



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

ELECTRONIC APPLICATION OF)	
BIG RIVERS ELECTRIC CORPORATION)	Case No.
FOR ANNUAL REVIEW OF ITS MRSM)	2025-00021
CHARGE FOR CALENDAR YEAR 2024)	

**Verified Application
and
Exhibits**

FILED: February 28, 2025

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

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ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION) Case No.
FOR ANNUAL REVIEW OF ITS MRSM) 2025-00021
CHARGE FOR CALENDAR YEAR 2024)

6
7

APPLICATION

8
9 Comes now Big Rivers Electric Corporation (“Big Rivers” or the
10 “Company”), by counsel, pursuant to the Kentucky Public Service Commission’s
11 (the “Commission”) June 25, 2020 Order in Case No. 2020-00064;¹ its August 17,
12 2020 Order in Case No. 2019-00365;² 807 KAR 5:001; and other applicable law,
13 and for its Application in the above-captioned matter, respectfully states as
14 follows:

15 **I. INTRODUCTION**

16 1. Big Rivers is a rural electric cooperative corporation organized
17 pursuant to KRS Chapter 279. Its full name is Big Rivers Electric Corporation.

¹ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval To Modify Its MRSM Tariff, Cease Deferring Depreciation Expenses, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064, Order (June 25, 2020), Ordering Paragraph No. 10.

² *In the Matter of: Electronic Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Corporation and Meade County Rural Electric Cooperative Corporation For (1) Approval of Contracts For Electric Service with Nucor Corporation, and (2) Approval of Tariff*, P.S.C. Case No. 2019-00365, Order (August 17, 2020), Ordering Paragraph No. 6.

1 Its mailing address is P.O. Box 20015, Owensboro, Kentucky 42304. Its street
2 address is 710 W. Second Street, Owensboro, Kentucky 42301. Its address for
3 electronic mail service is regulatory@bigrivers.com. 807 KAR 5:001, Section
4 14(1).

5 2. Big Rivers states that this Application and the supporting exhibits,
6 which are incorporated herein by reference, contain fully the facts on which the
7 relief requested by Big Rivers is based. 807 KAR 5:001, Section 14(1),

8 3. A complete copy of the public portions of this Application has been
9 sent to the Attorney General and counsel for Kentucky Industrial Utility
10 Customers, Inc.

11 4. No tariff change is contemplated and so notice pursuant to 807
12 KAR 5:011 Section 8 is not required.

13 5. Big Rivers owns generating assets and purchases, transmits, and
14 sells electricity at wholesale. Its principal purpose is to provide the wholesale
15 electricity requirements of its three Member–Owner distribution electric
16 cooperatives: Jackson Purchase Energy Corporation (“Jackson Purchase”),
17 Kenergy Corp. (“Kenergy”), and Meade County Rural Electric Cooperative
18 Corporation (“Meade County”) (collectively, “the Member–Owners”). The three
19 Member–Owners in turn provide retail electric service to approximately 121,000
20 consumers/retail members located in 22 western Kentucky counties: Ballard,
21 Breckenridge, Caldwell, Carlisle, Crittenden, Daviess, Graves, Grayson,

1 Hancock, Hardin, Henderson, Hopkins, Livingston, Lyon, Marshall, McCracken,
2 McLean, Meade, Muhlenberg, Ohio, Union, and Webster.

3 6. Big Rivers was incorporated in the Commonwealth of Kentucky on
4 June 14, 1961, and hereby attests that it is currently in good standing in
5 Kentucky. 807 KAR 5:001, Section 14(2).

6 7. A table of each regulatory requirement or Commission-ordered
7 requirement for filing, cross-referenced to the location in this Application where
8 the requirement is satisfied, is attached hereto as Exhibit A.

9 **II. BACKGROUND**

10 **A. Case Number 2020-00064**

11 8. On February 28, 2020, Big Rivers filed an application requesting
12 that the Commission authorize Big Rivers to modify its Member Rate Stability
13 Mechanism (“MRSM”) tariff to provide a monthly bill credit, increase
14 amortization of the Smelter Loss Mitigation (“SLM”) Regulatory Assets, take
15 additional steps to mitigate the loss of 850 MW of load when two aluminum
16 smelters left the Big Rivers system in 2013-2014, which represented more than
17 one-half of its total native load, and restore Big Rivers’ investment grade credit
18 rating from all three major ratings agencies.³

19 9. On May 29, 2020, Big Rivers, Kentucky Industrial Utility
20 Customers, Inc. (“KIUC”), and the Attorney General of the Commonwealth of

³ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval To Modify Its MRSM Tariff, Cease Deferring Depreciation Expenses, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064.

1 Kentucky, by and through the Office of Rate Intervention (“Attorney General”),
2 filed a unanimous Settlement Agreement, Stipulation, and Recommendation
3 (“Settlement Agreement”), wherein Big Rivers agreed, starting in 2021 and each
4 calendar year thereafter (through 2043), and no later than February 28 of each
5 calendar year, to provide the Commission, the Attorney General, and the KIUC
6 with a report regarding nine identified matters.⁴

7 10. The Commission’s final order in Case No. 2020-00064 (“June 25,
8 2020 Order”) approved the Settlement Agreement, subject to modifications, and
9 clarified the forum in which the report would be presented, finding that Big
10 Rivers “should file a formal docketed proceeding in the form of an annual
11 application to revise its MRS M rates that should include all information laid out
12 in the settlement and this Order.”⁵

13 11. Big Rivers filed its fourth formal docketed proceeding pursuant to
14 the June 25, 2020 Order on February 28, 2024, in Case No. 2024-00031.⁶ The
15 Commission issued its Order in Case No. 2024-00031 on December 6, 2024,
16 increasing the regulatory liability balance to \$12.4 million starting in 2024,
17 authorizing Big Rivers to use \$15.5 million of the TIER Credit Regulatory
18 Liability amount to reduce the SLM Regulatory Assets, and continuing Big

⁴ Case No. 2020-00064, Settlement Agreement, Stipulation, and Recommendation, (May 29, 2020).

⁵ Case No. 2020-00064, Order (June 25, 2020), at page 21.

⁶ See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Review of Its MRS M Charge for Calendar Year 2023*, P.S.C. Case No. 2024-00031.

1 Rivers' requirement to file annually an application pursuant to ordering
2 paragraph 10 of the June 25, 2020 Order in Case No. 2020-00064.⁷

3 12. Since the June 25, 2020 Order, Big Rivers has restored investment
4 grade credit rating from all three major ratings agencies and the Commission
5 has authorized Big Rivers to flow \$53.1 million through the MRSM Rider as
6 monthly bill credits and use \$79.8 million to reduce the SLM Regulatory Assets.
7 The Commission has also increased the Minimum Regulatory Liability Balance
8 from \$9.9 million to \$12.4 million.

9 **B. Case Number 2019-00365**

10 13. On September 26, 2019, Big Rivers and Meade County RECC
11 submitted a joint application seeking an order from the Commission approving:
12 1) the retail contract for electric service between Meade County and Nucor
13 Corporation ("Nucor") (the "Retail Agreement"); 2) a related Wholesale
14 Agreement between Big Rivers and Meade County (with the Retail Agreement,
15 the "Nucor Contracts"); and 3) the establishment of a Large Industrial Customer
16 Expansion ("LICX") tariff.⁸

17 14. Commission approval of the Nucor Contracts and the LICX tariff
18 was necessary to facilitate the construction of a new Nucor facility in

⁷ See P.S.C. Case No. 2024-00031, Order (December 6, 2024).

⁸ *In the Matter of: Electronic Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Corporation and Meade County Rural Electric Cooperative Corporation for Approval of Contracts for Electric Service with Nucor Corporation and Application of Big Rivers Electric Corporation for Approval of Tariff*, P.S.C. Case No. 2019-00365.

1 Brandenburg, Meade County, Kentucky, that will significantly bolster the
2 Commonwealth’s economy by creating 400 direct jobs (at an annual average
3 wage of \$72,000), over 2,600 indirect jobs, \$189 million in annual labor income,
4 \$14.3 million in annual state and local tax revenues, and approximately \$360
5 million in annual gross domestic product (“GDP”).⁹

6 15. On August 17, 2020, the Commission granted Big Rivers and
7 Meade County RECC the relief they sought and directed them to file, as part of
8 Big Rivers’ annual filing required in Case No. 2020-00064, information detailing
9 the financial impacts of the Nucor retail service agreement and the impact the
10 Nucor load has had on Big Rivers’ credit ratings.¹⁰

11 16. Through this filing, Big Rivers seeks to comply with the
12 Commission’s Orders in the two above-described proceedings.

13 **III. RESPONSE TO THE JUNE 25, 2020 ORDER**

14 17. In compliance with the Commission’s June 25, 2020 Order, Big
15 Rivers is filing information and documents related to: (1) matters identified in
16 the Settlement Agreement as set forth in the Order;¹¹ (2) Big Rivers’ current

⁹ *In the Matter of: Electronic Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Corporation and Meade County Rural Electric Cooperative Corporation For (1) Approval of Contracts For Electric Service with Nucor Corporation, and (2) Approval of Tariff*, P.S.C. Case No. 2019-00365, Application (Sept. 26, 2019), Direct Testimony of Robert W. Berry, Exhibit Berry-4.

¹⁰ *Id.*, Order (Aug. 17, 2020), Ordering Paragraph No. 6.

¹¹ Case No. 2020-00064, Order (June 25, 2020), at page 16 (directing Big Rivers to “file by February 28, an application to adjust its MRSMS rates, containing at minimum the information contained in the Settlement [Agreement], as modified herein”).

1 Member Equity Balance and the minimum required by its loan covenants;¹² (3)
2 the reasonableness of any 2024 decommissioning costs;¹³ and (4) detailed
3 descriptions of all actions Big Rivers has taken to minimize decommissioning
4 costs.¹⁴

5 18. The Settlement Agreement identified the following categories of
6 information to be included in this annual proceeding:

- 7 a. Year-end TIER calculation for the prior calendar year;
- 8 b. The amount of the New TIER Credit that will flow through the
9 MRSM Rider during the following twelve months;
- 10 c. The amount charged to depreciation and amortization expense
11 for recovery of the SLM Regulatory Assets in the prior
12 calendar year, that will reduce the SLM Regulatory Assets
13 balance;
- 14 d. Status of the amortization of the SLM Regulatory Assets;
- 15 e. Interest savings gained (annualized) once investment grade
16 ratings are received from at least two of the three rating
17 agencies;
- 18 f. Status of and expected decommissioning costs of Coleman
19 Station and Reid Station Unit 1, and the total and Big Rivers'

¹² *Id.* at page 21.

¹³ *Id.* at page 21.

¹⁴ *Id.*

1 estimated share of the decommissioning costs associated with
2 Station Two; and

3 g. A copy of any proposal to decommission Coleman Station, Reid
4 Station Unit 1, and Station Two that was awarded in the prior
5 year.¹⁵

6 19. The Direct Testimony of Dr. Talina Mathews attached to this
7 Application as Exhibit B responds to the first five subparts (a. through e.) and
8 provides Big Rivers' current Member Equity Balance and the minimum required
9 by its loan covenants, pursuant to the June 25, 2020 Order.¹⁶

10 20. The Direct Testimony of Charles ("Manny") Zeringue attached to
11 this Application as Exhibit C responds to the remaining two subparts (f. and g.).
12 Additionally, Mr. Zeringue's Direct Testimony describes the actions Big Rivers
13 has taken to minimize decommissioning costs and supports the reasonableness
14 of the decommissioning expenses.¹⁷

15 21. The Direct Testimony of Michael S. Mizell attached to this
16 Application as Exhibit D expounds on Mr. Zeringue's testimony by providing
17 information as related to the ash-pond closures and environmental matters.

18 22. The decommissioning of Coleman Station, Reid Unit 1, and Station
19 Two are currently at various stages, as fully discussed in Mr. Zeringue's and Mr.
20 Mizell's testimonies. However, Big Rivers and its expert consultants have and

¹⁵ June 25, 2020 Order at page 16

¹⁶ June 25, 2020 Order at page 21.

¹⁷ *Id.*

1 will continue to examine each decommissioning project to ensure it is a
2 reasonable, necessary, and cost-effective course of action to promote the best
3 interests of Big Rivers' Member-Owners, consistent with Big Rivers' obligations
4 under law, including increasingly-stringent environmental standards and
5 restrictions.

6 **IV. RESPONSE TO THE COMMISSION'S AUGUST 17, 2020 ORDER**

7 23. In its final Order in Case No. 2019-00365, the Commission granted
8 Big Rivers and Meade County the relief they sought and directed them to file, as
9 part of this proceeding, information detailing the financial impacts of the Nucor
10 retail service agreement and the impact the Nucor load has had on Big Rivers'
11 credit ratings.¹⁸

12 24. Nucor completed construction of its new Brandenburg, Kentucky,
13 facility in 2023 and began operations and thus taking service under the Nucor
14 Contracts. Dr. Mathews' Direct Testimony provides the confidential details of
15 the 2024 billing for these services to Nucor.

16 25. As discussed in Big Rivers' MRSM annual applications in Case Nos.
17 2022-00028, 2023-00038, and 2024-00031, securing the Nucor load has had a
18 positive impact on Big Rivers' credit ratings.

¹⁸ *In the Matter of: Electronic Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Corporation and Meade County Rural Electric Cooperative Corporation For (1) Approval of Contracts For Electric Service with Nucor Corporation, and (2) Approval of Tariff*, P.S.C. Case No. 2019-00365, Order (August 17, 2020), Ordering Paragraph No. 6.

1 **V. BIG RIVERS' PROPOSED ADJUSTMENTS AND ALTERATIONS**

2 26. The Commission's June 25, 2020, Order also stated that this
3 annual proceeding would allow Big Rivers "to propose adjustments and
4 alterations as it deems necessary."¹⁹

5 27. Big Rivers is not proposing adjustments or alterations.

6

7 WHEREFORE, Big Rivers requests an Order from the Commission:

8 1. authorizing Big Rivers to use the regulatory liability amount in
9 excess of \$12.4 million, or \$4.2 million in 2024, to further reduce the SLM
10 Regulatory Assets in 2025;

11 2. and granting Big Rivers all other relief to which it may appear
12 entitled.

13

14

¹⁹ Case No. 2020-00064, Order (June 25, 2020), at page 21.

1 On this the 28th day of February, 2025.

2

3

Respectfully submitted,

4

5

**BIG RIVERS ELECTRIC
CORPORATION**

6

7

8

/s/ Senthia Santana

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BIG RIVERS ELECTRIC CORPORATION

**ELECTRONIC APPLICATION OF
BIG RIVERS ELECTRIC CORPORATION FOR ANNUAL REVIEW
OF ITS MRSM CHARGE FOR CALENDAR YEAR 2024
CASE NO. 2025-00021**

VERIFICATION

I, Talina R. Mathews, Chief Financial Officer for Big Rivers Electric Corporation, hereby state that I have read the foregoing Application and that the statements contained therein are true and correct to the best of my knowledge and belief.



Talina R. Mathews

COMMONWEALTH OF KENTUCKY)
COUNTY OF DAVIESS)

25th SUBSCRIBED AND SWORN TO before me by Talina R. Mathews on this the
day of February 2025.



Notary Public, Kentucky State at Large

Kentucky ID Number KYNPI6841

My Commission Expires October 31, 2028

**REFERENCES FOR COMPLIANCE WITH STATUTORY AND REGULATORY
FILING REQUIREMENTS**

Case No. 2025-00021

Big Rivers Electric Corporation's Annual MRSM Application

Law / Regulation	Filing Requirement	Location in Application
807 KAR 5:001 Section 14(1)	The full name, mailing address, and electronic mail address of the Applicant	Application ¶ 1
807 KAR 5:001 Section 14(1)	A request for the order, authorization, permission or certificate desired	Application Page 10
807 KAR 5:001 Section 14(1)	A reference to the particular provision of law authorizing the relief requested	Application Page 1
807 KAR 5:001 Section 14(1)	The facts on which the application is based	Application ¶¶ 8-26 and Testimonies
807 KAR 5:001 Section 14(2)	State and date of incorporation; attest to good standing in state	Application ¶ 6
P.S.C. Case No. 2020-00064		
PSC Order Case No. 2020-00064, Final Order (June 25, 2020)	Filing Requirement Pursuant to Ordering Paragraph No. 10.	Location in Application
Pg. 21 of Final Order	Formal docketed proceeding in the form of an annual application to revise MRSM rates, including all information laid out in the Settlement and Order.	The Application was filed Feb. 28, 2025.
Per Settlement Agreement / Pg. 16 of Final Order	Calculation of year-end TIER for prior calendar year.	Mathews Testimony & Exhibit Mathews-2
Per Settlement Agreement / Pg. 16 of Final Order	The amount of the New TIER Credit that will flow through the MRSM Rider during the following twelve months.	Mathews Testimony & Exhibit Mathews-3
Per Settlement Agreement / Pg. 16 of Final Order	The amount to charge to depreciation and amortization expense for recovery of the Smelter Loss Mitigation Regulatory Assets in the prior calendar year, which will result in the reduction of the balance of Smelter Loss Mitigation Regulatory Assets.	Mathews Testimony & Exhibit Mathews-4

**REFERENCES FOR COMPLIANCE WITH STATUTORY AND REGULATORY
FILING REQUIREMENTS**

Case No. 2025-00021

Big Rivers Electric Corporation's Annual MRSM Application

P.S.C. Case No. 2020-00064		
PSC Order Case No. 2020-00064, Final Order (June 25, 2020)	Filing Requirement Pursuant to Ordering Paragraph No. 10.	Location in Application
Per Settlement Agreement / Pg. 16 of Final Order	The overall status of the amortization of the Smelter Loss Mitigation Regulatory Assets	Mathews Testimony & Exhibit Mathews-4
Per Settlement Agreement / Pg. 16 of Final Order	Once investment grade ratings are received from at least two of the three rating agencies, all interest savings gained (annualized) as a result thereof.	Mathews Testimony & Exhibit Mathews-5
Per Settlement Agreement / Pg. 16 of Final Order	The status of and anticipated decommissioning costs expected to be incurred by Big Rivers for each of the Coleman Station, Reid Station Unit 1, and Station Two (including the total anticipated decommissioning costs of Station Two and Big Rivers' estimated share of such costs.	Zeringue & Mizell Testimonies
Per Settlement Agreement / Pg. 16 of Final Order	A copy of any awarded proposals for the decommissioning of the Coleman Station, Reid Station Unit 1, and Station Two in the prior year.	Zeringue Testimony & Exhibit Zeringue-2
Per Settlement Agreement / Pg. 21 of Final Order	Current Member equity balance and minimum required by the loan covenants.	Mathews Testimony
Per Settlement Agreement / Pg. 21 of Final Order	The reasonableness of any 2024 decommission costs and detailed descriptions of all actions Big Rivers has taken to minimize decommission costs.	Zeringue Testimony
P.S.C. Case No. 2019-00365		
PSC Order Case No. 2019-00365 Final Order (Aug. 17, 2020) Ordering Paragraph No. 6	Information detailing the financial impacts of the Nucor retail service agreements in 2024 and the impact the Nucor load has had on Big Rivers' credit ratings	Mathews Testimony & Exhibit Mathews-6



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BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF)	
BIG RIVERS ELECTRIC CORPORATION)	Case No.
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)	2025-00021
FOR THE CALENDAR YEAR 2024)	

DIRECT TESTIMONY

OF

**TALINA R. MATHEWS
CHIEF FINANCIAL OFFICER**

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: February 28, 2025

**DIRECT TESTIMONY
OF
TALINA R. MATHEWS**

Table of Contents

	<u>Page</u>
I. INTRODUCTION	1
II. JUNE 25, 2020, ORDER IN CASE NO. 2020-00064	4
III. AUGUST 17, 2020, ORDER IN CASE NO. 2019-00365.....	11
IV. CONCLUSION	12

1 **DIRECT TESTIMONY**

2 **OF**

3 **TALINA R. MATHEWS**

4 **I. INTRODUCTION**

5 **Q. Please state your name, business address and occupation.**

6 A. My name is Talina R. Mathews and my business address is 710 W. 2nd Street,
7 Owensboro, Kentucky 42301. I am the Chief Financial Officer (“CFO”) for
8 Big Rivers Electric Corporation (“Big Rivers”).

9
10 **Q. Please summarize your education and professional experience.**

11 A. I earned a doctorate and a master’s in economics from the University of
12 Kentucky and an undergraduate degree in economics and mathematics from
13 Berea College.

