrecc.com' (dpace@mcrecc.com); Kyle Heavrin

(kheavrin@mcrecc.com)

Subject:

FW: Answers to your Big Rivers, Century questions

FYI - my comments below to this Kenergy consumer may be helpful to you in the future. Thanks, Marty

From: Marty Littrel

Sent: Thursday, January 24, 2013 11:52 AM

To: 'brian.grant@omhs.org'

Cc: Renee Jones (RJones@kenergycorp.com)

Subject: FW: Answers to your Big Rivers, Century questions

Brian:

I appreciate your questions and concerns. I wish I could provide easy, short answers to your questions, but unfortunately it's not that simple.

As you know, we are asking for a \$74 million rate increase which results in a 16.4% system wide retail electric rate increase. The majority (85%) of this proposed retail electric rate increase is due to Century Aluminum notifying Big Rivers/Kenergy of its intent to terminate its power purchase contract. The Century loss amounts to approximately \$206 million in annual revenue.

While we wish it could be done, cost cutting alone <u>cannot</u> offset the revenue loss from Century terminating its power contract; therefore the only immediate-term solution is to increase rates. The "big ticket" cost reduction measure Big Rivers will take most likely will be to idle a power plant which will result in ***\$121 million** in annual savings (*includes labor and variable costs such as fuel, pollution control reagent, etc.*). However we still have fixed costs for the plant that is idled such as long-term debt principle and interest, property taxes, along with administrative and transmission expenses which can total tens of millions of dollars per year.

The plants to serve the load in our area (including Century) were built in the 1970's and 80's and cost billions of dollars. Building these plants was the low-cost option over the expected life of the plants as opposed to other options such as buying power on the market. In fact at that time, there was no established market for buying power. That phenomenon only came into existence in the late 1990's. In order to finance those plants, Kenergy's predecessors (Green River Electric and Henderson Union) entered into long term power purchase agreements with Big Rivers to supply them with power. Lenders would not finance construction of these costly assets absent such contracts.

You may not be aware, but Kenergy/Big Rivers are the <u>only</u> U.S. utilities that serve two aluminum smelters. Serving loads of this magnitude comes with major risks as you said but Case No. 2012-00535

1

when the smelters first decided to locate in this area in the 1970's we were legally obligated to serve them but even had that not been the case, it would have been economically and politically impossible to refuse to serve them due to the economic benefits they brought to the area. The region was ambitiously pursuing economic development even though serving two extremely large/volatile loads (Alcan and Century) came with major risks. The risks since that time have only increased as global competition in the aluminum business has increased. Remember, these two entities being in the area has been good for western Kentucky for over three decades.

Unfortunately, like everything in life there is a time we must all deal with our own fate and that time is apparently here for Century. While we never want to increase electric rates, unfortunately we have no other choice at this time under this set of circumstances – we don't control Century's profitability, the world-wide price of aluminum, nor Century's decision whether to operate in the U.S. For the record, this will be Big Rivers' second rate increase in only 21-years so we don't have a history of frequent rate increases which is a testament to our commitment to maintain affordable rates.

Big Rivers and its three Member-Owners (including Kenergy) are working hard to attract new industry to the area while also trying to sell power to other utilities to lessen this rate increase over time. Even with this rate increase we will not be the highest priced electricity in the state of Kentucky which is a national leader in terms of low price electricity. Due to our competitive electric rates, large electrical intensive loads continue to be attracted to our area as was the case when the smelters first came to here. We've been talking to several large economic development prospects and are confident over time we can land new industry. Furthermore, our wholesale power marketing division solicits projects that are similar in size if not larger than the load consumed by Century. It just takes time to reach a deal and in time we'll be successful – that's why we have referenced that rates are not increasing permanently.

Century is a longtime valued customer but as a not-for-profit electric generation and transmission cooperative we are limited in our options to lower their rates without raising rates for all remaining homes and businesses served in our 3 Member-Owner's 22-county service territory. Originally Century and Alcan requested \$110 million annually in rate relief which would have meant a 37% retail rate increase for residential and 46% retail rate increase for business/industry in "permanent" relief. Even had we agreed to those demands, there was no assurance that relief would be enough over time and that further demands would not be forthcoming. We felt it wasn't fair to ALL consumers in our Member-owners' service territory to ask them to subsidize the smelters.

As a not-for-profit entity, a significant rate increase would have been necessary regardless of whether we agreed to the smelters' demands or not. The rate increase we are seeking is <u>lower</u> than would have been necessary had we agreed to the smelters' demands and rather than facing the potential for later increased demands from the smelters, we are instead looking at potential rate decreases over time as replacement load comes to our area. Again, we recognize no rate increase is good but we are trying to make the best possible decisions in a tough situation by travelling down the road that, frankly, we view as the lesser of two evils.

I'm sorry for such a long winded answer but ours is a complicated business and it's a tough challenge to communicate all the factors involved in this set of circumstances $_{\rm Case~No.~2012-00535}$

Thanks for your interest. I hope this information provides greater clarity on the situation.

Sincerely, Marty

MARTY LITTREL

Communications & Community Relations Manager
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42420
Direct (270)844-6153
Marty.Littrel@bigrivers.com

From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Wednesday, January 16, 2013 10:06 AM

To: Brian Grant **Cc:** Marty Littrel

Subject: RE: Answers to your Big Rivers, Century questions

Hi, Brian.

I apologize for taking so long to get back to you. Thank you for taking a thoughtful, studied approach to this issue.

Today at 2 p.m., Kenergy will host a press conference about the proposed rate increase. I encourage you to look at our Web site after 3 p.m. Much information, including a recording of the press conference, will be available to our members from the home page. The recording may not load until later today or early tomorrow morning, but keep watching the Web site. There will be a large photo of a lineman working. A copy box will say: "Proposed Rate Increase." Click there.

In the meantime, you asked if the \$74 million is long-term debt. I do not believe that is the case. The lion's share -- \$63 million -- of that is an annual revenue shortfall, so that would not be considered long-term debt.

You've asked some questions, such as how long will Big Rivers'/Kenergy members be asked to pay for this debt, that I am unqualified to answer. Therefore, I have carbon copied Big Rivers' Communications and PR Manager Marty Littrel. I will ask him to answer.

Marty is in meetings this morning, and he will join us at the press conference this afternoon. For those reasons, please allow him some time to get back to you.

Thank you, again, Brian. You asked some very good questions.

Sincerely,

Renee Beasley Jones

Kenergy Corp. Communications Manager (800) 844-4832, ext. 6103 (270) 689-6103, direct line

From: Brian Grant [mailto:brian.grant@omhs.org]
Sent: Tuesday, January 15, 2013 12:56 PM

To: Renee Jones

Subject: RE: Answers to your Big Rivers, Century questions

Ms Jones,

thank you for your response, I do appreciate Kenergy listening to it's members

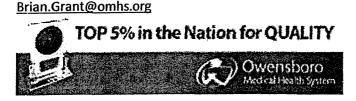
I am still concerned about the costs of 'lost revenue' being passed on to customers. While I too hope that economic development in this area can recover some of the lost power, I am also realistic in knowing that an aluminum smelter requires *substantially* more power than can be replaced with nearly any other industry.

