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January 13, 2023

**VIA Electronic Tariff Filing System**

Ms. Linda C. Bridwell  
Executive Director  
Public Service Commission  
211 Sower Boulevard, P.O. Box 615  
Frankfort, Kentucky 40601-0615

**RE: *JOINT SPECIAL CONTRACT FILING OF BIG RIVERS  
ELECTRIC CORPORATION AND KENERGY CORP.***

Dear Ms. Bridwell:

Kenergy Corp. (“Kenergy”), one of Big Rivers Electric Corporation’s (“Big Rivers”) member distribution cooperatives, has entered into a retail Agreement for Electric Service (the “Retail Agreement”) with Pratt Paper (KY), LLC (“Pratt”), a new large industrial customer locating in Kenergy’s service territory. Big Rivers and Kenergy executed a corresponding letter agreement (the “Wholesale Agreement”), under which Big Rivers will provide wholesale electric service to Kenergy, for Kenergy to provide retail electric service to Pratt.

Pursuant to KRS 278.160, 807 KAR 5:001 Section 13(3), and 807 KAR 5:011 Sections 2 and 13-14, Big Rivers is electronically filing the following via the Public Service Commission’s Electronic Tariff Filing System:

- (i) This cover letter;
- (ii) The Retail Agreement, with certain confidential information redacted;
- (iii) The Wholesale Agreement;
- (iv) The public version of Direct Testimony of Ronald R. Repsher, with Exhibits;
- (v) Direct Testimony of John Wolfram, with the public version of Exhibits; and
- (vi) A motion for confidential treatment of the confidential information in the Retail Agreement and the testimony (the “Confidential Information”).

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The electronic filing does not contain an unredacted copy of the Confidential Information. Pursuant to the Commission's Orders in Case No. 2020-00085, Big Rivers will file the Confidential Information with the Commission via email to PSCED@ky.gov.

Should you have any questions about this tariff filing or the other documents referenced herein, you may contact me at 270-844-6185 or at [tyson.kamuf@bigrivers.com](mailto:tyson.kamuf@bigrivers.com).

Sincerely yours,

/s/ Tyson Kamuf

Tyson Kamuf  
Corporate Attorney

cc: Jeff Hohn





- 1 information, including Pratt’s projected energy usage and the  
2 price it will pay for power;<sup>1</sup>
- 3 b) material terms of the retail electric service agreement between  
4 Meade County Rural Electric Cooperative Corporation (“*Meade*  
5 *Co. RECC*”) and Nucor Corporation (“*Nucor*”) (the “*Nucor*  
6 *Contract*”);<sup>2</sup>
- 7 c) information related to Big Rivers’ contracts with entities in  
8 Nebraska (the “*Nebraska Contracts*”);<sup>3</sup> Kentucky Municipal  
9 Energy Agency (“*KyMEA*”);<sup>4</sup> and Owensboro Municipal Utilities  
10 (“*OMU*”);<sup>5</sup> and
- 11 d) Big Rivers’ internal projections related to its margins and the  
12 Net Present Value (“*NPV*”) of the benefits to its Members from  
13 the proposed contracts.<sup>6</sup>
- 14

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<sup>1</sup>See, *In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 KV Transmission Line in Henderson County, Kentucky*, P.S.C. Case No. 2022-00012, Order (Jun. 3, 2022) (granting confidential treatment of the Memorandum of Agreement between Big Rivers, Kenergy, and Pratt, which was incorporated into the Retail Agreement).

<sup>2</sup> See, *In the Matter of: Joint Application of Big Rivers Electric Corporation and Meade County Rural Electric Cooperative Corporation for Approval of Contracts for Electric Service with Nucor Corporation*, P.S.C. Case No. 2019-00365, Order (Jan. 22, 2020).

<sup>3</sup> See, *In the Matter of: Big Rivers Electric Corporation Filing of Wholesale Contracts Pursuant to KRS 278.180 and KAR 5:001 §13*, P.S.C. Case No. 2014-00134, Order (Sept. 10, 2014).

<sup>4</sup> See, *In the Matter of: Filing of Agreement for the Purchase and Sale of Firm Capacity and Energy Between Big Rivers Electric Corporation and the Kentucky Municipal Energy Agency*, P.S.C. Case No. 2016-00306, Order (Jan. 2, 2019)

<sup>5</sup> See, TFS 2018-00318; see also *In the 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. 2021-000079, Order (Mar. 5, 2021).

<sup>6</sup> See, *In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 KV Transmission Line in Henderson County, Kentucky*, P.S.C. Case No. 2022-00012, Order (Jun. 3, 2022).

1           3.       The remaining Confidential Information, consisting of Big Rivers’  
2 internal projections related to its annual capacity position and its marginal  
3 production of energy costs, is substantially similar to information which the  
4 Commission has previously granted confidential treatment. *See, In the Matter of:*  
5 *Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase*  
6 *Energy Corporation for Approval and Confidential Treatment of a Special*  
7 *Contract and Cost Analysis Information and a Request for Deviation from the*  
8 *Commission’s September 24, 1990 Order in Administrative Case No. 327, Order,*  
9 *P.S.C. Case No. 2021-00282 (Oct. 14, 2021) (granting confidential treatment of*  
10 *Big Rivers internal projections related to its capacity position, its marginal*  
11 *production energy costs, and its margins and the NPV of the benefits to its*  
12 *Members from the proposed contracts for an indefinite period).*

13           4.       Pursuant to the Commission’s Emergency Orders *In the Matter of:*  
14 *Electronic Emergency Docket Related to the Novel Coronavirus Covid-19, Case*  
15 *No. 2020-00085 (March 16, 2020 and March 24, 2020), one (1) copy of the*  
16 *Confidential Information highlighted with transparent ink, printed on yellow*  
17 *paper, or otherwise marked “CONFIDENTIAL,” is being filed with this request*  
18 *via electronic mail sent to [PSCED@ky.gov](mailto:PSCED@ky.gov). One (1) copy of the documents with*  
19 *the Confidential Information redacted is also being electronically filed with this*  
20 *request. 807 KAR 5:001 Section 13(3)(a)(3).*

21           5.       In the event that and to the extent the Confidential Information  
22 becomes generally available to the public, whether through filings required by

1 other agencies or otherwise, Big Rivers will notify the Commission and have its  
2 confidential status removed. 807 KAR 5:001 Section 13(10)(b).