14 I served the Commonwealth of Kentucky for over twenty years
15 including as executive director and economist in the Kentucky Office of
16 Energy Policy and for the Kentucky Public Service Commission (“PSC”) as
17 executive director, policy advisor and staff economist. I was appointed to
18 serve on the PSC in 2017. In 2021, I took the position of Director of State
19 Regulatory Policy at Southwest Power Pool (“SPP”). I accepted my current
20 position of CFO for Big Rivers in August of 2022.

21 I was a member of the National Association of Utility Regulatory
22 Commissioners (NARUC), where I serve as a board director, co-vice chair of

1 the Committee on Electricity, and member of the Committee on Critical
2 Infrastructure. I also served on MISO’s Organization of MISO States and as
3 PJM’s Organization of PJM States (OPSI) president. I also served as
4 president of the Southeastern Association of Regulatory Utility
5 Commissioners. My professional experience is summarized in Exhibit
6 Mathews-1.

7

8 **Q. Please summarize your duties at Big Rivers.**

9 A. As CFO, I am responsible for all financial activities of the company, including
10 accounting and financial reporting, payroll, budgets, finance, and tax.

11

12 **Q. Have you previously testified before the Kentucky Public Service
13 Commission (“Commission”)?**

14 A. Yes. I submitted written testimony and written responses to requests for
15 information on behalf of Big Rivers in Cases No. 2023-00038¹ and No. 2024-
16 00031,² in which Big Rivers submitted its applications for annual review of
17 its MRSM charge for the calendar years 2022 and 2023. I submitted written

¹ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRSM Charge for Calendar Year 2022*, P.S.C. Case No. 2023-00038.

² *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRSM Charge for Calendar Year 2023*, P.S.C. Case No. 2024-00031.

1 testimony on behalf of Big Rivers in Case No. 2022-00433,³ in which the
2 Commission granted a Certificate of Public Convenience and Necessity to
3 construct Big Rivers' Transmission Operations Center. Additionally, I
4 submitted written responses to information requests and oral testimony in
5 in Case No. 2023-00310,⁴ in which Big Rivers presented its 2023 Integrated
6 Resource Plan.

7
8 **Q. What is the purpose of your testimony in this proceeding?**

9 A. The purpose of my testimony is: (i) to provide information pursuant to
10 Ordering Paragraph 10 of the Commission's June 25, 2020, Order in Case
11 No. 2020-00064⁵ (the "June 25, 2020, Order"); and (ii) to provide information
12 pursuant to Ordering Paragraph No. 6 of the Commission's August 17, 2020,
13 Order in Case No. 2019-00365.⁶

14

³ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing Construction of a New Transmission Operations Center and an Order Authorizing Big Rivers to Dispose of Property*, P.S.C. Case No. 2022-00433.

⁴ *In the Matter of: Electronic 2023 Integrated Resource Plan of Big Rivers Electric Corporation*, P.S.C. Case No. 2023-00310.

⁵ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval to Modify Its MRSM Tariff, Cease Deferring Depreciation Expense, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, Order (June 25, 2020).

⁶ *In the Matter of: Electronic Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Corporation and Meade County Rural Electric Cooperative Corporation For (1) Approval of Contracts For Electric Service with Nucor Corporation, and (2) Approval of Tariff*, P.S.C. Case No. 2019-00365, Order (Aug. 17, 2020).

1 **Q. Are you sponsoring any exhibits?**

2 A. Yes. The following exhibits were prepared by me or under my supervision:

- 3 • Exhibit Mathews-1: Professional Summary
- 4 • Exhibit Mathews-2: 2024 Year-End TIER Credit Calculation
- 5 • Exhibit Mathews-3: Amount of the New TIER Credit to Flow Through
- 6 the MRSM Rider During 2025; and Allocation of Monthly Bill Credit
- 7 to Customer Classes
- 8 • Exhibit Mathews-4: 2024 Amount Charged to Depreciation and
- 9 Amortization Expense for Recovery of SLM Regulatory Assets
- 10 • Exhibit Mathews-5: 2024 Interest Savings Attributable to Investment
- 11 Grade Credit Rating
- 12 • Exhibit Mathews-6: Most Recent Credit Rating Action Reports

13

14 **II. JUNE 25, 2020, ORDER IN CASE NO. 2020-00064**

15 **Q. Please identify the information you will be providing pursuant to**

16 **the Ordering Paragraph 10 of the Commission's June 25, 2020, Order**

17 **in Case No. 2020-00064.**

18 A. I will provide information specifically addressing the first five matters

19 identified in the May 29, 2020, Settlement Agreement among Big Rivers,

20 Kentucky Industrial Utility Customers, Inc., and the Office of the Attorney

1 General of the Commonwealth of Kentucky, as set forth in the Commission’s
2 June 25, 2020, Order:⁷

- 3 a. Year-end TIER calculation for the prior calendar year;
- 4 b. The amount of the New TIER Credit that will flow through the
5 MRSM Rider during the following twelve months;
- 6 c. The amount charged to depreciation and amortization expense for
7 recovery of the Smelter Loss Mitigation (“SLM”) Regulatory Assets
8 in the prior calendar year, that will reduce the SLM Regulatory
9 Assets balance;
- 10 d. Status of the amortization of the SLM Regulatory Assets; and
- 11 e. Interest savings gained (annualized) once investment grade
12 ratings are received from at least two of the three rating agencies.

13 I will also provide Big Rivers’ current Member equity balance and the
14 minimum required by its loan covenants as specified in the June 25, 2020,
15 Order.⁸

- 16
- 17 **Q. What is the Year-end TIER calculation for the prior calendar year?**
- 18 A. As shown on Exhibit Mathews-2, the 2024 pre-TIER Credit net margins are
19 \$19.3 million, which equates to a TIER of 1.47. In accordance with the

⁷ Case No. 2020-00064, Order at page 16 (June 25, 2020).

⁸ *Id.* at page 21.

1 Commission's Order in Case No. 2020-00064, such financial results prompt
2 the recording of a New TIER Credit of \$7.0 million, resulting in reported net
3 margins of \$12.3 million which equates to the targeted approved TIER of
4 1.30.

5
6 **Q. Please identify the amount of the New TIER Credit that will flow
7 through the MRSM Rider during the following twelve months.**

8 A. In accordance with the Commission's Order in Case No. 2020-00064, \$4.2
9 million (60%) of the New TIER Credit will be recorded as a regulatory
10 liability to reduce the SLM Regulatory Assets, and \$2.8million (40%) of the
11 New TIER Credit will flow through the MRSM Rider in 2025.

12 As shown on Exhibit Mathews-3, the amount of the New TIER
13 Credit to flow through the MRSM Rider in 2025 is to be credited to Rural
14 and Large Industrial customers based on a two-part allocation: 1) the first
15 \$0.7 million is assigned to Rural customers, and 2) the balance of the New
16 TIER Credit is allocated to each customer class based on their respective
17 2024 revenue. Of the total \$2.8 million MRSM Rider bill credits in 2025,
18 \$2.2 million will be credited to Rural customers and \$0.6 million will be
19 credited to Large Industrial customers. Accordingly, \$0.23 million (Rural:
20 \$0.18 million and Large Industrial: \$0.05 million) will be credited each
21 month in 2025.

1 **Q. Please provide the amount charged to depreciation and**
2 **amortization expense for recovery of the SLM Regulatory Assets in**
3 **the prior calendar year, which will reduce the SLM Regulatory**
4 **Assets balance.**

5 A. Based on the 2024 New TIER Credit calculation, as referenced above, \$4.2
6 million was charged to amortization expense for recovery of the SLM
7 Regulatory Assets. This amount is currently recorded as a regulatory
8 liability per Case No. 2020-00064. The regulatory liability account has a
9 carry-over balance of \$12.4 million from 2024. In accordance with the
10 Commission's orders, since the regulatory liability account balance exceeds
11 the required \$12.4 million minimum,⁹ Big Rivers proposes to utilize the
12 regulatory liability amount in excess of \$12.4 million, or \$4.2 million, to
13 reduce the SLM Regulatory Assets in 2025.

14

15 **Q. Please explain the status of the amortization of the SLM**
16 **Regulatory Assets.**

17 A. Big Rivers began amortizing the SLM Regulatory Assets in January 2021.
18 During 2024, this amortization resulted in a reduction to the SLM
19 Regulatory Assets identified in Case No. 2020-00064 by \$13 million.

⁹ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRSB Charge for Calendar Year 2023*, P.S.C. Case No. 2024-00031, Order (Dec. 6, 2024) (the minimum regulatory liability was increased from \$11.3 million to 12.4 million starting in 2024).

1 Additionally, the SLM Regulatory Assets were reduced by \$15.5 million in
2 2024 as a result of utilizing the excess 2023 TIER Credit Regulatory Liability
3 as ordered in the final order in Case No. 2024-00031.

4 In Case No. 2021-00079,¹⁰ the Commission authorized Big Rivers to
5 establish a regulatory asset (the “Green Station Regulatory Asset”) related
6 to the conversion of Green Station to gas as set forth in its application. The
7 Direct Testimony of Paul G. Smith, Exhibit C to Big Rivers’ application in
8 that case, fully described the regulatory asset to be established.¹¹ Mr. Smith
9 indicated that Big Rivers would include this regulatory asset in the list of
10 “Smelter Loss Mitigation Regulatory Assets” authorized in Case No. 2020-
11 00064, and that, beginning in 2022, Big Rivers would apply a levelized
12 amortization schedule to the Green Station regulatory asset in equal
13 amounts over the remainder of Big Rivers’ “all-requirements” contracts with
14 its Members.¹² Mr. Smith also explained, “Based on our financial
15 projections, even with the addition of the Green Station regulatory asset into
16 the list of Smelter Loss Mitigation Regulatory Assets, Big Rivers expects to
17 have fully amortize[d] the Smelter Loss Mitigation Regulatory Assets in

¹⁰ *In that Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing the Conversion of the Green Station Units to Natural Gas-Fired Units and an Order Approving the Establishment of a Regulatory Asset*, P.S.C. Case No. 2021-00079, Order (June 11, 2021), at Ordering Paragraph No. 9.

¹¹ *In that Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity Authorizing the Conversion of the Green Station Units to Natural Gas-Fired Units and an Order Approving the Establishment of a Regulatory Asset*, P.S.C. Case No. 2021-00079, Application (filed Mar. 1, 2021).

¹² *Id.*, Direct Testimony of Paul G. Smith, at pages 12 and 14.

1 approximately 10 years, assuming the Commission authorize[s] Big Rivers
2 to utilize the amounts in the regulatory liability over the \$9 million required
3 minimum to reduce the regulatory assets.”¹³ As of December 31, 2024, the
4 Green Station Regulatory Asset had a balance of \$81.1 million. Amortization
5 for 2024 was \$4.5 million.

6 The total balance of the SLM Regulatory Assets as of January 1, 2024,
7 was approximately \$214.5 million. As of December 31, 2024, the SLM
8 Regulatory Asset total balance was approximately \$187.9, excluding the
9 regulatory liability balance of \$16.6 million, as indicated in Exhibit
10 Mathews-4. The December 2024 balance of each of the SLM Regulatory
11 Assets is included in Exhibit Mathews-4.

12
13 **Q. How does Big Rivers plan to recalculate the SLM Regulatory assets**
14 **/ Green retirement asset amortization expense for 2025?**

15 A. The Commission’s June 25, 2020 Order in Case No. 2020-00064 authorized
16 Big Rivers to apply a portion of its TIER Credit to reduce regulatory asset
17 balances each year. The Order did not specify the method by which Big
18 Rivers would calculate the amortization expense for its SLM Regulatory
19 Assets, including the Green Station Regulatory Asset. Big Rivers initially
20 chose to record annual amortization expense based on the regulatory asset

¹³ *Id.* at page 13.

1 balance as June 25, 2020. This has resulted in project amortization
2 completion well ahead of the 2043 date that was used for calculation at the
3 beginning. For 2025, Big Rivers plans to recalculate the amortization
4 expense for its SLM Regulatory Assets, including the Green Station
5 Regulatory Asset based on year-ending December 31, 2024 balances, and to
6 continue this methodology in future years. This will cause a reduction in
7 Big Rivers' annual amortization expense for these regulatory assets, which
8 positively impacts its net margins and reduces the effective rates paid by Big
9 Rivers' Members.

10

11 **Q. Please explain the annual interest savings realized by receiving an**
12 **investment grade rating from at least two of the three rating**
13 **agencies.**

14 A. Please see Exhibit Mathews-5 showing Big Rivers' interest savings.

15

16 **Q. Please identify Big Rivers' current Member equity balance and the**
17 **minimum required by its loan covenants.**

18 A. At December 31, 2024, Big Rivers' Member equity balance was \$497 million
19 and the minimum required by its loan covenants was \$378 million

20

1 **Q. Is Big Rivers’ proposing any adjustments and/or alterations to its**
2 **MRSM credit in this proceedings? If so, why does Big Rivers deem**
3 **the proposed change(s) is necessary?**

4 A. No, Big Rivers is not proposing any adjustments or alterations.

5

6 **III. AUGUST 17, 2020, ORDER IN CASE NO. 2019-00365**

7 **Q. What relief did Big Rivers seek in Case No. 2019-00365?**

8 A. In Case No. 2019-00365, Big Rivers and Meade County RECC filed a joint
9 application seeking approval of a retail contract for electric service between
10 Meade County RECC and Nucor and a related wholesale letter agreement
11 between Big Rivers and Meade County RECC, to facilitate the construction
12 of a new Nucor facility in Brandenburg, Kentucky. Big Rivers also sought
13 approval to establish a modified version of the Large Industrial Customer
14 Expansion (“LICX”) tariff that was in effect from 2000 through 2014.

15

16 **Q. Did the Commission grant the relief Big Rivers sought, and how does**
17 **the final order in Case No. 2019-00365 relate to this proceeding?**

18 A. Yes, the Commission made the proposed LICX tariff effective on and after
19 the date of entry of its final order, August 17, 2020. Ordering Paragraph 6
20 of the final order in that case stated, “BREC and Meade County RECC shall
21 file as part of BREC’s annual filing required by ordering paragraph 10 of the
22 Commission’s June 25, 2020 Order in Case No. 2020-00064 information

1 detailing the financial impacts of the Nucor retail electric service agreement
2 and the impact the Nucor load has had on BREC's credit ratings.”

3

4 **Q What were the financial impacts of the Nucor retail service
5 agreement in 2024?**

6 A. Nucor was billed a total of [REDACTED] in 2024 under the rates set forth
7 in the retail service agreement.

8 **Q. What impact has the Nucor load had on Big Rivers' credit ratings in
9 2024?**

10 A. Big Rivers received credit rating upgrades from S&P Global Ratings (“S&P”) to BBB in July 2022, Fitch Ratings to BBB in August 2022, and Moody's Investors Service to Baa2 in October 2022. In 2024, ratings remained constant. A copy of the most recent credit rating action reports is attached hereto as Exhibit Mathews-6. Both Fitch Ratings and Moody's Ratings reports mention the Nucor load.

16

17 **IV. CONCLUSION**

18 **Q. Please summarize the relief requested by Big Rivers in this
19 proceeding?**

20 A. As outlined above and in accordance with the Commission's December 6,
21 2024 Order, the regulatory liability account balance exceeds the required
22 \$12.4 million minimum; accordingly, Big Rivers proposes to use the

1 regulatory liability amount in excess of \$12.4 million, or \$4.2 million in 2024,
2 to further reduce the SLM Regulatory Assets in 2025.

3

4 **Q. Does this conclude your testimony?**

5 A. Yes.

BIG RIVERS ELECTRIC CORPORATION

**ELECTRONIC APPLICATION OF
BIG RIVERS ELECTRIC CORPORATION FOR ANNUAL REVIEW
OF ITS MRSM CHARGE FOR CALENDAR YEAR 2024
CASE NO. 2025-00021**

VERIFICATION

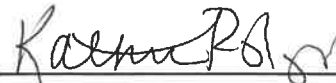
I, Talina R. Mathews, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that Direct Testimony is true and accurate to the best of my knowledge, information, and belief after a reasonable inquiry.



Talina R. Mathews

COMMONWEALTH OF KENTUCKY)
COUNTY OF DAVIESS)

25th SUBSCRIBED AND SWORN TO before me by Talina R. Mathews on this the
day of February 2025.



Notary Public, Kentucky State at Large

Kentucky ID Number KYNP 16841

My Commission Expires October 31, 2028

Professional Summary

Talina R. Mathews, PhD
Chief Financial Officer
Big Rivers Electric Corporation
710 W. 2nd Street
Owensboro, KY 42301

Professional Experience

Big Rivers Electric Corporation
Chief Financial Officer 2022-present

Southwest Power Pool
Director, State Regulatory Policy– 2021-2022

Kentucky Public Service Commission 2016-2021
Commissioner 2017-2021
Executive Director 2016-2017

Organization of MISO States 2015-2016
Director, Member Services

Kentucky Department of Energy Development and Independence 2013-2015
Director, Energy Generation, Transmission and Distribution

Kentucky Public Service Commission 2011-2013
Staff Advisor for Policy

Kentucky Department for Energy Development and Independence 2009-2011
Assistant Director, Carbon Management

ECSI 2008-2009
Executive Vice-President

Kentucky Office of Energy Policy 2006-2008
Executive Director

Kentucky Public Service Commission 2000-2006
Executive Staff Advisor
Economist

Kentucky Division of Water 1998-2000
Economist

Professional Experience (continued)

University of Kentucky 1995-1998
Research Analyst

Michigan Technological University 1993-1995
Assistant Professor

Education

PhD, Economics
University of Kentucky

MA, Economics
University of Kentucky

BA, Mathematics and Economics
Berea College

Big Rivers Electric Corporation
Case No. 2025-00021

TIER Credit Calculation

TIER CREDIT		<u>12/31/2024</u>
(1)	Interest Charges on Secured Obligations (gross)	\$ 41,158,457.35
(2)	Net Margin for a 1.30 TIER	\$ 12,347,537.21
(3)	Actual Net Margin (excluding equity adjustment)	\$ 19,303,275.13
(4)	TIER CREDIT	[(3) - (2)]
		\$ 6,955,737.92
(5)	Regulatory Liability	\$ 4,173,442.76
(6)	MRSM Liability - Rural	\$ 2,185,877.93
(7)	MRSM Liability - Large Industrial	\$ 596,417.23
(8)	TIER CREDIT	\$ 6,955,737.92

Big Rivers Electric Corporation
Case No. 2025-00021

Allocation of Monthly Bill Credit to Customer Classes

2024 New TIER Credit (Total)	\$6,955,737.92
Annual Amount to Refund as Monthly Bill Credit starting with January 2025 service month	\$2,782,295.16
Monthly Amount to Refund as Monthly Bill Credit starting with January 2025 service month	\$231,857.93

Allocation of Monthly Bill Credit to Customer Classes:

	<u>Total</u>	<u>Rural</u>	<u>Large Industrial</u>
<u>Rural & LIC Percentage Allocation:</u>			
2023 Member Revenue (Excluding EDR Sales)	\$319,398,194.99	208,895,286.03	\$110,502,908.96
Less: Sales not FAC applicable	(26,654,494.82)	0.00	(26,654,494.82)
2023 Adjusted Revenue for MRSRM Purposes	\$292,743,700.17	\$208,895,286.03	\$83,848,414.14
Allocation of Monthly Bill Credit	100.0000%	71.3577%	28.6423%
<u>Rural & LIC Dollar Allocation:</u>			
Rural and LIC Bill Credit Allocation	\$2,082,295.16	\$1,485,877.93	\$596,417.23
Rural Initial Credit	700,000.00	700,000.00	0.00
Total Billed in 2024 MRSRM	2,782,295.16	\$2,185,877.93	\$596,417.23
2024 Monthly Bill Credit (12 equal monthly installments)	\$231,857.93	\$182,156.49	\$49,701.44

BIG RIVERS ELECTRIC CORPORATION
CASE NO. 2025-00021

Regulatory Asset Schedule

Smelter Loss Mitigation Regulatory Assets							
	Focused Mgmt Audit	Wilson Station Deferred Depr	Coleman Station Deferred Depr	Reid Station Unit 1 Decommission	Station Two Decommission	Coleman Station Decommission	Total
1/1/2024 Balance	-	-	-	-	79,775,739.51	134,759,460.46	214,535,199.97
Monthly Amortization	-	-	-	(38,255.06)	(13,005,993.34)	-	(13,044,248.40)
2023 Excess TIER Credit	-	-	-	-	(15,511,033.55)	-	(15,511,033.55)
Retire Reid Unit 1	-	-	-	38,255.06	-	-	38,255.06
Retire Station Two	-	-	-	-	194,280.40	-	194,280.40
Retire Coleman Station	-	-	-	-	-	1,732,194.38 *	1,732,194.38
Total	-	-	-	-	51,452,993.02	136,491,654.84	187,944,647.86

Big Rivers began amortizing the SLM Regulatory Assets in January 2021. During 2024, this amortization resulted in a reduction to the Smelter Loss Mitigation Regulatory Assets by \$13,044,248.40. As ordered in the final order in Case No. 2024-00031, the SLM Regulatory Assets were reduced in 2024 by \$15,511,033.55 as a result of utilizing the excess 2023 TIER Credit Regulatory Liability.