It seems, logically, that Big Rivers should be able to reduce operating cost by scaling back operations related to the Century power-generating, and that that reduction of operating costs would offset the vast majority of the 'lost revenue' from Century's business.

Since this evidently is not the case, I suppose that a likely explanation would be that Big Rivers has more long-term debt to pay off than real operating costs associated with Century's power. I am curious how Big Rivers got into that position, especially with essentially common knowledge that Century wouldn't be financially able to continue to smelt Aluminum in the states long-term. Is that the case? Is the \$74 million primarily long-term debt? And if so, how long will Big Rivers's customers be paying for this debt not associated directly with operation or making power for their homes?

Thank you,

Brian Grant Lean Process Engineer Owensboro Medical Health System office: 270-688-2297



From: Renee Jones [mailto:RJones@kenergycorp.com]

Sent: Monday, January 14, 2013 9:58 AM

To: Brian Grant

Subject: Answers to your Big Rivers, Century questions

Good morning, Brian.

My name is Renee Beasley Jones, Kenergy's communications and PR manager. Our CEO Greg Starheim forwarded your e-mail to me. He is out of town on business and wanted you to receive an answer as soon as possible.

First, I want to thank you for taking time to correspond about this very complex issue that will affect every member on Kenergy's system. Especially because we are owned by the people we serve, we value members' opinions. Thank you for your well-thought-out questions.

Here are the answers:

1) Why would Big Rivers need to maintain its facilities at or near the same capacity as they have now?

Once Century leaves Big Rivers' system, Big Rivers will not use as much coal or employ as many people. So you are right in that regard.

However, Big Rivers' request for \$74 million is not **entirely** to cover lost revenue from Century's departure. In all – after cost-cutting measures are complete – Big Rivers estimates it will need \$63 million to cover the lost revenue. The remainder is needed to meet Big Rivers' financial obligations and to maintain facilities in order to provide reliable and safe electricity.

Here are the cost-cutting measures Big Rivers is proposing or has already implemented.

- Refinanced \$442 million in debt to reduce annual interest expenses,
- Deferred more than \$19.5 million in plant maintenance in 2012,
- Renegotiated fuel and reagent contracts in 2012,
- Implemented continuous improvements to reduce unit heat rates in an effort to lower operational expenses,
- Deferred filling a number of job vacancies,
- Decreased company vehicle inventory and associated expenses,
- Reduced employee benefit costs by adjusting medical coverage plan design, revising the eligibility requirements for post-retirement medical coverages (after 2013) and moving to a self-insured medical plan,
- And idling or selling a power plant.

In all, Big Rivers' revenue from Century's power contract sales comes to nearly \$200 million a year. Big Rivers' \$63 million revenue shortfall is what remains after all of the above cost-cutting measures take effect.

2) Why wouldn't Big Rivers offload the extra capacity "to the grid" for resale?

The wholesale power market, or the grid, is depressed; therefore, Big Rivers, like many utilities (including OMU), would struggle to sell the excess power profitably. However, we believe selling any power left behind by Century to another business or another utility company would be more profitable.

We often tell members they enjoy some of the cheapest power rates in the nation. I recently decided it was time to show them. These are residential rates, but our commercial rates are extremely low as well by comparison. Economic development offices always mention our low cost of power as an incentive for industries looking at relocating.

You can check out commercial and residential electric rates at www.eia.gov. In the meantime, here is an example I have readily available.

For comparison purposes, here are a few 2011 electric rates for residential consumers around the region and U.S.:

Case No. 2012-00535

•	Cairo (III.) Public Utility Co.	11.58
•	City of Bowling Green	10.84
•	City of Owensboro	9.84
•	City of Seattle (Wash.)	7.60
•	Duke Energy	8.39
•	Henderson City Utility Commission	6.13
•	Kenergy	7.46
•	Kentucky Utilities	8.02
•	Louisville Gas & Electric	8.60
•	Madisonville Municipal Utility	8.83
•	Nashville (Tenn.) Electric Service	10.37
•	San Diego Gas & Electric	17.70
•	Vectren (Southern Indiana Gas & Electric Co.)	14.21
•	United Illuminating Co. (Ct.)	22.26

Utility

This is the most current information available from the U.S. Energy Information Administration (EIA). Since 2011, some of these utilities have raised rates.

Cents per kilowatt hour

According to EIA statistics, Kenergy's rates are well below its peers and others across the nation. In recent years, Kenergy members have enjoyed some of the lowest electric rates in the nation.

3) Why can't Kenergy buy electricity "off the grid," instead of buying from Big Rivers?

Kenergy, Jackson Purchase Co-op and Meade County Co-op own Big Rivers. We have an "all requirements" contract with Big Rivers, which is Kenergy's wholesale energy supplier.

Our members own Big Rivers and Kenergy. We own the facilities and assets. Although we operate independently as a separate corporation, we own Big Rivers. It would not be in our members' best interests to buy from any other wholesale supplier.

For decades, we've had very stable rates. Yes, they have gone up. However, many times the market price has been more than Big Rivers' rate. In fact, Century asked for a long-term power contract about 5 years ago during Big Rivers' unwind.

Market prices are fickle and very volatile. We do not feel it would be in our members' best interests to subject them to the market's volatility.

Finally, any actions by Kenergy and Big Rivers must clear the Kentucky Public Service Commission. It is extremely doubtful the PSC would agree that the market would be the best place for Kenergy to buy its power.

It is important that our members realize Big Rivers is working aggressively to sell the power that will be left behind when Century leaves the system. That effort, combined with be effected $\frac{1}{20012-00535}$

economic development efforts, may lessen the impact of the upcoming rate increase over time.

As soon as Big Rivers files its rate case with the PSC, you will be able to view the entire rate case online. Kenergy will post a link on its Web site, along with lots of other information. Just go to our home page. You will see a link to a page of communications tools related to the upcoming rate case, such as a CEO video, audio recording of a press conference Kenergy will host the day after the rate case is filed, graphics, charts and other information.

Brian, I hope my answers helped. This is a very complicated issue that is difficult to explain in the short time allowed here.

Again, we thank you for commenting and sharing your concerns. Please don't hesitate to stay in touch on this issue.

Sincerely,

Renee Beasley Jones

Kenergy Corp. Communications Manager (800) 844-4832, ext. 6103 (270) 689-6103, direct line (270) 316-4335, cell phone

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Meade County RECC members: Electric rates will rise in 2013

To all members of Meade County RECC,

This past June, I provided you with information regarding future rate increases due to pending EPA regulations.