3 6. Pursuant to 807 KAR 5:001 Section 13(3)(a)(1), as discussed *infra*,  
4 the Confidential Information is entitled to confidential protection and is being  
5 submitted confidentially under the purview of KRS 61.878(1)(a) and KRS  
6 61.878(1)(c)(1).

7 **I. The Confidential Information is entitled to**  
8 **confidential protection based upon KRS 61.878(1)(a)**

9 7. KRS 61.878(1)(a) explicitly grants confidential protection to “[p]ublic  
10 records containing information of a personal nature where the public disclosure  
11 thereof would constitute a clearly unwarranted invasion of personal privacy.”  
12 Here, Pratt plans to operate an energy-intensive commercial facility in  
13 Henderson County, Kentucky and the Confidential Information reveals  
14 proprietary, business-sensitive, and otherwise private information, including its  
15 projected energy use and the cost it will pay for power.

16 8. Pratt, a retail customer on the Kenergy system, considers this  
17 information highly confidential and believes that public disclosure of this  
18 information will cause it substantial competitive harm. Because public  
19 disclosure of the Confidential Information consisting of negotiated terms of  
20 special contracts would constitute an unwarranted invasion of this customer’s  
21 privacy, this Confidential Information should be granted confidential treatment.  
22 *See Ky. Op. Atty. Gen. 96-ORD-176 (August 20, 1996) (holding Kroger Company’s*  
23 *utility bills exempt from disclosure under KRS 61.878(1)(a)); In the Matter of:*

1 *Application of Kentucky Utilities Company for an Adjustment of its Electric Rates,*  
2 Order, P.S.C. Case No. 2012-00221 (July 25, 2013) (holding customer names,  
3 account numbers, and usage information exempt from disclosure under KRS  
4 61.878(1)(a)).

5 **II. The Confidential Information is also entitled to**  
6 **confidential protection based upon KRS 61.878(1)(c)(1)**

7 9. The Confidential Information is also entitled to confidential  
8 protection based upon KRS 61.878(1)(c)(1), which protects “records confidentially  
9 disclosed to an agency or required by an agency to be disclosed to it, generally  
10 recognized as confidential or proprietary, which if openly disclosed would permit  
11 an unfair commercial advantage to competitors of the entity that disclosed the  
12 records.” *See* 807 KAR 5:001 Section 13(3)(a)(1). In support for this ground of  
13 granting confidential protection, Subsection A *infra* describes how Big Rivers  
14 operates in competitive environments; Subsection B *infra* explains that the  
15 Confidential Information is generally recognized as confidential or proprietary;  
16 and Subsection C *infra* demonstrates that public disclosure of the Confidential  
17 Information would permit an unfair commercial advantage to Big Rivers’  
18 competitors. As such, the Commission should grant confidential treatment to the  
19 Confidential Information.

20 **A. *Big Rivers Faces Actual Competition***

21  
22 10. Big Rivers must successfully compete in the wholesale power  
23 market in order to sell excess energy to meet its members’ needs, including  
24 competition in term bilateral energy markets, day-ahead and real-time energy

1 and ancillary services markets, the annual capacity market, and forward  
2 bilateral long-term wholesale agreements with utilities and industrial customers.  
3 Big Rivers' ability to successfully compete in these wholesale power markets is  
4 dependent upon an effective combination of a) obtaining the maximum price for  
5 the power it sells and the best contract terms, and b) keeping its cost of  
6 production as low as possible. Fundamentally, if Big Rivers' cost of producing a  
7 kilowatt hour or its business risk increases, its ability to sell that kilowatt hour  
8 in competition with other utilities is adversely affected.

9       11. Big Rivers also competes for reasonably-priced credit in the credit  
10 markets, and its ability to compete is directly impacted by the financial results it  
11 obtains and the business risks it assumes. Any event that adversely affects Big  
12 Rivers' financial results or increases its business risks may adversely affect the  
13 price it pays for credit. A competitor armed with Big Rivers' proprietary and  
14 confidential information will be able to increase Big Rivers' costs or decrease Big  
15 Rivers' revenues, which could in turn affect Big Rivers' apparent  
16 creditworthiness. Impediments to Big Rivers' obtaining the best contract terms  
17 could likewise affect its apparent creditworthiness. A utility the size of Big  
18 Rivers that operates generation and transmission facilities will always have  
19 periodic cash and borrowing requirements for both anticipated and unanticipated  
20 needs. Big Rivers expects to be in the credit markets on a regular basis in the  
21 future, and it is imperative that Big Rivers improve and maintain its credit  
22 profile.

1           12.   Accordingly, Big Rivers faces competition in the wholesale power  
2 and capital markets, and the Confidential Information should be afforded  
3 confidential treatment to prevent the imposition of an unfair competitive  
4 advantage to those competitors.

5           **B.    *The Confidential Information is Generally Recognized***  
6                   ***as Confidential or Proprietary***  
7

8           13.   The Confidential Information for which Big Rivers seeks  
9 confidential treatment under KRS 61.878 is generally recognized as confidential  
10 or proprietary under Kentucky law.

11          14.   As noted above, a portion of the Confidential Information consists of  
12 confidential, negotiated terms of retail electric service agreements. KRS  
13 278.160(3) specifically recognizes that terms of a special contract are not required  
14 to be publicly disclosed if such terms are entitled to protection under KRS  
15 61.878(1)(c)(1).

16          15.   The Confidential Information also consists of Big Rivers' projected  
17 annual capacity position; margins and Net Present Value of the benefits to its  
18 Member from the proposed contracts; and marginal energy production costs. It is  
19 clear that this information relates to the inner workings of Big Rivers.