The total balance of the SLM Regulatory Assets as of January 1, 2024 was approximately \$215 million. As of December 31, 2024, the SLM Regulatory Asset total balance decreased to approximately \$188 million as indicated in the table above.

* In addition to other 2024 Coleman decommissioning expenses, the deferred accretion and depreciation expense for the Coleman Ash Pond closures for the months of November and December of 2024, was recorded in account 18237100 in the amount of \$1,125,475.91.

**Big Rivers Electric Corporation
Case No. 2025-00021**

2024 Interest Savings

	\$150m Facility- Non-Investment Grade Level V	\$150m Facility- Investment Grade Level III	<i>Difference</i>
--	--	--	-------------------

Amounts & Terms:			
Total Facility Amount:	\$ 150,000,000	\$ 150,000,000	\$ -
Term (Years):	3	3	-
Secured/ Unsecured:	Secured	Secured	
Fees:			
One-Time/ Up-Front Fee:			
Arranger Fee (\$ Amt.)	\$ 10,000	\$ 10,000	\$ -
Upfront Fee (% of Total Facility)	0.175%	0.175%	0.000%
Upfront Fee (\$ Amt.)	\$ 262,500	\$ 262,500	\$ -
Annual Fees:			
Annual Facility Fee (% of Total Facility) <i>(per Pricing Grid)</i> ⁽¹⁾	0.350%	0.200%	0.150%
Annual Facility Fee (\$ Amt.) ⁽¹⁾	\$ 525,000	\$ 300,000	\$ 225,000
Annual Admin. Fee (\$ Amt.)	\$ 20,000	\$ 20,000	\$ -

Big Rivers Electric Corporation
Case No. 2025-00021

2024 Interest Savings

	\$150m Facility- Non-Investment Grade Level V	\$150m Facility- Investment Grade Level III	<i>Difference</i>
Letter of Credit (L/C) Fees:			
L/C Fronting Fee (% of Total L/Cs Outstanding)	0.125%	0.125%	0.000%
L/C Fronting Fee (Annual \$ Amt. Assuming \$0 L/Cs Outstanding)	\$ -	\$ -	\$ -
L/C Participant Fee (% of Total L/Cs Outstanding) (per Pricing Grid) ⁽¹⁾	1.650%	1.300%	0.350%
L/C Fronting Fee (Annual \$ Amt. Assuming \$0MM L/Cs Outstanding)	\$ -	\$ -	\$ -
Total Upfront Fees (one-time fees)	\$ 272,500	\$ 272,500	\$ -
Total Annual Fees	\$ 545,000	\$ 320,000	\$ 225,000
Total Letter of Credit Fees (assuming \$0 outstanding)	\$ -	\$ -	\$ -

⁽¹⁾ Based on BREC's current credit ratings and ratings-based pricing grid per existing 2023 agreement (see below).

= BREC's current credit ratings and applicable Pricing Level as of 01/24/2023.

Pricing Level	Ratings			Big Rivers' Rates	
	S&P	Moody's	Fitch	L/C Part. Fee & ABR / SOFR Margin	Annual Facility Fee
I.	≥ A-	≥ A3	≥ A-	1.000%	0.125%
II.	BBB+	Baa1	BBB+	1.100%	0.150%
III.	BBB	Baa2	BBB	1.300%	0.200%
IV.	BBB-	Baa3	BBB-	1.500%	0.250%
V.	<BB+	<Ba1	<BB+	1.650%	0.350%



In the Matter of:

**ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)
FOR CALENDAR YEAR 2024)**

**Case No.
2025-00021**

Exhibit Mathews-6

CREDIT OPINION

6 January 2025

Update

Send Your Feedback

RATINGS

Big Rivers Electric Corporation, KY

Domicile	Kentucky, United States
Long Term Rating	Baa2
Type	Senior Secured Bank Credit Facility - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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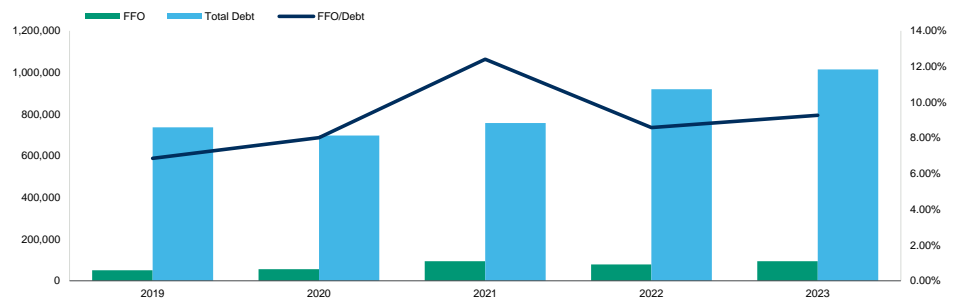
Big Rivers Electric Corporation, KY

Update to Credit Opinion

Summary

Big Rivers Electric Corporation's ("Big Rivers" or "BREC") (Baa2 stable) credit profile reflects the cooperative's continually strong financial profile and cash flow credit metrics offset by its higher business risk profile and exposure to carbon transition risks. During FY 2023, Big Rivers achieved a three year average funds from operations (FFO) coverage of interest expense of 3.6x and FFO to debt ratio of 10.4% based on Moody's standard adjustments. These credit metrics strongly position Big Rivers within the Baa rating category and reflects Moody's expectation that Big Rivers will likely continue to sustain similar robust credit metrics going forward.

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



Source: Moody's Ratings

BREC's credit profile reflects the cooperative's rate regulation by the Kentucky Public Service Commission (KPSC), which is unusual in comparison to many of its peers in the electric cooperative sector that have autonomous rate setting authority. However, Moody's considers the historical regulatory treatment from the KPSC as being credit supportive, and we anticipate that this supportive regulatory environment will continue. BREC also receives funding from the US Department of Agriculture's Rural Utilities Service (RUS) and is subject to its oversight.

BREC's credit profile further reflects its member concentration and relative high exposure to power sales and revenues from large load commodity based industrial customers, whose financial performance can be affected by global economic trends.

The credit profile further recognizes the measures taken by BREC to reduce carbon emissions with the retirement of its coal units and further acknowledges management's successful execution of strategies to better align its power supply portfolio with its changing load profile.

Credit strengths

- » Improved financial performance and key credit metrics that strongly positions Big Rivers within the rating category
- » Credit supportive regulatory treatment from the KPSC that allows for the timely rate recovery of Big Rivers' sizable regulatory assets.
- » Improved contracted sales to industrial loads that creates a better balance between available capacity and BREC's load profile.
- » Reliable net margins and no patronage capital returns to members have created some cushion in the balance sheet to support the financing of its capital spending programs

Credit challenges

- » The lack of autonomous rate setting authority and dependence on maintaining good working relations with KPSC for timely rate recovery of its costs.
- » Maintaining member rates at manageable levels while executing strategies to achieve full and timely recovery of the sizable regulatory asset balance.
- » Effectively managing through historically elevated carbon transition risks as BREC executes plans to reduce its carbon footprint in the coming years.
- » Limited member diversity and relatively high economic dependence on industrial customers within member service territories.

Rating outlook

The stable outlook reflects a prevailing credit supportive regulatory environment, including ongoing support for the recovery of BREC's sizable regulatory assets, improved power supply and demand balance, reduced reliance on coal generation, and the likelihood that Big Rivers can sustain its credit metrics at levels similar to recent financial performance to offset its relatively higher business risk profile.

Factors that could lead to an upgrade

- » Successfully executing the recovery of and reduction in its sizable regulatory assets.
- » Stronger credit metrics to balance its higher business and financial risks.
- » An upgrade could be considered should BREC's FFO coverage of interest and FFO to debt ratios achieve levels greater than 3.0x and in a range of 10% or better, respectively, with the DSC ratio tracking at close to 1.5x or better on a sustained basis.

Factors that could lead to a downgrade

- » A negative rating action could result if there was a shift to a less credit supportive regulatory environment by the KPSC.
- » If Big Rivers were to lose key high load industrial customers.
- » Negative rating pressure would also increase if there were uncertainty regarding the timely recovery of its sizable regulatory assets.
- » The rating could be pressured lower if BREC's FFO to debt and DSC ratios decrease below 6% and 1.2x, respectively, on a sustained basis, or if BREC's liquidity position unexpectedly deteriorates.

Key indicators

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Exhibit 2

	2019	2020	2021	2022	2023
Times Earned Interest Ratio	1.45	1.27	-1.48	1.21	1.22
Debt Service Coverage (DSC)	1.62	1.61	1.92	1.71	0.71
FFO/Debt	6.86%	8.02%	12.41%	8.58%	9.27%
(FFO+Interest Expense)/Interest Expense	1.99	2.26	2.92	3.00	3.22
Equity/Total Capitalization	41.41%	42.23%	37.67%	33.88%	32.23%

Source: Moody's Ratings

Profile

Big Rivers Electric Corporation (BREC) is an electric generation and transmission cooperative with its headquarters now in the City of Owensboro, Kentucky. BREC is owned by its three-member electric distribution system cooperatives— Jackson Purchase Energy Corporation; Kenergy Corporation; and Meade County Rural Electric Cooperative Corporation. These members are also the owners of BREC. The three members' electric distribution system provide retail electric power and energy to approximately 121,000 residential, commercial, and industrial customers in 22 counties in western Kentucky.

BREC owns an aggregate 936 MW of net generating capacity comprising of three power generating stations, including approximately 519MW of natural gas fired generators and the 417 MW D.B. Wilson coal fired generator. Additionally, BREC's owns about 1,305 miles of transmission lines and 24 substations.

Detailed credit considerations

Regulatory decisions by KPSC have been favorable and credit supportive for Big Rivers

Big Rivers' credit profile reflects its core wholesale power contracts (WPCs) with the three member electric distribution systems that is currently through December 31, 2043. While Big Rivers' board is actively involved in rate setting, Big Rivers and its members are subject to rate regulation by the KPSC. The rate oversight by the KPSC poses unique challenges to the cooperative's business model as the board is unable to set rates unilaterally in comparison to its peers within the electric generation and transmission (G&T) cooperative sector that typically have unilateral rate setting autonomy. That said, this regulatory risk for BREC and its members continues to be mitigated by a history of credit supportive rate decisions from the KPSC.

The KPSC has approved several tariff riders for BREC including a fuel adjustment clause, an environmental surcharge, and the Member Rate Stability Mechanism ("MRSM"). BREC's MRSM tariff includes allowances for the recovery in rates of stranded costs related to the early retirement of BREC's coal generation units. The KPSC rate order further established a times interest earned ratio (TIER) based credit mechanism that permits Big Rivers to use 60% of its net margin in excess of a 1.30 TIER to accelerate the amortization of its regulatory assets, with the remaining 40% of net margin in excess of the 1.30 TIER to be used as a member bill credit.

Prior KPSC rate rulings have also included approval of the retail power supply contract for electric service between Meade County and Nucor Steel, wholly-owned by Nucor Corporation (Nucor Baa1 stable). Nucor has constructed a steel plate manufacturing mill that came into service in 2023 and is located within Meade County's service territory. These long-term arrangements add about 200 MW of load to be served by BREC, effectively establishing Nucor as one of Meade County's members.

Regulatory Asset Recovery

BREC has established regulatory assets aggregating about \$384.2 million as of FYE 2023, which is comprised mainly of previously deferred depreciation following the retirement of the Coleman coal plant (balance of \$134.8 million as of FYE 2023), the decommissioning of Reid Unit 1 and Station Two plants (balance of \$79.8 million as of FYE 2023), and costs attributed to the conversion to gas fired generation of the former Robert Green coal plant. Under the terms of the KPSC order in 2021, BREC agreed to a one-time reduction in the balance of the regulatory assets as a charge amounting to approximately \$125 million in depreciation and amortization expenses which adversely impacted the cooperative's TIER ratio in 2021 and reduced its equity capitalization ratio. The KPSC order allows for BREC to recover the remaining regulatory assets by December 31, 2043, which coincides with the current expiration date of its wholesale power agreements with its three members. We view the recovery of this large regulatory asset balance in future rates as being a manageable risk that is supported by the rate authorizations provided to BREC by the KPSC.

Power supply-side strategies implemented to mitigate changing load profile

During the past several years, Big Rivers pursued a strategy to establish a better balance between load demands and resources following a period of having significant excess capacity. The credit profile recognizes the significant progress made by management to create a better balance between its available generation capacity and its load profile. This has been achieved by retiring certain legacy coal generating assets on the generation side and by entering into long-term power supply contracts with several industrial loads to shore up demand, benefitting from the strong economic growth expected in the western Kentucky region. The aforementioned arrangement with Nucor is a good example of this strategy.

Big Rivers' power supply now includes an aggregate 936 MW of owned generating capacity comprising of three power generating stations, including the 454 MW Robert D. Green natural gas fired plant (previously coal generator converted to natural gas generator), 65 MW Robert A. Reid combustion turbine (CT) unit with the ability to burn either fuel oil or natural gas, and the 417 MW D.B. Wilson coal fired generator. Additionally, BREC has about 178 MW of contracted hydro capacity from the Southeastern Power Administration (SEPA) and is expected to procure 160 MW of solar generating capacity through a PPA. The current supply mix provides a better alignment for BREC's member native load to be served through owned generation sources and limits exposure to 3rd party sales.

Significant progress towards decarbonization of the supply stack and reduce carbon transition risks

Big Rivers has significantly reduced its exposure to carbon emissions in its supply stack and reduced its carbon transition risks based on the initiatives undertaken over the past several years. These initiatives reflect the retirement of the 443 MW coal fired Coleman generating plant and its 65 MW Reid Unit 1 coal fired generator effective September 2020. BREC also terminated its operating agreement with Henderson Municipal Power and Light, KY (HMPL: A3 stable) for power procured from HMPL's coal generating station and eliminating its rights to about 187 MW of coal-fired generating capacity from the plant. These supply-side strategies also offset about 435 MW of load lost when the aluminum smelters terminated their contracts with BREC between 2013 and 2024.

Big Rivers has access to hydro power generation through its 178 MW power purchase contract with SEPA. With the aim of increasing its low carbon supply stack and implement renewable generation, Big Rivers received KPSC approval in June 2023 to enter into a 160 MW 20 year fixed price power purchase agreement (PPA) with National Grid Renewables in the Unbridled Solar Project in Henderson and Webster Counties in Kentucky.

Implementation of strategies to phase in long term industrial load

Big Rivers' demand-side strategies have included the replacement of higher risk legacy load exposure to two large aluminum smelters by phasing in long-term contracts for the sale of capacity and energy to more diversified industrial loads and load serving municipal electric distribution entities in Kentucky. BREC has an all-requirements power supply contract with Owensboro Municipal Utilities (OMU: A3 stable) for a peak load of about 180 MW (155 MW net) of capacity through 2026 and a contract for a 100 MW dispatchable capacity block through with the Kentucky Municipal Energy Agency (KYMEA, Baa1 stable) through May 2029.

As mentioned, among the strategy to replace legacy industrial load and concentration is a 20-year full-requirements power supply contract with Nucor Steel which has completed constructing a \$1.7 billion steel plate manufacturing mill within its member (Meade County Rural Electric Cooperative) service territory. The Nucor facility is expected to add significant job growth and supporting supplier and service industry related load that would be beneficial for BREC.

Additional diversification of BREC's industrial load has been achieved with the construction of a new \$500 million paper mill by Pratt Paper, whose load will be served through BREC's distribution member, Kenergy. The Pratt paper mill is expected to be operational by the end of the 4th quarter 2023.

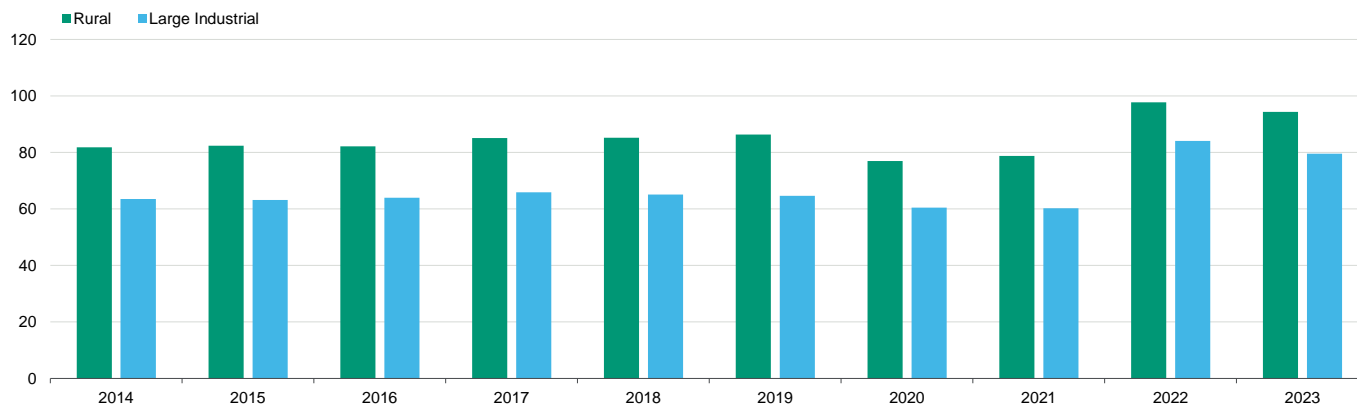
These recent developments enable Big Rivers to become less dependent on the wholesale power market sales for incremental revenues and help diversify its industrial revenue stream, which historically was heavily dependent on the aluminum industry, to one that is less volatile and relatively more predictable.

Maintains a reasonable rate competitive position

Big Rivers' average member rates have remained fairly stable for rural and large industrial customers through 2021. However, BREC as with other peer utilities increased its average rates in 2022 due to higher fuel and purchased power costs that remained during much of 2022 caused by higher natural gas and coal prices that increased power prices. Overall rates were slightly lower in 2023 due to lower

overall softening of commodity prices during 2023. These levels represent a reasonably competitive position for BREC, but not the lowest rates in the region.

Exhibit 3

Historical average member rates

Source: Big Rivers Electric Corporation

Financial performance continues to benefit from regulatory support for recent strategic initiatives of Big Rivers

Big Rivers' credit profile continues to be bolstered by its financial performance and strong credit metrics which are stronger than other similarly rated G&T cooperatives and help offset some of the higher business risk factors including a less diversified member pool, its higher exposure to industrial load and the exposure to rate regulation by the KPSC.

However, the credit supportive outcomes in Big Rivers' recent rate cases, the regulatory support for recovery of its legacy coal fired power plants, as well as other cost reduction and risk mitigation strategies implemented by BREC have collectively helped to improve its financial results and credit profile.

For fiscal years ending 2021-23 (including Moody's standard adjustments), Big Rivers' FFO coverage of interest and FFO to debt ratios showed improvement during the period and averaged 3.6x and 10.4%, respectively. Big Rivers' debt service coverage (DSC) ratio averaged approximately 1.2x for fiscal years 2021-23, inclusive of a substantial principal repayment which occurred during 2023. These credit metrics strongly position Big Rivers within the Baa rating category and reflects Moody's expectation that Big Rivers will likely continue to record similar cash flow metrics over the next two to three years to offset its relatively higher business risk profile.

Near term capital spending and upcoming debt maturities remain manageable

BREC utilizes RUS loan funding and utilizes funding from the CFC to fund its capital spending program and for refinancing of maturing debt.

BREC's capital spending is likely to remain manageable over the upcoming years ranging from \$30 million to about \$50 million annually between 2025 and 2027. A significant portion of this capital spend and near term outlays can be expected to be funded with internal cash flow generation.

Big Rivers utilized cash flow from operations to repay a significant portion of its recent debt maturities including the remaining approximately \$123 million outstanding amount under its RUS 2009 Series B Note in FY 2023. BREC refinanced \$122.8 million of the RUS Series B Note in May 2022 with RUS loans at 3.2%, due December 2043. BREC does not have any significant debt maturities in the upcoming years until 2031 other than annual principal amortization payments that range between approximately \$54 million and \$56 million during 2025 to 2027.

BREC's access to funding sources from the RUS and CFC through its bank line or a provider of long-term debt capital reduce any potential refinancing risk for the cooperative. BREC will be expected to continue accessing RUS funding.