And in August, I let you know that more changes were coming when Century Aluminum notified Big Rivers, our power supplier, of its intent to terminate its power purchase contract on August 20, 2013.

I am writing to you again to keep you updated on recent developments regarding Century's termination notice, because it will impact your electric rates this coming August in 2013.

Members of Meade County RECC enjoy some of the lowest electric rates in the nation.

As these rate increases move forward, we will continue our mission of distributing safe, reliable, and affordable power to the homes and businesses of Breckinridge, Grayson, Hancock, Hardin, Meade and Ohio counties.

Sincerely, Burns Mercer, President & CEO



Why should Meade County RECC members care about a business located 30 miles west in another county?

Century Aluminum's termination of its power purchase contract will affect your electric rates beginning in August 2013.

Century Aluminum is an aluminum smelter located in Hawesville, Kentucky. They buy power generated by Big Rivers Electric Corporation, the not-for-profit electric generation and transmission cooperative that supplies power to Meade County RECC.

Century uses approximately 39% of the power generated by our supplier, Big Rivers. Due to Century's termination of its contract, Big Rivers will need to increase electric rates to offset this reduction in power use until replacement buyers are found or other ways are found to compensate for that loss.

As a result of the Century loss, Big Rivers must replace annual electric revenues slightly over \$74 million per year to maintain its financial obligations and continue to reliably and safely provide electricity to our members.

What are Meade County RECC and Big Rivers doing to help?

Meade County RECC will work with Big Rivers to aggressively seek new industrial customers through economic development initiatives, to mitigate this rate increase in the long run.

Currently, Big Rivers is actively pursuing opportunities to sell power to other utilities to lessen this rate impact. In addition, Big Rivers is considering idling a power plant to reduce production costs.

If we attract new industrial customers and find other entities to buy the surplus power that was used by Century, we can likely lower rates in the future.

When will this rate increase take effect?

Big Rivers is working now to ask the Kentucky Public Service Commission for permission to raise rates. The request is to be filed January 2013. Assuming Big Rivers receives approval, increased rates would take effect on August 20, 2013.

What's the bottom line change to my electric bill?

Based on the current situation, electric rates are expected to increase by the following amounts, beginning August 2013:

- Residential member estimated 19% increase
- Business and industry estimated 17% increase

Where can I get more information about this?

For more information, visit the Kentucky Public Service Commission website located at **psc.ky.gov**. Case number **2012-00535** will be available for viewing case No. 2012-00535 after January 15, 2013.

Attachment for Response to AG 1-133 Witness: John Wolfram

Page 20 of 28

Rate Case Fact Sheet **December 14, 2012**

Big Rivers provides the following background information and comments in connection with potential distribution cooperative press releases/media queries about the upcoming Big Rivers rate case filing:

- 1. This material is NOT to be used for public information until or after the January 15, 2013 rate case filing.
- 2. Big Rivers filed a Notice of Intent with the Kentucky Public Service Commission in December 2012 to file an application for a general adjustment of rates that will be filed on January 15, 2013.
- 3. The 2012 Rate Case has been assigned Case No. 2012-00535.
- 4. The Century notice was notice that it had terminated its retail electric service agreement with Kenergy effective August 20, 2013.
 - a. It's likely the rate increase will take effect on August 20, 2013 and retail consumers will probably first see the effects of the rate increase in the bills they receive in September.
- 5. Big Rivers strongly discourages public disclosure of estimates **not** approved by Big Rivers for public disclosure that may change before the filing is made on January 15, 2013.
- 6. Based on the current situation, electric rates are expected to increase by the following amounts, beginning August 2013:
 - a. Residential member estimated 19% increase
 - b. Business and industry estimated 17% increase
 - c. Smelter (RTA) estimated 16% increase
- 7. Total Annual Revenue Request → \$74,476,120

Approximate Breakdown in Annual Revenue Request

- \$62 Million Century Revenue Loss
- \$15 Million Off System Sales Margins
- \$2 Million Depreciation Study Rate Change
- (\$4) Million Savings from 2012 Refinancing of existing RUS debt

- 8. The rate increase proposed by Big Rivers is not driven solely by the Century contract termination.
 - a. Although the Century contract termination impact represents a significant portion of the revenue increase, Big Rivers is also seeking additional revenue that is necessary for Big Rivers to comply with its credit agreement requirements, and to properly maintain the facilities that produce the power delivered to Big Rivers' members.
- 9. It is Big Rivers' and its Members' plan to reduce expenses and replace system load, combined with an eventual recovery of prices in the wholesale power market, will enable Big Rivers to reduce its rates in the future. However, because we cannot know if and when and under what circumstances these favorable events will occur, Big Rivers cannot characterize its proposed rate increase as "temporary."
 - a. The increase can be characterized as an increase in electric rates that could be reduced if and when power sales to replace the Century load are obtained through either successful Economic Development activities and/or through Energy Services' efforts in the wholesale power market (increase in wholesale market energy sales and/or selling power to other utilities).
 - b. Keep in mind, the rate increase requested in the January 15, 2013 rate case filing is still lower than the combined bailout originally requested by both smelters (\$110 million combined). But this filing ONLY deals with the contract termination of one smelter (Century Aluminum).
- 10. Big Rivers and its three distribution member owners are working hard to attract new load (Economic Development and Energy Services) to mitigate the rate increase required to fill the void encountered by Century leaving the system.
 - a. In addition, Big Rivers has undertaken multiple cost cutting measures to help alleviate the increase required to fiscally operate the business such as:
 - i. Deferral of over \$19.5 million in plant maintenance expense in 2012.
 - ii. Re-negotiations for fuel and reagent contracts occurred in 2012 along with continuous improvements to reduce unit heat rates to result in lower operational expenses.
 - iii. Deferred filling a number of job vacancies.
 - iv. Decreased company vehicle inventory and associated expenses.
 - v. Reduced employee benefit costs by adjusting the plan design for medical coverage, revising the eligibility requirements for post-retirement medical coverage (after 2013) and moving to a self-insured medical plan.
 - vi. Refinanced \$442 million in debt that reduced annual interest expense, AND...
 - vii. Could idle or sell one of its power plants to further reduce operational expenses.

Marty Littrel

From:

Marty Littrel

Sent:

Friday, December 14, 2012 3:34 PM

To:

"Kelly.Nuckols@jpenergy.com" (Kelly.Nuckols@jpenergy.com)

(Kelly.Nuckols@jpenergy.com)'

Subject:

Rate case materials - JPEC

Attachments:

Confidential-FactSheet_RateCase-Dec2012.pdf; JPEC_Century rate letter.docx; JPEC_CenturyRateLetter.pdf; JPEC_CenturyRateLetter_commercialprinter.pdf;

JPEC_CenturyRateLetter.sitx

Kelly:

This email contains the following attachments:

- 1. A confidential fact sheet for use in-house by co-op personnel **NOT** to be used publically until or after the <u>January</u> <u>15, 2013</u> rate filing.
- 2. Three versions of a letter to distribution members:
 - Text-only Word document
 - PDF set-up for in-house printing
 - PDF set-up for printing in 2 spot colors by a commercial print vendor
- 3. Zip file with InDesign source files (of the member letter) for use by an outside vendor

The drafts attached are designed to assist in JPEC's communication efforts relating to the upcoming 2012 rate case. The attached "fact sheet" should provide key information to your employees, Board of Directors and consumer-membership to assist from passing along incorrect information. In addition, the "fact sheet" provides greater detail than the "Letter to your Members" in case you need more specific information.