20          16.   The Confidential Information is not publicly available, nor is such  
21 information known or disseminated within the Kenergy, Pratt, or Big Rivers  
22 organizations except to those employees and professionals with a legitimate  
23 business need to know and act upon the information. Under Kentucky law, it is  
24 well recognized that the information about a company's detailed inner workings,

1 such as the Confidential Information, is generally recognized as confidential or  
2 proprietary. *See, e.g., Hoy v. Kentucky Indus. Revitalization Authority*, 907  
3 S.W.2d 766, 768 (Ky. 1995) (“[i]t does not take a degree in finance to recognize  
4 that such information concerning the inner workings of a corporation is  
5 ‘generally recognized as confidential or proprietary’”).

6 17. As referenced above, the Commission has recognized the  
7 confidentiality of Big Rivers’ projected annual capacity position and marginal  
8 energy production costs.

9 18. Based on the foregoing, the Confidential Information is generally  
10 recognized as confidential or proprietary under Kentucky law.

11 **C. Disclosure of the Confidential Information Would**  
12 **Permit an Unfair Commercial Advantage to Big Rivers’**  
13 **Competitors**  
14

15 19. Disclosure of the Confidential Information would permit an unfair  
16 commercial advantage to Big Rivers’ competitors. As discussed *supra*, Big Rivers  
17 faces actual competition in the wholesale power and credit markets. It is likely  
18 that Big Rivers’ ability to compete in these markets would be adversely affected  
19 if the Confidential Information was publicly disclosed, and Big Rivers seeks  
20 protection from such competitive injury.

21 20. Here, Pratt considers the Confidential Information consisting of  
22 negotiated terms of the Retail Agreement highly confidential. In Big Rivers’  
23 case, Big Rivers is actively engaged in buying and selling power in the wholesale  
24 power markets, and Big Rivers expects to engage in negotiations with

1 counterparties in the future. If confidential treatment of the confidential terms  
2 of the Agreement is denied, potential counterparties would know that the  
3 confidential terms of their contracts would be publicly disclosed, which could  
4 reveal information to their competitors about their competitiveness. Because  
5 many companies would be reluctant to have such information disclosed, public  
6 disclosure of the Confidential Information in this case would likely reduce the  
7 pool of counterparties willing to negotiate with Big Rivers, reducing Big Rivers'  
8 ability to buy and sell power at favorable prices. Further, any competitive  
9 pressure that adversely affects Big Rivers' revenue and margins could make the  
10 company appear less creditworthy and thus impair its ability to compete in the  
11 credit markets.

12         21. If the Confidential Information consisting of Big Rivers' projected  
13 annual capacity position; margins and Net Present Value of the benefits to its  
14 Member from the proposed contracts; and marginal energy production costs is  
15 publicly disclosed, market participants would have insight into the timing of Big  
16 Rivers' capacity needs, its cost of producing power, and the prices at which it is  
17 willing to buy and sell power. These market participants could use that  
18 information to manipulate the bidding process, leading to higher costs or lower  
19 revenues for Big Rivers and impairing its ability to compete in the wholesale  
20 power markets. Furthermore, any competitive pressure that adversely affects  
21 Big Rivers' revenue and margins could make the company appear less  
22 creditworthy and thus impair its ability to compete in the credit market.



## AGREEMENT FOR ELECTRIC SERVICE

**THIS AGREEMENT FOR ELECTRIC SERVICE** (“Agreement”) is made and entered into as of the 4<sup>th</sup> day of January, 2023, between **KENERGY CORP.**, a Kentucky rural electric cooperative corporation, with its principal office located at 6042 Old Corydon Road, P.O. Box 18, Henderson, Kentucky, 42419-0018 (“Seller”), and **PRATT PAPER (KY), LLC**, a Delaware limited liability company (“Customer”), with a service address at the facility Customer intends to construct and operate at 6303 Highway 425 West, Henderson, Kentucky 42420 (the “Facility”). Seller and Customer are individually referred to herein as a “Party” and collectively as the “Parties.”

WHEREAS, Seller will provide retail electric service to Customer under the terms of this Agreement;

WHEREAS, Seller will purchase the electric power and energy for resale to Customer from Big Rivers Electric Corporation (“Big Rivers”) under a wholesale power contract, as has been and may be amended from time to time (the “Wholesale Power Agreement”); and

WHEREAS, Customer is agreeable to locating the Facility in the Commonwealth of Kentucky contingent upon Seller providing the electrical requirements for the Facility under the terms of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties agree as follows:

### ARTICLE I GENERAL OBLIGATIONS

1.01 Basic Obligations of the Parties. Seller shall supply, sell, and deliver to Customer, and Customer shall accept and pay for all of the electric power and energy used by it in the operation of the Facility, up to the Maximum Contract Demand as defined in Section 2.04(b) of this Agreement, subject to the terms and conditions set forth herein. The electric service provided hereunder is subject to the rules, regulations, and orders of the Public Service Commission of Kentucky (the “Commission”) as may be applicable and effective from time to time. Except as otherwise provided herein, this Agreement contains the exclusive terms on which Seller will provide electric service to the Facility during the term of this Agreement.

1.02 Membership. Customer shall be a member of Seller, and shall be bound by applicable tariffs, rules, and regulations as may from time to time be adopted by Seller, subject to the specific terms and conditions of this Agreement.

1.03 Performance by Seller. Customer acknowledges and agrees that, to the extent Big Rivers has a corresponding or related obligation to Seller under the Wholesale Power Agreement, Seller’s performance of an obligation under this Agreement (i) is subject to and conditioned upon Big Rivers’ performance of such corresponding or related obligation to Seller, and (ii) may be undertaken by Big Rivers and that such performance of corresponding or related obligations by Big Rivers will satisfy Seller’s performance obligations hereunder. Big Rivers shall be entitled to the benefit of each covenant undertaken by Customer in this Agreement, and Big Rivers may enforce any such covenant by action in its own name or may require Seller to enforce such covenant for and on behalf of Big Rivers.

1.04 Description of the Facility. The Facility shall consist of a corrugated box recycling facility to be operated by Pratt (Henderson Corrugating), LLC, a Delaware limited liability company

located at 6305 Highway 425 West, Henderson, Kentucky 42420 (the “Corrugator”) and a paper mill facility to be operated by Customer and located at 6303 Highway 425 West, Henderson, Kentucky 42420 (the “Mill”).