Debt Structure

BREC's senior secured indenture with RUS and all senior secured debt holders, including the lenders under BREC's senior secured syndicated bank credit facility and term loans with CFC, are pari passu in terms of priority of claim and lien on assets.

The debt indenture with the RUS 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. The added flexibility of the senior secured indenture is deemed as credit positive.

Liquidity analysis

Big Rivers maintains sufficient levels of liquidity by supplementing its internally generated cash flow with lines of credit. BREC has in place a \$150 million syndicated senior secured credit facility with five financial institutions, led by National Rural Utilities Cooperative Finance Corporation (CFC: A2 stable), which matures in June 2026. The revolving credit facility has a one-year extension option of the expiration date subject to lender approval. As of September 30, 2024, Big Rivers had no outstanding balances under the \$150 million line of credit and had approximately \$69 million of cash and short-term investment balance.

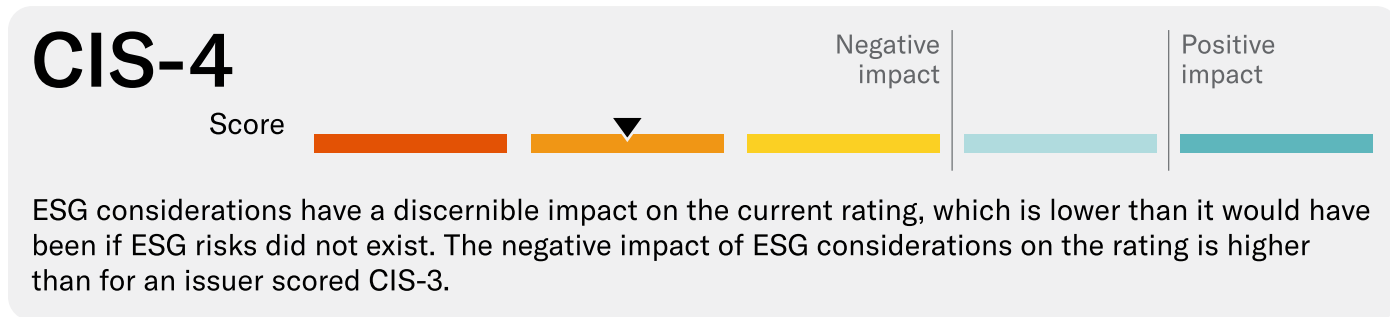
Terms of the CFC credit agreement provide a good quality source of liquidity for BREC. The facility does not have any more onerous financial covenants than the financial covenants in existing RUS debt indenture. The indenture and debt agreements require a minimum 1.1x margin for interest (MFI) ratio to be maintained. The line of credit, however, separately require Big Rivers to maintain a minimum equity balance at each fiscal quarter-end based on \$365 million plus 50% of the cooperative's cumulative positive net margins for each of the preceding fiscal years since December 31, 2022. Big Rivers is comfortably in compliance with those covenants, despite the adverse impact to the balance sheet from the writedown of its equity balance in 2021 related to the retirement of its coal plants.

Big Rivers also participates in a cushion of credit program administered by the RUS, which allows BREC to utilize balances to make scheduled principal and interest payments on certain RUS guaranteed Federal Financing Bank (FFB) loans (W8 and X8 loans). As of September 30, 2024, BREC had a balance of approximately \$4.1 million under the RUS cushion of credit program.

ESG considerations

Big Rivers Electric Corporation, KY's ESG credit impact score is CIS-4

Exhibit 4
ESG credit impact score

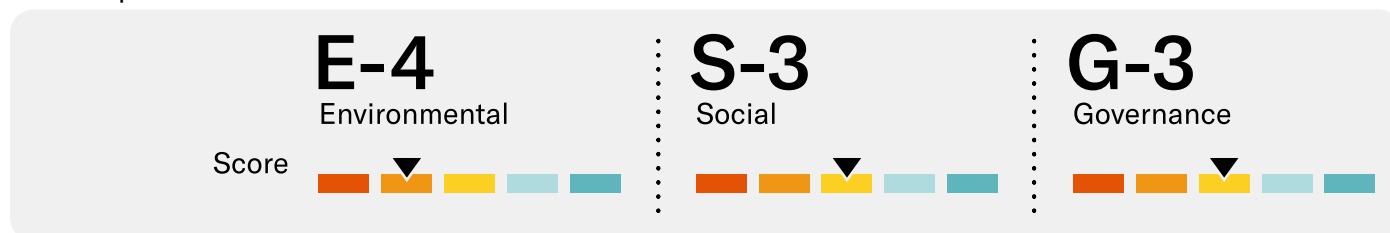


Source: Moody's Ratings

Big Rivers' **CIS-4** indicates that the rating is lower than it would have otherwise been if certain ESG risk exposures did not exist, including among other things, high carbon transition risk.

Exhibit 5

ESG issuer profile scores



Source: Moody's Ratings

Environmental

Big Rivers' **E-4** reflects the cooperative's high exposure to carbon transition risk, moderate exposure to physical climate risks and its exposure to waste and pollution risks given the operations of its coal generation facilities. However, Moody's recognizes the progress made to date by retiring its legacy coal generation plants and its overall decarbonization efforts to reduce carbon transition risks. While historically BREC had been depending on coal-fired generation plants to meet in excess of 90% of its members' energy supply needs, the reliance on coal fired generation has reduced substantially in recent years due to proactive steps taken by BREC's board and management to reduce exposure to coal and diversify its energy supply portfolio. These measures include the retirement of several coal generation units including the 443 MW Coleman plant and the 65 MW Reid Unit 1. BREC also successfully converted its 454 MW Robert Green coal plant to burn natural gas, while also adding some 160 MW of renewable (solar) resources to its supply mix through power purchase agreements including its PPA with SEPA that procures about 178 MW from hydro power. Overall, BREC's ownership in the only remaining 417 MW D.B. Wilson coal plant represents about 33% of its overall 1,274 MW supply resources (45% of owned generation). The recently executed measures have significantly reduced BREC's carbon footprint and reduced carbon transition risks. However, coal generation continues to represent 50 to 70% of its energy supply mix depending on market power purchase levels in its supply mix and which is reflected in the **E-4** issuer profile score. BREC's environmental risk profile also reflects its moderate exposure to physical climate risks due to the increasing frequency and severity of extreme weather events that pose potential threats to fuel supply infrastructure, transmission and distribution networks, thereby increasing costs to its members. Offsetting these risks are its neutral to low exposure for water management and natural capital risks.

Social

Big Rivers' **S-3** score reflects the cooperative's exposure to demographic and societal trends, as heightened public concern regarding carbon emissions could lead to more stringent environmental rules and increased costs to its members. However, this exposure is balanced in part by investments made by BREC and other steps taken to reduce its carbon emissions in a cost-effective way to minimize impact on members' rates, while also maintaining strong reliability of service. Our view of BREC's social risks also considers low exposure to health and safety, responsible production, customer relations and human capital related risks.

Governance

Big Rivers' **G-3** score primarily reflects its higher exposure to financial policy and risk management. Unlike most of its peers, BREC is subject to the regulatory jurisdiction of a state utility commission which could expose it to delays in or less than full recovery of its costs of providing service. Big Rivers actively manages this risk by maintaining a strong and transparent relationship with the KPSC and its staff and resulting in generally credit supportive outcomes. BREC is less exposed to other governance considerations including management credibility, organization and board structure, compliance and reporting risk factors, which are deemed to be broadly in line with other G&T cooperatives, and to the transparent relationship that it has with key stakeholders.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Structural considerations

N/A.

Rating methodology and scorecard factors

Moody's evaluates Big Rivers under the U.S. Electric G&T Cooperatives Methodology. The scorecard-indicated outcome for Big Rivers' senior most obligations under the Methodology is currently Baa2, which is consistent with Big Rivers' senior secured rating of Baa2.

Exhibit 6

am		Current FY 12/31/2023		Moody's 3 Month Forward View As of Published Date [3]	
Big Rivers Electric Corporation, KY		Measure	Score	Measure	Score
U.S. Electric Generation & Transmission Cooperatives Industry Scorecard [1][2]					
Factor 1: Long-Term Wholesale Power Supply Contracts and Regulatory Status (20.0%)					
a) % Member Load Served under Regulatory Status		Baa	Baa	Baa	Baa
Factor 2: Rate Flexibility (20.0%)					
a) Board Involvement / Variable Cost Adjustment Mechanisms		Baa	Baa	Baa	Baa
b) Purchased Power / Total MWh Sales (%)		43.3%	Ba	40-45%	Ba
c) New Build Exposure (% Net PP&E)		A	A	A	A
d) Potential for Rate Shock Exposure		B	B	B	B
Factor 3: Member / Owner Profile (10.0%)					
a) Residential Sales / Total Sales (%)		39.7%	Ba	35-40%	Ba
b) Members' Consolidated Equity / Capitalization (%)		38.1%		35-40%	Baa
Factor 4: 3-Year Average G&T Financial Metrics (40.0%)					
a) TIER (3 Year Avg)		0.5x	B	1.3x	A
b) DSC (3 Year Avg)		1.2x	Baa	1.3x	A
c) FFO / Debt (3 Year Avg)		9.9%	A	9.1%	A
d) (FFO + Interest) / Interest Expense (3 Year Avg)		3.2x	Aa	3.2x	Aa
e) Equity / Total Capitalization (3 Year Avg)		34.4%	A	36.2%	Aa
Factor 5: G&T Size (10.0%)					
a) Megawatt hour sales (Millions of MWhs)		5.3	Baa	5.3	Baa
b) Net PP&E (USD Billions)		\$1.0	Baa	\$1	Baa
Rating:					
a) Scorecard-Indicated Outcome			Baa2		Baa2
b) Actual Rating Assigned (Issuer Rating)			Baa2		Baa2

Source: Moody's Ratings

Ratings

Exhibit 7

Category	Moody's Rating
BIG RIVERS ELECTRIC CORPORATION, KY	
Outlook	Stable
Sr Sec Bank Credit Facility	Baa2

Source: Moody's Ratings

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Table Of Contents

Credit Highlights

Outlook

Credit Opinion

Big Rivers Electric Corp., Kentucky; Rural Electric Coop

Credit Profile		
Big Rivers Electric Corp. ICR		
<i>Long Term Rating</i>	BBB/Stable	Affirmed

Credit Highlights

- S&P Global Ratings affirmed its 'BBB' issuer credit rating (ICR) on Big Rivers Electric Corp. (BREC), Ky.
- The outlook is stable.

Security

The ICR reflects our view of BREC's overall creditworthiness and its capacity and willingness to meet financial commitments in full as they come due. It does not apply to any specific financial obligations. Our assessment of BREC's creditworthiness considers existing and projected debt balances. Bondholders have a security interest in the utility's assets because BREC's long-term debt is secured by property pledged under its mortgage indenture. The indenture obligates the utility to establish rates that are expected to yield a margins-for-interest ratio of 1.1x in each fiscal year. However, we perform a financial analysis based on a fixed-charge coverage (FCC) calculation that includes principal amortization and other fixed costs. Although we do not rate the utility's privately placed debt, we factor these debt balances into our assessment of BREC's credit quality. As of Dec. 31, 2023, the utility reported \$1 billion of debt.

Credit overview

The rating reflects our view of primarily industrial load growth which will absorb historically high surplus generation and reduce its exposure to volatile market sales. We understand BREC will be considering its power supply options including coal fleet and carbon-intensity reductions as part of completing its integrated resource plan by 2026. Three large retail electric loads are each investing \$50 million-\$1.7 billion in new facilities for their businesses within the service territories of BREC's member cooperatives, and management reports large industrial sales have increased 20% in 2024 compared to 2023. However, large industrial sales in 2024 remain 20% below original projections and slower industrial load growth has increased market sales above projections. These new and expanded facilities should translate into electricity consumption that can support a more predictable revenue stream and help shield BREC from becoming dependent on revenue from energy sales in competitive wholesale markets if nonmember municipal customers do not renew existing intermediate-term contracts for purchases of BREC power.

The cooperative reduced its carbon intensity through the conversion of a portion of the utility's coal generation fleet to natural gas in 2022; however, the cooperative will likely remain heavily reliant on coal, which accounted for 99% of self-generation and 56% of total energy requirements in 2023. The cooperative's FCC was at least 1.7x in fiscal years 2021-2023 and reasonable projections indicate coverage will weaken to a still healthy 1.3x coverage for unaudited fiscal 2024 due to mild weather and rising operating expenses including fuel costs.

Constraining the rating are:

- BREC members' significant dependence on revenue from industrial customers, which we view as more vulnerable to economic cycles than residential customers;
- The service territory's weak income levels, coupled with above-average member retail rates, which could limit the utility's rate-making flexibility; and
- Coal's ongoing substantial contribution to generation, despite retirements of portions of the coal-fired generation fleet.

Environmental, social, and governance

We view the cooperative's power supply centered on coal to be a credit weakness. Although BREC projects reducing coal-fired megawatt hours because of the conversion of its Green station units to natural gas, coal-fired electricity from the larger Wilson station accounted for 56% of energy sales in 2023, which we view as placing negative pressure on the credit quality of the cooperative. BREC's economic Midcontinent Independent System Operator market purchases due to the low natural gas price environment accounted for the majority of its purchased power and represented 35% of energy sales in 2023.

Energy Information Administration data show that weighted average retail rates in 2022 are 8%-13% higher than state averages, which we view as creating social risks that could limit financial flexibility, especially in an inflationary environment that creates a need for rate increases to cover higher operating, capital, and borrowing costs. The state's high poverty rate, combined with weak county income levels, compound affordability issues and social risks, which we consider moderately negative for credit quality. County income levels in 2023 across the BREC's three distribution cooperatives in western Kentucky range between 71% and 100% of the national average. We continue to monitor the strength and stability of electric utilities' revenue streams for evidence of delinquent payments or other revenue erosion. Although the rate of inflation as measured by the Consumer Price Index (CPI) has softened, Bureau of Labor Statistics data shows that electricity price inflation continued to outpace the broader CPI by 100 basis points (bps) to more than 200 bps during March-September 2024. The amalgam of increases in delinquent credit card, consumer, and auto loans, along with financial pressures associated with the resumption of student loan payments and weaker than historical household savings rates, will likely compound the financial pressures electricity consumers face. Potentially exacerbating issues of energy affordability are weak economic indicators, such as S&P Global Economics' forecast of a 25% recession risk within the next 12 months, which is elevated relative to the historical baseline. A cooling labor market, geopolitical risks, and the uncertainty surrounding whether and when the president-elect will implement economic initiatives proposed as a candidate, might add to recessionary pressures. (See "Economic Outlook U.S. Q4 2024: Growth And Rates Start Shifting To Neutral," published Sept. 24, 2024, on RatingsDirect; and "After Trump's Win, What's Next For The U.S. Economy?" published Nov. 7, 2024, both on RatingsDirect).

We believe management demonstrated favorable actions that mitigate risk through its pursuit of contracts for sales of the output of surplus generation capacity to nonmember utilities to temper market exposure and to more efficiently allocate fixed costs previously borne by industrial customers that severed their ties with BREC in 2013. In addition, the utility benefits from a proactive regulator that, in addition to overseeing the utility's rates, has demonstrated a commitment to monitoring management and board actions and financial performance. BREC's new president and

CEO started in January 2024 and it is too early to assess the cooperative's execution of strategic initiatives.

Outlook

The stable outlook reflects reduced risk of exposure to competitive wholesale markets through 2026, lower carbon intensity, and projections of continued sound FCC, liquidity, and leverage in the near term.

Downside scenario

We could lower the rating if the utility cannot sustain sound financial performance because of carbon-reduction costs or if the industrial customers, despite their substantial investments in facilities within BREC's service territory, experience economic dislocations and their energy sales are materially lower than projections.

Upside scenario

Although we believe industrial load growth and management actions have enhanced the stability and predictability of the revenue stream, we do not expect to raise the rating further within our two-year outlook horizon. We believe the utility continues to face material exposures that include a substantial carbon dependence, a significant reliance on industrial customers, and rates that we consider high relative to low income levels.

Credit Opinion

BREC is a generation and transmission cooperative that derived 65% of its 2023 energy sales from three distribution cooperatives (serving 121,000 customers) and the balance principally from sales to nonmember utilities with whom it has contracts and from market sales. Member revenue, which includes large industrial loads, represented 77% of total revenue in fiscal 2023, followed by contracted nonmember municipal revenue (13%). Because large industrial member sales growth has been slower, management expects market sales will represent 11% of energy in 2024, but well below BREC's market exposure of 31% in fiscal 2021. BREC's all-requirements wholesale power supply contracts with its three distribution cooperatives extend until Dec. 31, 2043, in line with its final debt maturity.

BREC completed its conversion of its two Green station generation units to natural gas in May 2022, but coal accounted for 99% of self-generation in 2023. Based on the gas conversions and plans to add contract purchases of solar electricity (160 MW), management projects coal's contribution to total energy sources will decline to 52% by 2025, from 83% in 2021. In our view, coal will continue to represent a substantial portion of energy sales, despite meaningful carbon reductions since 2015, and the cooperative remains financially exposed to potentially more stringent federal emissions regulations.

Following the loss of two aluminum smelter loads that accounted for about two-thirds of energy sales almost a decade ago, the utility faced a long generation position. To mitigate the cooperative's exposure to volatile power markets, management contracted to sell much of the surplus power to municipal utilities under contracts expiring at the end of 2026 and 2029. However, if BREC does not extend Owensboro Municipal Utilities' (OMU) contract in 2027, BREC will retain 155 MW in capacity to manage member load growth. If the municipal customers extend their contracts, the cooperative might need to secure through contracts or construction of additional generation resources to simultaneously serve those customers and the industrial loads the system is adding. We understand BREC will

consider its power supply options, including a potential new combined cycle natural gas plant, once there is clarity on municipal customers extending their contracts. For example, BREC's contracts with OMU and Kentucky Municipal Energy Agency accounted for 25% of energy sales in 2023.

Nucor Corp. is developing a \$1.7 billion steel plate manufacturing plant in Brandenburg, Pratt Industries is constructing a \$500 million paper mill in Henderson, and Blockware Mining built a \$50 million cryptocurrency server facility in Paducah. These facilities will add 300 MW of load, or almost 90% of the load the municipalities contribute. The industrial load additions should temper exposure to merchant energy markets if the municipal utility systems do not renew their wholesale power purchase agreements with BREC when they expire in the latter part of the decade. Management's original load forecast for large industrial members sales suggest a potential 25% increase in energy sales from 2024 levels.

Based on our view of management's financial forecast, we expect BREC will produce healthy 1.3x FCC for fiscal 2024 when considering a portion of purchased power costs as debt-like obligations. After excluding a bullet debt maturity that was refinanced through Rural Utilities Service, BREC provided robust 1.7x FCC, which considers a portion of purchased power costs debt-like obligations. BREC's liquidity position improved to a healthy 345 days' cash on hand in fiscal 2023, including an undrawn \$150 million syndicated line of credit with CFC, and we expect liquidity will be maintained near 250 days by the end of fiscal 2024.

Unlike many other cooperative utilities, BREC does not have autonomous rate-setting authority. Rather, the Kentucky Public Service Commission establishes the cooperative's wholesale rates and its members' retail rates. Tempering the absence of rate-setting autonomy is a history of supportive regulatory decisions and utility projections of modest rate increases principally through the utility's formulaic monthly fuel clause and purchased power cost mechanisms. BREC implemented a surplus margin sharing mechanism meant to increase debt amortization of regulatory assets while also providing member bill credits when possible. Currently, there are no plans for a base-rate increase request.

We consider BREC's members key credit characteristics sufficient FCC near 1.1x and thin liquidity, although both Jackson Purchase Energy Corp. and Meade County RECC maintain lines of credit. We consider the members' low customers per mile attributable to their serving portions of 26 counties in western Kentucky.

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RATING ACTION COMMENTARY

Fitch Affirms Big Rivers Electric Corporation (KY) at 'BBB'; Outlook Stable

Thu 18 Jul, 2024 - 10:36 AM ET

Fitch Ratings - New York - 18 Jul 2024: Fitch Ratings has affirmed the following ratings on Big Rivers Electric Corporation (Big Rivers), KY at 'BBB':

--Issuer Default Rating (IDR).

The Rating Outlook is Stable.

RATING ACTIONS

ENTITY / DEBT ↕	RATING ↕	PRIOR ↕
Big Rivers Electric Corporation (KY)	LT IDR BBB Rating Outlook Stable Affirmed	BBB Rating Outlook Stable
Big Rivers Electric Corporation (KY) /Issuer Default Rating/1 LT	LT BBB Rating Outlook Stable Affirmed	BBB Rating Outlook Stable

VIEW ADDITIONAL RATING DETAILS

The 'BBB' IDR reflects Big Rivers' midrange revenue defensibility, strong operating risk profile and stable financial performance. Big Rivers' leverage ratio, measured as net adjusted debt to adjusted funds available for debt service (FADS), declined from over 9.0x in 2017 to just under 7.0x in 2022 and 2023 due to strong operating income trends and an increase in non-cash depreciation expenses.