Please don't forget the detailed data listed within the drafts <u>are not</u> to be disclosed publically until <u>January 15</u>, <u>2012</u>. Also, please make sure your employees/Board Members are aware this data is for internal purposes only until the rate case filing is made. As you know, we are very cautious with our external communications to avoid harming the rate case efforts before the filing is made.

1

If you have any questions please don't hesitate to contact me.

Thank you, Marty

MARTY LITTREL

Communications & Community Relations Manager

Big Rivers Electric Corporation 201 Third Street Henderson, KY 42420 Direct (270)844-6153 Marty.Littrel@bigrivers.com

Page 23 of 28

Rate Case Fact Sheet **December 14. 2012**

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- 3. The 2012 Rate Case has been assigned Case No. 2012-00535.
- 4. The Century notice was notice that it had terminated its retail electric service agreement with Kenergy effective August 20, 2013.
 - a. It's likely the rate increase will take effect on August 20, 2013 and retail consumers will probably first see the effects of the rate increase in the bills they receive in September.
- 5. Big Rivers strongly discourages public disclosure of estimates not approved by Big Rivers for public disclosure that may change before the filing is made on January 15, 2013.
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- 7. Total Annual Revenue Request → \$74,476,120

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 - a. Although the Century contract termination impact represents a significant portion of the revenue increase, Big Rivers is also seeking additional revenue that is necessary for Big Rivers to comply with its credit agreement requirements, and to properly maintain the facilities that produce the power delivered to Big Rivers' members.
- 9. It is Big Rivers' and its Members' plan to reduce expenses and replace system load, combined with an eventual recovery of prices in the wholesale power market, will enable Big Rivers to reduce its rates in the future. However, because we cannot know if and when and under what circumstances these favorable events will occur, Big Rivers cannot characterize its proposed rate increase as "temporary."
 - a. The increase can be characterized as an increase in electric rates that could be reduced if and when power sales to replace the Century load are obtained through either successful **Economic Development** activities and/or through **Energy Services'** efforts in the wholesale power market (increase in wholesale market energy sales and/or selling power to other utilities).
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 - i. Deferral of over \$19.5 million in plant maintenance expense in 2012.
 - Re-negotiations for fuel and reagent contracts occurred in 2012 along with continuous improvements to reduce unit heat rates to result in lower operational expenses.
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 - iv. Decreased company vehicle inventory and associated expenses.
 - v. Reduced employee benefit costs by adjusting the plan design for medical coverage, revising the eligibility requirements for post-retirement medical coverage (after 2013) and moving to a self-insured medical plan.
 - vi. Refinanced \$442 million in debt that reduced annual interest expense, AND...
 - vii. Could idle or sell one of its power plants to further reduce operational expenses.

Jackson Purchase Energy Corporation members:

Electric rates will rise in 2013

To all members of Jackson Purchase Energy Corporation

This past August, Century Aluminum notified Big Rivers, our power supplier, of its intent to terminate its power purchase contract on August 20, 2013.

I am writing to you to keep you updated on recent developments regarding Century's termination notice, because it will impact your electric rates this coming August in 2013.

Members of JPEC enjoy some of the lowest electric rates in the nation.

As these rate increases move forward, we will continue our mission of distributing safe, reliable, and affordable power to the homes and businesses of Ballard, Carlisle, Graves, Livingston, Marshall and McCracken counties.

Sincerely, Kelly Nuckols, *President & CEO* Why should JPEC members care about a business located nearly 150 miles east in another county?

Century Aluminum's termination of its power purchase contract will affect your electric rates beginning in August 2013.

Century Aluminum is an aluminum smelter located in Hawesville, Kentucky. They buy power generated by Big Rivers Electric Corporation, the not-for-profit electric generation and transmission cooperative that supplies power to JPEC.

Century uses approximately 39% of the power generated by our supplier, Big Rivers. Due to Century's termination of its contract, Big Rivers will need to increase electric rates to offset this reduction in power use until replacement buyers are found or other ways are found to compensate for that loss.

Largely due to the Century loss, Big Rivers must increase annual electric revenues of slightly over \$74 million per year to maintain its financial obligations and continue to reliably and safely provide electricity to our members.

What are JPEC and Big Rivers doing to help?

JPEC will work with Big Rivers to aggressively seek new industrial customers through economic development initiatives to mitigate this rate increase in the long run.

Currently, Big Rivers is actively pursuing opportunities to sell power to other utilities to lessen this rate impact. In addition, Big Rivers is considering idling a power plant to reduce production costs.

If we attract new industrial customers and find other entities to buy the power that was used by Century, we can likely lower rates in the future.

When will this rate increase take effect?

Big Rivers is working now to ask the Kentucky Public Service Commission for permission to raise rates. The request is to be filed January 2013. Assuming Big Rivers receives approval, increased rates would take effect on August 20, 2013.

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Where can I get more information about this?

For more information, visit the Kentucky Public Service Commission website located at **psc.ky.gov**. Case number **2012-00535** will be available for viewing after January 15, 2013.

Page 27 of 28

Jackson Purchase Energy Corp. members: Electric rates will rise in 2013

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Sincerely, Kelly Nuckols, *President & CEO*



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For more information, visit the Kentucky Public Service Commission website located at **psc.ky.gov**. Case number **2012-00535** will be available for viewing after January 15, 2013.

Case No. 2012-00535 Attachment for Response to AG 1-133 Witness: John Wolfram

Page 28 of 28

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 134) Provide the names and dates of service for each of Big
2	Rivers' last three (3) chief financial officers (regardless of whether
3	they were permanent or interim CFOs), together with the reasons for
4	their departure from Big Rivers.
5	
6	a. State whether any of these former CFOs are currently
7	employed by Big Rivers, as an employee, consultant or
8	any other capacity whatsoever.
9	
10	Response) Big Rivers' current chief financial officer is Billie J. Richert. She
11	assumed these duties on July 15, 2012.
12	
13	From February 1, 2012, through July 14, 2012, Mark A. Hite was
14	interim chief financial officer. His reason for departure was retirement.
15	
16	From December 5, 2005 through January 31, 2012, C. William
17	Blackburn was chief financial officer. His reason for departure was
18	retirement.
19	
20	Prior to December 5, 2005, no one at Big Rivers had the title of chief
21	financial officer.
22	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's **Initial Request for Information** Dated February 14, 2013

February 28, 2013

a. Neither Mark A. Hite nor C. William Blackburn is currently 1 2 employed by Big Rivers, as an employee, consultant, or in any 3 other capacity. 4 5

Witness) Mark A. Bailey

> Case No. 2012-00535 Response to AG 1-134 Witness: Mark A. Bailey Page 2 of 2



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 135) Please provide copies of all documents that were provided
- to the Big Rivers' Board of Directors pertaining to the departures of
- 3 Mark Hite and Bill Blackburn from employment at Big Rivers.

