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COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

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

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

FILED: July 26, 2018

ORIGINAL

BIG RIVERS ELECTRIC CORPORATION

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

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

July 26, 2018

1 **Item 1)** ***Provide a copy of each debt rating agency report for Big Rivers***
2 ***issued from January 2015 to the present.***
3
4 **Response)** Please see attachments for copies of all credit rating agency reports for
5 Big Rivers issued from January 2015 to the present.
6
7
8 **Witness)** Paul G. Smith
9

BIG RIVERS ELECTRIC CORPORATION

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Case No. 2018-00146

KIUC 2-1 (PGS) – (1of12) Fitch Report 2015.02.05

FITCH AFFIRMS BIG RIVERS ELECTRIC CORP. AT 'BB'; OUTLOOK REVISED TO STABLE

Fitch Ratings-New York-05 February 2015: Fitch Ratings has affirmed the following Big Rivers Electric Corporation's (Big River or BREC) senior secured bonds at 'BB':

--$83.3 million county of Ohio pollution control revenue bonds series 2010A.

The Rating Outlook is revised to Stable from 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 wholesale sale or transmission of electricity.

KEY RATING DRIVERS

OUTLOOK REVISED TO STABLE: The Outlook revision largely reflects the positive effects of Big Rivers' mitigation plan, which was implemented following the termination of power supply contracts by Alcan and Century Aluminum (approximately 65% of the cooperative's revenues). Plan-driven cost reductions, idling of plants, rate increases, off-system sales and use of reserve funds have improved financial viability.

INCREASED RELIANCE ON WHOLESALE MARKETS: While termination of the smelter contracts eliminates exposure to the vagaries of commodity-based products, it leaves BREC with a significant amount of surplus power for sale, both on a contract basis and in the spot market. BREC has found some success with contractual sales to other utilities and sales into Midcontinent ISO (MISO), and it continues to seek other sales opportunities.

RATE RELIEF POSITIVE: Big Rivers and its three members' electric rates are regulated by the Kentucky Public Service Commission (KPSC). Recently approved rate increases and broadly supportive regulation by the KPSC, along with utility initiatives, should allow BREC to achieve satisfactory financial performance. No further rate increases are currently planned.

SUFFICIENT LIQUIDITY: Unrestricted cash and cash equivalents equaled $95.7 million at year end 2013 and are expected to remain around $100 million. Restricted reserves, totaling about $78 million as of Oct. 31, 2014, should be used over the next couple of years to offset the impact of higher electric rates. Additional liquidity is provided by a recently approved $130 million senior secured credit agreement with National Rural Utilities Cooperative Finance Corporation (CFC) and other lenders.

RATING SENSITIVITIES

CONTINUED SUCCESSFUL IMPLEMENTATION OF MITIGATION PLAN: Continued positive implementation of the mitigation plan, which reduces over reliance on short-term energy sales and provides long-term financial stability, could result in a rating upgrade.

INADEQUATE REGULATORY SUPPORT: Insufficient or untimely support by the KPSC would be viewed unfavorably.

CREDIT PROFILE

Big Rivers, a generation and transmission cooperative (G&T), provides all-requirements wholesale electric and transmission service to three electric distribution cooperatives pursuant to contracts through Dec. 31, 2043. The distribution members provide service to a total of about 114,000 retail customers located in 22 western Kentucky counties. Senior staff has experienced some recent changes, but appear to be well versed in cooperative and utility matters.

Capacity and energy is provided to the members through a combination of five owned generation stations, one leased plant and purchased power. Net capacity of owned generation equals 1,444 megawatts (MW). BREC became a member of MISO in December 2010 and is a member/owner of ACES.

In August 2012, Century issued a notice to terminate its power contract with Big Rivers and stated its intent to close its Hawesville, KY smelter. In January 2013, Alcan delivered notice to Big Rivers of its decision to terminate its power supply agreement and its plan to cease smelting operations at its Sebree plant at the end of the one-year notice period. In June 2013, Century acquired the Sebree smelter from Alcan.

MITIGTION PLAN EFFECTUATED

With the pending termination of the smelter agreements, Big Rivers moved forward with a formal load concentration analysis and mitigation plan. Part of the mitigation plan assumed that certain generating units would remain idle when market prices did not support the cost of generating. Big Rivers' revenue requirements in its rate cases assumed that both Coleman Station and Wilson Station would be idled once the smelters are no longer served.

The G&T cooperative continues to evaluate forward bilateral sales agreements, wholesale power contracts and capacity market participation, in light of the 850MW loss of load to the smelters. The cooperative has sold capacity and energy forward from the Wilson Station under multiple agreements through mid-2016 and it has contracted with a Nebraska consortium to sell 67MW of power beginning in 2018 and 2019. BREC and its members have established an economic development incentive rate that is being offered to new and existing businesses.

Big Rivers has also paid off debt, implemented cost-cutting measures, deferred certain maintenance (now caught up), renegotiated fuel contracts, improved heat rate performance and reduced employee benefits to mitigate the effect on customer rates. The G&T sought and received two rate adjustments to address revenue shortfalls caused by the smelter contract terminations and believes the rate increases will be sufficient to allow the cooperative to viably operate without replacement load, should that become necessary.

RESERVES HELP MITIGATE RATE INCREASES

BREC's wholesale and member system electric rates have historically been competitive. In 2009, supported by the KPSC, a plan was put in place where reserve funds were established to benefit Big Rivers members' future rates. These funds are restricted funds and are expected to be used to fully offset the second of the rate increases, through mid-2015 for commercial and industrial customers and mid-2016 for residential customers. As of Oct. 31, 2014, there were $77.4 million in designated reserves which are intended to be drawn down to offset planned rate increases. After 2016, Big Rivers' restricted reserves will be limited to transmission revenues received from the Hawesville smelter.

GREATER CLARITY OF FINANCIAL PERFORMANCE

Big Rivers' financial results and ratios have been negatively impacted by a number of unusual events in recent years, which have made it more difficult to assess the cooperative's intrinsic financial

health. Fitch calculated debt service coverage (DSC) was well below 1x in calendar 2012 and 2013, reflecting these items. Beginning in 2016, when deferred revenues are fully utilized and the amount of future non-member revenues and profits become clearer, a truer picture of sustained bottom-line performance should be provided.

Big Rivers' financial forecast (based on continued operation of Wilson Station with replacement sales), for the period 2014 to 2020 assumes total annual operating revenues of around $490 million and net margins (approximating $20 million) sufficient to produce a times interest earned ratio (TIER) ranging between 1.38x to 1.73x and DSC in the area of 1.50x. Financial performance of the three distribution systems is currently satisfactory.

Contact:

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

Secondary Analyst
Hugh Welton
Director
+1-212-908-0742

Committee Chairperson
Dennis Pidherny
Managing 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'.

Applicable Criteria and Related Research:
--'U.S. Public Power Peer Study -- June 2014' (June 13, 2014);
--'U.S. Public Power Peer Study Addendum - June 2014' (June 13, 2014);
--'U.S. Public Power Rating Criteria' (March 18, 2014);
--'2015 Outlook: U.S. Public Power and Electric Cooperative Sector' (December 2014).

Applicable Criteria and Related Research:
2015 Outlook: U.S. Public Power and Electric Cooperative Sector (Steady as She Goes)
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=831228
U.S. Public Power Rating Criteria
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=740841
U.S. Public Power Peer Study -- June 2014
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=749789
U.S. Public Power Peer Study Addendum - June 2014
http://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=750283

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Case No. 2018-00146

KIUC 2-1 (PGS) – (2of12) Fitch Report 2016.02.04

FITCH AFFIRMS BIG RIVERS ELECTRIC CORP. AT 'BB'; OUTLOOK STABLE

Fitch Ratings-New York-04 February 2016: Fitch Ratings affirms its 'BB' rating on the following bonds issued by Big Rivers Electric Corporation (Big Rivers):

--$83.3 million County of Ohio pollution control revenue bonds series 2010A.

The Rating Outlook is Stable.

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 wholesale sale and transmission of electricity.

KEY RATING DRIVERS

OUTLOOK REMAINS STABLE: The Stable Outlook reflects the beneficial results of Big Rivers' mitigation plan, which was put in place following the termination of power supply contracts with two large aluminum smelters. Cost reductions, idling of generation, rate increases, and off-system sales and use of reserve funds have combined to provide improved financial stability.

IMPORTANCE OF WHOLESALE MARKET SALES: While termination of the smelter agreements has eliminated exposure to volatile smelter sales, it leaves Big Rivers with a significant amount of surplus power for sale. A level of success has been achieved in marketing this power both on a contract basis and into the Midcontinent ISO (MISO) spot market, but short-term sales expose the cooperative to greater risk. Big Rivers is aggressively pursuing other contract sales opportunities.

SUPPORTIVE REGULATION: Big Rivers and its three member systems are rate regulated by the Kentucky Public Service Commission (KPSC). Rate increases and supportive regulatory policies, in conjunction with the cooperative's mitigation plan, should allow Big Rivers to meet its near-term financial goals.

ADEQUATE LIQUIDITY: Unrestricted cash and equivalents totaled about $50 million at year-end 2015. Higher cash balances are expected in 2016 and longer term, unrestricted balances are expected to be in excess of $60 million. A $130 million senior secured credit agreement provides added liquidity.

RATING SENSITIVITIES
ADDITIONAL CONTRACT SALES: Increasingly positive results brought about by Big Rivers Electric Corporation's mitigation plan, particularly additional longer-term capacity contract sales, could result in a credit upgrade.

LESS FAVORABLE REGULATORY SUPPORT: A reversal of supportive regulatory policy by the Kentucky Public Service Commission, in the wake of weaker energy sales or impediments to the mitigation plan could adversely impact Big Rivers' financial position and its rating.

CREDIT PROFILE

Big Rivers, a generation and transmission (G&T) cooperative, provides all-requirements wholesale electric and transmission service to three electric distribution cooperatives pursuant to contracts through Dec. 31, 2043. These distribution members provide service to a total of about 114,000 retail customers located in 22 western Kentucky counties. Kenergy Corporation, the largest of the three systems, previously served two large smelters (approximately 65% of G&T revenues), prior to termination of these contracts. This has resulted in a change to Big Rivers' customer profile which is now more residentially based. Financial performance of the three distribution systems is satisfactory and provides adequate support.

System peak demand, net of smelter load, is now around 700 megawatts (MW), approximately half of historical demand. Big Rivers is working aggressively to market the excess power under intermediate-term contracts and through spot sales in MISO. Big Rivers has implemented a mitigation plan with the goal of achieving financial savings and benefits that would help lower member rates. The cooperative's indenture and loan agreements require a margin for interest ratio (MFIR) of at least 1.10x each year.

IDLING OF GENERATION

With the end of the smelter agreements, Big Rivers no longer has an immediate market for power from the 443 MW coal-fired Coleman Station, which began operation in 1969. The plant has been idled and the cooperative continues to evaluate the best use of this facility.

Big Rivers has also considered idling Wilson Station (417 MW). However, this more cost-efficient plant continues to operate, since it affords greater operating flexibility and the ability to sell power when demand is sufficient and pricing attractive. Excess capacity and associated energy is sold under contract, through the spot market or retained for future contracted sales.

RATE ADJUSTMENTS

With the loss of smelter load and revenue, Big Rivers needed to increase its rates and modify its rate structure among its remaining customers. Following KPSC approved rate increases, wholesale base rates (excluding smelters) now approximate $75 per MWH. By 2020, rates are forecast at about $80 per MWH, and projected to remain fairly steady thereafter. The large industrial rate 'All-In' (net) for 2016 is estimated at $63.88 per MWH and for 2020 is estimated at $66.01. Rural retail customers typically pay about 3.5 cents per KWH in addition to the wholesale rate charged.

In 2009, concurrent with the unwinding of a generating asset lease transaction between Big Rivers and E.ON U.S., the KPSC issued rate orders designed to be sufficient to support the cooperative's financial viability, including the establishment of several reserve funds. These funds will be fully utilized by mid-2016. Thus, Big Rivers' financial forecast will no longer include these restricted reserves. Once the reserves are fully utilized, the average rural rate is expected to be approximately 11.6 cents per KWH. Management hopes to maintain member rate stability by crediting future surplus revenues to member rates.

FINANCIAL FORECAST

Big Rivers' previous financial results were affected by a number of unusual events, making it difficult to assess the cooperative's normalized financial performance. Fitch calculated debt service coverage (DSC) was below 1x in calendar years 2012 and 2013, reflecting termination of the smelter agreements, but improved in 2014 helped by implementation of the mitigation plan and enhanced sales brought on by unusually cold weather. Starting in 2016, when restricted reserves are fully utilized and the impact of non-member sales become clearer, a truer picture of the utility's financial standing is likely.

Big Rivers' current financial forecast for 2015 through 2019 assumes total annual operating revenues of around $450 million and annual net margins in excess of $12 million, including an amount of hedged and non-hedged off-system sales. This is forecasted to produce a times interest

earned ratio (TIER) of about 1.30x and DSC in the area of 1.25x. The KPSC previously authorized a TIER of 1.30x. While Big Rivers believes rates now in place are sufficient to sustain business operations and maintain reasonable financial ratios, a comprehensive energy sales program remains an important part of the cooperative's business model.

Unrestricted cash and equivalents totaled around $50 million at year-end 2015. On March 5, 2015, the cooperative closed on a new three-year $130 million CFC-led syndicated credit facility. The expanded facility is designed to provide approximately $100 million for normal operating requirements and $30 million to be used as a bridge loan for environmental expenditures, pending RUS long-term financing.

Contact:
Primary Analyst
Alan Spen
Senior Director
+1-212-908-0594
Fitch Ratings, Inc.
33 Whitehall Street
New York, NY 10004

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

Committee Chairperson
Kathy Masterson
Senior Director
+1-512-215-3730

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

Additional information is available at 'www.fitchratings.com'.

Applicable Criteria
Revenue-Supported Rating Criteria (pub. 16 Jun 2014)
https://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=750012
U.S. Public Power Rating Criteria (pub. 18 May 2015)
https://www.fitchratings.com/creditdesk/reports/report_frame.cfm?rpt_id=864007

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Case No. 2018-00146

KIUC 2-1 (PGS) – (3of12) Fitch Report 2017.07.07

FitchRatings

Fitch Affirms Big Rivers Electric Corp. at 'BB'; Outlook Revised to Positive

Fitch Ratings-New York-07 July 2017: Fitch Ratings has affirmed its 'BB' rating on the following bonds issued by Big Rivers Electric Corporation (BREC):

--$83 million County of Ohio pollution control revenue bonds, series 2010A.

The Rating Outlook is revised to Positive from Stable.

SECURITY

The bonds are secured by a mortgage lien on substantially all of BREC's owned tangible assets, which include the revenue generated from the wholesale sale and transmission of electricity.

KEY RATING DRIVERS

IMPROVED MARGINS: The revision in Outlook to Positive from Stable reflects Fitch's expectation that the full implementation of BREC's approved rate plan will produce sufficient revenues from the members to fully support all fixed costs beginning in 2017, and that even stronger financial margins may be attained from newly contracted sales to non-members commencing in 2018 and 2019.

PATH TO INVESTMENT GRADE: Fitch believes a path to investment grade is achievable if BREC can demonstrate, on a sustainable basis, stable financial results in light of the full cost of rates to the members and newly contracted sales. In addition, lower leverage resulting from either a decline in total debt outstanding or higher sustained cash flows would be viewed positively.

HIGH LEVERAGE: BREC's leverage profile remains weak, but is expected to improve. Fitch-calculated adjusted debt to adjusted funds available for debt service was over 14x in 2016 and is still high relative to peer utilities. Leverage is expected to improve commensurate with higher pro forma financial margins and debt amortization.

REGULATED UTILITY, SUPPORTIVE REGULATION: BREC and its three member systems are regulated by the Kentucky Public Service Commission (KPSC). However, supportive regulatory policies and successful rate recovery efforts point to a constructive regulatory environment. BREC's last rate order was received in 2014, with rates approved at levels expected to cover total fixed cost on a self-sustaining basis.

MANAGING POWER SUPPLY: BREC has been successfully managing its long resource position, but remains exposed to volatile sales into the Midcontinent ISO (MISO) spot market from available assets, until longer-term bi-lateral sales agreements can be arranged or become effective.

ADEQUATE LIQUIDITY TO IMPROVE: Unrestricted cash and short-term investments totaled $55 million at fiscal end 2016, or about 60 days cash on hand. Cash balances are expected to improve with forecasts showing greater financial margins by 2019. A $130 million senior secured credit agreement provides added liquidity. Maintenance of higher liquidity would also help support an investment grade rating.

RATING SENSITIVITIES

IMPROVED MARGIN AND REVENUE STABILITY: Evidence of improved revenue and margin stability through increased long-term contracted sales and reduced reliance on short-term market sales, and as the full effect of recent rate increases are realized, would be viewed positively and likely result in an upgrade for Big Rivers Electric Cooperative's rating.

REDUCED LEVERAGE: An upgrade in BREC's rating will also be predicated on a reduction in leverage to levels commensurate with the cooperative's revenue profile, customer base and operating margin.

CREDIT PROFILE

BREC, a non-profit generation and transmission (G&T) cooperative formed in 1961, provides all-requirements wholesale electric and transmission service to three electric distribution cooperatives pursuant to all-requirements contracts through Dec. 31, 2043. These distribution members provide service to a total of approximately 116,000 retail customers located in 22 western Kentucky counties. Financial performance of the three distribution systems is satisfactory and provides sufficient support for the current rating.

WELL MANAGED SUPPLY DESPITE RELIANCE on MARKET SALES

BREC has historically provided capacity and energy to its members through a combination of five owned generation stations (1,444 MW), one leased plant and power purchases for a total resource base of 1,819 MW. After the loss of load attributable to two large aluminum smelters, system peak demand has declined to around 650 MWs, or roughly half of historical demand. BREC has implemented a mitigation plan with the goal of achieving financial savings and benefits that would help lower member rates including aggressively marketing the excess power under intermediate-term contracts and through spot sales in MISO.

Existing customer growth coupled with the recent signing of contracts with Kentucky Municipal Energy Agency (KyMEA, rated 'A'/Outlook Stable) and a consortium of Nebraska based utilities, should result in 180 MW of additional intermediate-term contracted sales. In addition, BREC has idled the 443 MW coal-fired Coleman Station which, in total, has narrowed the resource/demand gap to around 200 MW. BREC will continue to aggressively market this excess power for sale.