Fitch expects a continued trend of strong cash flow based on management's financial forecast, which should allow leverage to remain low. Leverage is anticipated to rise in Fitch's Analytical Stress Test rating case stress scenario to closer to 9.0x, but remain supportive of the 'BBB' rating.

Fitch continues to assess Big Rivers' three members to have midrange credit quality, which constrains the corporation's overall revenue defensibility when coupled with the absence of independent rate-setting authority, and likely limits the upside of the overall IDR. Lastly, a consistently low operating cost burden, manageable capital needs and a supportive regulatory regime are also important rating considerations.

SECURITY

Big Rivers' IDR reflects Fitch's assessment of the utility's vulnerability to default on its financial obligations.

KEY RATING DRIVERS

Revenue Defensibility - 'bbb'

Strong Contractual Framework, Midrange Member Credit Quality

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Due to the midrange assessment principally reflects Fitch's assessment of the credit quality of the member utilities along with the regulatory framework within which Big Rivers and its customers operate, the rating is unlikely to migrate out of the 'BBB' category. Member credit quality is evaluated using Fitch's purchaser credit index (PCI), which reflects the weighted average credit quality of the relevant obligors.

Fitch's PCI score of 3.0 is based on an evaluation of all three-member cooperatives: Meade County Rural Cooperative Corporation, KY comprising approximately 20% of Big Rivers' revenues; Kenergy Corporation, KY (60% of revenues); and Jackson Purchase Energy Corporation, KY (20% of revenues).

Rate flexibility is assessed to be strong with rates consisting of a demand charge and an energy charge per kWh consumed, as approved by the Kentucky Public Service Commission (KPSC). While the KPSC is charged with approving rates for Big Rivers and its members, the corporation has certain approved riders, including a fuel adjustment clause and an environmental surcharge, which helps provide timely pass-through of variable charges. Overall, the regulatory regime has been constructive historically.

Big Rivers is expected to remain a relatively active off-system seller of excess power and energy through 2028, which is also factored as an asymmetric consideration for revenue defensibility.

Operating Risk - 'a'

Diverse Resource Base, Low Cost Burden

The strong operating risk assessment reflects a low operating cost burden that has averaged 6.6 cents/kWh over the past five years. Operating cost flexibility is assessed at neutral due to the diversity of resource capacity by fuel type and number of units. Big Rivers has idled, retired or converted much of its coal-fired capacity over the past several years, which has led to a decline in emissions.

Most of Big Rivers' capacity still consists of owned generation, including over 400MW's of coal-fired capacity. In 2023, the corporation owned a total of over 900MW's of capacity including its baseload coal plant, Wilson Station, but also including natural gas-fired Green units and Reid CT at Sebree Station. Green station was recently converted to burn natural gas. Other available generation includes capacity and energy provided to members through Southeastern Power Administration (SEPA, hydro) and growing renewable capacity. Management is in the process of adding renewable solar capacity through purchase power agreements (PPAs) totaling 160MW, further diversifying the resource base.

Capital planning and management is assessed to be strong based on a sustained trend of lower Fitch-calculated average age of plant over the past few years. Big Rivers had an exceptionally high average age of plant in prior years, which indicated high lifecycle needs. However, since 2019, regulatory approval to treat several generating facilities as regulatory assets and the decision to stop deferring depreciation on some other coal-fired units has helped improve the ratio to 13 years in 2023.

Financial Profile - 'bbb'

Stable Financial Profile, Midrange Leverage Expected in Rating Case Stress Scenario

Big Rivers' financial profile is stable with margins and leverage ratios that have improved over the past few years, and remain in line with the current rating. Stable financial results are expected to continue as the corporation continues to benefit from contracted energy and capacity sales to nonmember utilities and industrial customers over the next few years. In addition, higher cash flow from recovery of regulatory assets will help sustain the improvement operating income levels, and provide stability to the financial profile assessment.

While Fitch's base case scenario indicates that leverage should generally range between 5.0x and 7.0x over the next five years, much lower energy sales in its rating case stress scenario could push ratios closer to 9.0x. Big Rivers' liquidity profile is neutral to the rating, as coverage of full obligations has generally remained above 1.7x since 2019 and total liquidity (including cash on hand) has ranged between 168 and 343 days. Coverage fell below 1.0x in 2023 because of a sizable debt maturity, but cash on hand and proceeds from new debt issuance comfortably covered the scheduled payment.

Approximate Additional Risk Contributions

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Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

--A weakening in margins or higher debt levels that lead to leverage closer to 10.0x or higher on a sustained basis through Fitch's rating/stress case scenario;

--A downward shift in purchaser credit quality that results in a lower assessment of revenue defensibility.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

--Strong trend in financial performance and cash flow that leads to a leverage ratio that is closer to 6.0x on a sustained basis through Fitch's stress case scenario;

--A positive shift in purchaser credit quality that results in a higher assessment of revenue defensibility.

PROFILE

Big Rivers is a non-profit generation and transmission cooperative formed in 1961, providing wholesale electric and transmission service to three electric distribution cooperatives pursuant to all-requirements contracts through Dec. 31, 2043. The three members provide service to a total of approximately 125,000 retail customers located in 22 western Kentucky counties. Demographic indicators and financial performance of the three distribution systems are satisfactory and provide sufficient support for the rating.

Environmental Considerations and Clean Energy Transition

The Commonwealth of Kentucky does not have renewable portfolio standards. However, Big Rivers has been actively pursuing asset diversification and carbon reduction strategies over the past several years. In addition to repowering Green station to natural gas in 2022, Big Rivers is adding solar capacity through long-term fixed-price PPAs.

The projects are expected to achieve commercial operation in late 2024. By 2030, management predicts it will have reduced carbon emissions by almost 80% from 2005 levels with gas-fired generation comprising the majority of total energy, followed by coal, solar and hydropower.

New EPA Power Plant Standards

In May 2024, the Environmental Protection Agency released final standards regarding the regulation of carbon emissions for existing coal and gas-fired power plants. The regulations require the closure or significant modification of existing coal-fired power plants by 2032. Big Rivers does not currently have plans to retire While Station, but expects to undertake an integrated resource plan by 2026.

The EPA carbon standards are facing legal challenges that could delay, alter or prevent their implementation. Should the EPA standards withstand the legal challenges, the potential mandate to close or repower Wilson could dictate higher costs for the authority and its customers.

Sources of Information

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG CONSIDERATIONS

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit [https://www.fitchratings.com/web-content/esg-relevance-scores](#)

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APPLICABLE CRITERIA[U.S. Public Sector, Revenue-Supported Entities Rating Criteria \(pub. 12 Jan 2024\) \(including rating assumption sensitivity\)](#)[U.S. Public Power Rating Criteria \(pub. 08 Mar 2024\) \(including rating assumption sensitivity\)](#)**APPLICABLE MODELS**

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

FAST Econometric API - Fitch Analytical Stress Test Model, v3.0.0 (1)

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Big Rivers Electric Corporation (KY)

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

In the Matter of:

ELECTRONIC APPLICATION OF)	
BIG RIVERS ELECTRIC CORPORATION)	Case No.
FOR ANNUAL REVIEW OF ITS MRSM)	2025-00021
CHARGE FOR CALENDAR YEAR 2024)	

DIRECT TESTIMONY

OF

**CHARLES (“MANNY”) ZERINGUE
VICE PRESIDENT OF GENERATION**

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: February 28, 2025

Application Exhibit C

**DIRECT TESTIMONY
OF
CHARLES (“MANNY”) ZERINGUE**

Table of Contents

I. INTRODUCTION	1
II. STATUS OF DECOMMISSIONING	4
A. COLEMAN STATION.....	4
B. REID STATION UNIT 1.....	5
C. STATION TWO	6
III. AWARDED PROPOSALS FOR DECOMMISSIONING.....	8
IV. REASONABLENESS OF DECOMMISSIONING COSTS	9
V. CONCLUSION	9

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DIRECT TESTIMONY
OF
CHARLES (“MANNY”) ZERINGUE

I. INTRODUCTION

Q. Please state your name, business address and occupation.

A. My name is Charles (“Manny”) Zeringue. My business address is 710 W. Second Street, Owensboro, Kentucky 42301. I am the Vice President Generation for Big Rivers Electric Corporation (“Big Rivers”).

Q. Please summarize your education and professional experience.

A. I graduated from the United States Navy Advanced Engineering Systems School Command in 1986. After serving ten years in the United States Navy, I have worked in the utility industry for the past thirty years serving in various roles, such as Controls Engineer, Contract Performance Manager, Construction Manager, Operations Manager, Maintenance Manager, and Plant Manager. I began my career with Big Rivers in November of 2024 in my current position as Vice President Generation. My professional experience is summarized in Exhibit Zeringue-1 attached hereto.

1 **Q. Please summarize your duties at Big Rivers.**

2 A. As the Vice President Generation for Big Rivers, I oversee all activities
3 related to the operation and maintenance of the corporation's coal and gas-
4 fired generating facilities, including fuel procurement and management,
5 power plant engineering and construction.

6

7 **Q. Have you previously testified before the Kentucky Public Service
8 Commission ("Commission")?**

9 A. No. I have not previously testified before the Commission.

10

11 **Q. Please identify the information you will be providing pursuant to
12 Ordering Paragraph 10 of the June 25, 2020, Order in Case No.
13 2020-00064.**

14 A. I will provide information specifically regarding the last two matters
15 identified in the May 29, 2020, Settlement Agreement, as set forth in the
16 Commission's Order.¹ The matters include:

17 1. The status of and expected decommissioning costs of Coleman
18 Station and Reid Station Unit 1, and Big Rivers' estimated share of
19 costs associated with Station Two; and

¹ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval To Modify Its MRSB Tariff, Cease Deferring Depreciation Expenses, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064, Order at page16 (June 25, 2020).

1 2. A copy of any proposal to decommission Coleman Station, Reid
2 Station Unit 1, and Station Two that was awarded in 2024.

3 I will also support the reasonableness of the decommissioning costs
4 and provide detailed descriptions of all actions Big Rivers has taken to
5 minimize decommissioning costs.² The Direct Testimony of Michael S.
6 Mizell, Big Rivers' Chief Administrative Officer, attached to the
7 Application as Exhibit D, provides additional information regarding the
8 status of decommissioning activities related to the ash-pond closures and
9 environmental compliance matters.

10

11 **Q. Are you sponsoring any Exhibits?**

12 A. Yes. The following exhibits were prepared by me or under my supervision:

- 13 • Exhibit Zeringue-1: Professional Summary;
- 14 • Exhibit Zeringue-2: Awarded Decommissioning Proposals;
- 15 • Exhibit Zeringue-3: Outstanding Balance due from HMPL.

16

² See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval to Modify Its MRSB Tariff, Cease Deferring Depreciation Expense, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064, Order (June 25, 2020), at page 21.

1 **II. STATUS OF DECOMMISSIONING**

2 **A. COLEMAN STATION**

3 **Q. What is the status of decommissioning of the Coleman Station?**

4 A. The demolition of Coleman Station is ongoing and expected to be complete
5 in December of 2025. The Direct Testimony of Michael Mizell provides
6 additional information regarding the status of Coleman Station
7 decommissioning activities related to closure of Coleman Station’s three
8 ash ponds, which is “Project 13-2” of Big Rivers’ 2020 Environmental
9 Compliance Plan.³

10

11 **Q. What were the decommissioning costs incurred by Big Rivers for**
12 **the Coleman Station in 2024.**

13 A. The decommissioning costs for the Coleman Station in 2024 total
14 \$606,718.47. Ongoing decommissioning expenses continue to be incurred
15 for items such as: security, mowing, wildlife control, insect inspection, labor
16 for construction supervisor and maintenance of structures/equipment still
17 intact. A copy of new proposals awarded in 2024 for decommissioning
18 activities at Coleman Station is provided in Exhibit Zeringue-2 attached
19 hereto.

³ See *In the Matter of: Application of Big Rivers Electric Corporation for Approval of its 2020 Environmental Compliance Plan, Authority to Recover Costs Through a Revised Environmental Surcharge and Tariff, the Issuance of a Certificate of Public Convenience and Necessity for Certain Projects, and Appropriate Accounting and Other Relief*, Case No. 2019-00435, Application (filed Feb. 7, 2020).

1

2 B. REID STATION UNIT 1

3 **Q. What is the status of decommissioning of Reid Station Unit 1?**

4 A. As discussed in prior MRS M Applications, there have been multiple active
5 decommissioning projects ongoing at Sebree Station, and to optimize safety,
6 the project schedules have been staggered. On April 6, 2024, contractors
7 imploded the boiler that once served the Reid coal generation station (Reid
8 Station Unit 1). The remaining demolition projects for Reid Station Unit 1
9 consist of removal of the cooling towers, scrubber stack, and concrete from
10 the turbine pedestals.

11

12 **Q. What were the decommissioning costs incurred by Big Rivers for**
13 **Reid Station Unit 1 in 2024.**

14 A. FED agreed to full-scale demolition in exchange for the proceeds from the
15 sale of resulting scrap materials, as previously explained in the MRS M
16 Application filed in Case No. 2023-00038⁴. Ongoing decommissioning
17 expenses continue to be incurred. Big Rivers incurred \$38,255.06 in
18 decommissioning costs in 2024 for Reid Station Unit 1.

⁴ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRS M Charge for Calendar Year 2022*, P.S.C. Case No. 2023-00038

1 C. STATION TWO

2 **Q. What is the status of decommissioning of Station Two?**

3 A. As the Commission is aware, the FED contract for insulation removal,
4 asbestos abatement, and structural demolition of Station Two's units and
5 its concrete stack was approved by the Henderson Utility Commission on
6 January 31, 2022. That work was suspended in the fall of 2024 due to work
7 being performed on the Reid CT. The remaining demolition activities are
8 expected to be completed by December 2025.

9 The Direct Testimony of Michael Mizell provides additional
10 information regarding the status of Station Two decommissioning activities
11 related to closure of the Station Two ash pond. Like with the Station Two
12 ash pond, there will be future decommission activities associated with the
13 Station Two ash pond dredgings in the Big Rivers landfill, such as
14 environmental monitoring and any required environmental remediation, as
15 well as the closure the landfill at the end of its life, for which Henderson
16 will be responsible for its share under the terms of the Station Two
17 Contracts.

18

19 **Q. Please detail the anticipated decommissioning costs expected to be**
20 **incurred by Big Rivers for Station Two (including the total**
21 **anticipated decommissioning costs and Big Rivers' estimated share**
22 **of such costs).**

1 A. Pursuant to the Commission’s August 2, 2021, Order in Case No. 2019-
2 00269, Big Rivers anticipates its share of the costs to fully decommission
3 Station Two will include its share of the costs to fully decommission the
4 Station Two site, the Station Two ash pond, the ash pond dredgings in the
5 Green landfill, and all other joint use facilities, either now (if Big Rivers is
6 no longer going to utilize them) or in the future (once Big Rivers ceases to
7 utilize them).⁵ Despite the Franklin Circuit Court’s July 31, 2024, Order
8 affirming the Commission’s August 2, 2021 Order, HMPL and the City of
9 Henderson continue to dispute HMPL’s responsibility for its full share of
10 decommissioning costs.⁶

11 Further, Henderson has yet to fully reimburse Big Rivers for its
12 share of the outstanding decommissioning costs, as required by the
13 Commission’s August 2, 2021 Order in Case No. 2019-00269.⁷ The
14 attached Exhibit Zeringue-3 is a copy of a spreadsheet detailing related
15 invoices and showing HMPL’s outstanding balance of Station Two’s

⁵ *In the Matter of: Application of Big Rivers Electric Corporation for Enforcement of Rate and Service Standards*, P.S.C. Case No. 2019-00269.

⁶ Henderson appealed the Commission’s August 2, 2021, Order to the Franklin Circuit Court in consolidated Case No. 18-CI-00078. The Franklin Circuit Court affirmed the Commission’s August 2, 2021, Order as well as the Commission’s January 5, 2018, Order in Case No. 2016-00278. HMP&L has filed a Notice of Appeal of the Franklin Circuit Court Opinion and Order with the Kentucky Court of Appeals, Case No. 2024-CA-1023.

⁷ *In the Matter of: Big Rivers Electric Corporation Application for Enforcement of Commission Order*, P.S.C. Case No. 2021-00378. The Commission placed the matter on abeyance “pending an order from the Franklin Circuit Court or some other material change in circumstances” by order dated April 19, 2024.

1 decommissioning costs as of January 31, 2025. Exhibit Zeringue-3 also
2 breaks down the type of decommissioning costs in each invoice.

3 Big Rivers continues to maintain the Station Two site in accordance
4 with prudent utility practices. Future expenses will include the
5 decommissioning costs of certain joint use facilities and future costs
6 relating to environmental monitoring and any required environmental
7 remediation that could be required, as well as ongoing costs that are
8 attributable to Henderson's use of the Big Rivers Green Station landfill,
9 which is the repository for Station Two ash pond dredgings that are owned
10 by Henderson.

11

12 **III. AWARDED PROPOSALS FOR DECOMMISSIONING**

13 **Q. Were any proposals for the decommissioning of the Coleman
14 Station, Reid Station Unit 1, or Station Two awarded in the prior
15 year?**

16 **A.** As discussed above, the attached Exhibit Zeringue-2 includes a copy of the
17 proposals awarded in 2024 for decommissioning activities of the Coleman
18 Station. There were no other proposals for decommissioning activities
19 awarded in 2024.

20

1 **IV. REASONABLENESS OF DECOMMISSIONING COSTS**

2 **Q. Are the 2024 decommissioning costs reasonable?**

3 A. Yes. The decommissioning plans continue to include only reasonable
4 measures necessary and appropriate for continued environmental
5 compliance and appropriate reuse of the sites.⁸

6

7 **Q. Please provide detailed descriptions of all actions Big Rivers has**
8 **taken to minimize decommissioning costs?**

9 A. Big Rivers has previously provided testimony that fully discussed the
10 actions taken to minimize the decommissioning costs.⁹

11

12 **V. CONCLUSION**

13 **Q. Does this conclude your testimony?**

14 A. Yes, it does.

⁸ See Case No. 2021-00061, Application Exhibit B, Direct Testimony of Michael T. Pullen.

⁹ *Id.*; see also *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual review of Its MRSB Charge for Calendar Year 2021*, P.S.C. Case No. 2022-00028, Application Exhibit C, Direct Testimony Nathaniel A. Berry.

BIG RIVERS ELECTRIC CORPORATION

**ELECTRONIC APPLICATION OF
BIG RIVERS ELECTRIC CORPORATION FOR ANNUAL REVIEW
OF ITS MRSM CHARGE FOR CALENDAR YEAR 2024
CASE NO. 2025-00021**

VERIFICATION


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



Charles Zeringue

COMMONWEALTH OF KENTUCKY)
COUNTY OF DAVIESS)

25th SUBSCRIBED AND SWORN TO before me by Charles Zeringue on this the
day of February 2025.



Notary Public, Kentucky State at Large
Kentucky ID Number KYNP16841
My Commission Expires October 31, 2028

Professional Summary

CHARLES (“MANNY”) ZERINGUE

Vice President Generation
710 W. Second Street
Owensboro, Kentucky 42301

PROFESSIONAL EXPERIENCE

BIG RIVERS ELECTRIC CORPORATION, Owensboro, KY
Vice President Generation 2024 - Present

XCEL ENERGY, Pueblo, CO
Senior Director – Comanche Station 2021-2024

XCEL ENERGY, Hayden, CO
Director – Hayden Power Station 2014-2021

COLORADO SPRINGS UTILITIES, Fountain, CO
Plant Manager 2010-2014
Maintenance Manager 2006-2010
Operations Manager 2005-2006

ADDITIONAL EXPERIENCE

Duke Energy Corporation, Uniontown, PA
SkyGen Energy LLC /Calpine Corp., Various Locations
US Navy, Various Locations

EDUCATION

Grays Like CC / Colorado State University, Fort Collins, CO
Major in business management

US Navy

Advanced Engineering Systems School Command – Graduated 1986;
Plant O&M Training; Preventative Maintenance Management
Industrial Water Testing and Treatment; Automated Controls System;
Instructor & Curriculum Training

GE

Mark V Maintenance; Combustion Turbine O&M; EX2000; Mark V
HMI Maintenance



In the Matter of:

**ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)
FOR CALENDAR YEAR 2024)**

**Case No.
2025-00021**

Exhibit Zeringue-2



**VENDOR: EDDIE CUMMINGS NWCO
P O BOX 191
CANEVILLE, KY 42721**

BLANKET PURCHASE ORDER

PURCHASE ORDER NO 274176	REVISION 0	PAGE 1
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TERM	04-JAN-24	31-DEC-24
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SHIP TO:
See address below

BILL TO:
Refer to ship to address

VENDOR NO 69866	DELIVER TO	DATE OF ORDER/BUYER 04-JAN-24 Lucas, Christa Michelle	REVISED DATE/BUYER Lucas, Christa Michelle
PAYMENT TERMS 30 NET DAYS		BUYER TELEPHONE/FAX 270-844-5017 888-791-7019	BUYER EMAIL christa.lucas@bigrivers.com
FREIGHT TERMS OTHER	F.O.B DESTINATION	SHIP VIA TT	VENDOR CONTACT/TELEPHONE (270) 230-3416

Special Instructions: This Purchase Order No. must appear on all invoices, packing lists, cartons and correspondences related to this order. If you received this PO by e-mail, DO NOT REPLY TO faxstar@BigRivers.com. Please use the buyer's e-mail address listed above.