4

- 5 **Response)** Attached is a copy of an email dated July 13, 2012, from Mark
- 6 Bailey to Big Rivers' Board of Directors related to the retirement of Mark
- 7 Hite. Bill Blackburn's retirement was verbally communicated to the Board.

8

9 Witness) Mark A. Bailey

Case No. 2012-00535 Response to AG 1-135 Witness: Mark A. Bailey Page 1 of 1

Big Rivers Electric Corporation Case No. 2012-00535

Mark Bailey

Attachment to Response for AG 1-135

From:

Mark Bailey

Sent:

Friday, July 13, 2012 5:10 PM

To:

James Sills; Wayne Elliott; Larry Elder; Bill Denton; Lee Bearden; Paul E. Butler

Subject:

Mark Hite Retirement

Today at 4 PM, Mark Hite informed me of his plans to retire early on July 27th and join a business venture with a couple of acquaintances. He said he had been struggling with this for a couple of weeks and made this decision.

I plan to think on next steps over the weekend. It's possible he may have a change of heart. Our original plan for dealing with this was for James Haner to adopt Mark's testimony in the ECP case and let Donna Windhaus and Ralph run their respective areas of Accounting for a little while until a permanent solution can be put in place. The problem with that approach now is that contract negotiations should begin in August just when all the final preparations and hearing will be held in the ECP case. Another option would be to contact Bill Blackburn and see if he would adopt Mark's testimony, but there are several problems with that.

I would very much like for Billie Richert to play some role in all of this in some way and need to think through how that might best be done.

More later. Regards, Mark

Sent from my iPhone

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 11, 2013

February 28, 2013

- 1 Item 136) Please provide a copy of all documents pertaining to the
- 2 departure of Mark Hite and Bill Blackburn from employment at Big
- 3 Rivers.

4

- 5 Response) Attached are the following documents pertaining to the
- 6 retirements of Mark Hite and Bill Blackburn:

7

8

- Letter of Resignation from Bill Blackburn dated January 17, 2012.
- Letter of Resignation from Mark Hite dated July 13, 2012.
- Interoffice Memo dated January 25, 2012, associated with the retirement announcement of Bill Blackburn and related organizational
- changes.
- Interoffice Memo dated February 2, 2012, associated with the reassignment of duties due to Bill Blackburn's retirement.
- Press Release dated February 7, 2012, associated with the retirement announcement of Bill Blackburn and related organizational changes.
 - Interoffice Memo dated July 17, 2012, associated with the retirement announcement of Mark Hite and related organizational changes.

18 19

17

20 **Witness**) Mark A. Bailey



201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

FOR IMMEDIATE RELEASE February 7, 2012

FOR MORE INFORMATION CONTACT:

Mark Bailey

mark.bailey@bigrivers.com

(270) 827-2561

Marty Littrel

marty.littrel@bigrivers.com (270) 844-6153 - office

(270) 577-5496 - cell

BILL BLACKBURN, BIG RIVERS' SR. VICE PRESIDENT OF ENERGY & FINANCIAL SERVICES AND CFO, ANNOUNCES RETIREMENT

HENDERSON, Ky. – Bill Blackburn, Sr. Vice President of Energy & Financial Services and CFO, has announced his retirement effective on January 31, 2012. Blackburn had a 34-year career with Big Rivers beginning his employment as Senior Accountant in 1977.

Bill's departure will be addressed through reassignment of organizational responsibilities. Mark Hite has now become the Interim CFO in addition to his present responsibilities and his title will be Vice President Accounting & Interim CFO. Mark will also become responsible for the Power & Fuels Accounting section.

Bob Berry, Vice President Production, will assume responsibility of the Resource & Forecasting, Power Portfolio Optimization, and Fuels Procurement sections within the company.

Al Yockey, Vice President Government Relations and Enterprise Risk Management, will assume responsibility for Marketing & Member Relations as well as the IS/IT function at Big Rivers.

The Environmental Services section, which currently reports to Al Yockey, will be transferred to Eric Robeson, Vice President Environmental Services and Construction. In addition, Eric Robeson will assume oversight of the Supply Chain section at Big Rivers.

"Bill has made countless, significant contributions to Big Rivers during his career. Of particular note was his selfless dedication to completing the Unwind transaction in July 2009 after nearly six years. He will be missed", says Mark Bailey, President & CEO.

Bill and his wife Angela have two children, Marshall Blackburn of Henderson and William Blackburn of Denver, Colorado. Blackburn and his wife plan to spend time with their grandchildren, while traveling and spending winters at their Florida residence. They will remain in Henderson during the summer and will continue to be active members at the Henderson General Baptist Church.

Big Rivers Electric Corporation is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by three distribution cooperative members—Jackson Purchase Energy Corporation, headquartered in Paducah; Kenergy Corp, headquartered

Case No. 2012-00535 Attachment for Response to AG 1-136 Witness: Mark A. Bailey in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. These member cooperatives deliver retail electric power and energy to more than 111,000 residential, commercial and industrial customers in portions of 22 Western Kentucky counties.

- END -

Page 2 of 6



201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

FOR IMMEDIATE RELEASE: JULY 17, 2012

FOR MORE INFORMATION CONTACT:

Mark Bailey mark: bailey@bigrivers.com (270) 827-2561

Marty Littrel marty.littrel@bigrivers.com (270) 844-6153 - office

MARK HITE, VICE PRESIDENT ACCOUNTING AND INTERIM CHIEF FINANCIAL OFFICER, ANNOUNCES RETIREMENT

HENDERSON, Ky. – Mark Hite, vice president accounting and interim CFO, has announced his plans to retire from Big Rivers effective July 30, 2012. Hite started his career at Big Rivers in 1983 and has worked for the organization twice during his tenure for a total of 27 years of service in the accounting area. "Mark has made countless contributions to Big Rivers during his career. He will be missed, but we wish him well," said Mark Bailey, president and CEO.

Due to Hite's departure, Billie Richert has been named vice president accounting and interim CFO. In addition, she will continue her present duties of managing the company's Oracle business systems infrastructure.

Mark and his wife Sally, who have three adult children, have recently sold their home and plan to reside on the lake. Mark plans to work part time managing financial investments for friends and hopes to do more fishing.