EXPECTATION OF IMPROVED FINANCIAL MARGINS

BREC filed a rate case with the Kentucky Public Service Commission (KPSC) in 2013 as part of the mitigation plan requesting an increase in rates to levels that would provide full cost recovery of system obligations. The KPSC granted the new rates in 2014 but the full effect of the increases has not been realized until this year, fiscal 2017, as previously set aside reserves were

used to reduce rates paid by Members over the past several years.

Margins are expected to remain slim in fiscal 2017, but existing rates are projected to fully recover total fixed costs, an important determination for a higher rating. For an investment grade rating, Fitch would expect to see financial results follow the forecast with increased margins demonstrated on a sustainable basis once the impact of the full member rates and newly contracted sales are fully incorporated into the results. In addition, the higher forecasted margins, if achieved, would positively influence BREC's currently weak leverage position and improve liquidity, helping to better cushion bondholders against the potential for economic weakness and/or reduced sales.

LEVERAGE AND CAPEX

BREC's leverage/debt profile is weak. At Dec. 31, 2016, BREC had approximately $800 million of total debt outstanding, excluding outstanding lines of credit. All of the outstanding debt consists of fixed rate bonds and loans, maturing in 2032 and includes bullet maturities of $60 million-$70 million due in 2020 and 2021 that BREC expects to pay in full. Another $246 million bullet payment is due in 2023. BREC expects to refinance this larger maturity with long-term, fully amortizing bonds.

While debt has been on the decline since 2012, Fitch-calculated leverage remains high at over 14x FADS. The high leverage is as much a function of the amount of total debt outstanding on an absolute basis as it is the very low annual financial margins demonstrated since 2012. While total debt is not expected to decline much over the intermediate term, as financial margins improve, the high leverage ratios should also improve. Equity to capitalization approximated 36% in 2016. Debt is a very high $7,000 per retail customer.

Anticipated capital spending through 2020 is estimated to total $167 million. Routine capital projects remain steady at approximately $25 million annually over the next few years. Management anticipates internally funding the base CapEx projects and borrow for qualifying transmission projects and all projects related to environmental regulation.

Contact:

Primary Analyst
Andrew DeStefano
Director
+1-212-908-0284
Fitch Ratings, Inc.
33 Whitehall Street
New York, NY 10004

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

Committee Chairperson
Doug Scott
Managing Director
+1-512-215-3725

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

Additional information is available on www.fitchratings.com

Applicable Criteria
Rating Criteria for Public Sector Revenue-Supported Debt (pub. 05 Jun 2017)
(https://www.fitchratings.com/site/re/898969)
U.S. Public Power Rating Criteria (pub. 18 May 2015)
(https://www.fitchratings.com/site/re/864007)

Additional Disclosures
Dodd-Frank Rating Information Disclosure Form
(https://www.fitchratings.com/site/dodd-frank-disclosure/1026210)
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Case No. 2018-00146

KIUC 2-1 (PGS) – (4of12) Fitch Report 2018.07.05

FitchRatings

Fitch Upgrades Big Rivers Electric Corp. to 'BBB-'; Outlook Revised to Stable

Fitch Ratings-New York-05 July 2018: Fitch Ratings has upgraded the following bonds issued by Big Rivers Electric Corporation (BREC) to 'BBB-' from 'BB':

--$83 million County of Ohio pollution control revenue bonds, series 2010A.

The Rating Outlook is revised to Stable from Positive.

SECURITY

The bonds are secured by a mortgage lien on substantially all of BREC's owned tangible assets, which include the revenue generated from the wholesale sale and transmission of electricity.

KEY RATING DRIVERS

IMPROVED, SUSTAINABLE FINANCES: The rating upgrade to 'BBB-' reflects the solid financial results achieved in fiscal 2017, which included higher liquidity and lower leverage, and expectations for sustained improvement over the near term. BREC's improved performance is largely attributable to the full implementation of the cooperative's risk mitigation strategy and approved rate plan.

MANAGING POWER SUPPLY: The upgrade also reflects BREC's ongoing and successful management of its long resource position with reduced exposure to short term market sales over the next few years. Roughly 90% of BREC's capacity will be committed to serving its members and contracted load by 2020 as a result of existing and announced contracts with regional public power utilities and the closure of marginal generating capacity.

DECLINING LEVERAGE: BREC's leverage profile improved in 2017 as a result of better financial margins than in previous years. Fitch-calculated leverage improved to 9.9x in 2017, and Fitch expects this trend will continue with sustained pro forma financial margins and scheduled debt amortization expected to outpace new debt.

REGULATED UTILITY, SUPPORTIVE REGULATION: BREC and its three member systems are regulated by the Kentucky Public Service Commission (KPSC). However, supportive regulatory policies and successful rate recovery efforts point to a constructive regulatory environment. BREC's last rate order, received in 2014, approved rates at levels that allow it to cover total fixed costs on a self-sustaining basis. On the member level rates are set for full cost recovery.

ADEQUATE LIQUIDITY TO IMPROVE: Unrestricted cash and short-term investments totaled $65 million at fiscal end 2017, or about 70 days cash on hand. Cash balances are expected to improve with forecasts showing greater financial margins by 2019. A $100 million senior secured credit agreement provides added liquidity.

RATING SENSITIVITIES

IMPROVED MARGIN AND REVENUE STABILITY: The failure of Big Rivers Electric Cooperative to sustain its improved revenue profile and margins, as well as its reduced reliance on short-term market sales could result in ratings pressure over time.

REDUCED LEVERAGE: Fitch would view positively greater than anticipated reductions in system debt and leverage over time.

CREDIT PROFILE

BREC, a non-profit generation and transmission (G&T) cooperative formed in 1961, provides all-requirements wholesale electric and transmission service to three electric distribution cooperatives pursuant to all-requirements contracts through Dec. 31, 2043. These distribution members provide service to a total of approximately 116,000 retail customers located in 22 western Kentucky counties. Financial performance of the three distribution systems is satisfactory and provides sufficient support for the rating.

IMPROVED FINANCIAL MARGINS

BREC filed a rate case with the Kentucky Public Service Commission (KPSC) in 2013 requesting an increase in rates to levels that would provide full cost recovery of system obligations. The KPSC granted the new rates in 2014, but the full effect of the increases were not realized until fiscal 2017, as previously set aside reserves were used to reduce rates paid by Members over several previous years.

Financial results improved in fiscal 2017 with Fitch-calculated debt service coverage totaling 1.30x, and coverage of full obligations of 1.19x. Margins were aided by short-term market sales, but such sales comprised a limited portion of total margin and the ratios do not include the small amount of remaining mitigation reserve funds that were still available in fiscal 2017. Liquidity remained near historical levels at 71 days cash.

Member rates have been set to allow for full cost recovery, which is an important rating factor and basis for the investment grade rating. However, despite the ramp-up of newly contracted sales over the next few years, Fitch believes the stronger financial margins are sustainable over the intermediate to longer term.

WELL MANAGED SUPPLY

BREC has historically provided capacity and energy to its members through a combination of multiple owned generation stations, one leased plant and power purchases for a total resource base of 1,352 MW in 2017. After the loss of load attributable to the two large aluminum smelters leaving the system, system peak demand has declined to around 650 MWs, or roughly half of historical demand. BREC implemented a mitigation plan with the goal of achieving financial savings and benefits that would help lower member rates including aggressively marketing the excess power under intermediate-term contracts and through spot sales in MISO.

Existing customer growth coupled with the signing of contracts with Kentucky Municipal Energy Agency (KyMEA, A/Stable), a consortium of Nebraska based utilities, and the recently announced full requirements contracted sales to the city of Owensboro, KY (for 165 MW beginning in 2020) significantly increases intermediate-term contracted sales. In addition, BREC idled the 443 MW coal-fired Coleman Station and terminated the lease/contract with the city of Henderson, KY (187 MW as of June 1, 2018), reducing its total capacity to a manageable 10% of total expected peak demand by 2020.

The Nebraska wholesale customers began receiving energy in 2018, but full requirements capacity and energy (85 MW) will phase in over time. The KyMEA contract begins in mid-2019 for 100MW of firm purchase, which is followed by the city of Owensboro's agreement to purchase full requirements from BREC in mid-2020.

IMPROVING LEVERAGE, MANAGEABLE CAPEX

BREC's leverage profile is elevated but improving. At Dec. 31, 2017, BREC had approximately $820 million of total debt outstanding, including $20 million in outstanding lines of credit. All of the outstanding debt consists of fixed rate bonds and loans, maturing no later than 2032 and includes a bullet maturity of $246 million due in 2023. BREC expects to refinance this large payment with long-term, fully amortizing bonds.

Debt has been on a slow decline since 2012. However, Fitch-calculated leverage ratios, which exclude transferred reserve funds from revenue, remained high through 2016. Leverage, as measured by net adjusted debt to adjusted FADS, peaked at over 20.0x in 2015. As reliance on reserve transfers declined through 2017, leverage was a more manageable 9.9x.

While total debt is not expected to decline much over the intermediate term, a sustained improvement in financial margins should allow for a continued decline in leverage over time. Equity to capitalization approximated 37% in 2017. Anticipated capital spending through 2022 is estimated to total $174 million and will be funded with a combination of new debt and internal sources.

Contact:

Primary Analyst
Andrew DeStefano
Director

+1-212-908-0284
Fitch Ratings, Inc.
33 Whitehall Street
New York, NY 10004

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

Committee Chairperson
Joanne Ferrigan
Senior Director
+1-212-908-0723

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Media Relations: Sandro Scenga, New York, Tel: +1 212-908-0278, Email: sandro.scenga@fitchratings.com

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Applicable Criteria

Rating Criteria for Public-Sector, Revenue-Supported Debt (pub. 26 Feb 2018) (https://www.fitchratings.com/site/re/10020113)
U.S. Public Power Rating Criteria (pub. 18 May 2015) (https://www.fitchratings.com/site/re/864007)

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Case No. 2018-00146

KIUC 2-1 (PGS) – (5of12) Moody's Issuer Comment 2015.08.10

MOODY'S
INVESTORS SERVICE

ISSUER COMMENT
10 AUGUST 2015

RATINGS

Big Rivers Electric Corporation	
County of Ohio, Kentucky PCRBs	Ba2
Outlook	Stable

Source: Moody's Investors Service

ANALYST CONTACTS

Kevin G. Rose 212-553-0389
VP-Senior Analyst
kevin.rose@moodys.com

A.J. Sabatelle 212-553-4136
Associate Managing Director
angelo.sabatelle@moodys.com

Chee Mee Hu 212-553-3665
MD-Project Finance
cheemee.hu@moodys.com

Big Rivers Electric Corporation

Credit Opinion

Rating Drivers

» Good progress on implementing load mitigation plans following termination of contracts with two aluminum smelters

» Rate setting subject to jurisdiction of the Kentucky Public Service Commission (KPSC) and credit supportive rate case outcomes in 2013 and 2014

» Revenues from electricity sold to rural and other non-smelter customers under long-term wholesale power contracts with three member owners through 2043

» Ownership of generally competitive, albeit excess, coal-fired generation plants; pursuing environmental compliance plan approved by regulators; environmental cost surcharge in place

Corporate Profile

Big Rivers Electric Corporation (BREC or Big Rivers) is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by its three member system distribution cooperatives -- Jackson Purchase Energy Corporation; Kenergy Corp; and Meade County Rural Electric Cooperative Corporation. These member system cooperatives provide retail electric power and energy to approximately 114,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

SUMMARY RATING RATIONALE

The Ba2 rating considers the credit challenges BREC is facing while it implements load mitigation plans following significant load loss since two aluminum smelters being served by BREC's largest member owner, Kenergy Corp., terminated their respective power purchase contracts, in the first instance effective August 20, 2013 and the second effective January 31, 2014. The rating further reflects significant rate increases approved by the KPSC during 2013 and 2014 and other mitigation steps to compensate for the load loss and to maintain viable financial performance. The Ba2 rating further recognizes the cost plus nature of the cooperative model which generally allows for cost recovery from its members, albeit tempered in this case to some degree because BREC's rates are regulated by the KPSC, which is atypical for the G&T coop sector. Still, Big Rivers' credit profile also reflects the financial benefits of rate case decisions in 2013 and 2014, as well as several steps it took in 2008 and 2009 to unwind a lease and other transactions wherein its prior deficit net worth turned substantially positive, cash receipts were used to repay debt, and residual cash was set aside

in restricted accounts. Following the 2014 rate case decision, cash in the restricted accounts is being used, in part, to mitigate cost pressures from significant smelter load loss.

DETAILED RATING CONSIDERATIONS

CONTRACT TERMINATIONS OF TWO LARGE ALUMINUM SMELTERS CREATE NEED FOR LOAD MITIGATION PLANS; SMELTERS CONTINUE TO OPERATE

BREC's contracts with its largest customer, Century Aluminum of Kentucky (a subsidiary of Century Aluminum Company, which owns the Hawesville smelter and the Sebree smelter) historically made up roughly two-thirds of BREC's annual energy sales and accounted for just under 60% of its system demand and in excess of 60% of annual revenues. Revenues which BREC had been receiving from base energy charges paid by the smelters ended on August 20, 2013 in the case of the Hawesville smelter and January 31, 2014 in the case of the Sebree smelter.

While initial expectations contemplated the prospect that both smelters could cease operations upon termination of their respective power contracts, subsequent developments are allowing the smelters to continue operating, while purchasing power on the wholesale market. When compared to the alternative scenario of having both smelters permanently shut down, we view this outcome as being acceptable particularly since BREC and Kenergy are being reimbursed for any incremental costs to their members of the smelters' continued operation.

Effective June 3, 2013, Century acquired substantially all the assets of the Sebree aluminum smelter from Rio Tinto Alcan. This deal followed Century's definitive agreement with BREC and Kenergy that, upon receiving various regulatory approvals, is allowing Century to continue operating its Hawesville smelter by purchasing electricity on the open market. Under the agreement, Kenergy arranges for the energy purchases at wholesale market prices and Century pays the market price and additional amounts to cover any incremental costs incurred by BREC and Kenergy to accommodate Century's desire to purchase energy on the market for the Hawesville smelter. Century used this framework as a model for a similar arrangement for the Sebree smelter, which became effective when its termination period expired on January 31, 2014.

CREDIT POSITIVE REGULATORY DECISIONS BY KPSC

On October 29, 2013 the KPSC approved a wholesale power rate increase of $54.2 million (retroactive to August 20, 2013), and, on April 25, 2014 approved a wholesale power rate increase of $36.2 million (retroactive to February 1, 2014). Even though the approved rate increase in the October 2013 decision is about 20% less than the full amount included in the revised filing and the approved rate increase in the April 2014 decision is just over half of the full amount included in the revised filing, the rate increases are credit positive for BREC because the incremental amounts are supporting financial performance, ensuring a degree of cushion for compliance with financial covenants, (minimum required margins for interest (MFI) ratio of 1.1 times in its debt documents), and allowing for BREC to further advance strategies to mitigate the significant electric load loss owing to the termination of contracts with the two aluminum smelters. It is not uncommon for a state public service commission to disallow certain requested amounts in rate case proceedings and in some instances, disallowed amounts are even more substantial compared to BREC's two latest decisions. Notwithstanding the fact that BREC is left with substantial excess capacity due to large customer contract termination notices, the KPSC made supportive comments in the rate orders about prudent steps taken by BREC and the commission clearly states its intent to ensure rates are sufficient to maintain BREC's financial integrity. For example, the revenue requirements approved in the April 25, 2014 rate decision are specifically targeting achievement of a 1.3 times interest earned ratio (TIER) which is akin to the MFI ratio and comfortably above the 1.1 times minimum required in the debt documents, which we view as credit positive.

The substantial majority of the rate increases requested in the cases were seeking replacement revenues to offset loss of the Hawesville and Sebree smelter loads, respectively, and, in both instances, to also cover anticipated lower margins from off-system sales and other operating cost pressures.

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Among the more significant items contributing to the lower than requested rate increase approved in the October 2013 decision were the deferral of costs related to depreciation of a generation plant that will be in excess of BREC's needs at least in the near term, as well as several other reductions to costs of service that will reduce BREC's operating margins, and to some extent, its cash flow. The most significant item contributing to the lower than requested rate increase approved in the April 2014 decision was the deferral of costs related to depreciation of the Wilson Generation Plant that is in excess of BREC's system needs at this time. There were several other reductions relating to various costs of service items, offset in part by the KPSC's support for additional revenue amounts to support BREC's TIER at 1.3 times. Collectively the April 2014 decision reduces BREC's operating margins, and to some extent, its cash flow. Importantly and a key rating consideration are the KPSC's approval of plans to accelerate use of the economic reserve, rural economic reserve and transmission revenue economic reserve accounts in the amount of roughly $97 million as of June 30, 2014 to offset the rate increase approved April 25, 2014. The accelerated use of the reserve accounts is effectively neutralizing the non-smelter customer rate impact from the April 25, 2014 rate order for large industrial/business (non-smelter) customers and for rural (residential) customers. Under this approach, the additional rate shock for BREC's non-smelter customers is now expected to be delayed into October 2015 for large industrial/business (non-smelter) customers and at least mid-2016 for rural (residential) customers, during which time BREC will continue to implement other load concentration mitigation strategies.

We also note that the KPSC included in its April 25, 2014 order a requirement for BREC to hire an independent consultant to conduct a management audit, with a particular focus on BREC's load mitigation strategies. The outcome of this audit, which is anticipated to be available before the end of 2015, will be one of the data points Moody's considers regarding the future directional trend of the BREC rating.