## ARTICLE II SERVICE CHARACTERISTICS

2.01 Delivery Point and Character of Service. The “Delivery Point” of the electric power and energy made available under this Agreement shall be at the 12.47 kV low-side busing of the 161/12.47 kV transformer in the new, Seller provided substation(s), equipped with both a primary and standby transformer, to be located on a mutually agreed location as defined in Section 2.08(b)(1). The electric power and energy delivered under this Agreement will be in the form of three-phase alternating current (60 hertz) at nominal 12.470 kV voltage level.

2.02 Service Restriction. Customer may self-generate power for any power requirements at the Facility beyond the Maximum Contract Demand. Any supplementary, back-up, or similar service to support any customer-owned generation will be subject to Seller’s then-existing Standby Service tariff, or any successor tariff.

2.03 Customer shall not use the electric power and energy furnished hereunder as an auxiliary or supplement to any other source of power and shall not sell electric power and energy purchased hereunder; provided, however, the Mill may submeter electric power and energy furnished hereunder to the Corrugator.

### 2.04 Contract Demand.

(a) “Billing Demand” shall be considered equal to the highest integrated 30-minute clock-hour non-coincident peak demand during a billing month; provided, however, that the Billing Demand for any billing month shall not be less than 60% of the Maximum Contract Demand.

(b) Customer’s maximum Billing Demand in any billing month during the Term of this Agreement (the “Maximum Contract Demand”) shall be [REDACTED]

(c) Seller shall not be obligated under this Agreement to supply capacity in excess of the Maximum Contract Demand.

### 2.05 System Disturbances; Obligation for Damages.

(a) A “System Disturbance” shall be deemed to exist if the use of power by Customer directly or indirectly results in a risk of harm to human beings or material damage to or substantial interference with the functioning of Big Rivers’ generating system or transmission system, Seller’s distribution system, or the plant, facility, equipment or operations of any customer of one of Big Rivers’ distribution cooperative members. A System Disturbance includes, but is not limited to: (i) a level of current harmonic total demand distortion (“TDD”) measured at the Delivery Point that exceeds the limits on TDD described in IEEE Standard 519, Section 10; and (ii) a use of capacity and energy in such a manner that causes a current imbalance between phases greater than five percent at the Delivery Point.

(b) In its role as Local Balancing Area Operator in the Midcontinent Independent System Operator, Inc. (“MISO”) and reader of the meters serving Seller, Big Rivers shall have primary responsibility for determining the existence and source of System Disturbances. If Big Rivers reasonably

believes that Customer is responsible for a System Disturbance, it shall provide notice to Seller and Customer, and Customer may take, but shall not be obligated to take, appropriate action at its sole expense to cure, correct or suppress such System Disturbance. If Customer declines for any reason to take action to correct the System Disturbance, then Seller shall undertake, or cause Big Rivers to undertake, appropriate action to cure, correct or suppress such System Disturbance. Customer shall be obligated to reimburse Seller for all costs incurred by Seller or Big Rivers to cure, correct or suppress such System Disturbance, provided that such action was successful in curing, correcting or suppressing such System Disturbance, and further providing Customer is determined to be the cause of such System Disturbance.

(c) Customer acknowledges and agrees that Seller nor Big Rivers shall have any responsibility for damage to any property, or to any equipment or devices connected to Customers' electrical system on Customer's side of the Delivery Point to the extent such damage results from acts or omissions of Customer, its employees, agents, contractors or invitees, or malfunction of any equipment or devices connected to Customer's electrical system on Customer's side of the Delivery Point.

2.06 Power Factor. Customer shall maintain a power factor at the Delivery Point as nearly as practicable to unity. Power factor during normal operation may range from unity to ninety percent (90%). If Customer's power factor is less than 90% at time of maximum load, Seller reserves the right to require Customer to choose either (a) installation at Customer's expense of equipment which will maintain a power factor of 90% or higher; or (b) adjustment of the maximum monthly metered demand for billing purposes in accordance with the following formula:

$$\frac{\text{Maximum Actual Measured Kilowatts} \times 90\%}{\text{Power Factor} (\%)}$$

2.07 Metering.

(a) The metering equipment necessary to register the electric demand and energy for this service to Customer shall be furnished, installed, operated, and maintained by Seller or Big Rivers, and shall be and remain the property of Seller or Big Rivers. Any submetering equipment that Customer desires for submetering power used by the Corrugator shall be furnished, installed, operated, and maintained by Customer, and shall be and remain the property of Customer.

(b) Each meter provided by Seller or Big Rivers shall be read on or about the first day of each month, or such other day as the Parties may mutually agree upon, by a representative of Seller and may be simultaneously read by a representative of Customer should Customer so elect.

(c) All inspections and testing of metering equipment shall be performed in accordance with the Commission's applicable rules and regulations.

2.08 Easements and Facilities Provided by Customer.

(a) Customer shall furnish, operate, and maintain (or cause to be furnished, operated, and maintained) such facilities and equipment as may be necessary to enable it to receive and use electric power and energy purchased hereunder at and from the Delivery Point.

(b) Customer shall provide or cause to be provided, without cost to Seller or Big Rivers, the following facilities which are or may be necessary for Seller to supply the electric consuming facilities of Customer with retail electric service and for Big Rivers to supply Seller with the corresponding wholesale electric service:

1. Adequate sites for the construction and erection of such new substations and other facilities and future alterations to such new facilities as may from time to time be necessary to serve Customer, at such locations and of such dimensions as mutually agreed upon with the fee simple title thereto in form and substance reasonably acceptable to Seller and Big Rivers, rough graded to Seller's or Big Rivers' requirements, as may be from time to time required by Seller or Big Rivers;

2. Easements for rights-of-way upon Customer's property, at such locations and of such dimensions as determined by Seller or Big Rivers and which are necessary for the construction of facilities which Seller or Big Rivers must furnish to provide electric service under this Agreement. If Customer wishes to move any such facilities in the future, Seller will cooperate in identifying alternate satisfactory locations so long as any relocation is at Customer's expense;

3. An easement for ingress and egress for the exercise by Seller or Big Rivers of Seller's rights under this Agreement; and

4. Facilities for Big Rivers' metering equipment.

(c) Customer shall pay for the actual cost of the distribution facilities needed for Seller to provide power during the construction through the commercial operation of the Facility ("Construction Power"). Customer has already paid, and Seller acknowledges receipt of, a prepayment of [REDACTED] Seller may adjust for additional distribution facilities not included in this current estimate. This prepayment will be true-up to actual upon Seller's completion of the facilities, with Seller timely reimbursing Customer the difference if the actual cost is less than the prepayment, and Customer making a timely true-up payment if the actual cost is more than the prepayment.