Big Rivers Electric Corporation is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by three distribution cooperative members—Jackson Purchase Energy Corporation, headquartered in Paducah; Kenergy Corp, headquartered in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. These member cooperatives deliver retail electric power and energy to more than 112,000 residential, commercial, and industrial customers in portions of 22 western Kentucky counties.

- END -



201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

TO: All Big Rivers' Employees

FROM: Mark Bailey

DATE: January 25, 2012

SUBJECT: Retirement Announcement (Bill Blackburn)

As you may be aware, Bill Blackburn, Sr. Vice President of Energy & Financial Services and CFO, has announced his plans to retire effective the end of January. Bill has been a loyal, dedicated Big Rivers' employee over his 34-year career and has made countless, significant contributions to the company over that time. He will be greatly missed, but we wish him and his wife Angela the very best as they enter this new phase in life.

Bill's departure will necessitate reassignment of organizational responsibilities. In addition to his regular duties, Bill recently assumed Project Management responsibility for the company's Environmental Compliance Project. Bob Berry, Vice President Production, will assume that responsibility.

Bill also served on the Environmental Compliance Project Steering Committee. His vacancy on that committee will be assumed by Al Yockey, Vice President Government Relations and Enterprise Risk Management, and Mark Hite, Vice President of Accounting.

Mark Hite will become Interim CFO in addition to his present responsibilities and his title will be Vice President Accounting & Interim CFO. Mark will also become responsible for the Power & Fuels Accounting section.

Al Yockey will assume responsibility for Marketing & Member Relations as well as the IS/IT function.

To balance responsibilities and work load, the Environmental Services section, which currently reports to Al Yockey will be transferred to Eric Robeson. In addition, Eric will assume oversight of the Supply Chain section.

The Resource Planning & Fuels Support function, Resource & Forecasting, Power Portfolio Optimization, and Fuels Procurement sections that were assigned to Bob Berry on a temporary

basis when Bill Blackburn assumed the Project Lead of the Corporate Environmental Compliance Project will now be permanently assigned to Mr. Berry.

Vickie King, Bill's Administrative Assistant, will report to Billie Richert who oversees the Business System Infrastructure section.

Please extend your usual good cooperation to all these individuals as we transition to this new structure.

- END -



201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

TO:

All Big Rivers' Employees

FROM:

Marty Littrel

DATE:

February 2, 2012

SUBJECT: Reassignment of Duties

Due to the recent retirement of Bill Blackburn, former Sr. Vice President of Energy & Financial Services and CFO, a reassignment of organizational responsibilities was made to assume those duties.

The Supply Chain and Environmental Services sections, now report to Eric Robeson, Vice President **Environmental Services and Construction.**

Vickie King, will now become the Administrative Assistant for Eric Robeson. In addition, Vickie will assist Rob Toerne and Supply Chain personnel.

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 137) Please provide copies of all documents that were provided
- 2 to the Big Rivers' Board of Directors pertaining to the departure of
- 3 Albert Yockey from employment at Big Rivers.

4

- 5 Response) Please see the attached copy of an email dated January 16,
- 6 2013, from Mark Bailey to Big Rivers' Board of Directors related to the
- 7 retirement of Albert Yockey.

8

9 Witness) Mark A. Bailey

Case No. 2012-00535 Response to AG 1-137 Witness: Mark A. Bailey Page 1 of 1

Mark Bailey

From:

Mark Bailey

Sent:

Wednesday, January 16, 2013 6:58 PM

To:

James Sills; Wayne Elliott; Larry Elder; Bill Denton; Lee Bearden; Paul E. Butler

Subject:

Al Yockey - Confidential

Al Yockey asked to meet with me late this afternoon to inform me he plans to retire at the end of January. He indicated he felt he had to do so for personal reasons. Although I didn't prod terribly much I did so enough to come to the conclusion the reason is truly personal and can understand why he is making this move now and why on such short notice.

The plan is for Al to inform my staff in the morning and then for him to inform his staff shortly thereafter.

Although there is never a good time to deal with replacing someone with Al's responsibilities on such short notice, given where we are with a critical rate case amplifies things that much more. Our situation doesn't lend itself to attracting someone from the outside so I'll likely need to sort out how to best deal with this with the staff I have. The answer will likely involve splitting up his duties amongst myself and other staff. I'll need some time to think that through.

I wanted to let you know ahead of time so you wouldn't be flabbergasted when Al makes his announcement to you while you are at Big Rivers this week.

In the meantime, please treat this as confidential until he tells you. We want to make sure my and Al's staff hear about it in the right sequence and from Al himself. Thanks for your support.

More later.

Mark

Sent from my iPhone

Case No. 2012-00535 Response to AG 1-137 Witness: Mark A. Bailey

Page 1 of 1



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 138) Please provide a copy of all documents pertaining to the
- departure of Albert Yockey from employment at Big Rivers.

3

- 4 **Response)** Attached are the following documents pertaining to the
- 5 retirement of Albert Yockey:

6

- Letter of Resignation dated January 16, 2013.
- Press Release dated January 18, 2013, associated with the retirement
 of Albert Yockey.
- Press Release dated February 1, 2013, associated with organizational changes/re-assignments related to the retirement of Albert Yockey.

12

13 Witness) Mark A. Bailey

Case No. 2012-00535 Response to AG 1-138 Witness: Mark A. Bailey Page 1 of 1



201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.blgrivers.com

FOR IMMEDIATE RELEASE February 1, 2013 FOR MORE INFORMATION CONTACT:

Mark Bailey

mark.bailey@bigrivers.com

(270) 827-2561 - office

Marty Littrel

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BIG RIVERS ANNOUNCES ORGANIZATIONAL CHANGES/RE-ASSIGNMENTS RELATED TO AL YOCKEY'S RETIREMENT

HENDERSON, KY — Today, Mark Bailey, President and CEO of Big Rivers, announced organizational changes to address current and anticipated challenges, including the January 31, 2013 retirement of Al Yockey, Vice President Governmental Relations and Enterprise Risk Management. The changes will become effective February 1, 2013.

Bob Berry, Vice President Production, will assume the position of Chief Operating Officer. He will continue to report to Mr. Bailey. In addition to his current oversight of the Production, Fuels Procurement, and Energy Services functions, Mr. Berry will assume additional responsibilities involving System Operations, Environmental Services and Construction, and Member Relations. David Crockett, Vice President System Operations, and Eric Robeson, Vice President Environmental Services and Construction, will report to Mr. Berry.

Lindsay Barron, Managing Director Energy Services, will become Vice President Energy Services. She will continue to report to Mr. Berry. Russ Pogue, who reported to Mr. Yockey as Manager Marketing and Member Relations, will report to Ms. Barron as Manager Member Relations.