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

OTHER LOAD MITIGATION STRATEGIES

Other load mitigation strategies, some of which are already being implemented, include entering into long-term bilateral sales arrangements, temporarily idling generation and reducing staff. BREC is selling power forward from the Wilson plant under four separate transactions that will allow BREC to continue operating the Wilson plant through May 31, 2016. More recently, BREC entered into three nine-year contracts to sell capacity and energy to three Nebraska entities. Effective July 21, 2015, the KPSC approved, the long-term power sales contracts which collectively will facilitate BREC transmitting 67 MWs to the Nebraska entities, with power beginning to flow in 2018 and reaching full output in 2022. Also, the cooperative is responding to other requests for proposals to sell power from the Wilson plant to other energy providers and awaits further developments related to those responses. The Coleman plant was idled in May 2014 and will be maintained to permit restart should market conditions become economically feasible. By idling the Coleman plant, BREC achieved overall cost savings of $26 million. Longer term opportunities may also arise for sales of electricity, depending on economic development activity in its service territory. Should a transaction, either an outright sale or a unit specific long-term power arrangement for all capacity involving both Wilson and Coleman occur, BREC's total owned/available capacity would reduce to 584 MW from 1,444 MW. BREC also has rights to about 197 MW of coal-fired capacity from Henderson Municipal Power and Light Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration.

Although BREC's rates are experiencing upward pressure owing to the loss of smelter loads, we note the economics of power produced from BREC's generation sources have been enabling it to still maintain a reasonable competitive advantage in the Southeast and even more so when compared to other regions around the country. The capacity factors and efficient operations of the assets resulted in 2014 net member wholesale revenue per MWh for rural members and large industrial members of $61.59 and $47.62, respectively, compared to $51.17 and $40.94, respectively, for 2013 (including the beneficial effects of the member rate stability mechanism). Excluding the benefits of the member rate stability mechanism, the 2014 member wholesale revenue per MWh for rural members and large industrial members would have been $81.79 and $63.56, respectively, compared to $57.74 and $47.00, respectively, for 2013.

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 are in effect through December 31, 2043. The underlying favorable economics of power produced by BREC's

generation assets can help temper some of the member disenchantment that undoubtedly stems from significant rate increases approved in 2013 and 2014. Notwithstanding a relatively competitive starting point in 2013 and other price mitigating strategies, it remains possible that the specter of member unrest could surface if further substantial rate increases become necessary due to environmental compliance or other operating cost pressures. That said, the currently overall sound member profile helps provide a degree of assurance of the revenue stream from members, which is integral to servicing Big Rivers' debt.

BASE RATE INCREASES AND OTHER LOAD MITIGATION STRATEGIES TO SUPPORT FINANCIAL VIABILITY

Big Rivers financial performance is being supported by the outcomes in its last two rate cases and other mitigation strategies. BREC's financial performance in fiscal year December 31, 2014 exceeded management's expectations owing to successful cost controls and better than anticipated margins from off system sales, with net margins of $32.7 million, which were more than $25 million above budget. For the first quarter ended March 31, 2015, BREC's net margins were $14.5 million, reflecting a 65% decline from the first quarter of 2014 when financial performance far surpassed the cooperative's budget reflecting the weather effects of the 2014 polar vortex, benefits of off-system sales during the period and forward sales of power from the Wilson Plant. Financial performance for the first quarter of 2015 also reflect the effects of the contract termination of the Sebree smelter in January 2014, and reduced margins from sales to non-members compared to the prior period.

On a three-year average basis over the fiscal years 2012-2014, Big Rivers' funds from operations (FFO) coverage of interest and FFO to debt ratios, as well as its debt service coverage (DSC) ratio fall into the "Ba", "B" and "B" rating categories, respectively, for the ratios covered under the Rating Methodology for U.S. Electric G&T Cooperatives. For example, Big Rivers' three year average FFO coverage of interest, FFO to Debt, and DSC for 2012-2014 were 1.39 times, 2.0%, and 1.0 times, respectively. Although the three year average scores for these three metrics are at weak levels under the rating methodology, the recent weak levels for the FFO to interest and FFO to debt metrics are directly tied to the accounting effects of noncash member rate mitigation revenue. Importantly, the 2013 and 2014 rate case decisions have firmly established the necessary revenue requirements and rate levels to maintain the financial viability of Big Rivers and restore these metrics to stronger levels once all the economic reserve, rural economic reserve and transmission revenue economic reserve accounts are utilized. The weak average DSC ratio for the same period primarily reflects some pressure in FY 2013 as a large principal payment was made. We expect that the DSC ratio will also improve going forward. For the same 2012-2014 period, TIER averaged 1.5 times (in the "Aa" category range) primarily reflecting supportive regulatory decisions and strong net margins, especially in FY 2014, and equity to total capitalization averaged 32.8% (in the "A" category range) as the metric is benefitting from debt reduction and full retention of net margins. The equity ratio continues to benefit from the lease unwind transactions that were completed in 2009. Prior to that Big Rivers had negative equity. Even as Big Rivers' FFO coverage of interest and debt and DSC ratios are expected to improve, the Ba2 rating still factors in the substantial overcapacity at BREC, the remaining execution risk as BREC implements its mitigation strategy, and the industry concentration risk that remains given the region's reliance on the aluminum smelter industry.

LIQUIDITY

BREC maintains ample liquidity by supplementing its existing cash on hand and internally generated cash flow with a three-year $130 million syndicated senior secured credit agreement with five banks, led by National Rural Utilities Cooperative Finance Corporation (NRUCFC), which expires in March 2018. As of March 31, 2015, BREC reported its cash and temporary investments balance at approximately $95 million and $121.4 million available under the NRUCFC credit agreement. Usage under the credit agreement is comprised entirely of outstanding letters of credit. BREC has manageable debt maturities over the next eight quarters, which are largely comprised of scheduled amortizations of long-term debt to be paid at a rate of roughly $5.5 million per quarter.

$30 million of the NRUCFC credit agreement is reserved for interim financing of KPSC approved environmental related capital expenditures. BREC has applied for long-term senior secured financing of the KPSC approved environmental related capital expenditures under the U.S. Department of Agriculture's Rural Utilities Service (RUS) loan program. Once those funds are secured, BREC would be required to repay any draws under the NRUCFC led credit agreement which were used for the environmental related expenditures at which time the total available amount of the credit agreement would be reduced to approximately $100 million.

The quality of the alternate liquidity provided by the syndicated credit agreement 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. Additionally, the credit agreement benefits from no ongoing material adverse change (MAC) clause. The syndicated credit agreement does not have any rating triggers, just a pricing grid based on rating.

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

Rating Outlook

BREC's rating outlook is stable, reflecting its good progress in implementing load mitigation strategies, the most critical ones being the credit supportive rate case outcomes at the KPSC and better than anticipated success in selling excess energy and capacity off system in the MISO and other markets at good margins. The stable outlook also incorporates our view that the smelters will continue to operate, thereby providing support for the local economy, including employment levels.

What Could Change the Rating - Up

Further significant support from the KPSC in any future regulatory filings, favorable outcomes from the findings of the internal audit and successful results through other ongoing load mitigation strategies would be credit positive and help to improve BREC's rating.

What Could Change the Rating - Down

In light of the stability that has surfaced in Big Rivers' results and near term prospects, there are limited expectations for a negative rating action. That said, we could take a negative rating action, if there was a shift to less regulatory support in future regulatory filings and a weakening of external liquidity. Also, we would view a scenario under which either or both of the smelters discontinued operations as credit negative given the potential residual negative effects such action would have on the local economy. Furthermore, if full and timely recovery of environmental compliance costs does not occur as anticipated under the KPSC approved environmental cost recovery mechanism, that would add downward rating pressure, especially if such amounts increase substantially from currently anticipated levels.

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, 2014. The grid indicated rating for Big Rivers' senior most obligations under the Methodology is currently Baa3 and relies on the aforementioned historical quantitative data and qualitative assessments. The grid indicated rating under the Methodology largely reflects B and Ba scores for the factors relating to funds from operations coverage of debt and interest, respectively, and also the B scores for the factors relating to the DSC ratio and potential for rate shock, as well as the Ba score for contractual relationships and regulatory status. These low scores are partially balanced by the stronger Aa scores for new build exposure and TIER, as well as the A score for the equity to total capitalization ratio. Notwithstanding the current Baa3 grid indicated rating for Big Rivers under the Methodology, as mentioned above, its actual senior secured rating of Ba2 reflects the unique risks relating to Big Rivers' need for further progress including further implementation of its load mitigation strategies following the smelter contract terminations.

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AUTHOR
Kevin Rose

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Case No. 2018-00146

KIUC 2-1 (PGS) – (6of12) Moody's Issuer Comment 2016.08.01

MOODY'S
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ISSUER COMMENT

Big Rivers Electric's 10-Year Supply Contract Is Credit Positive

From Credit Outlook

Analyst Contacts:

NEW YORK	+1.212.553.1653
Kevin Rose *Vice President - Senior Analyst* kevin.rose@moodys.com	+1.212.553.0389
Sarah Lee *Analyst* sarah.lee@moodys.com	+1.212.553.6955
Dan Aschenbach *Senior Vice President* dan.aschenbach@moodys.com	+1.212.553.0880

Last Thursday, Big Rivers Electric Corporation, KY (Ba2 stable) announced a 10-year power supply contract with the Kentucky Municipal Energy Agency (KyMEA). The contract is credit positive for Big Rivers, an electric generation and transmission cooperative, because it locks up some of its substantial excess capacity and energy with load-serving municipal-distribution companies for 10 years, helping the cooperative replenish load lost during 2013-14, when two aluminum smelters canceled supply contracts.

We expect that the contract will support Big Rivers' long-term financial performance and provide a reliable source of recovery for Big Rivers' fixed and variable costs and contribute to its overall competitiveness through better rates for its members. Moreover, the contract allows Big Rivers to become less dependent on the currently depressed wholesale power market for incremental revenues and helps diversify the cooperative's revenue stream, which has been heavily dependent on the aluminum industry, to one that is less volatile and more predictable.

Under the agreement, Big Rivers will provide to KyMEA 75-100 megawatts beginning in June of 2019. The supply could also be expanded by up to 50 megawatts later in the contract term. KyMEA is a newly formed joint-action agency whose members are made up of 10 Kentucky-based municipal utilities. The Big Rivers' agreement with KyMEA is still subject to approval by the Kentucky Public Service Company (KPSC) and the US Rural Utilities Service.

In addition to the predictable revenue stream provided by the contract, entering another long-term contract for the sale of excess power also bodes well for Big Rivers' regulatory relationship with the KPSC, since the regulators established an action plan in 2013 that called for the pursuit of such supply contracts. Maintaining supportive regulatory relationships is an important credit factor for Big Rivers since its rate-setting is subject to regulation, which is atypical for an electric generation and transmission cooperative.

Based in Henderson, Kentucky, Big Rivers is an electric generation and transmission cooperative owned by three distribution cooperative members in the state: Paducah-based Jackson Purchase Energy Corporation; Henderson-based Kenergy Corp.; and Brandenburg-based Meade County Rural Electric Cooperative Corporation. These member cooperatives deliver retail electric power and energy to more than 115,000 residential, commercial and industrial customers in portions of 22 western Kentucky counties.

What is Moody's Credit Outlook?

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Authors
Kevin Rose
Sarah Lee
Dan Aschenbach

Senior Production Associate
Marimuthu M

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Case No. 2018-00146

KIUC 2-1 (PGS) – (7of12) Moody's Credit Opinion 2016.08.08

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CREDIT OPINION
8 August 2016

Update

Rate this Research

Contacts

Kevin G. Rose 212-553-0389
VP-Senior Analyst
kevin.rose@moodys.com

A.J. Sabatelle 212-553-4136
Associate Managing Director
angelo.sabatelle@moodys.com

Big Rivers Electric Corporation

Update of Key Rating Factors

Summary Rating Rationale

The Ba2 rating considers the credit challenges Big Rivers Electric Corporation (Big Rivers) faces while still carrying out load mitigation plans following significant load loss since two aluminum smelters being served by Big Rivers' largest member owner, Kenergy Corp., terminated their respective power purchase contracts in August 2013 and January 2014, respectively. The rating further reflects significant rate increases approved by the Kentucky Public Service Commission (KPSC) during 2013 and 2014 and other mitigation steps to compensate for the load loss and to maintain viable financial performance. The rating further recognizes the cost plus nature of the cooperative model which generally allows for cost recovery from its members, albeit tempered in this case to some degree because Big Rivers' rates are regulated by the KPSC, which is atypical for the electric generation and transmission (G&T) coop sector. Still, Big Rivers' credit profile also reflects the financial benefits of KPSC approved increases in revenue requirements through rate case decisions in 2013 and 2014, as well as several steps it took in 2008-2009 to unwind a lease and other transactions wherein its prior deficit net worth turned substantially positive, cash receipts were used to repay debt, and residual cash was set aside in restricted accounts. Since the 2014 rate case decision, cash in the restricted accounts is being used, in part, to mitigate rate increases that followed significant smelter load loss.

Credit Strengths

- Good progress on implementing load mitigation plans following termination of contracts with two aluminum smelters, including recently signed long-term power sales contracts with entities in Nebraska and Kentucky
- Increased revenue requirements approved through credit supportive rate case outcomes in two most recent rate case decisions
- Variable cost adjustment mechanism and environmental cost surcharge in place
- Revenues from electricity sold to rural residential and other non-smelter customers under long term wholesale power contracts with three member owners through 2043
- Ownership of generally competitive, albeit excess, coal-fired generation plants

Credit Challenges

- As bill credits are expiring, approved increases to revenue requirements create upward pressure on members' wholesale power rates and, in turn, retail rates for members' customers

- Rate setting subject to KPSC jurisdiction
- Significant excess of mostly coal-fired, carbon-emitting, owned generation capacity while awaiting more clarity on the future of the Clean Power Plan (CPP)
- Finding additional market opportunities to sell significant excess capacity
- Local economic dependence on industrial activity, including two aluminum smelters

Rating Outlook

The rating outlook is stable, reflecting good progress in implementing load mitigation strategies, the most critical ones being the credit supportive rate case outcomes at the KPSC and better than anticipated success in selling excess energy and capacity off system in the Midcontinent Independent System Operator (MISO) and other markets at good margins. The stable outlook also incorporates our view that the smelters will continue to operate, thereby providing support for the local economy, including employment levels, and that Big Rivers will continue to pursue additional long-term contracts for sale of its excess capacity beyond those already in place.

Factors that Could Lead to an Upgrade

- Further credit support from the KPSC in any future regulatory filings, especially relating to recovery of costs tied to regulatory assets, satisfactory completion of recommended steps from the findings of the independent audit, successful results through other ongoing load mitigation strategies, and creating a seamless transition to higher customer rates would be credit positive and help to improve Big Rivers' rating.

Factors that Could Lead to a Downgrade

- In light of the stability that has surfaced in Big Rivers' results and near term prospects, there are limited expectations for a negative rating action
- That said, we could take a negative rating action if there was a shift to a less credit supportive regulatory environment and a weakening of external liquidity
- Also, we would view a scenario under which either or both of the smelters discontinued operations as credit negative given the potential residual negative effects such action would have on the local economy
- Furthermore, if full and timely recovery of environmental compliance costs and increasing regulatory assets does not occur as anticipated under the KPSC approved environmental cost recovery mechanism and future rate proceedings, that would add downward rating pressure, especially if such amounts increase substantially from currently anticipated levels

Key Indicators

Exhibit 1

Big Rivers Electric Corporation, KY

	2011	2012	2013	2014	2015
TIER	1.1x	1.3x	1.5x	1.6x	1.3x
DSC	1.7x	0.9x	0.8x	1.5x	1.2x
FFO / Debt	3.1%	3.6%	3.4%	-1.2%	-2.2%
(FFO + Interest) / Interest Expense	1.5x	1.7x	1.7x	0.7x	0.5x
Equity / Total Capitalization	33.0%	30.3%	33.1%	34.9%	35.2%

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

Source: Moody's Investors Service

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Detailed Rating Considerations

CONTRACT TERMINATIONS OF TWO LARGE ALUMINUM SMELTERS CREATE NEED FOR LOAD MITIGATION PLANS; SMELTERS CONTINUE TO OPERATE

Big Rivers' contracts with its largest customer, Century Aluminum of Kentucky (a subsidiary of Century Aluminum Company, which owns the Hawesville smelter and the Sebree smelter) historically made up roughly two-thirds of Big Rivers' annual energy sales and accounted for just under 60% of its system demand and in excess of 60% of annual revenues. Revenues which Big Rivers had been receiving from base energy charges paid by the smelters ended on August 20, 2013 in the case of the Hawesville smelter and January 31, 2014 in the case of the Sebree smelter. On one hand, Big Rivers now benefits from less exposure to customer and sales concentration with two previously volatile sources of revenue; however, this scenario subjects the cooperative to risks resulting from a sizable exposure to excess owned coal-fired generation capacity.

Importantly, since canceling their respective contracts, both of the smelters continue to operate, while purchasing power on the wholesale market. That said, we understand that the Hawesville smelter has recently been operating only two of its five pot lines, representing about a 60% capacity reduction, while the Sebree smelter is at full production. When compared to the alternative scenario of having both smelters permanently shut down, we view this outcome as being acceptable particularly since Big Rivers and Kenergy are being reimbursed for any incremental costs to their members of the smelters' continued operation and there are residual benefits to the local economy.

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

CREDIT POSITIVE REGULATORY DECISIONS BY KPSC

Even though the KPSC approved rate increase in the October 2013 decision is about 20% less than the full amount included in the revised filing and the approved rate increase in the April 2014 decision is just over half of the full amount included in the revised filing, the rate increases are credit positive for Big Rivers because the incremental amounts are supporting financial performance, ensuring a degree of cushion for compliance with financial covenants, (minimum required margins for interest (MFI) ratio of 1.1x in its debt documents), and allowing for Big Rivers to further advance strategies to mitigate the significant electric load loss owing to the termination of contracts with the two aluminum smelters. It is not uncommon for a state public service commission to disallow certain requested amounts in rate case proceedings and in some instances, disallowed amounts are even more substantial compared to Big Rivers' two latest decisions. Notwithstanding the fact that Big Rivers is left with substantial excess capacity due to large customer contract termination notices, the KPSC made supportive comments in the rate orders about prudent steps taken by Big Rivers and the commission clearly states its intent to ensure rates are sufficient to maintain Big Rivers' financial integrity. For example, the revenue requirements approved in the April 2014 rate decision are specifically targeting achievement of a 1.3 times interest earned ratio (TIER) which is akin to the MFI ratio and comfortably above the 1.1x minimum required in the debt documents, which we view as credit positive.

The substantial majority of the rate increases requested in the cases were seeking replacement revenues to offset loss of the Hawesville and Sebree smelter loads, respectively, and, in both instances, to also cover anticipated lower margins from off-system sales and other operating cost pressures.