#### 2.09 Facilities Provided by Seller.

(a) Except as otherwise set forth in this Agreement, Seller shall furnish or cause to be furnished, at no extra charge to Customer, all of the transmission facilities required for the delivery of electric power and energy to the Delivery Point at 12.47 kV, including metering, communications, relaying, control circuits, and associated equipment necessary to properly measure, control, and coordinate the delivery of electrical power and energy between Seller's and Customer's facilities. Seller shall make commercially reasonable effort to have the supplied facilities complete and operational by July 1, 2023, or sooner if reasonably possible.

(b) Construction Power. The rates applicable to Construction Power (up to 1.5 MW, and through the commercial operation of the project) will be under Seller's Rate Schedule 5 (for a demand of 1,000 kW or less) or 7 (for a demand of 1,000 kW or more), with no Economic Development Rate Credit applicable to Construction Power. Seller's Rate Schedule 5 and Rate Schedule 7 are each attached hereto and incorporated herein by reference as Exhibits D and E, respectively. The rates applicable to power provided after commercial operation will be the rates in this Agreement. Seller has furnished or caused to be furnished facilities required for the delivery of Construction Power during Customer's site development and building construction period.

(c) The rates applicable to this backup power provided from Seller's transformer will be under Seller's Rate Schedule 5, with no Economic Development Rate Credit being applied ) or Schedule 7 (for a demand of 1,000 kW or more), with no Economic Development Rate Credit applicable to Construction Power.

2.10 Operation and Maintenance of Facilities.

(a) Seller shall construct, operate, and maintain, or cause to be constructed, operated, and maintained, all facilities and equipment owned by it or by Big Rivers and required to supply retail electric service to Customer in accordance with the terms of this Agreement.

(b) Customer shall construct, operate, and maintain, or cause to be constructed, operated, and maintained, all facilities and equipment owned by it in accordance with the applicable provisions of the National Electrical Safety Code and all other applicable laws, codes, and regulations; provided, however, that Seller shall have no duty to inspect such facilities for compliance therewith.

(c) Nothing in this Agreement shall be construed to render either Party liable for any claim, demand, cost, loss, cause of action, damage, or liability of whatsoever kind or nature arising out of or resulting from the construction, operation, or maintenance of such Party's electric system or electric systems connected to such Party's electric system.

2.11 Right of Removal. Any and all equipment, apparatus, devices, or facilities placed or installed, or caused to be placed or installed, by any Party on or in the premises of another Party shall be and remain the property of the Party owning and installing such equipment, apparatus, devices, or facilities regardless of the mode or manner of annexation or attachment to real property of the other. Upon the termination of this Agreement, the owner thereof shall have the right to enter upon the premises of the other and shall within a reasonable time remove such equipment, apparatus, devices, or facilities.

2.12 Termination Charges. If this Agreement expires or is terminated for any reason, Customer shall pay Seller and Seller shall pay Big Rivers, in addition to any other obligations Customer may have to Seller upon the expiration or termination of this Agreement, a "Transmission Facilities Termination Charge" and an "EDR Termination Charge" in accordance with Exhibit B hereto.

2.13 Ancillary Services; Transmission. Seller shall be responsible for procuring transmission and ancillary services needed to deliver capacity and energy to Customer under this Agreement, subject to the rates and other terms hereunder.

2.14 Demand-side resource programs. Customer may participate in a load modifying resource or other demand-response program but only through an applicable tariff of Seller or Big Rivers, or through a separate contract entered into with Big Rivers.

ARTICLE III  
PAYMENT

3.01 Rates. During the Term of this Agreement but after the Construction Power phase:

(a) Customer shall take service from Seller at the rates set forth in Seller's Schedule 34 and Schedule 35, as applicable, a copy of which are attached hereto as Exhibits F and G and incorporated herein by reference, and under any other applicable tariffs of Seller, as they may be amended from time to time, or any successor tariff(s), all of which are incorporated herein by reference, subject to the Economic Development Rate ("EDR") credit set forth in Exhibit C hereto.

(b) Seller shall take service from Big Rivers under Big Rivers' Large Industrial Customer ("LIC") tariff as such tariff may be amended from time to time, and any other applicable tariffs of Big Rivers, or any successor tariff(s), all of which are incorporated herein by reference, subject to the EDR credit.

(c) Notwithstanding the foregoing, to the extent any provision of this Agreement, including the exhibits hereto, are inconsistent with the tariffs referenced in this section, the provisions of the Agreement shall prevail.

3.02 Taxes. Customer shall pay all taxes, charges, fees, or assessments now or hereafter applicable to electric service hereunder.

3.03 Billing. Bills for service hereunder shall be paid electronically or at the office of the Seller as follows:

Kenergy Corp.  
6402 Old Corydon Road  
P.O. Box 18  
Henderson, KY 42419-0018

Such payments shall be due on the 15<sup>th</sup> day of each month for service furnished during the preceding monthly billing period (the “Due Date”). If payment in full is not paid on or before the Due Date, or if Customer fails to maintain adequate credit support or payment security as required hereunder, Seller may discontinue service to the Customer without further action on the part of Seller by giving the Customer written notice at least ten (10) calendar days in advance of its intention to do so; provided, however, that such discontinuance of service shall not relieve the Customer of any of its obligations under this Agreement or limit Seller’s other remedies under this Agreement. Simple interest equal to the then-effective prime commercial lending rate as published in the “Money Rates” section of *The Wall Street Journal* plus one percent (1%) shall apply to any unpaid amounts from the Due Date until paid.

In the event any portion of the bill is in bona fide dispute, as a result of metering-related issues or otherwise, Customer shall notify Seller on or before the Due Date of the disputed amount and the reason therefor and shall pay the undisputed amount. The parties shall attempt in good faith to resolve the dispute. If the Parties are unable to agree upon a correct amount within ten (10) business days of Customer’s written notice of the dispute, then the disputed amount shall become due fifteen (15) days after the end of that ten (10) business day period.