John Talbert, who reported to Mr. Yockey as Director Regulatory and Government Relations, will report to Mr. Bailey as Director Governmental Relations. Dean Lawrence, Director Risk Management/Strategic Planning who previously reported to Mr. Yockey, will also report to Mr. Bailey.

Travis Siewert, Senior Staff Accountant, has been named Director Rates and Tariffs. He will directly report to Billie Richert, Vice President Accounting, Rates and Chief Financial Officer. Mr. Siewert will manage the existing regulatory staff of Roger Hickman, Barbara Harwood, and Inez Galbraith.

Marty Littrel, Communications and Community Relations Manager will become Director Communications and Community Relations. He will continue reporting to Mr. Bailey.

These expanded roles and leadership changes are designed to ensure that Big Rivers remains well-positioned and properly structured for sustainable, long-term growth in the electric generation and transmission industry.

Bailey noted, "Al has been a great asset to Big Rivers. He's made countless, significant

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Attachment for Response to AG 1-138

Witness: Mark A. Bailey Page 1 of 3 contributions to the company during his time with us and we wish him and his wife Terrye the very best in their retirement." In addition, Bailey remarked, "I want to congratulate these individuals on their appointments and thank them for assuming expanded responsibilities. These assignments are part of our ongoing succession planning process to help assure talented leadership continues within all levels of management at Big Rivers."

TY:

Big Rivers Electric Corporation is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by three distribution cooperative members—Jackson Purchase Energy Corporation, headquartered in Paducah; Kenergy Corp, headquartered in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. These member cooperatives deliver retail electric power and energy to more than 112,000 residential, commercial, and industrial customers in portions of 22 western Kentucky counties.

- END -

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201 Third Street P.O. Box 24 Henderson, KY 42419-0024 270-827-2561 www.bigrivers.com

FOR IMMEDIATE RELEASE January 18, 2013

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ALBERT YOCKEY, BIG RIVERS' VICE PRESIDENT OF GOVERNMENTAL RELATIONS & ENTERPRISE RISK MANAGEMENT, ANNOUNCES RETIREMENT

HENDERSON, Ky. – Albert Yockey, Big Rivers' Vice President of Governmental Relations & Enterprise Risk Management, has announced his retirement effective on January 31, 2013. Yockey began his five year career with Big Rivers on February 11, 2008. Prior to joining Big Rivers, Yockey had a lengthy career in the electric utility industry beginning in 1972 with Pennsylvania Power & Light (PP&L) as a Relay Engineer. He was Manager, Transmission Strategic Issues, with American Electric Power before his arrival at Big Rivers.

Yockey received a Bachelor of Science in Electrical Engineering from the University of Pittsburgh and a Master of Science in Electrical Engineering from Lehigh University. In 1994, Al was awarded his Juris Doctorate from The Capital University in Columbus, Ohio.

Mark Bailey, President and CEO, noted, "As a member of my staff, Al dedicated countless hours on numerous critical projects during his five years at Big Rivers. He played a major role in the company's transition following the Unwind Transaction in addition to multiple regulatory and risk management assignments. He has been an integral part of the Senior Leadership Team and is known by all whom have come into contact with him for his caring, gentle and warmhearted nature. He will definitely be missed within Big Rivers both professionally and personally".

No immediate replacement for Mr. Yockey has been named.

Al and his wife Terrye have two children, Jason Yockey of Columbus, Ohio and Lynette Turay of State College, Pennsylvania. Al and his wife look forward to vacationing while spending more time with family, friends and grandchildren.

Big Rivers Electric Corporation is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by three distribution cooperative members—Jackson Purchase Energy Corporation, headquartered in Paducah; Kenergy Corp, headquartered in Henderson; and Meade County Rural Electric Cooperative Corporation, headquartered in Brandenburg. These member cooperatives deliver retail electric power and energy to more than 112,000 residential, commercial and industrial customers in portions of 22 Western Kentucky counties.

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 139) Please refer to Big Rivers' tariff "Standard rate - LICX -
2	Large Industrial Customer Expansion", beginning at Sheet 45 Section
3	1. Specifically describe how this tariff and its provisions helps or
4	hinders Big Rivers' implementation of the Load Concentration
5	Analysis and Mitigation Plan.
6	
7	a. Please explain the import and applicability of the neu
8	definition of "Third Party Suppliers" in the proposed tarifj
9	sheet number 46.
1.0	
11	Response) Big Rivers believes that the flexibility in this tariff language does
12	not hinder Big Rivers' implementation of the Load Concentration Analysis
13	and Mitigation Plan. However, Big Rivers is studying changes to the LICX
14	tariff to clarify its purpose and use going forward.
15	
16	a. The addition of the definition of "Third Party Suppliers" to
17	proposed Sheet No. 46 in the LICX rate schedule has no
18	substantive effect. The definition of that term is taken from the
19	QFS rate schedule in Big Rivers' existing tariff (existing Sheet
20	No. 20) and was added to proposed Sheet No. 46 because the
21	term "Third Party Suppliers" is also used in the LICX rate
22	schedule.
23	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1 **Witness**) Robert W. Berry

Case No. 2012-00535 Response to AG 1-139 Witness: Robert W. Berry

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APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 140) Please refer to Kelly Direct, Depreciation Study at II-1 to II-
- 2 30: Provide the latest updated Boiler Condition Spreadsheet for all
- 3 units covered by depreciation study. Information should include
- 4 electronic format compatible with Microsoft Office programs.

5

- 6 Response) Please see the document provided on the PUBLIC CD
- 7 accompanying these responses for the latest updated Boiler Condition
- 8 Spreadsheet for all units covered by the depreciation study.

9

10 **Witness**) Robert W. Berry

Case No. 2012-00535 Response to AG 1-140 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

1	Item 141) Please reference the Depreciation Study, Engineering
2	Assessment, p. II-7 in vol. 5 of the Application. Does Big Rivers agree
3	with the following statement found therein: "Since the Unwind
4	Closing in 2009, Big Rivers has been unable to perform major
5	maintenance on a schedule consistent with prudent utility
6	operations."
7	
8	a. If so, please explain fully why Big Rivers has not been
9	performing major maintenance on a schedule consistent
10	with prudent utility operations.
11	b. If Big Rivers disagrees with the statement, provide a
12	complete explanation as to why not.
13	c. Provide a schedule depicting the inspections that have not
14	been performed.
15	d. Please describe why the inspections referenced in this
16	statement are in fact necessary.
17	e. On what does RUS base its definition of "prudent utility
18	operations?"
19	
20	Response) Big Rivers does not agree with the referenced statement.
21	a. Please see the response to PSC 2-30.
22	b. Please see the response to PSC 2-30.
23	c. Please see table below.
	Case No. 2012-00535

Response to AG 1-141
Witness: Robert W. Berry
Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

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February 28, 2013

- 1 **d.** Please see table below.
 - **e.** Big Rivers cannot speak for RUS.