Among the more significant items contributing to the lower than requested rate increase approved in the October 2013 decision were the deferral of costs related to depreciation of a generation plant that will be in excess of Big Rivers' needs at least in the near term, as well as several other reductions to costs of service that will reduce Big Rivers' operating margins, and to some extent, its cash flow. The most significant item contributing to the lower than requested rate increase approved in the April 2014 decision was the deferral of costs related to depreciation of the Wilson Generation Plant that is in excess of Big Rivers' system needs at this time. There were several other reductions relating to various costs of service items, offset in part by the KPSC's support for additional revenue amounts to support Big Rivers' TIER at 1.3x. Collectively the April 2014 decision reduces Big Rivers' operating margins, and to some extent, its cash flow.

A key rating consideration is the KPSC's approval of accelerated use of the economic reserve, rural economic reserve and transmission revenue economic reserve accounts, which has been offsetting the rate increase approved in April 2014. The accelerated use of the reserve accounts effectively delayed the additional rate shock from the April 2014 rate order for Big Rivers' large industrial/business (non-smelter) customers until October of 2015 and for its rural (residential) customers until the summer of 2016. During this time, Big Rivers has also been implementing its other load mitigation strategies.

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

OVERALL CREDIT POSITIVE IMPACT FROM KPSC MANDATED INDEPENDENT MANAGEMENT AUDIT

As required by the KPSC in its April 2014 rate order, Big Rivers hired an independent consultant to conduct a management audit, with a particular focus on Big Rivers' load mitigation strategies. The final report and findings of the audit were made public in October 2015 and a final action plan was issued on December 6, 2015. We consider the action plan to be a credit positive since it incorporates a combination of many supportive or neutral findings about Big Rivers' past decisions and future plans, as well as five specific, seemingly manageable, recommendations. Of those five recommendations, four were already in process as of the report date, including those relating to increasing expertise regarding the MISO market, pursuing new energy sales and analyzing the best use of the currently idled Coleman plant. The report also recommended adding a new board member with energy expertise by the end of 2016, which requires a change to Big Rivers' bylaws.

The cooperative is adding to staff with a focus on enhancing internal expertise in production cost and financial modeling to further leverage its association as a member of ACES. Big Rivers has completed analysis of options for its Coleman plant and determined that it is best to await further clarity around how the CPP and future power markets materialize before making a final decision on the Coleman plant. As Big Rivers moves forward in addressing the audit recommendations, it is also required to report to the KPSC each six months following this report for two years and annually thereafter if necessary. Big Rivers provided the first of such progress reports to the KPSC in April.

OTHER LOAD MITIGATION STRATEGIES

Other load mitigation strategies include entering into long-term bilateral sales arrangements, temporarily idling generation and reducing staff. We understand that Big Rivers has also arranged various short-term contracts, which the cooperative reports effectively triples the volume sold under such arrangements since 2014. Big Rivers is using these type contracts as a bridge to long-term contracts described below and is relying on price hedging strategies to protect itself from commodity price risk. Big Rivers is also responding to other requests for proposals to sell power from the Wilson plant to other energy providers and awaits further developments related to those responses.

At this point, Big Rivers has three nine-year contracts to sell capacity and energy to three Nebraska entities. Effective July 21, 2015, the KPSC approved, the long-term power sales contracts which collectively will facilitate Big Rivers transmitting 67 MWs to the Nebraska entities, with power beginning to flow in 2018 and reaching full output in 2022. More recently, in late July 2016 the cooperative announced a 10-year contract to transmit as much as 100 MW from its Wilson Station to Kentucky Municipal Energy Agency (KyMEA), beginning in 2019, with potential to increase the contract for sale of capacity by another 50 MW starting in 2022. The contract with KyMEA is subject to KPSC approval. These contracts are credit positive for Big Rivers because they lock up some of its substantial excess capacity and energy with load-serving municipal-distribution entities for multiple year periods, helping the cooperative replenish load lost during 2013-2014, when the two aluminum smelters canceled supply contracts. We expect that the contracts will support Big Rivers' long-term financial performance and provide a reliable source of recovery for Big Rivers' fixed and variable costs and contribute to its overall competitiveness through better rates for its members. Moreover, the contracts allow Big Rivers to become less dependent on the currently depressed wholesale power market for incremental revenues and helps diversify the cooperative's revenue stream, which has been heavily dependent on the aluminum industry, to one that is less volatile and more predictable. In addition to the predictable revenue stream provided by the contracts, entering the long term contracts for the sale of excess power also bodes well for Big Rivers' regulatory relationship with the KPSC, since the regulators established an action plan in 2013 that called for the pursuit of

such supply contracts. Maintaining supportive regulatory relationships is an important credit factor for Big Rivers since its rate-setting is subject to regulation, which is atypical for an electric generation and transmission cooperative.

The Coleman plant was idled in May 2014 and is being maintained to permit restart should market conditions become economically feasible. By idling the Coleman plant, Big Rivers achieved overall cost savings of $26 million annually. Big Rivers is reporting internal load growth and additional longer term opportunities may also arise for sales of electricity, depending on economic development activity in its service territory. That said, Big Rivers has an industrial customer utilizing the cooperative's economic development incentive rate in its business expansion, which will contribute significant growth to the cooperative's load.

Should a transaction, either an outright sale or a unit specific long-term power arrangement for all capacity involving both Wilson and Coleman occur, Big Rivers' total owned/available capacity would reduce to 584 MW from 1,444 MW. Big Rivers also has rights to about 197 MW of coal-fired capacity from Henderson Municipal Power and Light Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration.

REASONABLY COMPETITIVE POSITION MAINTAINED DESPITE RATE INCREASES APPROVED

Although Big Rivers' rates are increasing following the loss of the smelter loads, we note the economics of power produced from Big Rivers' generation sources have enabled it to still maintain a reasonable competitive position in the Southeast and even more so when compared to other regions around the country. The capacity factors and efficient operations of the assets resulted in a 2015 net member effective wholesale rate per MWh for rural members and large industrial members of $63.74 and $51.66, respectively, compared to $64.49 and $49.58, respectively, for 2014 and $51.18 and $40.94, respectively, for 2013 (including the beneficial effects of the member rate stability mechanism).

Excluding the benefits of the member rate stability mechanism, the 2015 member effective wholesale rate per MWh for rural members and large industrial members would have been $82.30 and $63.76, respectively, compared to $82.18 and $63.29, respectively, for 2014 and $57.74 and $47.00, respectively, for 2013.

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 are in effect through December 31, 2043. The underlying favorable economics of power produced by Big Rivers' generation assets can help temper any expressed or latent member disenchantment that undoubtedly stems from significant rate increases approved in 2013 and 2014. Notwithstanding a relatively competitive starting point in 2013 and other price mitigating strategies, it remains possible that the specter of member unrest could surface if further substantial rate increases become necessary due to environmental compliance or other operating cost pressures. That said, the currently overall sound member profile helps provide a degree of assurance of the revenue stream from members, which is integral to servicing Big Rivers' debt.

BASE RATE INCREASES AND OTHER LOAD MITIGATION STRATEGIES TO SUPPORT FINANCIAL VIABILITY

Big Rivers' financial performance is being supported by the outcomes in its last two rate cases and other mitigation strategies. Big Rivers' financial performance in fiscal year December 31, 2015 was reasonably consistent with its budget expectations, including net margins of $11.2 million, which supported a 1.27x interest earned ratio (TIER), a contractual margins for interest (MFI) ratio of 1.29x and a debt service coverage (DSC) ratio of 1.2x, all as defined in the cooperative's debt documents. Although the fiscal year 2015 financial performance was far below the net margins of $32.7 million achieved in 2014, this is not an undue credit risk because 2014 results were more than $25 million above budget owing to the weather effects of the 2014 polar vortex, higher margins from off-system sales during the period and forward sales of power from the Wilson Plant. Financial performance for the first quarter of 2016 also reflects the effects of warmer winter weather and reduced margins from sales to non-members compared to the prior period.

On a three-year average basis over the fiscal years 2013-2015 (including Moody's standard adjustments), Big Rivers' funds from operations (FFO) coverage of interest and FFO to debt ratios, as well as its DSC ratio fall into the "B", "B" and "Baa" rating categories, respectively, for the ratios covered under the Rating Methodology for U.S. Electric G&T Cooperatives. For example, Big Rivers' three year average FFO coverage of interest, FFO to Debt, and DSC for 2013-2015 were 1.0x, 0%, and 1.1x, respectively. Although the three year average scores for two of these three metrics are at weak levels under the rating methodology, the recent weak levels for

the FFO to interest and FFO to debt metrics are directly tied to the accounting effects of noncash member rate mitigation revenue. Importantly, the 2013 and 2014 rate case decisions have firmly established the necessary revenue requirements and rate levels to maintain Big Rivers' financial viability and restore these metrics to stronger levels once all the economic reserve, rural economic reserve and transmission revenue economic reserve accounts are utilized. The Baa ranking for the DSC ratio for the same period primarily reflects some pressure in FY 2013 as a large principal payment was made. We expect that the DSC ratio can be sustained near 1.2x going forward. For the same 2013-2015 period, TIER averaged 1.5x (in the "Aa" category range) primarily reflecting supportive regulatory decisions and strong net margins, especially in FY 2014, and equity to total capitalization averaged 34.4% (in the "A" category range) as the metric is benefitting from debt reduction and full retention of net margins. The equity ratio also continues to benefit from the lease unwind transactions that were completed in 2009. Prior to that, Big Rivers had negative equity. Even as Big Rivers' FFO coverage of interest and debt and DSC ratios are expected to improve, the Ba2 rating still factors in the substantial overcapacity at Big Rivers, the remaining execution risk as Big Rivers implements its mitigation strategy, and the industry concentration risk that remains given the region's reliance on the aluminum smelter industry.

LIQUIDITY

Big Rivers maintains ample liquidity by supplementing its existing cash on hand and internally generated cash flow with a three-year $130 million syndicated senior secured credit agreement with five banks, led by National Rural Utilities Cooperative Finance Corporation (NRUCFC), which expires in March 2018. As of June 30, 2016, Big Rivers reported its cash and temporary investments balance at approximately $33 million and $123.91 million available under the NRUCFC credit agreement. Usage under the credit agreement is comprised of $6.1 million of outstanding letters of credit. Big Rivers has manageable debt maturities over the next eight quarters, which are largely comprised of scheduled amortizations of long-term debt to be paid at a rate of roughly $5.5 million per quarter.

$30 million of the NRUCFC credit agreement is reserved for interim financing of KPSC approved environmental related capital expenditures. Big Rivers has applied for long-term senior secured financing of the KPSC approved environmental related capital expenditures under the U.S. Department of Agriculture's Rural Utilities Service (RUS) loan program. Once those funds are secured, Big Rivers would be required to repay any draws under the NRUCFC led credit agreement which were used for the environmental related expenditures at which time the total available amount of the credit agreement would be reduced to approximately $100 million.

The quality of the alternate liquidity provided by the syndicated credit agreement 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. Additionally, the credit agreement benefits from no ongoing material adverse change (MAC) clause. The syndicated credit agreement does not have any rating triggers, just a pricing grid based on rating.

DEBT STRUCTURE

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

Obligor Profile

Big Rivers is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by its three member system distribution cooperatives -- Jackson Purchase Energy Corporation; Kenergy Corp; and Meade County Rural Electric Cooperative Corporation. These member system cooperatives provide retail electric power and energy to more than 115,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

Other Considerations

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative Rating Methodology grid below is based on historical data through December 31, 2015. The grid indicated rating for Big Rivers' senior most obligations under the Methodology

is currently Baa3. However, Big Rivers' actual senior secured rating of Ba2 reflects several of the unique risks at Big Rivers and the challenges facing the cooperative in mitigating these risks, including further implementation of its load mitigation strategies following the smelter contract terminations.

Methodology

Exhibit 2

Rating Factors

Big Rivers Electric Cooperative, KY

U.S. Electric Generation & Transmission Cooperatives [1][2]	Current FY 12/31/2015		Moody's 12-18 Month Forward View As of Publication Date [3]	
Factor 1 : Wholesale Power Contracts and Regulatory Status (20%)	**Measure**	**Score**	**Measure**	**Score**
a) % Member Load Served and Regulatory Status	Ba	Ba	Ba	Ba
Factor 2 : Rate Flexibility (20%)				
a) Board Involvement / Rate Adjustment Mechanism	Baa	Baa	Baa	Baa
b) Purchased Power / Sales (%)	34.8%	Baa	25%-35%	Baa
c) New Build Capex (% of Net PP&E)	Aa	Aa	Aa	Aa
d) Rate Shock Exposure	B	B	B	B
Factor 3 : Member / Owner Profile (10%)				
a) Residential Sales / Total Sales	26.3%	Ba	25%-30%	Ba
b) Members' Consolidated Equity / Capitalization	37.6%	Baa	37%-39%	Baa
Factor 4 : 3-Year Average G&T Financial Metrics (40%)				
a) Times Interest Earned Ratio (TIER)	1.5x	Aa	1.2x -1.4x	A
b) Debt Service Coverage Ratio (DSC)	1.1x	Baa	1.1x - 1.2x	Baa
c) Funds from Operations Coverage of Interest (FFO/Interest)	0.0%	B	0% - 2%	B
d) FFO/Debt	1.0x	B	1x - 1.5x	Ba
e) Equity/Total Adjusted Capitalization	34.4%	A	34.5% - 36%	Aa
Factor 5 : G&T Size (10%)				
a) MWh Sales	8.8	Baa	8 - 10	Baa
b) Net PP&E	$1.1	A	$1 - $1.1	A
Rating:				
Indicated Rating from Grid		Baa3		Baa3
Actual Rating Assigned (Senior Secured)				Ba2

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

[2] As of 12/31/2015; Source: Moody's Financial Metrics™

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

RATINGS

BIG RIVERS ELECTRIC CORPORATION, KY	
Rating: County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project; cusip number 677288AG7)	Ba2
Outlook	Stable

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REPORT NUMBER **1036145**

MOODY'S
INVESTORS SERVICE

Case No. 2018-00146

KIUC 2-1 (PGS) – (8of12) Moody's Rating Action 2017.08.16

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's affirms County of Ohio, Kentucky (Big Rivers Electric Corporation Project) at Ba2; outlook revised to positive

Global Credit Research - 16 Aug 2017

Approximately $83.3 million of securities affected

New York, August 16, 2017 -- Moody's Investors Service today affirmed the Ba2 senior secured rating on $83.3 million of County of Ohio, Kentucky (the county) Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project; cusip number 677288AG7) and concurrently revised the rating outlook to positive from stable.

RATINGS RATIONALE

"The rating actions for the bonds previously issued by the county on behalf of Big Rivers Electric Corporation (BREC) primarily reflect BREC's track record of managing through the significant loss of load from two aluminum smelters who were previously being served by BREC's largest member owner, Kenergy Corp., until they terminated their respective power purchase contracts in 2013 and 2014" said Kevin Rose, Vice President-Senior Analyst. "There is a high likelihood that BREC can steadily increase its operating margins and increase its cash flow during 2017-19 thanks to successful implementation of load concentration mitigation strategies, including credit supportive rate increases which are taking full effect in 2017 and anticipated profitable sales of excess capacity under signed firm contracts in the Midcontinent Independent System Operator (MISO) and other markets beginning in 2018 and 2019", Rose added.

BREC's credit quality continues to recognize the cost plus nature of the cooperative model which generally allows for cost recovery from its members, albeit tempered in this case because BREC's rates are regulated by the Kentucky Public Service Commission (KPSC). Rate regulation by state public utility commissions is atypical for the G&T coop sector and can sometimes impede full and timely recovery of costs of service. Still, BREC's credit profile not only reflects the financial benefits of rate case decisions in 2013 and 2014, but also considers the various steps it took to unwind a lease and other transactions in 2008 and 2009 where among other benefits, residual cash was set aside in restricted accounts to provide a mitigant in the event of lost smelter load. Pursuant to the terms of the KPSC rate case decision in 2014, cash in the restricted accounts was used to temporarily mitigate cost pressures from significant smelter load loss. The restricted accounts were used in full to provide bill credits during 2014-16, which temporarily minimized the rate shock until September 2015 for large industrial/business (non-smelter) customers and August 2016 for rural (residential) customers. This approach appears to have tempered any expressed or latent member disenchantment now that members are feeling the full impact of significant rate increases. Despite a relatively competitive starting point in 2013 and other price mitigating strategies, it remains possible that some member unrest could still surface, especially if further substantial rate increases become necessary to recover an increasing regulatory asset balance or if environmental compliance and other operating cost pressures surface unexpectedly.

BREC's contracts with its former largest customer, Century Aluminum of Kentucky (a subsidiary of Century Aluminum Company, which owns the Hawesville and Sebree smelters) historically made up roughly two-thirds of BREC's annual energy sales and accounted for just under 60% of its system demand and in excess of 60% of annual revenues. While initial expectations contemplated the prospect that both smelters could cease operations upon expiration of their respective power contracts, regulatory approvals of Century's definitive agreements with BREC and Kenergy are allowing Century to continue operating both smelters by purchasing electricity on the open market. Under the agreements, Kenergy arranges for the energy purchases at wholesale market prices and Century pays the market price and additional amounts to cover any incremental costs incurred by BREC and Kenergy to accommodate Century's desire to purchase energy on the market for the smelters. When compared with the alternative scenario of having both smelters permanently shut down, this outcome is a better alternative from a credit standpoint owing to ancillary loads remaining intact with BREC and Kenergy being reimbursed for the incremental costs to purchase power at wholesale market prices for the smelters.

Credit supportive rate case decisions by the KPSC in October 2013 and April 2014, resulted in approval of a combined wholesale power rate increase of about $90.4 million. With the expiration of bill credits in 2016, the

full effects of the wholesale power rate increases are now being fully borne by BREC's members and, in turn, the members' retail customers. The rate increases are credit positive for BREC because the incremental amounts are estimated to result in about 90% of BREC's total gross margins coming from its members that have all requirements contracts in place through 2043. We anticipate that the current wholesale power rates will continue to support strengthened financial performance, ensure a degree of cushion for compliance with financial covenants and allow for BREC to further advance load concentration mitigation strategies.