3.04 Security for Customer’s Obligations.

(a) Credit Support for Monthly Billing Obligations. Customer shall provide to Big Rivers, prior to the Service Commencement Date defined in Section 11.03, a cash deposit or an irrevocable bank standby letter of credit representing two (2) months of estimated billing, currently estimated to be [REDACTED] as security for the payment of its monthly billing obligations. In the event Customer fails to pay any undisputed monthly billing invoice to Seller by the Due Date, after notifying Customer of its intent to do so, Big Rivers may, in addition to and without limiting any other remedies available to it, call on the standby letter of credit provided in this subsection or any other security deposit, payment security, or credit support on any other agreement between Customer and Seller for payment provided by Customer to satisfy any unpaid invoices. Big Rivers may increase or decrease the required amount of this payment security as necessary based on estimated increases or decreases in Customer’s bills. Customer shall provide the level of credit support required by Big Rivers within 15 business days after each such adjustment.

(b) Credit Support for Termination Charges.

1. As security for payment of the Transmission Facilities Termination Charge described in Exhibit B of this Agreement, Customer shall provide Big Rivers at the time that this Agreement is signed and maintain until the Transmission Facilities Termination Charge is reduced to zero

dollars (\$0), which is projected to occur within ten (10) years after the commencement of the transmission facilities improvements, a parent guarantee equal to the Transmission Facilities Termination Charge as detailed in Exhibit B. In addition, Customer has provided Big Rivers a surety bond, and Customer shall maintain, for three (3) years after commercial operation, that bond or a replacement bond reasonably acceptable to Big Rivers, in an amount equal to the Transmission Facilities Termination Charge.

2. As security for payment of the EDR Termination Charge as detailed in Exhibit B, Customer shall provide, at the time Customer becomes entitled to an EDR credit, and thereafter maintain, a cash deposit or an irrevocable bank letter of credit acceptable to Big Rivers in an amount equal to the total amount of the EDR credits that remain subject to refund.

3.05 Financial Statements. The Mill shall provide Seller and Big Rivers with the Mill's and the Mill's parent's audited financial statements upon written request; and both Seller and Customer may seek additional assurances should the Mill's or the Mill's parent's financial health diminish.

#### ARTICLE IV CONTINUITY OF SERVICE

4.01 Continuity of Service. Seller shall use reasonable diligence to provide a constant and uninterrupted supply of electric power and energy hereunder. However, Seller does not guarantee uninterrupted service from maintenance and similar temporary outages or a Force Majeure Event, and neither Seller nor Big Rivers shall be responsible for damages to Customer occasioned by maintenance and similar temporary outages or a Force Majeure Event, as defined in Section 4.02 of this Agreement. For scheduled maintenance that requires power interruption, Seller shall make commercially reasonable efforts to provide at least sixty (60) days' notice to Customer and shall coordinate with Customer on dates of any power interruption so as to minimize disruption and impact upon Customer operations.

4.02 Force Majeure. In the event a Party's performance of this Agreement is limited or prevented in whole or in part by Acts of God, strikes, labor trouble, acts of the public enemy, wars, blockades, insurrections, riots, pandemics, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of the government (whether federal, state, or local, or civil or military), civil disturbances, explosions, breakage of or accident to machinery, equipment or transmission lines, or inability to obtain necessary materials, supplies, or permits due to existing or future rules, regulations, orders, laws or proclamations of governmental authorities (whether federal, state, or local, or civil or military), or any other cause beyond the reasonable control of the Parties hereto whether or not specifically provided herein (each a "Force Majeure Event"), the obligations (other than payment obligations) of all Parties shall be suspended to the extent made necessary by such Force Majeure Event; provided that the affected Party gives notice and reasonably full particulars of such Force Majeure Event, first by telephone and then confirmed in writing, to the other Parties within a reasonable time after the occurrence of the Force Majeure Event. Each Party will, in the event it experiences a Force Majeure Event, use all commercially reasonable efforts to eliminate the effects of such Force Majeure Event on its performance as soon as reasonably possible; provided that nothing contained herein may be construed to require a Party to prevent or to settle a labor dispute against its will.

#### ARTICLE V RIGHT OF ACCESS

5.01 Duly authorized representatives of the Seller shall be permitted to enter Customer's premises at all reasonable times and upon forty-eight (48) hours' notice to Customer (except in emergency situations) in order to carry out the provisions hereof. Seller agrees to comply with

Customer's safety, health and other rules, regulations and procedures at all times while on Customer's premises.

5.02 Customer shall furnish to Seller such reports and information concerning the matters addressed in or matters arising out of this Agreement or any exhibit hereto as the Seller may reasonably request from time to time.

**ARTICLE VI**  
**EVENTS OF DEFAULT AND REMEDIES**

6.01 **Events of Default.** Each of the following constitutes an "**Event of Default**" under this Agreement:

(a) Subject to the provisions of Section 3.03 hereof, failure by Customer to make any payment in accordance with this Agreement within 5 days of its due date;

(b) Written notice of a Failure of a Party to perform any material duty imposed on it by this Agreement, including but not limited to the failure to maintain adequate credit support as required in Section 3.04 of this Agreement, that remains uncured for more than five (5) days after the breaching party's receipt of written notice of such breach; or

(c) Any attempt by a Party to transfer an interest in this Agreement other than as permitted under Subsection 2.03 or Article X of this Agreement.

(d) Any filing of a petition in bankruptcy or insolvency, or for reorganization or arrangement under any bankruptcy or insolvency laws, or voluntarily taking advantage of any such laws by answer or otherwise, or the commencement of involuntary proceedings under any such laws by a Party and such petition has not been withdrawn or dismissed within 60 days after filing;

(e) Assignment by a Party for the benefit of its creditors; or

(f) Allowance by a Party of the appointment of a receiver or trustee of all or a material part of its property and such receiver or trustee has not been discharged within 60 days after appointment.