A signed copy of the General Services Agreement (GSA) is on file at Big Rivers Electric Corporation and is hereby incorporated by reference.

ITEM	PART NUMBER/DESCRIPTION	DELIVERY DT	QTY	UNIT	UNIT PRICE	EXTENSION
1.0	COLEMAN & WILSON - MONTHLY INSPECTION SHIP TO:			Monthly	\$ 495.00	\$
2.0	COLEMAN & WILSON - TRAPPING FEES SHIP TO:			EACH	\$ 150.00	\$
3.0	GREEN MONTHLY INSPECTION SHIP TO:			Monthly	\$ 495.00	\$
4.0	GREEN - TRAPPING FEES SHIP TO:			EACH	\$ 175.00	\$
TOTAL					\$ 33,000.00	

From: [Eddie Cummings](#)
To: [Lucas, Christa](#)
Subject: Re: Big Rivers - Blanket PO
Date: Monday, January 1, 2024 12:43:17 PM
Attachments: [image001.png](#)

Hi Christa,
The rates will stay the same for 2024.
Coleman- Inspection- \$495.00, Daily trapping- \$150.00
Wilson- Inspection- \$495.00, Daily trapping- \$150.00
Reid/Green- Inspection- \$495.00, Daily trapping- \$175.00
Thank you
Eddie

On Fri, Dec 29, 2023 at 3:21 PM Lucas, Christa <Christa.Lucas@bigrivers.com> wrote:

Can you send me a new rate sheet for 2024 for Wilson, Coleman and Green? One day next week should be fine.

Thank you! Happy New Year!

Christa Lucas

Sr. Procurement Agent

Big Rivers Electric Corp.

Wilson Station

5663 St. Rt. 85 West

Centertown, KY 42328

Office 270.844.5017



Fax 888.791.7019

Christa.Lucas@bigrivers.com

Security Services Bill Rates - Bid Submittal Form W1-24-216

Hourly Rate ONLY locations include:	Year of Contract	Straight Time Hourly Rate for Additional Hours Worked requested by BREC	Overtime Hourly Rate for Additional Hours Worked requested by BREC
	Coleman Station (Temporary)	1st Year	27.97
Wilson Station Scales (Open)	2nd Year	27.97	31.97
Sebree Station Scales (Closed)	3rd Year	28.52	31.97
Wilson Gate 3 (Special Projects/ Outages)	4th Year	28.52	31.97
Owensboro Office/Special Events (As Needed)	5th Year	28.52	31.97

Monthly Flat Rate ONLY	Year of Contract	Monthly Flat Rate (Additional Hours will reflect the rate above.)	
		D.B. Wilson Main Guard	1st Year
	2nd Year	27.97	31.97
	3rd Year	28.52	31.97
	4th Year	28.94	31.97
	5th Year	28.94	31.97
Sebree Main Guard	1st Year	27.97	31.97
	2nd Year	27.97	31.97
	3rd Year	28.52	31.97
	4th Year	28.94	31.97
	5th Year	28.94	31.97

Company Name: Stora Security, Ltd.

Name: Mark McDaniel, President

Date: 5/22/2024

Exp. Item Date	Project	Project Name	Task Number	Exp Type	Vendor Name	PO #	Rls#	PO Line#	Invoice #	Cost	Comment
1/6/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	748	1	10122	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
1/13/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	751	1	10152	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
1/20/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	752	1	10191	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
1/27/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	757	1	10220	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
2/3/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	759	1	10453	3,206.72	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
2/10/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	762	1	10490	3,224.94	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
2/17/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	767	1	10527	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
2/24/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	766	1	10560	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
3/2/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	769	1	10802	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
3/9/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	774	1	10832	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
3/16/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	777	1	10865	3,042.74	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
3/23/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	781	1	10900	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.

Exp. Item Date	Project	Project Name	Task Number	Exp Type	Vendor Name	PO #	Rls#	PO Line#	Invoice #	Cost	Comment
3/30/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	783	1	11139	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
4/6/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	786	1	11205	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
4/13/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	790	1	11237	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
4/20/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	791	1	11244	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
4/27/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	794	1	11479	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
5/4/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	798	1	11516	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
5/11/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	803	1	11552	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
5/18/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	806	1	11590	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
5/25/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	809	1	11623	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
6/1/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	812	1	11863	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
6/8/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	814	1	11904	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
6/22/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	818	1	11973	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.

Exp. Item Date	Project	Project Name	Task Number	Exp Type	Vendor Name	PO #	Rls#	PO Line#	Invoice #	Cost	Comment
6/29/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	254092	822	1	12200	3,060.96	CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ HND-19-009.
6/15/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	25	4	11938	3,060.96	PRE-APPROVED EXTRA
7/6/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	5	1	12234	3,356.40	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
7/6/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	5	4	12234	874.56	PRE-APPROVED EXTRA
7/13/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	6	1	12272	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
7/20/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	9	1	12303	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
7/27/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	11	1	12343	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
8/3/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	15	1	12567	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
8/10/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	18	1	12600	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
8/17/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	20	1	12632	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
8/24/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	23	1	12668	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
8/31/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	26	1	12889	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
9/7/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	29	1	12925	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216

Exp. Item Date	Project	Project Name	Task Number	Exp Type	Vendor Name	PO #	Rls#	PO Line#	Invoice #	Cost	Comment
9/14/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	34	1	12960	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
9/21/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	37	1	12992	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
9/28/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	38	1	13208	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
10/5/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	41	1	13236	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
10/12/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	46	1	13267	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
10/19/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	48	1	13297	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
10/26/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	51	1	13327	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
11/2/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	53	1	13547	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
11/9/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	57	1	13578	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
11/16/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	59	1	13609	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
11/23/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	64	1	13638	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
11/30/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	67	1	13848	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216

Exp. Item Date	Project	Project Name	Task Number	Exp Type	Vendor Name	PO #	Rls#	PO Line#	Invoice #	Cost	Comment
12/7/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	69	1	13875	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
12/14/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	72	1	13909	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
12/21/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	75	1	13940	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216
12/28/2024	CLRETIRE	CL Retire Units	SECURITY	0307 O/S - SECURITY	STORM SECURITY, LTD	275962	78	1	14160	4,698.96	YEAR 1 - CONTRACTOR TO PROVIDE SECURITY FOR ALL STATIONS PRICING AS PER RFQ W1-24-216

\$ 201,581.44



VENDOR: POLLARD AND SON EXCAVATING LLC
150 CENTRAL CITY ROAD
MADISONVILLE, KY 42431

BLANKET PURCHASE ORDER		
PURCHASE ORDER NO 275568	REVISION 0	PAGE 1
TERM	29-APR-24	31-OCT-24
SHIP TO: Kenneth C. Coleman Station 4982 River Road Hawesville, KY 42348		
BILL TO: Kenneth C. Coleman Station 4982 River Road Hawesville, KY 42348		

VENDOR NO 80647	DELIVER TO	DATE OF ORDER/BUYER 29-APR-24 Lucas, Christa Michelle	REVISED DATE/BUYER Lucas, Christa Michelle
PAYMENT TERMS 30 NET DAYS		BUYER TELEPHONE/FAX 270-844-5017 888-791-7019	BUYER EMAIL christa.lucas@bigrivers.com
FREIGHT TERMS PREPAID/ADD	F.O.B DESTINATION	SHIP VIA	VENDOR CONTACT/TELEPHONE (270) 824-8499

Special Instructions: This Purchase Order No. must appear on all invoices, packing lists, cartons and correspondences related to this order. If you received this PO by e-mail, DO NOT REPLY TO faxstar@BigRivers.com. Please use the buyer's e-mail address listed above.

A signed copy of the General Services Agreement (GSA) is on file at Big Rivers Electric Corporation and is hereby incorporated by reference.

ITEM	PART NUMBER/DESCRIPTION	DELIVERY DT	QTY	UNIT	UNIT PRICE	EXTENSION
1.0	CHEMICAL APPLICATION			EACH	\$ 5566.00	\$
2.0	4X - MOWING (BLUE AREAS)			EACH	\$ 2621.43	\$
3.0	2X - MOWING (RED AREA)			EACH	\$ 3399.36	\$
4.0	WASTE WATER TREATMENT (WWTF) APPROX. 4 TIMES			EACH	\$ 2933.05	\$
5.0	ADDITIONAL WEEDEATING			Hourly	\$ 75.90	\$
6.0	MISC. - APPROVED			EACH	\$ 1.00	\$

TOTAL					\$ 37,000.00
<i>Christa Lucas</i>					

PO 275568

Big Rivers Electric Corporation
Submittal Form C1-21-214

The Bidder agrees to perform the work described in this specification and other attached documents for the following firm price:

The Supplier may bid the complete control package or only the chemical or the mechanical portion depending on their expertise and/or business interest.

Type of Work	2023	2024
Chemical Application (yearly) Continuous Vegetation Control	\$5060.00 /lot	\$5566.00 /lot
Bi-Weekly Mowing (Yellow Area)	/wk	/wk
4 Times Mowing (Blue Area)	\$2184.53 /ea	\$2621.43 /ea
Mowing (Red Area) (approximately 2 Times)	\$2832.80 /ea	\$3399.36 /ea
Waste Water Treatment Facility (WWTF) (approximately 4 Times)	\$2444.21 /ea	\$2933.05 /ea

ADDITIONAL OPTIONS

Additional Weedeating	\$75.90 /hr	\$75.90 /hr	/hr
Materials Cost Plus %	20 %	20 %	%

- TIME AND MATERIALS RATE SHEET ATTACHED
- EXCEPTIONS & CLARIFICATIONS (ATTACHED)
- SUBCONTRACTOR LIST
- APPLICATOR'S LICENSE(s)

Included Future

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

General Services Agreement

Contractor Safety Credentials Assessment Program Forms

Equal Opportunity, Debarment, & Lobbying Forms

Vendor Information & W-9 Forms

Subcontractor List

Pollard & Sons Excavating
Company Name

Andy Thomison
Printed Name

Andy Thomison
Signature

4/26/2024
Date



SOLE SOURCE AUTHORIZATION

DATE: 4-29-2024

Purchase Order /Contract No. 275568

Requisition No. _____

Estimated cost: \$ 37,000.00

Vendor/Contractor: Pollard and Sons

This is to acknowledge that two or more competitive quotations were not solicited or received for the above-referenced Purchase Order for the following reason:

- Single source item or service as designated by Proponent.
- Single source caused by lack of two or more acceptable sources of supply.
- Emergency requirement, time not permitting two or more quotations.
- Proprietary item.
- Sole source item.
- Other (explain)

Justification and/or Explanation:

This is for mowing, spraying and weedeating for coleman station ash pond areas for the year of 2024. Pollard and Sons has done this work for the past 2 years.

Requester: *Trevin*

Authority levels are up to \$100,000 for Managers; up to \$500,000 for Plant Managers/Directors; up to \$750,000 for Vice-Presidents; up to \$1,000,000 for CAO, COO and CFO; and over \$1,000,000 for CEO.

Manager *Mike Dwyer* Plant Manager _____

Vice President _____ COO/CFO/CAO _____

CEO _____



STATEMENT OF WORK

The services described below are provided by Keller Schroeder & Associates, Inc., to Big Rivers Electric Corporation pursuant to the terms and conditions of the Consulting Services Agreement between these two parties dated August 25, 2014.

- A. Scope of Services: Construction Supervisor
- B. Name of KSA's assigned employee or subcontractor: Steve Kennedy
- C. Term: 1/1/2024 up to 12/31/2024 – as needed, when available
- D. Amount payable to KSA: \$114.40/hr for straight time
\$171.60/hr for hours worked over 40 per week
- E. Other provisions: This agreement supersedes all prior agreements for this time period.

KELLER SCHROEDER & ASSOCIATES, INC.

By: *Susie Mattingly*
 Printed: Susie Mattingly
 Title: Business Unit Director
 Date: 12/6/2023

BIG RIVERS ELECTRIC CORPORATION

DocuSigned by:
 By: *Luke Aull*
C15456FDBBE046F...
 Printed: Luke Aull
 Title: Director Employee Benefits & Supply Chain
 Date: 12/6/2023



VENDOR: KELLER SCHROEDER AND ASSOCIATES, INC
4920 CARRIAGE DRIVE
EVANSVILLE, IN 47715

BLANKET PURCHASE ORDER		
PURCHASE ORDER NO 273882	REVISION 2	PAGE 1
TERM	01-JAN-24	17-JAN-25
SHIP TO: D. B. Wilson Station 5663 State Route 85 West Centertown, KY 42328		
BILL TO: D. B. Wilson Station 5663 State Route 85 West Centertown, KY 42328		

VENDOR NO 70159	DELIVER TO	DATE OF ORDER/BUYER 07-DEC-23 Lucas, Christa Michelle	REVISED DATE/BUYER 03-JAN-25 Lucas, Christa Michelle
PAYMENT TERMS 30 NET DAYS		BUYER TELEPHONE/FAX 270-844-5017 888-791-7019	BUYER EMAIL christa.lucas@bigrivers.com
FREIGHT TERMS PREPAID/ADD	F.O.B DESTINATION	SHIP VIA	VENDOR CONTACT/TELEPHONE (812) 474-6825

Special Instructions: This Purchase Order No. must appear on all invoices, packing lists, cartons and correspondences related to this order. If you received this PO by e-mail, DO NOT REPLY TO faxstar@BigRivers.com. Please use the buyer's e-mail address listed above.

A signed copy of the General Services Agreement (GSA) is on file at Big Rivers Electric Corporation and is hereby incorporated by reference.

ITEM	PART NUMBER/DESCRIPTION	DELIVERY DT	QTY	UNIT	UNIT PRICE	EXTENSION
1.0	CONSRUCTION SUPERVISOR - STEVE KENNEDY			LOT	\$ 1.00	\$

TOTAL					\$ 320,000.00
<i>Christa Lucas</i>					



In the Matter of:

**ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)
FOR CALENDAR YEAR 2024)**

**Case No.
2025-00021**

Exhibit Zeringue-3

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Past Due Invoices</u>						<u>Total Past Due</u>	<u>Total Amount Due</u>
	<u>Station Two Operations</u>	<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>	<u>Payments Received</u>		
Excess Henderson Energy	\$ (3,310,482.54)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,310,482.54)	\$ (3,310,482.54)
HMP&L Native Load	4,693,587.29	-	-	-	-	-	4,693,587.29	4,693,587.29
MISO Fees	1,422,761.54	-	-	-	-	-	1,422,761.54	1,422,761.54
FY 17/18 Annual Settlement	(1,649,922.53)	-	-	-	-	-	(1,649,922.53)	(1,649,922.53)
FY 18/19 Annual Settlement	(1,020,295.80)	-	-	-	-	-	(1,020,295.80)	(1,020,295.80)
Auxillary Power	78,750.98	-	-	-	-	-	78,750.98	78,750.98
Invoice BR32019	214,398.94	-	-	-	-	-	214,398.94	214,398.94
Invoice BR06-2021	-	777,685.08	-	664,219.23	-	(9,727.84)	1,432,176.47	1,432,176.47
Invoice BR07-2021	-	38,292.84	-	153,262.68	-	-	191,555.52	191,555.52
Invoice BR08-2021	-	-	-	-	69,653.42	(68,179.51)	1,473.91	1,473.91
Invoice BR09-2021	-	-	-	-	2,720.84	(2,674.87)	45.97	45.97
Invoice BR10-2021	-	6,513.60	-	42,787.23	-	-	49,300.83	49,300.83
Invoice BR11-2021	-	-	-	-	1,553.34	(1,494.90)	58.44	58.44
Invoice BR12-2021	-	525.73	-	44,813.23	-	-	45,338.96	45,338.96
Invoice BR13-2021	-	-	-	-	666.87	(616.87)	50.00	50.00
Invoice BR14-2021	-	4,125.96	-	16,878.08	-	-	21,004.04	21,004.04
Invoice BR01-2022	-	-	-	-	56.37	-	56.37	56.37
Invoice BR02-2022	-	5,592.08	-	12,765.49	-	-	18,357.57	18,357.57
Invoice BR03-2022	-	-	-	-	608.63	(551.30)	57.33	57.33
Invoice BR04-2022	-	5,475.37	-	13,296.05	-	-	18,771.42	18,771.42

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Past Due Invoices</u>						<u>Total Past Due</u>	<u>Total Amount Due</u>
	<u>Station Two Operations</u>	<u>Decommissioning Costs</u>				<u>Payments Received</u>		
		<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>			
Invoice BR05-2022	-	-	-	-	76.26	(12.92)	63.34	63.34
Invoice BR06-2022	-	23,042.19	110,985.00	11,720.23	-	(110,985.00)	34,762.42	34,762.42
Invoice BR07-2022	-	-	-	-	24,918.98	(24,840.25)	78.73	78.73
Invoice BR08-2022	-	13,554.06	6,936.56	14,265.41	-	(6,936.56)	27,819.47	27,819.47
Invoice BR09-2022	-	-	-	-	1,940.44	(1,878.68)	61.76	61.76
Invoice BR10-2022	-	6,204.68	6,936.56	14,926.36	-	(6,936.56)	21,131.04	21,131.04
Invoice BR11-2022	-	-	-	-	20,765.49	(20,765.49)	-	-
Invoice BR12-2022	-	4,859.19	6,936.56	18,127.67	-	(6,936.56)	22,986.86	22,986.86
Invoice BR13-2022	-	-	-	-	11,447.49	(11,447.49)	-	-
Invoice BR14-2022	-	3,563.98	13,873.12	18,263.34	-	(13,873.13)	21,827.31	21,827.31
Invoice BR15-2022	-	-	-	-	6,088.68	(6,088.68)	-	-
Invoice BR16-2022	-	4,242.19	-	2,268.06	-	-	6,510.25	6,510.25
Invoice BR17-2022	-	-	-	-	291.38	(291.38)	-	-
Invoice BR18-2022	-	2,026.38	6,936.56	13,498.70	-	(6,936.56)	15,525.08	15,525.08
Invoice BR19-2022	-	-	-	-	182.67	(182.67)	-	-
Invoice BR20-2022	-	1,336.94	6,936.56	3,723.23	-	(6,936.56)	5,060.17	5,060.17
Invoice BR21-2022	-	-	-	-	54.53	(54.53)	-	-

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Past Due Invoices</u>						<u>Total Past Due</u>	<u>Total Amount Due</u>
	<u>Station Two Operations</u>	<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>	<u>Payments Received</u>		
Invoice BR22-2022	-	1,336.50	29,586.56	2,770.35	-	(6,936.56)	26,756.85	26,756.85
Invoice BR23-2022	-	-	-	-	12,230.04	(12,230.04)	-	-
Invoice BR24-2022	-	3,166.30	6,936.56	(2,750.15)	-	(6,936.56)	416.15	416.15
Invoice BR01-2023	-	-	-	-	85.73	(85.73)	-	-
Invoice BR02-2023	-	705.78	15,583.97	3,289.93	-	(6,936.56)	12,643.12	12,643.12
Invoice BR03-2023	-	-	-	-	97.77	(97.77)	-	-
Invoice BR04-2023	-	3,164.46	13,873.12	4,827.99	-	(13,873.13)	7,992.44	7,992.44
Invoice BR05-2023	-	-	-	-	4,820.72	(1,354.47)	3,466.25	3,466.25
Invoice BR06-2023	-	3,212.58	-	7,870.45	-	-	11,083.03	11,083.03
Invoice BR07-2023	-	-	-	-	(3,373.24)	-	(3,373.24)	(3,373.24)
Invoice BR08-2023	-	394.81	6,936.56	1,181.46	-	(6,936.56)	1,576.27	1,576.27
Invoice BR09-2023	-	-	-	-	3,200.33	(3,200.33)	-	-
Invoice BR10-2023	-	768.04	13,873.12	8,699.69	-	(13,873.13)	9,467.72	9,467.72
Invoice BR11-2023	-	-	-	-	100.47	(100.47)	-	-
Invoice BR12-2023	-	391.85	-	4,833.10	-	-	5,224.95	5,224.95
Invoice BR13-2023	-	-	-	-	319,248.69	(319,248.69)	-	-
Invoice BR14-2023	-	494.53	6,936.56	5,567.80	-	(6,936.56)	6,062.33	6,062.33
Invoice BR15-2023	-	-	-	-	115,256.75	(104,099.86)	11,156.89	11,156.89