Even though BREC has substantial excess capacity owing to the large customer contract terminations, the KPSC made supportive comments in the rate orders about prudent mitigation steps taken by BREC and the commission clearly states its intent to ensure rates are sufficient to maintain BREC's financial integrity. In fact, the KPSC rates approved in the April 2014 rate order are designed to enable BREC to achieve a 1.3x Times Interest Earned Ratio (TIER), a level that is 20 basis points higher than the 1.1x margins for interest (essentially the equivalent of TIER) required under BREC's indenture.

Besides obtaining regulatory support for rate increases and securing long-term contracts for the sale of capacity and energy from its 417 megawatt (MW) Wilson plant to load serving municipal-distribution entities in Nebraska and Kentucky, BREC's other load concentration mitigation strategies include temporarily idling generation, reducing staff, making short-term off system sales and participating in the capacity markets. For example, the 443 MW Coleman plant was idled in May 2014 and is being maintained to permit restart should market conditions become economically feasible. Longer term opportunities may also arise for sales of electricity beyond those in place today, depending on economic development activity in BREC's service territory. BREC also owns and operates the 130 MW Robert A. Reid and 454 MW Robert D. Green plants and has rights to about 197 MW of coal-fired capacity from Henderson Municipal Power and Light Station Two and about 178 MW of contracted hydro capacity from Southeastern Power Administration.

BREC maintains ample liquidity to support its credit quality by supplementing any existing cash on hand and internally generated cash flow with a good quality three-year $130 million syndicated senior-secured credit agreement with five banks, led by National Rural Utilities Cooperative Finance Corporation (NRUCFC), which expires in March 2018. We understand that BREC is negotiating to amend and extend the credit agreement by the end of 2017. As of March 31, 2017, BREC reported cash and temporary investments of about $44.3 million and $122.2 million available under the NRUCFC credit agreement. Usage under the credit agreement is comprised of $7.8 million of outstanding letters of credit. BREC has manageable debt maturities over the next eight quarters, which are largely comprised of scheduled amortizations of long-term debt to be paid at a rate of roughly $5.5 million per quarter. The NRUCFC credit agreement has no undue financial covenants, which largely mirror those in its mortgage indenture and there is no ongoing material adverse change clause.

Rating Outlook

The positive rating outlook reflects good progress in implementing load concentration mitigation strategies, the most critical ones being the credit supportive rate case outcomes at the KPSC and better than anticipated success in selling excess energy and capacity off system in the MISO and other markets at good margins. The outlook also considers that rate relief and anticipated profitable contracts to sell energy and capacity beginning in 2018-19 will produce increases in operating margins and cash flow. The positive outlook also incorporates Moody's view that the smelters will continue to operate, thereby providing support for the local economy, including employment levels, and that BREC will continue to pursue additional long-term contracts for sale of its excess capacity beyond those already in place.

What Could Change the Rating – Up

A rating upgrade is possible within 12-18 months if the anticipated improvements in BREC's operating margins and cash flow begin to materialize, credit supportive regulatory treatment remains intact, and BREC achieves further successful results through other ongoing load concentration mitigation strategies. In terms of metrics, FFO coverage of interest and debt closer to 2.0x and 4%, respectively, and debt service coverage tracking close to 1.2x would increase the prospects for an upgrade.

What Could Change the Rating -- Down

A rating downgrade is unlikely during the next 12-18 months owing to the positive rating outlook. Beyond that horizon, there are a variety of factors that could cause us to take negative rating action, including a shift to less credit regulatory support in future regulatory filings and weakening of external liquidity. Also, we would view a scenario under which either or both of the smelters discontinued operations as credit negative given the potential residual negative effects such action would have on the local economy. Furthermore, if full and timely

recovery of environmental compliance costs and increasing regulatory assets does not occur as anticipated under the KPSC approved environmental cost recovery mechanism and future rate proceedings, that would add downward rating pressure, especially if such amounts increase substantially from currently anticipated levels.

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 116,000 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 April 2013. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

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Kevin Rose
Vice President - Senior Analyst
Project Finance Group
Moody's Investors Service, Inc.
250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

A.J. Sabatelle
Associate Managing Director
Project Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Investors Service, Inc.

250 Greenwich Street
New York, NY 10007
U.S.A.
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

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Update

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Contacts

Kevin G. Rose 212-553-0389
VP-Senior Analyst
kevin.rose@moodys.com

A.J. Sabatelle 212-553-4136
Associate Managing Director
angelo.sabatelle@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
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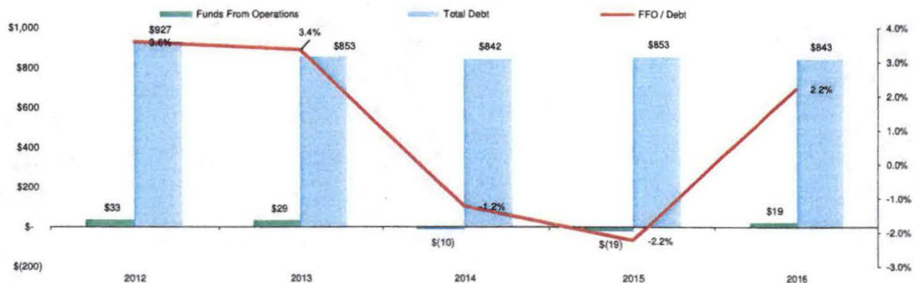
Big Rivers Electric Corporation

Update following outlook change to positive

Summary

Big Rivers Electric Corporation (Big Rivers, Ba2 positive) has good prospects for achieving stronger financial metrics that is providing positive momentum for the cooperative's credit quality despite its substantial excess generation capacity, which represents a primary credit constraint along with execution risk while management further implements its load loss mitigation strategies. Big Rivers is demonstrating a good track record since 2013 to combat the significant load loss. For example, sizable rate increases approved by the Kentucky Public Service Commission (KPSC) and cost saving initiatives, among other steps are helping to compensate for the load loss and maintain the cooperative's viable financial performance. The regulatory support should help its funds from operations (FFO) coverage of interest and debt strengthen over the next 12-18 months closer to 4% and 2.0x, respectively, compared to 2.2% and 1.5x, respectively, for FY 2016, and should result in the utility being free cash flow positive for the next three years. Big Rivers maintains ample liquidity with a $130 million bank line which supplements internal cash flow generation.

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



Source: Moody's Financial Metrics

Credit Strengths

- Contracted sales of some excess capacity and energy beginning in 2018-19
- Expected increase in net margins, no patronage capital returns to members and routine capital spending should drive free cash flow and contribute to debt reduction
- Regulatory support for base rate increases, a variable cost adjustment mechanism and an environmental cost surcharge provide support for timely recovery of costs of service
- Revenues from electricity sold to rural residential and other non-smelter customers under long term wholesale power contracts with three member owners through 2043
- Ownership of generally competitive coal-fired generation plants

Credit Challenges

- Bill credits have expired and the full impact of approved increases to members' wholesale power rate has increased retail rates for members' customers
- Need for future cost recovery of regulatory assets resulting from ongoing deferral of depreciation expense associated with certain coal-fired generation assets
- Significant excess of mostly coal-fired, carbon-emitting, owned generation capacity while awaiting more clarity on future environmental regulations
- Finding additional market opportunities to sell significant excess capacity
- Local economic dependence on industrial activity, including two aluminum smelters

Rating Outlook

The positive rating outlook reflects good progress in implementing load concentration mitigation strategies, the most critical ones being the credit supportive rate case outcomes at the KPSC and better than expected success in selling excess energy and capacity off system in the Midcontinent Independent System Operator (MISO) and other markets at good margins. The outlook also considers that rate relief and expected benefits from contracts to sell energy and capacity beginning in 2018-19 should produce increases in operating margins and cash flow to drive free cash flow and debt reduction. The positive outlook also incorporates our view that the smelters will continue to operate, thereby providing support for the local economy, including employment levels, and that Big Rivers will continue to pursue additional long-term contracts for the sale of its excess capacity beyond those already in place.

Factors that Could Lead to an Upgrade

- A rating upgrade is possible within 12-18 months if FFO coverage of interest and debt move closer to 2.0x and 4%, respectively and the debt service coverage ratio keeps tracking close to 1.2x
- Credit supportive regulatory treatment remains intact and there is future support for cost recovery relating to regulatory assets
- Achieving further successful results through other ongoing load concentration mitigation strategies (e.g., additional contracted sales of excess generating capacity)

Factors that Could Lead to a Downgrade

- A rating downgrade is unlikely during the next 12-18 months owing to the positive rating outlook

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» We could take a negative rating action if there was a shift to a less credit supportive regulatory environment and the bank line is not extended this year as anticipated

» A scenario under which either or both of the smelters discontinued operations would be credit negative owing to the potential residual negative effects on the local economy

» The likelihood of a negative rating action would increase if full and timely recovery of environmental compliance costs and increasing regulatory assets does not occur as anticipated under the KPSC approved environmental cost recovery mechanism and future rate proceedings, especially if such amounts increase substantially from currently anticipated levels

Key Indicators

Exhibit 2
Big Rivers Electric Corporation

	2012	2013	2014	2015	2016
Times Interest Earned Ratio (TIER)	1.3x	1.5x	1.6x	1.3x	1.1x
DSC (Debt Service Coverage)	0.9x	0.8x	1.5x	1.2x	1.2x
FFO / Debt	3.6%	3.4%	-1.2%	-2.2%	2.2%
(FFO + Interest Expense) / Interest Expense	1.7x	1.7x	0.8x	0.5x	1.5x
Equity / Total Capitalization	30.3%	33.1%	34.9%	35.3%	36.2%

Source: Moody's Investors Service

Obligor Profile

Big Rivers is an electric generation and transmission cooperative headquartered in Henderson, Kentucky and owned by its three member system distribution cooperatives -- Jackson Purchase Energy Corporation; Kenergy Corp; and Meade County Rural Electric Cooperative Corporation. These member system cooperatives provide retail electric power and energy to more than 116,000 residential, commercial, and industrial customers in 22 Western Kentucky counties.

Detailed Credit Considerations

Contract terminations of two large aluminum smelters necessitates load concentration mitigtion plans; smelters continue to operate and provide residual benefits to the economy

Although Big Rivers now benefits from less exposure to customer and sales concentration with two previously volatile sources of revenue, it faces risks resulting from a sizable exposure to excess owned coal-fired generation capacity. Big Rivers' contracts with its largest customer, Century Aluminum of Kentucky (a subsidiary of Century Aluminum Company, which owns the Hawesville and Sebree smelters) historically made up roughly two-thirds of Big Rivers' annual energy sales and accounted for just under 60% of its system demand and in excess of 60% of annual revenues. Revenues which Big Rivers had been receiving from base energy charges paid by the smelters ended in August 2013 and January 2014 in the cases of the Hawesville and Sebree smelters, respectively.

Since canceling their respective contracts, both of the smelters continue to operate. We understand that the Hawesville smelter has only been operating at about 40% of its capacity for more than a year, while the Sebree smelter is at full production. When compared with the alternative scenario of having both smelters permanently shut down, this outcome is acceptable particularly since Big Rivers and Kenergy are being reimbursed for any incremental costs to their members of the smelters' continued operation and there are residual benefits to the local economy.

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

Rate case decisions by KPSC in 2013-14 and ongoing cost recovery mechanisms are credit positive factors

Credit supportive rate case decisions by the KPSC in October 2013 and April 2014, resulted in approval of a combined wholesale power rate increase of about $90.4 million. With the expiration of bill credits in 2016, the full effects of the wholesale power rate increases are now being fully borne by Big Rivers' members and, in turn, the members' retail customers. The rate increases are credit positive for Big Rivers because the incremental amounts are estimated to result in about 90% of Big Rivers' total gross margins coming from its members that have all requirements contracts in place through 2043. We expect that the current wholesale power rates will continue to support strengthened financial performance, ensure a degree of cushion for compliance with financial covenants and should allow for Big Rivers to further advance load concentration mitigation strategies.

Even though Big Rivers has substantial excess capacity owing to the large customer contract terminations, the KPSC made supportive comments in the rate orders about mitigation steps taken by Big Rivers and the commission clearly states its intent to ensure rates are sufficient to maintain Big Rivers' financial integrity. For example, the KPSC rates approved in the April 2014 order are designed to enable Big Rivers to achieve a 1.3 times interest earned ratio (TIER), a level that is 20 basis points higher than the 1.1x margins for interest (MFI), essentially the equivalent of TIER, required as defined under Big Rivers' indenture. The additional revenue amounts to support Big Rivers' TIER at 1.3x is credit positive because the amounts help to partially offset certain other cost items not covered by the approved rate increases, the most significant of which relate to deferrals of any recovery of depreciation costs relating to the 443 megawatt (MW) Coleman and 417 MW Wilson plants that are currently in excess of Big Rivers' needs at this time.

Another key credit supportive consideration is the KPSC's approval of accelerated use of the economic reserve, rural economic reserve and transmission revenue economic reserve accounts. Pursuant to the terms of the KPSC rate case decision in 2014, the restricted accounts were used in full to provide bill credits during 2014-16, which temporarily minimized the rate shock until September 2015 for large industrial/business (non-smelter) customers and August 2016 for rural (residential) customers.

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

Overall credit positive impact from KPSC mandated independent management audit

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

Big Rivers has added to staff resources focused on enhancing internal expertise in production cost and financial modeling to further leverage its association as a member of ACES and is far along in seeking amendments to its debt documents which would address any restrictions around the sale or early retirement of the Coleman plant. After analyzing the various options for its Coleman plant, Big Rivers determined that it is best to await further clarity around how future environmental regulations and power markets materialize before making a final decision on the Coleman plant. As Big Rivers moves forward in addressing the still open audit recommendations, it is required to report to the KPSC each six months from the completion of the report for two years and annually thereafter if necessary. Big Rivers has provided three reports to this point and anticipates filing its next report with the KPSC in October.

Good progress on other load mitigation strategies

Besides obtaining regulatory support for rate increases, Big Rivers' other load concentration mitigating strategies include securing long-term contracts for the sale of capacity and energy from its fleet to load serving municipal-distribution entities in Nebraska and Kentucky, temporarily idling generation, reducing staff, making short-term off system sales and participating in the capacity markets.

Big Rivers currently has three nine-year contracts to sell capacity and energy to three Nebraska entities. During July 2015, the KPSC approved the long-term power sales contracts which collectively will facilitate Big Rivers transmitting about 69 MWs to the Nebraska

entities, with power beginning to flow in 2018 and reaching full output in 2022. Then in late July 2016 the cooperative announced a 10-year contract to transmit as much as 100 MWs from its Wilson Station to Kentucky Municipal Energy Agency (KyMEA), beginning in 2019, with the potential to increase the contract for sale of capacity by another 50 MW starting in 2022. In December 2016, the KPSC approved the contract with KyMEA. These contracts are credit positive for Big Rivers because they lock up some of its substantial excess capacity and energy with load-serving municipal-distribution entities for multiple year periods, helping the cooperative replenish the smelter load lost during 2013-2014. We expect that the contracts will support Big Rivers' long-term financial performance and provide a reliable source of recovery for Big Rivers' fixed and variable costs and contribute to its overall competitiveness through better rates for its members. Moreover, the contracts allow Big Rivers to become less dependent on the currently depressed wholesale power market for incremental revenues and helps diversify the cooperative's revenue stream, which historically was heavily dependent on the aluminum industry, to one that is less volatile and more predictable.

In addition to the predictable revenue stream provided by the contracts, entering the long term contracts for the sale of excess power also bodes well for Big Rivers' regulatory relationship with the KPSC, since the regulators established an action plan in 2013 that called for the pursuit of such supply contracts. Maintaining supportive regulatory relationships is an important credit factor for Big Rivers since its rate-setting is subject to regulation, which is atypical for an electric generation and transmission cooperative. Rate regulation can potentially introduce uncertainty around the timeliness and extent of future cost recovery, making that uncertainty an especially important credit risk factor for Big Rivers as its regulatory asset balance is increasing.

Although the Coleman plant was idled in May 2014, it is being maintained to permit restart should market conditions become economically feasible. By idling the Coleman plant, Big Rivers achieved overall cost savings of about $26 million annually. Big Rivers is reporting internal load growth and additional longer term opportunities may also arise for sales of electricity, depending on economic development activity in its service territory. For example, Big Rivers has an industrial customer utilizing the cooperative's economic development incentive rate in its business expansion, which will contribute significant growth to the cooperative's load.

In addition to owning the Wilson and Coleman plants, Big Rivers also owns and operates the 130 MW Robert A. Reid and the 454 MW Robert D. Green plants. In aggregate, Big Rivers owns 1,444 net MWs of generating capacity and including its rights to about 197 MWs of coal-fired capacity from Henderson Municipal Power and Light Station Two and about 178 MWs of contracted hydro capacity from the Southeastern Power Administration (SEPA) its total power capacity is 1,819 MWs. Setting aside the SEPA capacity which Big Rivers rarely receives much energy from and the 443 MWs associated with the idled Coleman plant, Big Rivers has about 1,198 MWs of capacity available. This amount compared with average member peak load of 650 MWs, additional contracted capacity sales of about 185 MWs anticipated during 2018-19 and allocating about 130 MWs for an approximate 15% reserve margin, leaves Big Rivers with about 233 MWs of excess capacity, representing a key credit challenge. Achieving additional capacity sale contracts and further economic growth in its service territory to reduce this long capacity position would be an important credit positive development.

Reasonably competitive position maintained

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

Wholesale power contracts support Big Rivers' credit profile

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

Base rate increases and other load mitigation strategies are supporting financial viability

Big Rivers' financial performance is being supported by the outcomes in its last two rate cases and other mitigation strategies. Big Rivers' financial performance in fiscal year December 31, 2016 was reasonably consistent with its budget expectations, including net margins of $12.9 million, which supported a 1.31x TIER, a contractual MFI ratio of 1.31x and a debt service coverage (DSC) ratio of 1.23x, all as defined in the cooperative's debt documents. Although the net margins in fiscal years 2015 and 2016 were far below the net margins of $32.7 million achieved in 2014, financial performance during 2014 was aided by the positive weather effects of the polar vortex which added more than $25 million on a non-reoccurring basis to Big Rivers' off-system margins that year.