Notwithstanding the foregoing, if Customer shall be unable to meet its obligations hereunder, a Customer Event of Default shall not be deemed to have occurred if Customer's lender assumes such obligations on behalf of the bondholders of the City of Henderson, Kentucky, Exempt Facilities Revenue Bonds (Pratt Paper (KY), LLC Project), Series 2022A or the City of Henderson, Kentucky, Exempt Facilities Revenue Bonds (Pratt Paper (KY), LLC Project), Series 2022B.

6.02 **Remedies.** Following the occurrence and during the continuance of an Event of Default by any Party beyond any applicable cure period, the non-defaulting Party may, in its sole discretion, elect to terminate this Agreement upon written notice to the other Parties, or to seek enforcement of its terms at law or in equity. Remedies provided in this Agreement are cumulative. Nothing contained in this Agreement may be construed to abridge, limit, or deprive any Party of any means of enforcing any remedy either at law or in equity for the breach or default of any of the provision herein, except as provided in Section 6.03 of this Agreement.

6.03 **LIMITATION OF DAMAGES. EXCEPT AS EXPRESSLY PROVIDED OTHERWISE IN THIS AGREEMENT, UNDER NO CIRCUMSTANCES WILL CUSTOMER**

**OR SELLER (OR BIG RIVERS), OR THEIR RESPECTIVE AFFILIATES, DIRECTORS, OFFICERS, MEMBERS, MANAGERS, EMPLOYEES OR AGENTS BE LIABLE HEREUNDER, WHETHER IN TORT, CONTRACT, OR OTHERWISE, FOR ANY SPECIAL, INDIRECT, PUNITIVE EXEMPLARY, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS. CUSTOMER'S OR SELLER'S LIABILITY (AND THE LIABILITY OF BIG RIVERS) HEREUNDER SHALL BE LIMITED TO DIRECT, ACTUAL DAMAGES. THE EXCLUSION OF ALL OTHER DAMAGES SPECIFIED IN THIS SECTION IS WITHOUT REGARD TO THE CAUSE OR CAUSES RELATING THERETO. THIS PROVISION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.**

6.04 Survival. Any obligations of a Party that have accrued under this Agreement on or before the date this Agreement is terminated or otherwise expires shall survive that termination or expiration.

## ARTICLE VII INDEMNIFICATION

7.01 For purposes of this Section 7.01, the Mill, the Corrugator, Seller, and Big Rivers are each an "Indemnifying Party" when indemnifying; and each are an "Indemnified Party" when being indemnified. The Mill, the Corrugator, Seller, and Big Rivers shall each indemnify and hold each other harmless from and against any and all claims, demands, damages, judgments, losses or expenses, including reasonable attorney fees, asserted against another Indemnified Party arising out of, related to or concerning damage to Seller's distribution facilities, Big Rivers' generation or transmission facilities, or the transmission facilities of any other entity resulting from the Indemnifying Party's operations, activities, or usage of electric power and energy hereunder, except to the extent said claim, demand, damage, judgments, losses or expenses arise out of the negligence or intentional misconduct of the Indemnified Party. Additionally, the Mill, the Corrugator and Seller each assume all responsibility for the electric service at and from that Party's side of the Delivery Point of electricity and for the wires and equipment used in connection therewith, and will indemnify and hold the other Indemnified Parties harmless from any and all claims for injury or damage to persons or property occurring at and from the Indemnifying Party's side of the Delivery Point of electricity, occasioned by such electricity or said wires and equipment, except to the extent said injury or damage is occasioned by the negligence or intentional misconduct of the Indemnified Party. Big Rivers will indemnify and hold the other Parties harmless from any and all claims for injury or damage to persons or property occurring at and from Seller's side of the Delivery Point of electricity for power is served from Big Rivers' transmission system, occasioned by such electricity or said wires and equipment, except to the extent said injury or damage is occasioned by the negligence or intentional misconduct of the Indemnified Party.

## ARTICLE VIII NOTICE

8.01 Except as herein otherwise expressly provided, any notice, demand or request provided for in this Agreement, or served, given or made in connection with it, shall be in writing and shall be deemed properly served, given or made if delivered in person or by any qualified and recognized delivery service, or sent postage prepaid by United States certified mail, return receipt requested, to the persons specified below unless otherwise provided for in this Agreement.

TO CUSTOMER:

PRATT PAPER (KY), LLC  
4004 Summit Boulevard NE  
Suite 1000  
Atlanta, Georgia 30319  
Attn: Stephen Ward  
Chief Financial Officer

A copy of any notice from Seller to Customer shall be given concurrently to Pratt (Henderson Corrugating), LLC, using the same methods of delivery required by this Agreement for notice to Customer, at the following address:

PRATT PAPER (KY), LLC  
4004 Summit Boulevard NE  
Suite 1000  
Atlanta, Georgia 30319  
Attn: Douglas R. Balyeat  
Vice President and General Counsel

TO SELLER:

Kenergy Corporation  
6402 Corydon Road  
P.O. Box 18  
Henderson, KY 42419-0018  
Attn: President and CEO

Any notice from Customer to Seller shall be given concurrently to Big Rivers, using the same methods of delivery required by this Agreement for notice to Seller, at the following address:

President and CEO  
Big Rivers Electric Corporation  
201 Third Street  
Henderson, Kentucky 42420

Each Party shall have the right to change the name of the person or location to whom or where notice shall be given or served by notifying the other Party of such change in accordance with this section.

## ARTICLE IX REPRESENTATIONS AND WARRANTIES

9.01 Representations of Seller. Seller hereby represents and warrants to Customer as follows:

(a) Seller is an electric cooperative corporation duly organized, validly existing and in good standing under the laws of the Commonwealth of Kentucky, and has the power and authority to execute and deliver this Agreement, to perform its obligations hereunder, and to carry on its business as such business is now being conducted and as is contemplated hereunder to be conducted during the term hereof.

(b) The execution, delivery, and performance of this Agreement by Seller have been duly and effectively authorized by all requisite corporate action.

9.02 Representations and Warranties of Customer. Each of the Mill and the Corrugator hereby represents and warrants to Seller as follows:

(a) Each of the Mill and the Corrugator is a limited liability company duly organized and validly existing and in good standing under the laws of the State of Delaware, is authorized to do business in the Commonwealth of Kentucky, and has the power and authority to execute and deliver this Agreement, to perform its obligations hereunder, and to carry on its business as such business is now being conducted and as is contemplated hereunder to be conducted during the term hereof.