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Past Due Invoices</u>						<u>Total Amount Due</u>	
	<u>Station Two Operations</u>	<u>Decommissioning Costs</u>				<u>Payments Received</u>		<u>Total Past Due</u>
	<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>				
Invoice BR16-2023	-	526.43	-	947.61	-	-	1,474.04	1,474.04
Invoice BR17-2023	-	-	-	-	230,398.83	(175,498.41)	54,900.42	54,900.42
Invoice BR18-2023	-	435.45	-	1,742.77	-	-	2,178.22	2,178.22
Invoice BR19-2023	-	-	-	-	283,831.06	(261,608.34)	22,222.72	22,222.72
Invoice BR20-2023	-	584.09	-	757.04	-	-	1,341.13	1,341.13
Invoice BR21-2023	-	-	-	-	257,501.53	(235,215.71)	22,285.82	22,285.82
Invoice BR22-2023	-	1,922.95	-	2,382.90	-	-	4,305.85	4,305.85
Invoice BR23-2023	-	-	-	-	211,723.95	(190,978.16)	20,745.79	20,745.79
Invoice BR24-2023	-	1,534.83	-	3,087.17	-	-	4,622.00	4,622.00
Invoice BR01-2024	-	-	-	-	169,423.79	(152,558.91)	16,864.88	16,864.88
Invoice BR02-2024	-	1,238.93	-	1,718.69	-	-	2,957.62	2,957.62
Invoice BR03-2024	-	-	-	-	175,279.12	(158,030.75)	17,248.37	17,248.37
Invoice BR04-2024	-	3,103.44	-	5,938.84	-	-	9,042.28	9,042.28
Invoice BR05-2024	-	-	-	-	259,799.15	(234,196.62)	25,602.53	25,602.53
Invoice BR06-2024	-	792.69	-	452.28	-	-	1,244.97	1,244.97
Invoice BR07-2024	-	-	-	-	288,145.11	(259,461.05)	28,684.06	28,684.06
Invoice BR08-2024	-	443.86	-	3,138.35	-	-	3,582.21	3,582.21

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Past Due Invoices</u>					<u>Payments Received</u>	<u>Total Past Due</u>	<u>Total Amount Due</u>
	<u>Station Two Operations</u>	<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>			
Invoice BR09-2024	-	-	-	-	180,768.31	(163,090.04)	17,678.27	17,678.27
Invoice BR10-2024	-	459.63	-	2,003.89	-	-	2,463.52	2,463.52
Invoice BR11-2024	-	-	-	-	218,106.22	(198,421.88)	19,684.34	19,684.34
Invoice BR12-2024	-	465.01	-	3,336.99	-	-	3,802.00	3,802.00
Invoice BR13-2024	-	-	-	-	163,458.95	(151,485.12)	11,973.83	11,973.83
Invoice BR14-2024	-	502.38	-	3,240.66	-	-	3,743.04	3,743.04
Invoice BR15-2024	-	-	-	-	261,565.54	(239,148.99)	22,416.55	22,416.55
Invoice BR16-2024	-	448.52	-	3,130.50	-	-	3,579.02	3,579.02
Invoice BR17-2024	-	-	-	-	198,135.32	(198,135.32)	-	-
Invoice BR18-2024	-	485.52	-	2,198.05	-	-	2,683.57	2,683.57
Invoice BR19-2024	-	-	-	-	96,335.74	(96,335.74)	-	-
Invoice BR20-2024	-	488.13	-	16,812.13	-	-	17,300.26	17,300.26
Invoice BR21-2024	-	-	-	-	156,407.44	(156,407.44)	-	-
Invoice BR22-2024	-	530.06	-	18,533.96	-	-	19,064.02	19,064.02

Big Rivers Electric Corporation
Case No. 2025-00021
Summary of Outstanding Balance Due
As of January 31, 2025

<u>Description</u>	<u>Current Invoices</u>					<u>Total Amount Due</u>
	<u>Decommissioning Costs</u>					
	<u>Ramp Down</u>	<u>Asbestos & Demolition</u>	<u>Landfill</u>	<u>Ash Pond and CCR</u>	<u>Total</u>	
Invoice BR23-2024	-	-	-	52,038.75	52,038.75	52,038.75
Invoice BR24-2024	912.31	-	68,396.83	-	69,309.14	69,309.14
				TOTAL		\$2,725,984.18



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

In the Matter of:

ELECTRONIC APPLICATION OF)	
BIG RIVERS ELECTRIC CORPORATION)	Case No.
FOR ANNUAL REVIEW OF ITS MRSM)	2025-00021
CHARGE FOR CALENDAR YEAR 2024)	

DIRECT TESTIMONY

OF

**MICHAEL S. MIZELL
CHIEF ADMINISTRATIVE OFFICER**

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: February 28, 2025

Application Exhibit D

**DIRECT TESTIMONY
OF
MICHAEL S. MIZELL**

Table of Contents

I. INTRODUCTION	1
II. STATUS OF DECOMMISSIONING	4
A. COLEMAN STATION.....	4
B. STATION TWO	5
III. CONCLUSION	6

1 **DIRECT TESTIMONY**

2 **OF**

3 **MICHAEL S. MIZELL**

4

5 **I. INTRODUCTION**

6 **Q. Please state your name, business address and occupation.**

7 A. My name is Michael Mizell. My business address is 710 W, Second Street,
8 Owensboro, KY 42301. I am the Chief Administrative Officer for Big
9 Rivers Electric Corporation (“Big Rivers”).

10

11 **Q. Please summarize your education and professional experience.**

12 A. I graduated from Nova Southeastern University, in Fort Lauderdale,
13 Florida in 1994, with a Bachelor of Science degree and Cumberland School
14 of Law at Samford University in Birmingham, Alabama in 1997, with a
15 Juris Doctorate. I began my career with Big Rivers in 2020, as the Vice
16 President of Environmental compliance. I assumed the position of Chief
17 Administrative Officer in May of 2022. My professional experience is
18 summarized in Exhibit Mizell-1.

19

20 **Q. Please summarize your duties at Big Rivers.**

21 A. I am the Chief Administrative Officer with responsibility over the areas of
22 Human Resources, Procurement, Safety and Environmental Compliance.

1 In terms of environmental issues, I am responsible for all environmental
2 compliance activities across Big Rivers. This includes compliance with all
3 State and Federal environmental regulations, interactions with State and
4 Federal agencies regarding such regulations and monitoring the
5 development of new environmental regulations that have the potential to
6 impact Big Rivers or its Member/Owners.

7 **Q. Have you previously testified before the Kentucky Public Service**
8 **Commission (“Commission”)?**

9 A. Yes. I recently provided written responses to information requests and oral
10 testimony on behalf of Big Rivers in Case No. 2023-00310,¹ in which Big
11 Rivers presented its 2023 Integrated Resource Plan. Previously, I provided
12 written responses to information requests and oral testimony in Case No.
13 2020-00299,² in which Big Rivers presented its 2020 Integrated Resource
14 Plan. Additionally, I provided written testimony in Case Nos. 2022-00028,³
15 2023-00038,⁴ and 2024-00031,⁵ in which Big Rivers filed its MRS
16 Application for calendar years 2021, 2022, and 2023.

¹ *In the Matter of: Electronic 2020 Integrated Resource Plan of Big Rivers Electric Corporation*, P.S.C. Case No. 2023-00310.

² *In the Matter of: Electronic 2020 Integrated Resource Plan of Big Rivers Electric Corporation* P.S.C. Case No. 2020-00299.

³ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRS Charge for Calendar Year 2021*, P.S.C. Case No. 2022-00028.

⁴ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRS Charge for Calendar Year 2022*, P.S.C. Case No. 2023-00038.

⁵ *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Review of Its MRS Charge for Calendar Year 2023*, P.S.C. Case No. 2024-00031.

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. The purpose of my testimony is to provide additional information
3 regarding certain decommissioning activities as related to environmental
4 compliance. My testimony supplements the Direct Testimony of Manny
5 Zeringue, which is attached to the Application as Exhibit C.

6

7 **Q. Please identify the information you will be providing pursuant to**
8 **Ordering Paragraph 10 of the June 25, 2020, Order in Case No.**
9 **2020-00064.**

10 A. I will provide information regarding one matter identified in the May 29,
11 2020, Settlement Agreement, as set forth in the Commission's Order:⁶ the
12 status of decommissioning of Coleman Station and Henderson Station Two,
13 as related to ash pond closures and environmental compliance.

14

15 **Q. Are you sponsoring any Exhibits?**

16 A. Yes. I have prepared the following exhibit to my testimony.

- 17 • Exhibit Mizell-1 – Professional Summary
- 18 • Exhibit Mizell-2 – Station Two Ash Pond Acceptance Letter
- 19 • Exhibit Mizell-2 – Station Two Ash Pond Deadline Extension

⁶ See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval to Modify Its MRSB Tariff, Cease Deferring Depreciation Expense, Establish Regulatory Assets, Amortize Regulatory Assets, and Other Appropriate Relief*, P.S.C. Case No. 2020-00064, Order (June 25, 2020), at page 16.

1 **II. STATUS OF DECOMMISSIONING**

2 **A. COLEMAN STATION**

3 **Q. What is the status of decommissioning of Coleman Station, as**
4 **related to ash ponds and/or any other environmental compliance**
5 **matters?**

6 A. The U.S. Environmental Protection Agency (“EPA”) published the final
7 Coal Combustion Residual (“CCR”) Legacy Rule in the Federal Register on
8 May 8, 2024. The Final CCR Legacy Rule requires that Big Rivers initiates
9 closure of the Coleman Station legacy ash ponds no later than May 8, 2028.
10 Closure of the legacy ponds must be completed within five (5) years from
11 the initiation of closure but no later than May 8, 2033. The capital cost for
12 closing the Coleman Station legacy ponds was estimated at \$48.72 million,
13 not including capitalized interest. This project is Project 13-2 of Big
14 Rivers’ 2020 Environmental Compliance Plan (“ECP”).⁷ The Kentucky
15 Public Service Commission granted a Certificate of Public Convenience and
16 Necessity for Project 13-2 on August 6, 2020, subject to “the actual
17 inclusion of legacy ponds, such as Coleman Station ash ponds, as being
18 subjected to the requirements of the CCR Rule or being subjected to the
19 Kentucky Administrative Regulations for special waste facilities or

⁷ See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Its 2020 Environmental Compliance Plan, Authority to recover Costs Through a Revised Environmental Surcharge and Tariff, The Issuance of a Certificate of Public Convenience and Necessity for Certain Projects, and Appropriate Accounting and Other Relief*, Case No. 2019-00435, Application Exhibit E, Direct Testimony of Michael T. Pullen, at p. 39.

1 forthcoming state regulations specifically applicable to disposal of CCR.”⁸

2 Big Rivers will review the methodology for closing the Coleman Station ash
3 pond described Big Rivers’ 2020 ECP⁹ and provide an updated cost prior to
4 initiating closure.

5
6 B. STATION TWO

7 **Q. What is the status of decommissioning of Station Two as it relates**
8 **to ash ponds and/or any other environmental compliance matters?**

9 A. Closure of the Station 2 ash pond was completed on September 11, 2024.

10 Representatives from the Kentucky Division of Waste Management (the
11 “Division”) inspected the pond on September 11 to verify the closure
12 process had been completed. The Division issued a closure “acceptance
13 letter” on October 29, 2024, which is attached hereto as Exhibit Mizell-2. It
14 should be noted, the closure deadline for the Station 2 ash pond was
15 extended to October 1, 2024, pursuant to 40 C.F.R. §257.102(f)(2)(i). A
16 report documenting this deadline extension was submitted to the Division
17 and placed on the Big Rivers Electric Corporation Sebree Station “CCR
18 Rule Compliance and Data Information” website on April 17, 2024. A copy
19 of the report is attached hereto as Exhibit Mizell-3.

20

⁸ *Id.* Order (Aug. 6, 2020) at Ordering Paragraph No. 6.

⁹ *Id.* Application Exhibit E, Direct Testimony of Michael T. Pullen, at p. 35.

1 **III. CONCLUSION**

2

3 **Q. Does this conclude your testimony?**

4 **A. Yes, it does.**

BIG RIVERS ELECTRIC CORPORATION

**ELECTRONIC APPLICATION OF
BIG RIVERS ELECTRIC CORPORATION FOR ANNUAL REVIEW
OF ITS MRSM CHARGE FOR CALENDAR YEAR 2024
CASE NO. 2025-00021**

VERIFICATION


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



Michael Mizell

COMMONWEALTH OF KENTUCKY)
COUNTY OF DAVIESS)

27 SUBSCRIBED AND SWORN TO before me by Michael Mizell on this the
day of February 2025.



Notary Public, Kentucky State at Large
Kentucky ID Number KYNP43026
My Commission Expires 1-14-2026

PROFESSIONAL SUMMARY

MICHAEL S. MIZELL

Chief Administrative Officer Big Rivers Electric Corporation
710 W. Second Street
Owensboro, Kentucky 42301

PROFESSIONAL EXPERIENCE

BIG RIVERS ELECTRIC CORPORATION, Owensboro, KY

Chief Administrative Officer – 2022 to Present
Vice President of Environmental Compliance – 2020 to 2022

ICE MILLER, Indianapolis, IN

Senior Strategic Advisor – 2017 to 2019

AES CORPORATION (NYSE: AES), Arlington, VA

Vice President, Regulated Utilities –
AES US Services, LLC, Indianapolis, IN (2015 to 2017)
Senior Vice President and General Counsel –
AES US Services, LLC, Indianapolis, IN (2013 to 2015)

DAYTON POWER & LIGHT, INC., Dayton, OH

Senior Vice President and General Counsel – 2012 to 2013

ENERGY DEVELOPMENTS, LTD., Australia

General Counsel and Company Secretary – 2011 to 2012
Energy Developments, Inc., Nashville, TN

WALLER LANSDEN DORTCH & DAVIS, PLLC, Nashville, TN

Partner, Head of Energy and Environment Practice (2006-2010)
Partner (2004-2010)
Associate (1997-2004)

EDUCATION & CERTIFICATIONS

AES Global Leadership Program, Georgetown University, McDonough
School of Business, 2016

J.D., Cumberland School of Law at Samford University, Birmingham, AL, 1997

B.S., Nova Southeastern University, Business, Fort Lauderdale, FL, 1994



In the Matter of:

**ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)
FOR CALENDAR YEAR 2024)**

**Case No.
2025-00021**

Exhibit Mizell-2



Andy Beshear
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

300 Sower Boulevard
Frankfort, Kentucky 40601
Phone: (502) 564-2150
Fax: 502-564-4245

Rebecca Goodman
SECRETARY

Anthony R. Hatton
COMMISSIONER

October 29, 2024

Ms. Heather Todd
Big Rivers Electric Corporation
9000 KY 2096
Robards, Kentucky 42452

Sent via e-mail only

RE: Acceptance of Clean Closure Construction Progress Report (CPR)
Approval of Post-Closure Plan
Big Rivers Electric Corp – Reid HMP&L Station 2 – Green Station
Agency Interest No. 4196
Application I.D. No. APE20240006
Webster County

Dear Ms. Todd,

The Kentucky Division of Waste Management (DWM), Solid Waste Branch has completed review of the above-referenced clean closure CPR and post-closure plan, received on October 8, 2024. The CPR, certified by Sargent & Lundy, documents the closure of the Henderson Municipal Power and Light Station Pond (CCR Pond 2). On September 11, 2024, Woody Higginbotham, P.E., of DWM conducted a final inspection. DWM hereby accepts the report and approves the post-closure plan.

Enclosed is a copy of the facility permit. To receive an electronic copy of the approved application, please utilize Kentucky Department for Environmental Protection's eSearch tool via <https://dep.gateway.ky.gov/eSearch/AgencyInterest> on or around November 12, 2024.

Be advised that if you consider yourself aggrieved by the issuance of this permit, you have the right, pursuant to KRS 224.10-420(2) to file a petition demanding a hearing with the Cabinet.

Case No. 2025-00021

Exhibit Mizell-2

Page 1 of 2

This right shall be limited to a period of thirty (30) days from issuance of this permit. The petition should be filed with The Office of Administrative Hearings located at 211 Sower Blvd., Frankfort, KY 40601. See <https://eec.ky.gov/About/Administrative-Hearings/Pages/default.aspx> for additional information. If you need additional information, please contact Woody Higginbotham, P.E., at Woody.Higginbotham@ky.gov or 502-782-0147.

Sincerely,



Signed by: Danny Anderson
Danny Anderson, P.E.
Manager, Solid Waste Branch

Enclosure
DA/cwh/oy/lkg

c: Ms. Heather Todd via e-mail: heather.todd@bigrivers.com
Mr. Mark Bertram via e-mail: mark.bertram@bigrivers.com



In the Matter of:

**ELECTRONIC APPLICATION OF)
BIG RIVERS ELECTRIC CORPORATION)
FOR ANNUAL REVIEW OF ITS MRSM CHARGE)
FOR CALENDAR YEAR 2024)**

**Case No.
2025-00021**

Exhibit Mizell-3



Sebree Station
9000 Highway 2096
Robards, KY 42452
www.bigrivers.com

April 17, 2024

Mr. Danny Anderson, P.E.
Solid Waste Branch Manager
Division of Waste Management
300 Sower Boulevard
Frankfort, Kentucky 40601

RE: Reid-HMP&L Surface Impoundment Closure Deadline Extension Demonstration
Agency Interest #4196; Permit #SW11700016, SW11700007; ACTV0006

Dear Mr. Anderson:

Pursuant to 40 C.F.R. § 257.102(f)(2)(i), Big Rivers Electric Corporation (BREC) is extending the closure deadline for the Reid/Henderson Municipal Power & Light (Reid/HMP&L) CCR Surface Impoundment by 5.5 months to October 1, 2024. On behalf of BREC, Sargent & Lundy (S&L) has prepared the attached document ("Demonstration") to demonstrate the need for this time extension for closing the Reid/HMP&L CCR Surface Impoundment.

Please contact Mark Bertram at (270) 844-5708 or at mark.bertram@bigrivers.com should you have questions or concerns.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

Regards,

A handwritten signature in blue ink that reads "Heather Todd".

Heather Todd
Plant Manager

Case No. 2025-00021
Exhibit Mizell-3
Page 1 of 11



**Sebree Generating Station
Reid/HMP&L CCR Surface Impoundment**

Demonstration for Extension to Closure Deadline

Revision 0

April 17, 2024

Issue Purpose: Use

Project No.: 14055-010

55 East Monroe Street
Chicago, IL 60603-5780 USA
312-269-2000
www.sargentlundy.com

Sargent & Lundy

Case No. 2025-00021

Exhibit Mizell-3

Page 2 of 11

1.0 INTRODUCTION

Federal CCR Rule Reference: 40 C.F.R. § 257.102(f)(2)(i)

1.1 PURPOSE

Pursuant to 40 C.F.R. § 257.102(f)(2)(i), Big Rivers Electric Corporation (BREC) is extending the closure deadline for the Reid/Henderson Municipal Power & Light (Reid/HMP&L) CCR Surface Impoundment by 5.5 months to October 1, 2024. On behalf of BREC, Sargent & Lundy (S&L) has prepared this document ("Demonstration") to demonstrate the need for this time extension for closing the Reid/HMP&L CCR Surface Impoundment. In accordance with 40 C.F.R. § 257.102(f)(2)(i) and 401 KAR 46:110 Section 9, this Demonstration (1) substantiates the need for additional time beyond April 17, 2024, and (2) justifies BREC's six-month extension for closing the Reid/HMP&L CCR Surface Impoundment.