For fiscal years 2014-2016 (including Moody's standard adjustments), Big Rivers' FFO coverage of interest, FFO to debt and DSC ratios averaged in the "B", "B" and "A" rating categories, respectively, for the ratios covered under the Rating Methodology for U.S. Electric G&T Cooperatives. For example, Big Rivers' three year average FFO coverage of interest, FFO to Debt, and DSC for 2014-2016 were 0.9x, -0.4%, and 1.3x, respectively. Although the average scores for two of these three metrics are at weak levels under the rating methodology, the ratio of FFO to interest and FFO to debt metrics during FY 2014-16 are negatively affected by the accounting effects of noncash member rate mitigation revenue. Importantly, the 2013 and 2014 rate case decisions have firmly established the necessary revenue requirements and rate levels to maintain Big Rivers' financial viability and restore these metrics to stronger levels now that the economic reserve, rural economic reserve and transmission revenue economic reserve accounts have been utilized. The A category ranking for the average DSC ratio for the same period primarily reflects some improvement because a large principal payment which was made in FY 2013 is no longer pressuring the three-year average DSC ratio. We expect that the DSC ratio can be sustained near 1.2x for the next couple of years. For the same 2014-2016 period, the TIER averaged 1.3x (in the "A" category range) primarily reflecting supportive regulatory decisions which support net margins, and equity to total capitalization averaged 35.5% (in the "Aa" category range) as the metric is benefitting from debt reduction and full retention of net margins. As noted in our summary above, we expect that Big Rivers' FFO coverage of interest and debt and DSC ratios will strengthen over the next 12 to 18 months, which provides positive momentum for the cooperative's credit quality despite the substantial overcapacity at Big Rivers and the remaining execution risk as Big Rivers implements its mitigation strategies.

Liquidity

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

Big Rivers supplements its existing cash on hand and internally generated cash flow with a three year $130 million syndicated senior secured credit agreement with five banks, led by National Rural Utilities Cooperative Finance Corporation (NRUCFC), which expires in March 2018. As of March 31, 2017, Big Rivers had a cash and temporary investments balance of about $44.3 million and $122.2 million available under the NRUCFC credit agreement. Usage under the credit agreement is comprised of $7.8 million of outstanding letters of credit. Big Rivers has manageable debt maturities over the next eight quarters, which are largely comprised of scheduled amortizations of long-term debt to be paid at roughly $5.5 million per quarter. Terms of the NRUCFC credit agreement reserve $30 million for interim financing of KPSC approved environmental related capital expenditures. Big Rivers' application for long-term senior secured financing of the KPSC approved environmental related capital expenditures under the U.S. Department of Agriculture's Rural Utilities Service (RUS) loan program was approved in September 2016. Big Rivers anticipates drawing those funds before the end of FY 2017, which would reduce its liquidity requirements. Accordingly, Big Rivers is negotiating with its existing bank group to amend and extend the $130 million agreement to reduce the aggregate amount to $100 million and extend the maturity for another multi-year term. There are no other material changes contemplated for the agreement, so the quality of the alternate liquidity to be provided by the planned amendment and extension of the syndicated credit agreement would continue to benefit from a 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. Additionally, the credit agreement benefits from no ongoing material adverse change (MAC) clause. The syndicated credit agreement does not have any rating triggers, just a pricing grid based on Big Rivers' rating.

Big Rivers is considering expanding its bank relationships by negotiating a $15 million term loan with Federal Agricultural Mortgage Corporation, proceeds from which it would likely use to pre-pay a portion of the existing series A loan from RUS to achieve interest cost savings.

Debt Structure

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

Other Considerations

Big Rivers' mapping under Moody's U.S. Electric Generation & Transmission Cooperative Rating Methodology grid below is based on historical data through December 31, 2016. The grid indicated rating for Big Rivers' senior most obligations under the Methodology is currently Baa3. However, Big Rivers' actual senior secured rating of Ba2 reflects several of the unique risks at Big Rivers and the challenges facing the cooperative in mitigating these risks, including further implementation of its load mitigation strategies following the smelter contract terminations. The positive outlook for the Ba2 rating reflects the good track record in addressing these risks and prospects for credit improvement over the next 12-18 months.

Methodology

Exhibit 3

U.S. Electric Generation & Transmission Gooperative Rating Methodology

Rating Factors				
Big Rivers Electric Corporation, KY				
U.S. Electric Generation & Transmission Cooperatives [1][2]	Current FY 12/31/2016		Moody's 12-18 Month Forward View As of Published Date [3]	
Factor 1 : Wholesale Power Contracts and Regulatory Status (20%)	Measure	Score	Measure	Score
a) % Member Load Served and Regulatory Status	Ba	Ba	Ba	Ba
Factor 2 : Rate Flexibility (20%)				
a) Board Involvement / Rate Adjustment Mechanism	Baa	Baa	Baa	Baa
b) Purchased Power / Sales (%)	24.5%	A	20%-35%	A
c) New Build Capex (% of Net PP&E)	Aa	Aa	Aa	Aa
d) Rate Shock Exposure	B	B	B	B
Factor 3 : Member / Owner Profile (10%)				
a) Residential Sales / Total Sales	30.4%	Ba	25%-35%	Ba
b) Members' Consolidated Equity / Capitalization	37.5%	Baa	37%-40%	Baa
Factor 4 : 3-Year Average G&T Financial Metrics (40%)				
a) Times Interest Earned Ratio (TIER)	1.3x	A	1.2x-1.4x	A
b) Debt Service Coverage Ratio (DSC)	1.3x	A	1.2x-1.3x	A
c) FFO / Debt	-0.4%	B	1% - 3%	Ba
d) (FFO + Interest) / Interest Expense (3 Year Avg)	0.9x	B	1.3x - 1.7x	Baa
e) Equity/Total Adjusted Capitalization	35.5%	Aa	36% - 38%	Aa
Factor 5 : G&T Size (10%)				
a) MWh Sales	7.7	Baa	8 - 10	Baa
b) Net PP&E	$1.1	A	$1 - $1.1	A
Rating:				
Indicated Rating from Grid		Baa3		Baa2
Actual Rating Assigned (Senior Secured)		Ba2		Ba2

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

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

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

RATINGS

BIG RIVERS ELECTRIC CORPORATION, KY	
Rating: County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds (Big Rivers Electric Corporation Project; cusip number 677288AG7)	Ba2
Outlook	Positive

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Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Primary Credit Analyst:
David N Bodek, New York (1) 212-438-7969; david.bodek@standardandpoors.com

Secondary Contact:
Jeffrey M Panger, New York (1) 212-438-2076; jeff.panger@standardandpoors.com

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Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Credit Profile		
Big Rivers Electric Corp. ICR		
Long Term Rating	BB-/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	BB-/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services has revised its outlook to stable from negative on the following:

- Its 'BB-' issuer credit rating on Big Rivers Electric Corp., Ky. (BREC); and
- Its 'BB-' rating on Ohio County, Ky.'s $83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corp. Project) issued for Big Rivers' benefit.

At the same time, Standard & Poor's affirmed the 'BB-' ratings.

The outlook revision reflects our view of sound debt service coverage (DSC) of 1.4x in 2013 and preliminary results for 2014 that indicate DSC will be about 1.5x. We calculated 2013's DSC ratio after removing the $58.8 bullet maturity of its 1983 pollution control bonds (PCB) from scheduled principal payments because BREC retired the PCB maturity with proceeds of a 2012 loan. Net of the refinancing, BREC repaid $21.1 million of principal in 2013. Revenues available for debt would have produced DSC of only 0.75x of the year's scheduled maturities and interest payments if BREC had not refinanced the PCB maturity.

The strength of 2013's adjusted DSC and 2014's projected DSC ratios transcend the loss of its three members' two largest retail customers in August 2013 and January 2014. Those customers operate smelters that provided about 64% of 2012's operating revenues before moving their electricity purchases to the wholesale market.

Notwithstanding the presence of sound DSC, we have not raised the rating above 'BB-' because the utility increasingly relies on market sales of electricity for margins to compensate for lost loads. We consider the sustainability of market sales to be unpredictable. In our view, sales in competitive wholesale markets expose the utility to substantial price and volume uncertainty, which we consider to be inconsistent with stronger credit quality. Moreover, the strong demand for electricity that the Polar Vortex created likely enhanced 2014's financial performance, which also raises questions about the sustainability of that year's projected results. In addition, BREC faces sharply increasing principal amortization that could pressure revenue requirements for the utility to achieve sound DSC.

We also evaluate the utility's financial metrics against the backdrop of these factors:

- We believe that the departures of its two largest loads and their high load factors deprive the utility of the substantial anchors that historically supported much of its fixed costs and benefitted other customers' rates.
- In October 2013 and April 2014, the Kentucky Public Service Commission (KPSC) approved rate increases that we view as helping insulate credit quality from further declines and mitigating the financial impacts of the customer losses.
- The utility projects that the KPSC rate adjustments, in and of themselves, cannot sustain DSC at levels comparable to 2013's DSC and that it will need margins from sales of surplus power in competitive markets and load growth to replace some of the margins associated with the smelters. Nevertheless, BREC projects that the rate increases should provide margins that, with limited market sales, will meet debt service obligations. The financial forecast assumes that competitive market sales will provide about 40% of 2015's operating revenues and lesser amounts in subsequent years as the utility experiences projected load growth and pursues contracts for sales of its surplus power.
- Nonmember sales represented about 60% of 2014's megawatt-hour sales and more than 40% of operating revenues. However, nonmember sales' margins represented a lesser one-quarter of total margins.
- BREC's financial forecast stress case shows that declines in market sales relative to its base case assumptions can whittle DSC and necessitate higher member rates.
- About 35% of the utility's debt portfolio does not amortize before maturity, which boosts coverage relative to cooperative utilities with amortizing debt because the absence of amortization defers principal payments and reduces the DSC calculation's denominator.
- Although principal repayments in 2015-2019 will average $23.7 million, they will spike to $71 million in 2020 and $67 million in 2021. BREC projects that its cash flows will be sufficient to retire these maturities.
- The utility's debt service is back-loaded, which could stress revenue requirements. Compared with the cited 2015-2019 average principal payments, BREC's principal payments will increase sharply even after repaying bullet maturities in 2020 and 2021. It forecasts that 2022-2023 principal payments will average $34 million, nearly 50% higher than 2015-2019 principal payments and will be $47 million to $56 million during 2024-2028.
- A limited three-member customer base, serves about 113,000 retail electric customers and dilutes the benefits of long-term power supply contracts with members that extend to 2043. Moreover, many of the counties that the utility's members serve have income levels that are 20%-30% below the national median household effective buying income, which we consider as constraining ratemaking and financial flexibility.
- BREC depends almost exclusively on coal units, which exposes the utility to increasingly stringent emissions regulations.
- In addition to existing and proposed emissions regulations' potential limits on market sales opportunities, the utility's market activities face competing natural gas-fired resources that can benefit from the fuel's low prices to the detriment of coal-fired units' dispatch opportunities.
- We believe BREC's few, vintage, coal-fired generation assets present operational exposures that can affect financial performance.
- The utility projects it will maintain relatively stable debt balances of about $800 million through 2019 as it makes necessary capital investments.
- Its 67% debt-to-capitalization ratio is favorable for a cooperative utility.

Henderson, Ky.-based Big Rivers is a generation and transmission cooperative that produces and procures electricity for sale to its three distribution cooperative members and their approximately 113,000 retail customers. The distribution cooperatives are Kenergy Corp., Jackson Purchase Energy, and Meade County Rural Electric Cooperative.

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 commission also regulates BREC's members' rates. It allows the utility to use a fuel adjustment clause to capture changes in variable costs. We believe this tool helps reduce financial volatility.

We consider the rate increases awarded in 2013 and 2014 as reflecting the commission's commitment to the financial viability of the utility, although the KPSC did not provide BREC with its full request for rate relief to offset the customer departures. The commission granted a 15.6% rate increase in October 2013 and a 14.1% increase in April 2014. Its latter decision provided only about half of the utility's 26.5% requested increase.

BREC is temporarily shielding its customers from the effects of the second rate increase by using reserves balances to fund the rate adjustment until it depletes the reserves. Commercial and industrial customers will lose the benefits of the reserves in mid-2015 and residential customers in mid-2016.

Market sales' margins are tempering the financial effects of the customer losses on the remaining customers. BREC is remarketing some of the generation output that previously served the smelters to temper the severity of cost reallocations. We believe that market sales partially transform the utility into a merchant generator that faces the risks inherent in facing volatile market demand and prices. Moreover, we do not view the short-term contracts for its Wilson plant's output as a solution commensurate with the tenor of the utility's more than $850 million of debt. Although BREC is pursuing additional sales contracts, the existing arrangements provide for energy sales only through February 2015 and capacity sales through the first half of 2016.

The utility is also reevaluating its generation portfolio as part of its strategy to reduce costs. It idled its 443 megawatt (MW), coal-fired Coleman power plant and is assessing idling its 417 MW, coal-fired Wilson plant. The generation portfolio also includes 454 MW at the coal-fired Green station and 130 MW in multiple units at the coal and oil-fired Reid Station. We believe that Big Rivers' concentration in coal resources exposes the utility to the potential financial and operational effects of the Environmental Protection Agency's power plant emissions regulations.

The utility reported $853 million of debt as of Dec. 31, 2013. Debt consisted of Rural Utilities Service loans, the Ohio County bonds, and the $537 million loan Big Rivers closed with CoBank ACB and National Rural Utilities Cooperative Finance Corp. in July 2012. In addition to replenishing $35 million of transition reserve funds that had been applied to debt prepayment in 2011, loan proceeds restructured a portion of the utility's RUS borrowing to eliminate some of the spikes in debt service requirements, reduce interest rates, and transition some debt to a mortgage-style amortization. A portion of the 2012 loan reduced 2012's $72.1 million scheduled maturity to $12.1 million, with the remaining $60 million to be amortized later. The loan also retired the $58.8 million maturity of the 1983 PCBs.

In October 2014, the utility secured commitments for a $130 million secured, three-year, revolving credit facility. We consider the syndication's banks' commitments as demonstrating access to capital markets and providing liquidity for working capital, capital expenditures, other general corporate purposes and letters of credit.

Ohio County sold bonds in 2010 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 BREC's senior-secured debt.

Outlook

The stable outlook reflects what we view as sound financial performance in 2013 and 2014 despite the departure of the system's two largest customers. The outlook also reflects our assessment of KPSC rate relief, successful marketing of surplus power, and the utility's demonstrated access to liquidity. Nevertheless, we are maintaining the 'BB-' rating because the lost load exposes the utility's financial performance to the vicissitudes of merchant markets. Furthermore, BREC faces sharply increasing principal amortization that could pressure revenue requirements. If the utility cannot sustain sound financial performance or its members' financial profiles erode because of the lost load, we could lower the ratings. We could raise the ratings if Big Rivers demonstrates a more secure revenue stream together with consistently sound financial performance.

Related Criteria And Research

Related Criteria

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

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Case No. 2018-00146

KIUC 2-1 (PGS) – (11of12) S&P Report 2016.06.14

S&P Global
Ratings

RatingsDirect®

Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Primary Credit Analyst:
David N Bodek, New York (1) 212-438-7969; david.bodek@spglobal.com

Secondary Contact:
Jeffrey M Panger, New York (1) 212-438-2076; jeff.panger@spglobal.com

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Rationale

Outlook

Related Criteria And Research

Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Credit Profile		
Big Rivers Electric Corp. ICR		
Long Term Rating	BB-/Stable	Affirmed
Ohio Cnty, Kentucky		
Big Rivers Electric Corp., Kentucky		
Ohio Cnty (Big Rivers Electric Corp.) RURELCCOO		
Long Term Rating	BB-/Stable	Affirmed

Rationale

S&P Global Ratings affirmed its 'BB-' issuer credit rating on Big Rivers Electric Corp., Ky. (BREC) and its 'BB-' rating on 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 stable.

The ratings reflect our opinion of the following exposures:

- In 2015 debt service coverage dropped to 1.15x from 1.53x in 2014 and 1.35x in 2013, due to weak wholesale market prices.
- Based on BREC's financial forecast that assumes relatively flat energy sales and no base rate adjustments in 2016, we have calculated the potential for coverage to remain at 1.1x in 2016, which we view as an exposure given the company's forecast of continuing meaningful dependence on revenues from nonmember sales, which we view as limiting the utility's power to steer its financial performance.
- BREC is a price-taker that is exposed to market prices when it sells its power plants' output to non-members through competitive markets transactions. We also view the inability to set prices for competitive market sales as limiting some of the financial forecast's predictive value.
- BREC's average revenue per megawatt-hour from non-member sales in 2015 was 10% lower than 2014's.
- Because BREC's membership base lost its two largest retail customers in 2013 and 2014, 2014's member energy sales were 60% lower than 2013's and energy sales declined another 11% in 2015.
- Energy sales to nonmembers jumped to 62% of 2014-2015's total energy sales, up from 13% in 2012. At the same time, nonmember revenues jumped to 42% of operating revenues in 2015, up from 8% in 2012 and 15% in 2013.
- BREC depends almost exclusively on coal units for its energy production, which exposes the utility to increasingly stringent emissions regulations that might limit power plant output and market sales opportunities.
- The utility's market activities compete with natural gas-fired resources that are benefitting from the fuel's low prices to the detriment of coal-fired units' dispatch opportunities.
- Slightly more than one-third of BREC's debt does not amortize before maturity, which defers principal payments and boosts debt service coverage metrics relative to those of other cooperative utilities with amortizing debt.
- Although annual 2016-2019 principal repayments average $25 million, they will spike to $71 million in 2020 and $67 million in 2021, which will require cash flows sufficient to retire these maturities or market access to refund the

maturities. Moreover, because of a back-loaded amortization schedule, BREC projects that 2022-2023 principal payments will average $34 million and will be $47 million to $56 million during 2024-2028.
- We believe BREC's few, vintage, coal-fired generation assets present operational exposures that can affect financial performance.

Our rating also incorporates these mitigating factors:

- The utility projects it will maintain relatively stable debt balances of about $850 million through 2019 as it proceeds with nearly $100 million of capital investments.
- BREC's 65% debt-to-capitalization ratio is favorable for a cooperative utility.
- Supportive regulatory rate decisions from the Kentucky Public Service Commission (KPSC) in 2013 and 2014.

Henderson, Ky.-based Big Rivers is a generation and transmission cooperative that produces and procures electricity for sale to its three distribution cooperative members -- Kenergy Corp., Jackson Purchase Energy, and Meade County Rural Electric Cooperative -- and their approximately 115,000 retail customers. The members serve in 22 counties. The state's median household income levels are nearly 20% below the nation's, which could limit ratemaking flexibility.