2

Item c.	Item c.	Item c.	Item d.
Deferred Inspection	Originally	Current	Reason Inspection is Necessary
Deferred inspection	Scheduled	Schedule	Reason inspection is recessary
Coleman 1 Turbine Valve			Ensure accurate speed/load control and
Inspection	Feb-11	Apr-13	provide overspeed protection.
			Inspect and repair damaged machine
Coleman 3 Turbine/Generator			components and restore running clearances
Inspection	May-12	Apr-14	for maximum efficiency.
			Inspect and repair damaged machine
HMP&L 2 Turbine/Generator			components and restore running clearances
Inspection	Mar-12	Mar-13	for maximum efficiency.

5

6 Witness) Robert W. Berry

Case No. 2012-00535 Response to AG 1-141 Witness: Robert W. Berry Page 2 of 2



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 142) Please provide all Big Rivers correspondence to RUS that
- includes the subject of "scheduled major inspections and maintenance
- 3 per prudent utility operations" as contained in Richert Exhibit 3.
- 5 **Response)** Please see Big Rivers' responses to PSC 2-15 and PSC 2-30.
- 7 **Witness)** Robert W. Berry

4

6

		•	

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 143) Please provide all documents that were provided to the Big
- 2 Rivers Board of Directors regarding the planning and execution of
- 3 corporate-wide cost-cutting business strategies referenced at page 23,
- 4 lines 7-14 of the Richert testimony.

5

- 6 Response) Presentations that were made to the Big Rivers Board of
- 7 Directors regarding the planning of cost cutting strategies are attached to
- 8 this response, subject to a petition for confidentiality.

9

10 **Witness)** Robert W. Berry

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 144) Please provide all documents that were provided to the Big
- 2 Rivers' Board of Directors regarding the planning and execution of
- 3 business strategies including implementation of cost deferral
- 4 measures referenced at page 23, lines 7-14 of the Richert testimony.
- 6 **Response**) Please see the response to AG 1-143.
- 8 Witness) Robert W. Berry

5

7

Case No. 2012-00535 Response to AG 1-144 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 145) Please identify any other parts of the business strategies

2	besides corporate-wide cost-cutting and cost deferral measures that
3	were part of Big Rivers' approach for attaining its MFIR for the period
4	referenced in the Richert testimony at page 23.
5	
6	Response) Big Rivers objects to this request on the grounds that it is overly
7	broad and unduly burdensome. Notwithstanding this objection, but
8	without waiving it, Big Rivers states as follows. Other parts of the business
9	strategies besides corporate-wide cost cutting and cost deferral measures
10	that were part of Big Rivers' approach for attaining its MFIR for the fiscal
11	year 2011 included the following:
12	
13	• Implementation of a general rate increase effective September 1,
14	2011 resulting from the Commission's order in Case No. 2011-
15	00036 which was filed March 1, 2011. This was the first time
16	Big Rivers had obtained a wholesale tariff rate increase in 20
17	years.
18	 Big Rivers voluntarily prepaid \$11.5 million on its 5.75 percent
19	RUS Series A note, thus reducing interest expense.
20	 Big Rivers successfully sold 92 percent of its available
21	generation in fiscal year 2011, representing a 4 percent increase
22	from 2010 as a result of its membership in the Midwest

Case No. 2012-00535 Response to AG 1-145 Witness: Billie J. Richert Page 1 of 2

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

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February 28, 2013

1		Independent Transmission System Operator, Inc. ("MISO").
2		This was the first full year of membership in MISO and was
3		made to provide the most cost-effective alternative for meeting
4		NERC-mandated emergency reserve requirements.
5	•	Big Rivers effectively managed its cash flow and successfully
6		funded internally all of its operating expenses and capital
7		expenditures in 2011 without any new borrowing, thus avoiding
8		additional interest costs and related financing costs.
9		
10	Witness)	Billie J. Richert



APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 146) Please provide complete source documentation for all
- inputs into the Financial Model, in electronic spreadsheet readable
- 3 file format.

4

- 5 Response) Please see the files provided on the CONFIDENTIAL CD
- 6 accompanying the response to PSC 1- 57 and the files provided in response
- 7 to AG 1-239.

8

9 Witness) Travis A. Siewert

Case No. 2012-00535 Response to AG 1-146 Witness: Travis A. Siewert Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 147) Please refer to Speed Direct at page 11, line 7: Provide assumptions, data, and summary of fuel procurement contracts Big Rivers provided to ACES in development of the production cost modeling used as an input to the Big Rivers Financial model used in this case. Information should include spreadsheets, etc., in electronic format compatible with Microsoft Office programs.

7

- 8 **Response)** Speed Direct Testimony at page 11, line 7 is discussing non-fuel
- 9 variable costs. Speed Direct Testimony at page 11, lines 15-19 discusses
- 10 the fuels budget development. Please see the attachments to AG 1-97 for
- 11 the delivered fuel cost that was used as an input for ACES production cost
- 12 modeling.

13

14 **Witness**) Robert W. Berry

Case No. 2012-00535 Response to AG 1-147 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

Item 148) Please refer to Speed Direct at page 11, line 7: Provide production cost model output data received from ACES for inclusions in the Big Rivers financial model used in this case. Information should include input and output spreadsheets, etc. in electronic format compatible with Microsoft Office programs.

6

- 7 **Response)** Please see the Excel file titled "PSC 1-57 Big Rivers 2013-2016
- 8 PCM CONFIDENTIAL.xlsx" provided on the confidential CD accompanying
- 9 the Response to PSC 1-57.

10

11 Witness) Travis A. Siewert

Case No. 2012-00535 Response to AG 1-148 Witness: Travis A. Siewert Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 149) Please refer to Speed Direct at page 11, line 7: Provide 2 any changes to information provided to ACES or production cost
- 3 model outputs from implementation of the Load Concentration
- 4 Mitigation plan.

5

- 6 Response) No changes were made to the production related non-fuel
- 7 variable costs inputs provided to ACES for production cost modeling due to
- 8 the implementation of the Load Concentration Mitigation plan.

9

10 Witness) Robert W. Berry

Case No. 2012-00535 Response to AG 1-149 Witness: Robert W. Berry Page 1 of 1

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2012-00535

Response to the Office of the Attorney General's Initial Request for Information Dated February 14, 2013

February 28, 2013

- 1 Item 150) Please refer to Speed Direct at page 11, line 20: Provide
- details of the emission fee budget included in the Big Rivers financial
- 3 model used in this case. Information should include spreadsheets, etc.
- 4 in electronic format compatible with Microsoft Office programs.

5

- 6 **Response)** Please see the electronic spreadsheet provided with a petition
- 7 for confidential treatment on the CONFIDENTIAL CDs accompanying these
- 8 responses.

9

10 **Witness)** Robert W. Berry

Case No. 2012-00535 Response to AG 1-150 Witness: Robert W. Berry Page 1 of 1