1.2 BACKGROUND

The Reid/HMP&L CCR Surface Impoundment is a coal combustion residual surface impoundment (CCRSI) that is regulated by the U.S. Environmental Protection Agency's (EPA) regulations for CCRSIs codified in 40 CFR Part 257 Subpart D ("Federal CCR Rule") and by Title 401, Chapter 46 of the Kentucky Administrative Regulations (KAR), which incorporates the Federal CCR Rule by reference. The impoundment is located in Webster County, Kentucky, at the Sebree Generating Station, where three coal-fired power plants were historically co-located: the Robert D. Green Station, the Robert A. Reid Station ("Reid"), and HMP&L Station Two. The Reid/HMP&L CCRSI was constructed around the same time as HMP&L Station Two, which consisted of two units that began commercial operations in 1973 and 1974. The impoundment received sluiced CCR from both HMP&L Station Two and the Reid Station until the impoundment was retired in 2019. On April 17, 2019, BREC initiated closure of the Reid/HMP&L CCRSI and placed a notification of intent to close the pond in the Station's operating record in accordance with 40 CFR 257.102(g) and 401 KAR 46:110 Section 9. Therefore, pursuant to 40 CFR 257.102(f)(1)(ii), BREC must complete closure of the Reid/HMP&L CCRSI by April 17, 2024, unless BREC extends the closure deadline under 40 CFR 257.102(f)(2)(i).

In accordance with the Federal CCR Rule and 401 KAR 46:110 Section 8, BREC monitors groundwater at the Reid/HMP&L CCRSI site with a monitoring well network. This network initially consisted of four monitoring wells to monitor the impoundment's performance relative to potential impacts to groundwater: upgradient well MW-7 and downgradient wells MW-8, MW-9, and MW-10. In late 2018, lithium concentrations at MW-10 were determined to be at statistically significant levels (SSLs) above the groundwater protection standard (GWPS) established for lithium in accordance with 40 CFR 257.95(h). In response to this exceedance, BREC initiated an Assessment of Corrective Measures (ACM) in January 2019 to identify applicable remedial technologies to address the reported lithium impacts in groundwater pursuant to 40 CFR 257.96 (AECOM, 2019a).

2.0 DEMONSTRATION FOR CLOSURE DEADLINE EXTENSION

Federal CCR Rule Reference: 40 C.F.R. § 257.102(f)(2)(i)

BREC is extending the closure deadline for the Reid/HMP&L CCRSI at the Sebree Generating Station under 40 CFR 257.102(f)(2)(i) due to the cumulative time required to (1) select a remedy for the lithium impacts to groundwater observed at well MW-10 and to (2) dewater the CCR stored in the impoundment. In the 2019 ACM, BREC identified the closure of the Reid/HMP&L CCRSI as the primary means of controlling the source of lithium impacts observed at monitoring well MW-10 (AECOM, 2019a). Therefore, BREC could not start closure construction until a remedy for the lithium concentrations observed at well MW-10 was selected in accordance with 40 CFR 257.97(a). As discussed in Section 2.1, BREC needed to evaluate supplemental remedial technologies, collect additional data, and develop a contaminant fate and transport model before selecting a final remedy for groundwater at the impoundment. As discussed in Section 2.2, the contractor closing the Reid/HMP&L CCRSI initially forecasted having the impoundment closed by the April 17, 2024, deadline, but the predominately silty nature of the ash stored in the impoundment has required additional processing and dewatering time that has made it infeasible to meet this deadline. As noted in 40 CFR 257.102(f)(2)(i)(B), the “time required to dewater a surface impoundment due to...the characteristics of the CCR in the unit” is a factor that may substantiate the need for additional time to close a CCR unit beyond the maximum timeframe stipulated in 40 CFR 257.102(f)(1), *i.e.*, five years.

2.1 TIME REQUIRED TO SELECT GROUNDWATER REMEDY

In accordance with 40 CFR 257.97(a), BREC selected a remedy for the lithium impacts observed in the groundwater at MW-10 as soon as feasible. Within a year of initiating the ACM, a characterization monitoring well was installed at the Station's property line to define the extent of lithium migration downgradient of the Reid/HMP&L CCRSI, and a closing the impoundment in-place in accordance with 40 CFR 257.102(d) was initially selected as the primary means of controlling the source of the lithium contamination observed at well MW-10. BREC then implemented a systematic approach to select a groundwater remedy and develop a design for closing the Reid/HMP&L CCRSI. BREC first evaluated additional data needs and then performed the necessary field investigations and laboratory tests to obtain the required data. After obtaining enough data and developing conceptual closure designs for the impoundment, BREC developed a contaminant fate and transport model to evaluate the performance of the different closure alternatives and to determine whether supplemental remedial technologies were needed (*e.g.*, hydraulic containment, physical containment, *ex-situ* treatment). Using the results of the contaminant fate and transport model, BREC then completed an evaluation of potential corrective measures and selected the groundwater remedy that was forecasted to perform the best amongst the evaluated alternatives. Finally, BREC finalized the corresponding closure design and specifications and procured a contractor to execute the final closure plan for the Reid/HMP&L CCRSI.

After identifying lithium in well MW-10 at SSLs above the GWPS, BREC performed an ACM between January and June 2019 to identify potential groundwater remedies (AECOM, 2019a). Pursuant to 40 CFR 257.96(c), the ACM included an analysis of whether the identified potential corrective measures could meet the standards for a groundwater remedy specified under 40 CFR 257.97, including the five threshold criteria specified under 40 CFR 257.97(b). One of these threshold criteria, which are the minimum standards (*i.e.*, thresholds) that must be met in order for a potential corrective measure to be considered an acceptable remedy, is “control[ling] the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV [40 CFR Part 257] into the environment.” 40 CFR 257.97(b)(3). Because the Reid/HMP&L CCRSI was indicated to be the source of the elevated lithium concentrations noted at well MW-10, the ACM identified closure of the impoundment as the primary means of meeting the source control criterion specified by the Federal CCR Rule for selecting a groundwater remedy. Therefore, closure construction at the Reid/HMP&L CCRSI could not commence until a remedy for the lithium concentrations observed at well MW-10 was selected in accordance with 40 CFR 257.97(a).

Approximately one month after initiating the ACM, BREC installed a new characterization well, MW-110, downgradient of the Reid/HMP&L CCRSI, near the Station’s western property line in accordance with 40 CFR 257.95(g)(1)(iii). Pursuant to 40 CFR 257.95(g)(1), the purpose of this well was to “assist in the characterization of the existence, quality, quantity, areal extent of groundwater degradation, and the rate and direction of migration of CCR contaminants in the groundwater” (AECOM, 2019b, p. 7). BREC sampled well MW-110 in March and April 2019, and the corresponding analytical results found all Appendix III or Appendix IV constituents to be at concentrations below their respective GWPSs. Notably, these initial analytical test results indicated lithium contamination had not migrated off-site. (AECOM, 2019b.)

By December 2019, BREC anticipated closing the Reid/HMP&L CCRSI in-place in accordance with 40 CFR 257.102(d) as the primary means of mitigating the source of lithium impacts observed in the groundwater at well MW-10. In 2020 and 2021, BREC continued evaluating potential remedies centered around closure in-place of the impoundment, assessing whether supplemental remedial technologies would be needed to meet the performance standards for corrective action under the Federal CCR Rule. Two remedial technologies that were considered to pair with closing the impoundment were hydraulic containment (groundwater extraction wells with *ex-situ* treatment) and physical containment (funnel-and-gate slurry walls with an extraction well and *ex-situ* treatment) (AECOM, 2019c). While evaluating these potential remedial technologies, BREC developed a plan to collect the data necessary to complete the evaluation and select a remedy for the lithium impacts noted in the groundwater at well MW-10, including the engineering design for closing the Reid/HMP&L CCRSI. BREC started executing the plan in 2022, the major elements of which were:

- Conducting a subsurface investigation within the impoundment to obtain geotechnical data for the impounded ash and natural subsoils under the impoundment. (Geotechnical data for the impoundment's dikes was previously collected in 2016).
- Performing a survey of the Reid/HMP&L to obtain the topographic data needed to develop a final grading plan and a stormwater run-off control system for the closed impoundment.
- Installing additional monitoring wells downgradient and cross-gradient of the impoundment to confirm the southwestern and south-southeastern extents of lithium impacts to the groundwater. (MW-110 defined the western extents.)
- Developing a contaminant fate and transport model to determine the effectiveness of the impoundment closure design and to determine whether supplemental remedial technologies should be incorporated into the remedy (e.g., hydraulic containment, physical containment, *ex-situ* treatment).
- Developing cost estimates to support project planning and budgeting.

In February 2022, BREC conducted a subsurface exploratory program within the Reid/HMP&L CCRSI to obtain information on the physical and engineering properties of the CCR stored in the impoundment and the natural subsoils under the impoundment. The following month, BREC initiated a topographic and bathymetric survey to obtain the topographic data needed to develop and evaluate different options for closing the impoundment in-place. In the spring and summer of 2022, BREC developed several different closure designs for the impoundment using the geotechnical and topographic data at the site. At this time, BREC re-introduced closure-by-removal under 40 CFR 257.102(c) as a potential remedy for the lithium impacts noted at the Reid/HMP&L CCRSI. Although this closure methodology was eliminated from consideration in 2019, BREC's further study of the impoundment site warranted re-introducing closure-by-removal as a potential remedy.

In March 2022, BREC installed two new characterization wells, MW-111 and MW-112, to define the nature and extent of potential lithium migration southwest and south-southeast of the impoundment. Similar to the analytical test results at well MW-110, analytical testing of groundwater samples collected at wells MW-111 and MW-112 in March, June, and December 2022 did not report Appendix III or Appendix IV constituents at concentrations above GWPSs. Therefore, BREC was able to conclude that the lithium GWPS exceedance at the Reid/HMP&L CCRSI was limited in downgradient extent to the general vicinity of well MW-10.

After developing conceptual closure designs for the Reid/HMP&L CCRSI, and after conducting two sampling events at MW-111 and MW-112 (and at the impoundment's other CCR and characterization wells), BREC developed a contaminant fate and transport model to evaluate the effectiveness of each closure method in mitigating the lithium contamination observed at the site. Completed in October 2022, this contaminant fate and transport model was used to develop time-versus-decay curves for lithium at well MW-10 for four closure

scenarios: complete closure by-removal and three variations of closure in-place. These time-versus-decay curves were created by running the model incrementally for 100 years, as generally required in such environmental evaluations, and evaluating the forecasted lithium concentrations at well MW-10 at different timesteps. Based on an evaluation of these time-versus-decay curves for lithium at well MW-10, closure by-removal was found to achieve the GWPS in the shortest timeframe. For more information on the contaminant fate and transport model, refer to Appendix C in the "Final Report on Selection of Groundwater Remedy" for the Reid/HMP&L CCRSI (Sargent & Lundy and KPRG, 2023).

After developing and evaluating the contaminant fate and transport model for the impoundment, BREC started the final evaluation of alternative corrective measures for the lithium impacts observed in the groundwater at well MW-10. As detailed in the "Final Report on Selection of Groundwater Remedy" (Sargent & Lundy and KPRG, 2023), BREC performed this evaluation in accordance with the guidance promulgated by EPA's "Fact Sheet #3: Final Remedy Selection for Results-Based RCRA Corrective Action" (EPA, 2000) to determine the most appropriate remedy and, by extension, closure design for the Reid/HMP&L CCRSI. Based on the Federal CCR Rule's threshold and balancing criteria for selecting a remedy, BREC's evaluation concluded that closure by-removal would be the best performing remedy of the corrective measures alternatives considered to address the lithium impacts to groundwater observed at the Reid/HMP&L CCRSI.

In the spring of 2023, BREC started finalizing the engineering design for closing the Reid/HMP&L CCRSI by removing the CCR stored therein pursuant to 40 CFR 257.102(c). This effort included finalizing the design for the closed condition of the impoundment site and the corresponding technical specifications for the contractor tasked with closing the impoundment. In May 2023, BREC started engaging potential contractors to perform the closure work. Before making a final decision on the groundwater remedy to be implemented, and in accordance with 40 CFR 257.96(e), BREC held a public meeting on May 24, 2023, in Henderson, Kentucky, to discuss the ACM and evaluation of potential groundwater remedies. No members of the public attended the meeting, and no comments were received. In July 2023, after evaluating proposals submitted by contractors to perform the closure work, BREC finalized the engineering design and specifications for closing the Reid/HMP&L CCRSI and formally selected closure by-removal with institutional controls and continued groundwater monitoring to remedy the lithium impacts observed in the groundwater at MW-10.

Shortly after finalizing the groundwater remedy and, by extension, the closure design for the Reid/HMP&L CCRSI, BREC awarded the closure contract to a contractor. In accordance with the contractor's proposal, the contractor planned to be fully mobilized to the site by August 2023 and start removing ash in September 2023. With this start date, the contractor initially forecasted having all ash removed in the Reid/HMP&L by the April 17, 2024, deadline established by 40 CFR 257.102(f)(1). However, the predominantly silty nature of

the ash encountered in the Reid/HMP&L CCRSI by the contractor requires additional processing and dewatering time that has made it infeasible to meet this deadline.

2.2 TIME REQUIRED TO DEWATER CCR STORED IN THE IMPOUNDMENT

Prior to dewatering the ash stored in the Reid/HMP&L CCRSI, the contractor first had to install a temporary water treatment system to treat the interstitial water to ensure all water discharged from the site would meet the water quality requirements stipulated in the Station's Kentucky Pollutant Discharge Elimination System permit. Upon mobilizing to the site in August 2023, the contractor began installing the temporary water treatment system while also preparing the site for the forthcoming ash excavation and dewatering work. Site preparation work included clearing and grubbing vegetation within the impoundment, decanting free surface water in the southern end of the impoundment, and installing silt fences for temporary erosion and sediment control. By mid-September 2023, the temporary water treatment facility was online, and the site was ready for ash excavation and dewatering work to begin.

To dewater the ash in the Reid/HMP&L CCRSI, the contractor excavated a rim ditch around the perimeter of the pool storage area and several lateral ditches ("finger ditches") within the pool storage area that could drain into the rim ditch. The contractor excavated a sump near the outlet structure in the pond's southern corner to collect water from the rim ditch prior to discharge. Meanwhile, on the opposite end of the pond, the contractor developed a one-acre area to process / condition excavated ash to remove free liquids from the material prior to transferring the ash to the Station's landfill. To promote removal of free liquids, the contractor planned to use this area to windrow ash, stockpile ash, and blend drier ash with wetter ash. Using this excavation and dewatering plan, the contractor planned to haul ash to the Station's landfill at a rate of 5,885 cubic yards per day to ensure the Reid/HMP&L CCRSI was closed by April 17, 2024.

About one month into removing ash from the impoundment, the contractor noted that the ash materials encountered in the pond were more silty than coarse-grained. Siltier ash retains moisture better and, therefore, does not drain as freely as coarse-grained ash. Therefore, siltier ash particles require more processing time to add air and/or heat to dry the material than free-draining, coarse-grained ash particles. In the context of the material encountered in the Reid/HMP&L CCRSI, this means that the contractor had to use multiple excavators to move excavated ash between windrows multiple times in the one-acre ash processing area. On average, it has taken the contractor an additional four to five days to remove free liquids from the siltier ash material than the time required to dewater the coarse-grained ash material. This additional processing time has adversely impacted the contractor's production rate. For example, the contractor was only able to haul about 64% of the targeted volume of ash to the Station's landfill in October 2023 despite working six days per week. This loss in production was directly attributable to the additional time required to dewater the siltier ash material excavated from the Reid/HMP&L CCRSI.

By mid-November 2023, the initial one-acre ash processing area had reached capacity, so the contractor developed a second ash processing area to maintain production. Given the amount of siltier ash encountered within the impoundment and the impact the additional dewatering time was having on production, the contractor excavated several test pits to assess the distribution of silty to coarse-grained ash remaining in the impoundment and to adjust their excavation and dewatering plan as needed. By the end of November 2023, the contractor estimated the ash remaining in the impoundment was 70% to 80% silt-sized, with the balance consisting of free-draining, coarse-grained particles. Meanwhile, the contractor was only able to haul about 70% of the targeted volume of ash to the Station's landfill in November 2023 despite working six days per week.

Given the extent of siltier ash remaining in the impoundment, and the additional processing time required to dewater that ash, the contractor began implementing additional measures in December 2023 to maintain production. These measures included expanding the ash processing area to five acres, adding a new sump to redirect water away from the expanded processing area, and modifying the haul road to the landfill to divert truck traffic away from ash dewatering in the expanded processing area. Although implementation of this modified dewatering and excavation plan hindered production in December 2023 (in addition production was lost due to inclement weather), these measures ensured adequate space was provided to process the siltier ash material. During this time, the contractor also took samples of the ash material at 17 locations in the impoundment to determine grain size and *in situ* moisture content. Most of these samples had at least 70% of the ash particles pass the No. 200 sieve, confirming the abundance of silt-sized ash in the impoundment.

To date, the contractor has removed 512,000 cubic yards of ash from the Reid/HMP&L CCRSI, which is about 62% of the 822,000 cubic yards of total CCR estimated to be in the impoundment when the closure work began (Sargent & Lundy, 2023). In addition, the upper six inches of native subsoils below the CCR stored in the impoundment, equivalent to about 18,000 cubic yards of soil, will be removed to verify all CCR constituents have been removed in accordance with 40 CFR 257.102(c) and 401 KAR 46:110 Section 9. Therefore, the contractor still has approximately 328,000 cubic yards of CCR and native subsoils to remove from the impoundment.

Since ash removal started in mid-September 2023, the contractor has removed ash from the impoundment at an average rate of 66,000 cubic yards per month. The lowest four-week production rate recorded to date was approximately 40,000 cubic yards, which was caused by several days of heavy rains. If the contractor continues removing ash at an average rate of 66,000 cubic yards per month, except for one month where production is limited to 40,000 cubic yards to account for future weather impacts, then the contractor will require an additional 5.5 months to remove the remaining ash and six inches of native subsoils in the Reid/HMP&L CCRSI. Although the contractor has implemented necessary measures to maintain production,

the siltier ash material prevalent in the impoundment limits the rate at which ash can be transferred to the Station's landfill.

3.0 NEW CLOSURE DEADLINE FOR REID/HMP&L CCRSI

Federal CCR Rule References: 40 C.F.R. §§ 257.102(f)(2)(i) and 257.102(f)(2)(ii)(A)

Given the demonstration in Section 2.0 that an extension to the closure deadline for the Reid/HMP&L CCRSI is necessary due to the cumulative time required to (1) select a remedy for the lithium impacts to groundwater observed at MW-10 and to (2) dewater the CCR stored in the impoundment, BREC may, in accordance with 40 CFR 257.102(f)(2)(i), extend the closure deadline for the Reid/HMP&L CCRSI. Per 40 CFR 257.102(f)(2)(ii)(A), BREC may extend the closure deadline by up to two years. Based on the rate at which the contractor has been able to remove the predominately silt-sized ash material from the pond since ash removal began in mid-September 2023, BREC is extending the deadline for closing the Reid/HMP&L CCRSI by 5.5 months to October 1, 2024.

4.0 OWNER CERTIFICATION

Federal CCR Rule Reference: 40 CFR 257.102(b)(1)(v)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Heather Todd
Plant Manager



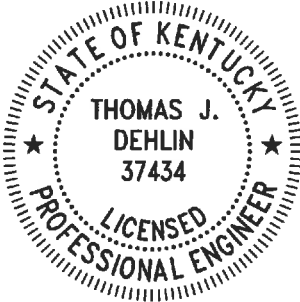
Date

5.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

I certify that this Demonstration was prepared by me or under my supervision and that I am a registered professional engineer under the laws of the Commonwealth of Kentucky.

Certified By: Thomas J. Dehlin Date: April 17, 2024

Seal:



th Dehlin
Digitally signed by
Thomas Dehlin
Date: 2024.04.17
13:39:00-05'00'

6.0 REFERENCES

AECOM. (2019a, June 13). "Assessment of Corrective Measures Under the CCR Rule: CCR Surface Impoundment, Reid/HMP&L Station, Webster County, Kentucky."

AECOM. (2019b, November 18). "Groundwater Characterization Report, CCR Monitoring Program: Reid/HMP&L Surface Impoundment, Sebree Station, Webster County, Kentucky."

AECOM. (2019c, December 9). "Remedy Selection Progress Report: Reid/HMP&L Surface Impoundment, Sebree Generating Station, Webster County, Kentucky."

EPA. (2000, March). "Fact Sheet #3: Final Remedy Selection for Results-Based RCRA Corrective Action." *RCRA Corrective Action Workshop On Results-Based Project Management: Fact Sheet Series*.

Sargent & Lundy. (2023, July 24). "Reid/HMP&L CCR Surface Impoundment Closure Plan." Rev. 2.

Sargent & Lundy and KPRG. (2023, July 25). "Final Report on Selection of Groundwater Remedy." Rev. 0.