The KPSC must approve the rate adjustment requests of the utility and its member distribution cooperatives, which distinguishes these utilities from many other cooperative utilities that have autonomous ratemaking authority. Although the regulator has provided rate adjustments that support adequate financial performance, the utility is greatly exposed to the vicissitudes of competitive wholesale markets where the utility cannot exert price-setting authority over its customers. The commission allows the utility to use a fuel adjustment clause to capture changes in variable costs. We believe this tool helps reduce financial volatility, but does not sufficiently compensate for the utility's exposure to non-members for 60% of energy sales and 40% of revenues.

The commission granted a 15.6% rate increase in October 2013 and a 14.1% increase in April 2014. Its latter decision provided only about half of the utility's 26.5% requested increase. Moreover, the utility is depleting the reserve balances it has been using as a rate stabilization fund to soften the impacts of the commission-approved rate adjustments on customers. In mid-2015, the utility depleted reserves benefitting commercial and industrial customers. Residential customers will lose the benefits of the balance of the reserves in mid-to-late 2016. Because it is exhausting reserves, BREC projects that residential rates will rise 23% in 2016 and 10% in 2017, without base rate adjustments.

To temper the severity of the fixed cost reallocations flowing from its customer losses, BREC is remarketing some of the generation output that previously served those customers. We believe that market sales partially transform the utility into a merchant generator that faces the risks inherent in facing volatile market demand and prices. Moreover, we do not view the short-term contracts for its plants' output as a solution commensurate with the tenor of the utility's debt. The utility reported $855 million of debt as of Dec. 31, 2015. Debt consisted of Rural Utilities Service loans, the Ohio County bonds, and the $537 million loan Big Rivers closed with CoBank ACB and National Rural Utilities Cooperative Finance Corp. in July 2012.

The utility's generation portfolio provides little diversity. It includes the 443 megawatt (MW), coal-fired Coleman power plant, the 417 MW, coal-fired Wilson plant, the 454 MW, coal-fired Green station, and 130 MW from multiple units at the coal and oil-fired Reid Station. We believe that Big Rivers' concentration in coal resources exposes the

utility to the potential financial and operational effects of the Environmental Protection Agency's (EPA) power plant emissions regulations. Until litigations challenging the EPA's Clean Power Plan (CPP) are resolved and state implementation plans are developed, we are unable to ascertain the CPP's financial impact and the extent to which the utility's financial flexibility can accommodate those costs.

In March 2015, the utility entered into a $130 million secured, three-year, revolving credit facility with National Rural Utilities Cooperative Finance Corporation, CoBank, ACB, Fifth Third Bank, KeyBank N.A., and Regions Bank. We consider the syndication's banks' commitments as demonstrating access to capital markets and providing liquidity for working capital, capital expenditures, other general corporate purposes, and letters of credit. As of Dec. 31, 2015, $98 million of the line's capacity remained available to the utility.

Ohio County sold bonds in 2010 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 BREC's senior secured debt.

Outlook

The stable outlook reflect the utility's maintaining adequate debt service coverage under adverse market conditions, its access to liquidity, and the rate relief that the KPSC provided in 2013 and 2014.

Upside scenario

We do not expect to raise the ratings within our two-year outlook horizon because prospects for a more secure revenue stream appear remote. The utility projects that it will continue to make more than half of its energy sales to non-members and will derive nearly half of revenues from customers over whom it cannot exert the price setting authority that we typically associate with the sound credit quality of other electric cooperative utilities. Furthermore, because residential customers will face sharply higher rates as the utility depletes rate stabilization reserves and we consider service area income levels to be weak, we believe the utility's ability to respond to higher costs and rising debt service might be limited.

Downside scenario

We could lower the ratings if the utility cannot sustain sound financial performance because of weak market conditions or poor plant performance. Similarly, if BREC's members' financial profiles erode, we could lower the ratings.

Related Criteria And Research

Related Criteria

- USPF Criteria: Applying Key Rating Factors To U.S. Cooperative Utilities, Nov. 21, 2007
- USPF Criteria: Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011
- USPF Criteria: Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015
- Criteria: Use of CreditWatch And Outlooks, Sept. 14, 2009

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.globalcreditportal.com. All ratings affected by this rating action can be found on the S&P Global Ratings public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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Case No. 2018-00146

KIUC 2-1 (PGS) – (12of12) S&P Report 2017.09.29

S&P Global
Ratings

RatingsDirect®

Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Primary Credit Analyst:
David N Bodek, New York (1) 212-438-7969; david.bodek@spglobal.com

Secondary Contact:
Doug Snider, Centennial 303-721-4709; doug.snider@spglobal.com

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Rationale

Outlook

Summary:

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Credit Profile		
Big Rivers Electric Corp. ICR		
Long Term Rating	BB/Stable	Upgraded
Ohio Cnty, Kentucky		
Big Rivers Electric Corp., Kentucky		
Ohio Cnty (Big Rivers Electric Corp.) RURELCCOO		
Long Term Rating	BB/Stable	Upgraded

Rationale

S&P Global Ratings raised its issuer credit rating on Big Rivers Electric Corp., Ky. (BREC) to 'BB' from 'BB-'. At the same time, S&P Global Ratings raised its rating on Ohio County, Ky.'s $83.3 million pollution control refunding revenue bonds, series 2010A (Big Rivers Electric Corp. Project), issued for BREC, to 'BB' from 'BB-'. The outlook is stable.

The upgrade reflects our view of the following developments:

- The cooperative has added more contracts with nonmembers for the sale of surplus portions of generation capacity output following the loss of two aluminum smelters that represented its members' two principal industrial customers. We believe these contracts add more predictability to the revenue stream and mitigate the utility's and its lenders' vulnerability to default. Debt service coverage (DSC) levels were essentially stable in 2015 and 2016 at nearly 1.2x. Nevertheless, a mismatch remains between the duration of the utility's debt and the shorter tenor of the contracts. For the most part, the nonmember contracts will expire five-to-eight years before the maturity of nearly $200 million of the utility's amortizing and nonamortizing debt outstanding. This figure compares with $814 million of long-term debt that the utility reported as of Dec. 31, 2016.
- Following the customer departures, the Kentucky Public Service Commission (KPSC) approved rate adjustments in 2013 and 2014 that allocate a greater share of fixed costs to BREC's members' remaining native load customers. We believe that these rate actions temper, but do not eliminate, the utility's dependence on nonmember sales for margins and fixed cost recovery.

The ratings also reflect our opinion of the following exposures:

- BREC's contracts for the sale of surplus energy to nonmembers do not cover a meaningful portion of the utility's long generation position, leaving it exposed to competitive market forces.
- BREC is a price-taker that is exposed to market prices when it sells its power plants' output to nonmembers through competitive markets transactions. Also, the negotiated prices in nonmembers contracts reflect market conditions. We view the inability to set prices for competitive market sales as limiting some of the financial forecast's predictive value.

- The utility's aging generation fleet is largely coal-based, faces emissions remediation issues, and competes in the markets in which the Midcontinent Independent System Operator Inc. operates where there are many newer, gas-fired assets that are often more efficient.
- The company forecasts continuing meaningful dependence on nonmember revenues for about a third of its revenues through 2020, which we view as limiting the utility's power to steer its financial performance. BREC projects that its member energy sales will remain close to current levels during those years, which we view as an exposure given the significant size of principal repayments the utility is deferring to later years through its use of non-amortizing debt and inclining principal amortization for its amortizing debt.
- Members' residential revenues, which we consider to generally represent the most stable and predictable revenue stream, accounted for only one-third of members' 2017 revenues. Large commercial and industrial revenues accounted for half of their revenues.
- Although DSC reached 1.19x in 2016, we view DSC levels as only adequate relative to the business risks the utility faces. In 2015 accrual DSC dropped to 1.15x from 1.53x in 2014 and 1.35x in 2013, due to the weak wholesale market prices BREC received for its surplus power sales.
- Because more than one-third of BREC's debt does not amortize before maturity, it skews DSC metrics upward relative to those of other cooperative utilities with amortizing debt.
- BREC's average revenue per megawatt-hour from nonmember sales remained anemic in 2016 at about $32. Annual principal repayments will spike to $72 million in 2020 and $67 million in 2021, which will require cash flows sufficient to retire these maturities or market access to refund the maturities. However, BREC was able to secure financing in 2017 to retire a $26 million bridge facility borrowing to fund emissions remediation projects. We view the refinancing as a favorable development.
- The member distribution cooperatives' 2016 residential customers' retail rates were between 44% and 59% higher than they were in 2011, which we view as potentially limiting financial flexibility. Overall, rates are competitive with state averages, but we believe the sharp increases that were needed to temper the loss of the smelter roads might erode the regulator's and customers' appetite for further increases.
- We believe BREC's few, vintage, coal-fired generation assets present operational exposures that can affect financial performance.

Our ratings also incorporate these mitigating factors:

- The utility projects its debt balances will remain relatively stable through 2020 as it pursues nearly $170 million of capital investments.
- BREC's 64% debt-to-capitalization ratio is favorable for a generation-owning, cooperative utility.

Henderson, Ky.-based BREC is a generation and transmission cooperative that produces and procures electricity for sale to its three distribution cooperative members--Kenergy Corp., Jackson Purchase Energy, and Meade County Rural Electric Cooperative--and their approximately 116,000 retail customers. The members serve in 22 counties. The state's median household income levels are nearly 20% below the nation's, which could limit ratemaking flexibility.

The KPSC must approve the rate adjustment requests of the utility and its member distribution cooperatives, which distinguishes these utilities from many other cooperative utilities that have autonomous ratemaking authority. Although the regulator has provided rate adjustments that support adequate financial performance, we consider the financial margins to be weak relative to the magnitude of the utility's exposure to the vicissitudes of competitive wholesale markets where the utility cannot exert price-setting authority over its customers. The commission allows the utility to use a fuel adjustment clause to capture changes in variable costs, which we view as a positive factor. We

believe this tool helps reduce financial volatility, but does not sufficiently compensate for the utility's exposure to nonmembers for about one-third of revenues.

The commission granted a 15.6% rate increase in October 2013 and a 14.1% increase in April 2014. Its latter decision provided only about half of the utility's 26.5% requested increase. Moreover, the utility depleted the reserve balances it had used as a rate stabilization fund to soften the impacts of the commission-approved rate adjustments on customers. The loss of large industrial loads whose high load factors historically absorbed a substantial portion of the utility's fixed costs, coupled with the depletion of the reserves translate into retail rates that are much higher than they were five years ago. The service territory's low income levels exacerbate the limits that such sharp increases might place on future increases.

To temper the severity of the fixed cost reallocations flowing from its customer losses, BREC is remarketing some of the generation output that previously served those customers. We believe that market sales partially transform the utility into a merchant generator that faces the risks inherent in facing volatile market demand and prices. Moreover, we believe that the mismatch between the tenor of the contracts and the maturity schedule for the utility's debt distinguishes this cooperative utility from others that tend to align debt maturities with the duration of all-requirements power sale contracts. The utility reported $814 million of long-term debt and $26 million of draws on credit lines as of Dec. 31, 2016.

The utility's generation portfolio provides little fuel diversity. It includes the 443-megawatt (MW), coal-fired Coleman power plant; the 417-MW, coal-fired Wilson plant; the 454-MW, coal-fired Green station; and 130 MWs from multiple units at the coal- and gas-fired Reid Station. Although the cooperative also has an allocation of 154 MWs of Southeastern Power Administration hydroelectric power, coal represents the dominant energy source. In 2016, BREC's coal-fired Green and Wilson plants produced 77% of the energy it sold. BREC sourced another 13% of its 2016 energy supply from its rights to the output of the coal-fired Henderson Municipal Power & Light Station 2 power plant. We believe that BREC's concentration in coal resources exposes the utility to the potential financial and operational effects of emissions regulations and coal combustion residuals regulations.

BREC's Coleman station has been idle since the loss of the smelter loads in 2014. The Reid plant's coal capacity can only operate if the utility remediates the plant's emissions.

Ohio County sold $83.3 million of bonds in 2010 for the benefit of BREC, which used bond proceeds to refund auction-rate securities. The bonds do not amortize and have a 2031 bullet maturity. We understand that the financing structure obligates the utility to unconditionally pay the county's bonds' debt service. BREC 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 BREC's senior secured debt.

Outlook

The stable outlook reflect the utility's ability to maintain adequate DSC under adverse market conditions, its access to liquidity, the rate relief that the KPSC provided in 2013 and 2014, and the addition of nonmember contracts that provide more predictability to the revenue stream.

Upside scenario

We do not expect to raise the ratings within our two-year outlook horizon without prospects for a more secure revenue stream that is better aligned with debt maturities. Furthermore, residential customers are shouldering sharply higher rates that we view as potentially limiting ratemaking flexibility. We also consider the utility's reliance of coal-fired resources to support 90% of BREC's 2016 energy sales as a significant hurdle. We view DSC levels as only adequate relative to these exposures.

Downside scenario

We could lower the ratings if the utility cannot sustain sound financial performance because of weak market conditions or poor plant performance. Similarly, if BREC's members' financial profiles erode, we could lower the ratings.

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BIG RIVERS ELECTRIC CORPORATION

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

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

July 26, 2018

1 **Item 2)** ***Provide the cost of obtaining debt rating agency ratings and***
2 ***reports incurred by Big Rivers by FERC O&M or other expense account for***
3 ***each year 2015 through 2017.***
4
5 **Response)** Big Rivers' cost of obtaining debt rating agency ratings and reports is
6 $60,000.00 for each of the years from 2015 through 2017 and is recorded in RUS
7 expense account 930.2 Miscellaneous General Expenses.
8
9
10 **Witness)** Paul G. Smith
11

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

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

July 26, 2018

1 **Item 3)** ***Explain why Big Rivers incurs the cost to obtain debt rating***
2 ***agency ratings and reports. If this is a requirement imposed by any of the***
3 ***existing Big Rivers lenders, then cite to and provide a copy of the specific***
4 ***provisions of each loan agreement that requires Big Rivers to obtain these***
5 ***ratings and reports and incur the cost to do so.***
6
7 **Response)** The First Amended and Restated Consolidated Loan Contract dated
8 January 2, 2018, between Big Rivers Electric Corporation (as Borrower) and United
9 States of America, acting by and through the Administrator of the Rural Utilities
10 Service (the "2018 RUS Consolidated Loan Contract"), Section 5.24(a) Maintenance
11 of Credit Ratings, provides that "*As long as there remains any RUS Note, the Borrower*
12 *shall (i) maintain a Credit Rating from at least two Rating Agencies and (ii)*
13 *continuously subscribe with a Rating Agency for the services described in Exhibit B*
14 *attached hereto*".
15 Refer to the attachments provided with Big Rivers' response to Item 4 of
16 KIUC's Second Request for Information for a complete copy of the 2018 RUS
17 Consolidated Loan Contract.
18
19
20 **Witness)** Paul G. Smith
21

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

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

July 26, 2018

1 **Item 4)** ***Provide a copy of each loan agreement that is in effect.***

2

3 **Response)** Electronic copies of Big Rivers' loan agreements that are currently in

4 effect are provided on the electronic media accompanying these responses.

5

6

7 **Witness)** Paul G. Smith

8

1 **Item 5)** *Refer to the response to KIUC 1-4, which states, in part:*
2
3 *...such a write off would result in a corresponding reduction to Big*
4 *Rivers' bondable additions, which Big Rivers relies upon to issue*
5 *new debt under its Indenture. Thus, a write off would reduce Big*
6 *Rivers' ability to issue new debt necessary to finance capital projects*
7 *required in the future.*
8
9 *a. Provide a copy of the Indenture, if not provided in response to the*
10 *immediately preceding question requesting a copy of each loan*
11 *agreement in effect, and cite to the specific provisions of the*
12 *Indenture that would be implicated if Big Rivers is required to write*
13 *off the approximately $89.6 remaining net book value of Station 2.*
14 *b. Indicate whether the Indenture restricts or precludes the Company's*
15 *ability to issue new debt that is not subject to the Indenture. Is so,*
16 *describe the restriction(s) and/or prohibitions and cite to the*
17 *specific provisions of the Indenture relied on for your response.*
18
19 **Response)**
20 a. See Big Rivers' response to Item 4 of KIUC's Second Request for
21 Information for copies of Big Rivers' Indenture and the Eighth
22 Supplemental and Amendatory Indenture. Specific provisions of the
23 Indenture that would be implicated if Big Rivers is required to write-off its
24 remaining net book value of the Station Two assets include, but are not
25 limited to:

1 • Section 4.2
2 • Section 2.02
3 • Section 5.1
4 • Section 5.2
5 • Section 6.2
6 • Section 8.1
7 • Section 13.14
8 • Section 13.15
9 b. The Indenture does not preclude Big Rivers' ability to issue unsecured debt;
10 however, the issuance of unsecured debt in any meaningful amount is
11 extremely limited by a non-investment grade credit rating.
12
13
14 **Witness)** Paul G. Smith
15

Response to the Kentucky Industrial Utility Customers, Inc.'s Second Request for Information dated July 16, 2018

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1 **Item 6)** ***Refer to the response to KIUC 1-4, which states in part:***
2
3 ***In previous reports, credit rating agencies have indicated that lack***
4 ***of regulatory support for cost recovery of Big Rivers' assets, such as***
5 ***the Station Two assets which have benefited its members for several***
6 ***decades, could be a credit challenge which would inhibit Big Rivers'***
7 ***ability to achieve an investment grade credit rating.***
8
9 ***a. Provide all credit rating agency reports that specifically address***
10 ***recovery of the Station 2 costs.***
11 ***b. Provide all reasons why Big Rivers believes it is necessary, as***
12 ***opposed to desirable, "to achieve an investment grade credit rating."***
13 ***If Big Rivers is subject to any requirement "to achieve an investment***
14 ***grade credit rating," then describe each such requirement and***
15 ***provide a copy of the relevant documents and citations to the***
16 ***relevant provisions with the documents.***
17 ***c. Provide all reasons why Big Rivers believes it is desirable, as***
18 ***opposed to necessary, "to achieve an investment grade credit***
19 ***rating." Provide a copy of all documents relied on for the Company's***
20 ***believe that an investment grade credit rating is desirable, as***
21 ***opposed to necessary, including specific quantifications of potential***
22 ***savings, if any.***
23
24

1 **Response)**

2 a. See the following attachments, provided with Big Rivers' response to Item
3 1 of KIUC's Second Request for Information ("KIUC 2-1"):

4 • KIUC 2-1, Attachment 3 of 12: Fitch Ratings Report dated 7/10/2017;
5 • KIUC 2-1, Attachment 4 of 12: Fitch Ratings Report dated 7/5/2018;
6 • KIUC 2-1, Attachment 7 of 12: Moody's Ratings Report dated 8/8/2016;
7 • KIUC 2-1, Attachment 9 of 12: Moody's Ratings Report dated
8 8/17/2017; and
9 • KIUC 2-1, Attachment 12 of 12: S&P Global Ratings Report dated
10 9/29/2017.

11 b. Please see the RUS Note, Section 5.24.

12 c. Big Rivers believes it is necessary, and desirable, to take all prudent and
13 economically attractive actions to provide wholesale electric service to its
14 Member-Owners at the lowest reasonable cost. Such actions include
15 achieving, and maintaining, an investment grade credit rating. Achieving
16 and maintaining an investment grade credit rating will increase the ability
17 to secure debt, when necessary, as well to receive more favorable terms,
18 such as lower interest rates.

19 In addition to interest savings on future borrowings, Big Rivers
20 would recognize immediate cost savings in the form of reduced fees and
21 interest charges associated with the existing Credit Agreement.

1 Lastly, achieving and maintaining an investment grade credit rating
2 will reduce, or eliminate, the collateral requirements associated with off-
3 system sales agreements.
4
5
6 **Witness)** Paul G. Smith
7

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 7)** ***Refer to the attachment to the response to KIUC 1-4. Provide this***
2 ***attachment, along with all other electronic schedules/workpapers, in live***
3 ***Excel spreadsheet format with all formulas intact.***
4
5 **Response)** The CONFIDENTIAL Excel file containing the attachment to Big
6 Rivers' response to KIUC 1-4 is provided as an attachment named "KIUC 1-4
7 (PGS)(Att) - Finl Metrics - HMPL Exit 3-24-2016 (Non-CPP) – CNF". In addition, the
8 three financial models used to complete the analysis and provide metrics in this
9 spreadsheet are also provided. The CONFIDENTIAL Base model and approved
10 forecast at the time is named "Financial Forecast (2015-2029) 11-25-2015 (Non-
11 CPP)". The CONFIDENTIAL financial model containing the analysis of amortizing
12 the entire impact of the HMPL Exit is provided in Excel format as an attachment and
13 named "Financial Forecast (2015-2029) 3-24-2016 (HMPL Exit) Amortize Entire
14 Loss". The CONFIDENTIAL financial model containing the analysis of amortizing
15 the amount of the impact of the HMPL Exit to the extent that Big Rivers' equity
16 requirements were not exceeded is provided in Excel format as an attachment and
17 named "Financial Forecast (2015-2029) 3-24-2016 (HMPL Exit) Amortize Loss Above
18 Equity Threshold".
19
20
21 **Witness)** Paul G. Smith
22

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1 **Item 8)** ***Refer to the footnotes on pages 8, 9, and 10 of the attachment to***
2 ***the response to KIUC 1-4, which states: "Green O&M and Labor expenses are***
3 ***no longer shared with Station Two and are included in the forecast as gross***
4 ***amounts." Explain why there are no reductions to the Green O&M and Labor***
5 ***expenses if Big Rivers no longer provides services to Station 2. Provide a copy***
6 ***of all analyses and other documentation that supports your response.***
7
8 **Response)** The Green Station units and the Station Two units sit side by side on
9 the same plant site. Because of their close proximity, the units gained economies of
10 scale and scope by sharing the O&M expenses of certain common and shared facilities
11 and employees. The O&M expenses on equipment that is shared with Station Two
12 include items such as the barge unloading system, solid waste disposal, limestone
13 processing, and Big Rivers-owned shared buildings and grounds. The shared and
14 common facilities will continue to be used and will incur costs to maintain and
15 operate. Station Two will no longer receive its allocation of costs, so it was assumed
16 for purposes of the analysis that Green Station will bear 100% of such costs.
17 Likewise, certain labor positions that are shared between Green Station and Station
18 Two will still be required to operate and maintain the Green Station. For example,
19 there is currently one plant manager that manages both Green Station and Station
20 Two. This position is still required for the management of Green Station when Big
21 Rivers no longer operates Station Two. Thus, Station Two will no longer receive its

1 allocation of costs, so it was assumed for purposes of the analysis that Green Station
2 will bear 100% of such costs.
3 It should be noted that the forecast provided in response to Item 4 of the
4 KIUC's first request for information in this case was prepared in early 2016; thus,
5 many assumptions and cost estimates have changed significantly. Please also see
6 Big Rivers' response to Item 5a of the Commission Staff's Supplemental Request for
7 Information in this case.
8
9
10 **Witnesses)** Paul G. Smith and
11 Michael T. Pullen
12

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 9)** ***Refer to the response to KIUC 1-8, which provides a calculation***
2 ***of the minimum equity based on a starting amount of $375 million at***
3 ***December 31, 2014 plus 50% of the positive net margins after that date.***
4 ***a. Provide the definition of "positive net margins" used in the***
5 ***calculation of the minimum equity and provide a copy of all***
6 ***documentation relied on for this definition.***
7 ***b. Confirm that the one half of positive margins each year is added to***
8 ***the minimum equity on a one year lagged basis.***
9
10 **Response)**
11 a. "Positive net margins" is not a defined term within Big Rivers' 2015 Credit
12 Agreement.
13 b. For purposes of the response to KIUC 1-8, one-half of the positive annual
14 net margins for each fiscal year is added to the minimum Members'
15 Equities' Balance calculated for the end of the following fiscal year.
16
17
18 **Witness)** Paul G. Smith
19

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1 **Item 10)** ***Refer to the response to KIUC 1-9. Provide the calculation of the***
2 ***"positive net margins" used in the calculation of the 2019 minimum equity if***
3 ***the Company is directed to write off or otherwise is not allowed a regulatory***
4 ***asset for the approximately $89.6 remaining net book value of Station Two in***
5 ***2018. Indicate whether the "positive net margins" for 2018 would be reduced***
6 ***to $0 or would be substantially negative. Indicate if the "positive net***
7 ***margins" can be negative under the definition provided in response to part***
8 ***(a) of the immediately preceding question.***
9
10 **Response)** "Positive net margins" is not a defined term. Big Rivers believes that it
11 will be allowed to record a regulatory asset for its unrecovered investment in Station
12 Two, a facility that has provided significant benefits to its Member-Owners for over
13 40 years.
14 However, under the hypothetical situation posed in this request, the net
15 margins for the year in which the write-off is recorded will be a negative amount and
16 therefore the incremental minimum equity requirement would be $0. See attachment
17 for the calculation of the Projected 2019 Minimum Members' Equities' Balance if the
18 Company is directed to write off or otherwise is not allowed a regulatory asset for the
19 approximately $89.6 million remaining net book value of its Station Two assets in
20 2018.
21
22 **Witness)** Paul G. Smith

BIG RIVERS ELECTRIC CORPORATION
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Projected Minimum Equity Level for Quarters Ending in 2019
If Big Rivers is Required to Write Off Approximately $89.6M
for its Remaining Net Book Value of Station Two Assets in 2018

Per Sec. 6.07(b) of Big Rivers' 2015 Syndicated Senior Secured Credit Agreement
(As Amended September 19, 2017)

			Quarters ending in 2019 Minimum Equity Balance
Initial Minimum Equity Requirement at December 31, 2014:		$	375,000,000
Plus: 50% of 2014 Positive Net Margins:		$	16,333,720
Plus: 50% of 2015 Positive Net Margins:		$	5,608,059
Plus: 50% of 2016 Positive Net Margins:		$	6,452,633
Plus: 50% of 2017 Positive Net Margins:		$	6,499,211
Plus: 50% of 2018 Budgeted Positive Net Margins (As Adjusted):	(1)	$	-
Projected Minimum Equity Requirement		**$**	**409,893,623**

(1) *2018 Budgeted Net Margins*		
Less: Assumed Loss on Retirement of Station Two Assets	*$*	*(89,600,000)*
Adjusted 2018 Budgeted Net Margins		

Note: Based on the calculation of the Minimum Members' Equities' Balance per Section 6.07(b) of Big Rivers' 2015 Credit Agreement, only positive net margins for a fiscal year are included in the calculation. Accordingly, $0 would be included for the 2018 Net Margins in the calculation of the Minimum Members' Equities' Balance for 2019.

1 Item 11) *Refer to the response to KIUC 1-10.*

2 a. *Provide the revenue associated with the operation of Station Two*
3 *that is included in base rates and provide a copy of the*
4 *schedules/workpapers from the last base rate case that show the*
5 *calculation of those revenues.*

6 b. *Provide the margin (revenue less variable expenses) associated with*
7 *the operation of Station Two that is included in base rates and*
8 *provide a copy of the schedules/workpapers from the last base rate*
9 *case that show the calculation of that margin.*

10 c. *Quantify the fixed expenses that will cease when Station Two no*
11 *longer operates. Provide all supporting calculations and*
12 *documentation.*

13 d. *Quantify the fixed expenses that will not cease and the fixed*
14 *expenses that will increase due to a 100% allocation to Big Rivers*
15 *when Station Two no longer operates. Provide all supporting*
16 *calculations and documentation.*

17 e. *Refer to the schedule of Station II fixed expenses currently recovered*
18 *in rates, which includes $3.439 million recorded for depreciation*
19 *expense in account 555, purchased power expense. Is this the*
20 *depreciation expense associated with HMP&L's plant in service*
21 *allocated to Big Rivers or is this the depreciation expense on Big*
22 *Rivers' plant in service recorded on its accounting books? If the*

1 *latter, explain why depreciation expense recorded on Big Rivers' plant in service is recorded in account 555 instead of account 403.*
2
3
4 **Response)**
5 a. Big Rivers did not calculate the revenue for each generating station as
6 allowed in its last rate case, Case No. 2013-00199.[1] However, as the
7 forecasted test period generation at Green Station essentially matches the
8 total forecasted test period rural and large industrial sales volume, the
9 Station Two forecasted test period generation provides the off-system sales,
10 or $9.6 million gross margin. The sales and generation volumes utilized in
11 Big Rivers' forecasted test period are shown in the table on the following
12 page.
13
14

[1] See *In the Matter of: Application of Big Rivers Electric Corporation for a General Adjustment in Rates Supported by Fully Forecasted Test Period*, Case No. 2013-00199.

1

Big Rivers Electric Corporation
Sales & Generation Volumes in
Big Rivers' Forecasted Test Period –
Case No. 2013-00199

Sales Volume (MWhs):	
Rural	2,308,552
Large Industrial	983,179
Off-System Sales	1,825,807
	5,117,538

Generation (MWhs):	
Green	3,291,303
Station Two	1,628,375
Wilson	0
Reid 1	0
Reid CT	16,050
	4,935,728

2

3 b. Please see the response to subpart a.

4 c. Please see Big Rivers' response to Item 5a of the Commission Staff's
5 Supplemental Request for Information.

6 d. Please see Big Rivers' response to Item 5a of the Commission Staff's
7 Supplemental Request for Information.

8 e. The $3.439 million reflects the depreciation expense associated with Big
9 Rivers' Station Two plant in service investment. Pursuant to the Power
10 Sales Contract, as amended, Big Rivers has a purchase power agreement
11 with Henderson. The price Big Rivers pays for the power it receives under

1 the Power Sales Contract is calculated, in part, by allocating a share of the
2 actual Station Two fixed costs to Big Rivers. Big Rivers follows guidance
3 from the USDA Uniform System of Accounts-Electric, Bulletin 1767B-1,
4 when recording transactions. Accordingly, Big Rivers reflects its cost-share
5 of the purchased power from Station Two in account 555, Purchased Power.
6
7
8 **Witness)** Paul G. Smith
9

1 **Item 12)** ***Refer to the response to KIUC 1-14 where the Company states that***
2 ***it does not hold title to or ownership in the physical assets that are recorded***
3 ***on its books as plant in service.***
4 ***a. Identify and describe these physical assets in detail by RUS plant***
5 ***account, including their physical location.***
6 ***b. Identify who or what entity owns these physical assets.***
7
8 **Response)**
9 a. Please see Big Rivers' response to Item 5 of the Attorney General's Initial
10 Request for Information.
11 b. The City of Henderson owns these assets.
12
13
14 **Witnesses)** Paul G. Smith (*a. only*)
15 Robert W. Berry (*b. only*)
16

1 **Item 13)** ***Provide all authoritative support for the Company's position that***
2 ***it is allowed or required to record costs to electric plant in service accounts***
3 ***for physical assets that it does not own.***
4
5 **Response)** Big Rivers' accounting for its capital investments is in accordance with:
6 - Big Rivers' Capitalization Policy,
7 - Memorandum of Understanding between Big Rivers and HMP&L dated
8 April 7, 2014,
9 - Generally Accepted Accounting Principles, and
10 - The annual opinion issued by no fewer than four large, independent,
11 international public accounting firms that have audited Big Rivers'
12 financial statements over the past 40 years.

13 To summarize, electric utility companies build and operate utility plants under joint
14 ownership/lease agreements or arrangements that do not create legal entities for
15 which separate financial statements are presented. Under these arrangements, the
16 participating utility is responsible for its proportionate share of the costs of
17 construction and operation and is entitled to its proportionate share of the energy
18 produced. When a joint-owned/lease plant becomes operational, one of the
19 participant utilities acts as the operator and bills the other participants for their
20 proportionate share of the direct expenses incurred.
21
22

1 Further, per the Price Waterhouse Coopers (PwC) Power & Utility Handbook:

2 Each owner should record its share of the assets and liabilities
3 associated with the joint plant. Although there may be transactions or
4 accounting considerations related to the assets and liabilities that apply
5 broadly to the group of investors, each is individually responsible for
6 making decisions related to their own accounting.
7
8 Examples of accounting decisions and considerations may include:

9 • Developing capitalization policies,
10 • Establishing depreciable lives and methods,
11 • Evaluating potential impairments,
12 • Developing assumptions related to asset retirement obligations,
13 • Evaluating contingent liabilities,
14 • Determining the appropriate accounting for supply contracts or other
15 contractual arrangements such as power purchase agreements (*e.g.*,
16 treatment as a lease, derivative, or executory contract), and
17 • Valuing contracts accounted for as derivatives.
18
19
20 **Witness)** Paul G. Smith
21

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1 **Item 14)** ***Refer to the response to KIUC 1-12, which describes the basis for***
2 ***the Company's capitalization of certain Station Two costs to plant in service.***
3
4 **Response)** Please see Big Rivers' response to Item 15 of KIUC's Second Request for
5 Information.
6
7
8 **Witness)** Paul G. Smith
9

1 **Item 15)** *The Company did not cite the requirements of the RUS Uniform*
2 *System of Accounts ("USOA") in its response. Indicate if the Company's*
3 *capitalization of certain Station Two costs to plant in service was in*
4 *accordance with RUS USOA. If so, then indicate where the RUS USOA*
5 *authorizes the capitalization of costs to plant in service if the cooperative*
6 *does not own the physical assets.*
7 *a. Indicate when the Company began to capitalize certain Station Two*
8 *costs to plant in service. Indicate if there was some event, such as*
9 *the Unwind, that precipitated any change in the capitalization of*
10 *certain Station Two costs to plant in service of the ownership of the*
11 *physical assets.*
12
13 **Response)** Big Rivers' capitalization of certain Station Two costs to plant in service
14 is in accordance with RUS USOA Bulletin 1767B-1, Section 1767.18, Subsection 101
15 Electric Plant in Service.
16 a. Big Rivers began capitalizing certain Station Two costs to plant in service
17 in 1979. Over the past forty years, the capitalization of such costs has been
18 reviewed annually, by at least four different independent, international
19 public accounting firms, each of which expressed an opinion confirming the
20 appropriateness of Big Rivers' accounting.
21
22 **Witness)** Paul G. Smith

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1 **Item 16)** *Refer to the Company's base financial model forecast provided in*
2 *response to KIUC 1-6.*
3 *a. Describe the Company's plan to refinance the RUS Note B in 2023*
4 *reflected in the Company's base financial model. Identify the*
5 *lender(s) or potential lender(s) assumed, the source of the interest*
6 *rate assumed, and the source and/or basis for all other terms of the*
7 *refinancing, such as contingent or schedule principal payments*
8 *going forward. Indicate specifically whether the Company assumes*
9 *that Note B will be rolled over (extended) or refinanced by the RUS*
10 *or whether the Company assumes that it will refinance with another*
11 *lender. Provide a copy of all documentation relied on for your*
12 *assumptions.*
13 *b. Indicate whether the Company assumes that it will be required to*
14 *hold an investment grade debt rating in order to refinance the RUS*
15 *Note B in 2023. If yes, provide all support for your response.*
16
17 **Response)**
18 a. Big Rivers' base financial plan assumes refinancing the RUS Note B in 2023
19 at a [redacted] and [redacted]. The refinancing term
20 and interest rate assume that Big Rivers will hold an investment grade
21 credit rating at the time of the refinancing. The RUS has indicated that it
22 cannot refinance the loan. Big Rivers has not yet held any substantial

1 conversations with potential lenders about this refinance, but continues to
2 build relationships with a number of lenders in order to provide the lowest
3 cost of debt to our Member-Owners.
4 b. Big Rivers does not believe that holding an investment grade credit rating
5 would be required to refinance the RUS Note B in 2023; however, holding
6 an investment grade credit rating would provide numerous benefits
7 including access to a significantly expanded pool of potential lenders, and a
8 materially lower interest rate, both of which would result in lower costs to
9 our Member-Owners. The credit rating agencies have expressed concerns
10 regarding Big Rivers' ability to refinance RUS Note B.
11
12
13 **Witness)** Paul G. Smith
14

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1 **Item 17)** ***Provide a copy of all working documents and/or analyses related***
2 ***to the Company's plan to refinance the RUS Note B in 2023.***
3
4 **Response)** Please see Big Rivers' response to Item 6 of KIUC's Initial Request for
5 Information.
6
7
8 **Witness)** Paul G. Smith
9