(b) The execution, delivery, and performance of this Agreement by each of the Mill and the Corrugator have been duly and effectively authorized by all requisite corporate action.

(c) The rates offered to Customer and incorporated into this Agreement were a necessary factor in the decision of Customer to locate its operations in Kentucky. The Mill estimates that its Facility will involve a capital investment of approximately \$465 million. The Mill and the Corrugator, jointly, expect to employ approximately 321 full-time persons at wages averaging nearly \$30 per hour.

## ARTICLE X ASSIGNMENT AND SUCCESSION

10.01 No Party shall assign its rights hereunder without the prior written consent of the other Parties, which consent shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, a Party may withhold approval of a proposed assignment until it has been provided with all information it may reasonably require regarding the proposed assignee, and it has determined that the proposed assignee has the ability to fulfill assignor's obligations hereunder to the reasonable satisfaction of the Party following the proposed assignment. No assignment by a Party shall relieve the assignor of its obligations hereunder without the written consent of the other Party to accept the assignee as a substitute obligor. This Agreement shall be binding upon and inure to the benefit of the successors, legal representatives, and permitted assigns of the respective Parties hereto. Notwithstanding the foregoing, any Party may make a collateral assignment of this Agreement to its lenders without consent of the other Parties hereto.

## ARTICLE XI TERM, TERMINATION, AND SERVICE COMMENCEMENT DATE

11.01 Term. This Agreement shall become effective upon the satisfaction or waiver of the contingencies referred to in Section 12.01 of this Agreement and shall remain in effect for twenty (20) years following the Service Commencement Date, as defined in Section 11.03 (the "Term"). At the end of the initial twenty-year Term, the Term will automatically be extended for successive one-year evergreen renewal terms unless terminated in accordance with Section 6.02 or Section 11.02.

11.02 Termination. Any Party may terminate this Agreement at the expiration of the initial Term or any subsequent one-year renewal term by giving the other Parties at least one year's written notice. Termination shall not affect any obligation accrued prior to such termination or any other obligation which, pursuant to the terms of this Agreement, survives termination.

11.03 “Service Commencement Date” shall mean the date on which the Mill commences commercial operations at the Facility, and such date shall be specified by Customer, but shall be on or about July 1, 2023.

## ARTICLE XII APPROVAL AND EFFECTIVE DATE

12.01 The “Effective Date” of this Agreement shall be the date hereof, except that said Effective Date shall be postponed and this Agreement shall not become effective unless and until:

- (a) approvals of this Agreement and a corresponding amendment to the Wholesale Power Agreement are received from (i) the Commission; and (ii) the Rural Utilities Service (“RUS”); or the Parties and Big Rivers waive such approvals; and
- (b) the items of security for Customer’s obligations provided for in Section 3.04 hereto have been delivered and are in full force and effect, including but not limited to the Mill’s Parent Guarantee, duly authorized, executed and delivered by the Mill’s Parent.

## ARTICLE XIII MISCELLANEOUS

13.01 Entire Agreement. The terms, covenants, and conditions contained in this Agreement, including the attached exhibits, constitute the entire agreement between the Parties and shall supersede all previous communications, representations, or agreements, either oral or written between the Parties hereto with respect to the subject matter hereof; provided, however, that service to Customer is subject to the articles, bylaws, tariffs, rules, and regulations of Seller and to the laws, rules, regulations, and lawful orders of the Commission. In the event of a conflict between this Agreement and the articles, bylaws, tariffs, rules, and regulations of Seller, this Agreement shall take precedence.

13.02 Governing Law, Jurisdiction, and Venue. All respective rights and obligations of the Parties shall be governed by the laws of the Commonwealth of Kentucky without regard to its conflicts of law rules. The courts of the Commonwealth of Kentucky will have exclusive jurisdiction over each and every judicial action brought under or in relationship to this Agreement; provided that the subject matter of such dispute is not a matter reserved by law to the Commission (in which event exclusive jurisdiction and venue will lie with the Commission), or to the U.S. federal judicial system (in which event exclusive jurisdiction and venue will lie with the U.S. District Court for the Western District of Kentucky), and the Parties shall submit to the jurisdiction of Kentucky courts for such purpose. Venue of any state court action, legal or equitable, having as its basis the enforcement or interpretation of this contract, shall be Henderson County, Kentucky.

13.03 Waiver. The waiver by either Party of any breach of any term, covenant, or condition contained herein will not be deemed a waiver of any other term, covenant, or condition, nor will it be deemed a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein.

13.04 Amendments. This Agreement may be amended, revised, or modified by, and only by, a written instrument duly executed by all Parties and consented to by Big Rivers.

13.05 Counterparts and Electronic Signatures and Delivery. This Agreement may be executed in any number of counterparts, which together will constitute but one and the same instrument, and each counterpart will have the same force and effect as if they were one original. The counterparts of this

Agreement may be executed and delivered by facsimile or other electronic signature (including portable document format) by any of the parties and the receiving party(ies) may rely on the receipt of such document so executed and delivered electronically or by facsimile as if the original had been received.

13.06 Headings. The headings contained in this Agreement are solely for convenience and do not constitute a part of the agreement between the Parties, nor should such headings be used to aid in any manner in the construction of this Agreement.

13.07 Severability. Should any provision or provisions of this Agreement be declared void or illegal by any court of competent jurisdiction, then such void or illegal provision or provisions shall be severed from this Agreement, and all other provisions hereof shall remain in full force and effect.

[SIGNATURE PAGE(S) FOLLOW]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement all as of the day and year first above written.

KENERGY CORP.

By: Jeff Hohn  
Jeff Hohn  
President and CEO

PRATT PAPER (KY), LLC

By: D.J. Kyles  
Printed Name: D.J. Kyles  
Title: Vice President and Treasurer



PRATT (HENDERSON CORRUGATING), LLC

By: D.J. Kyles  
Printed Name: D.J. Kyles  
Title: Vice President and Treasurer



# EXHIBIT A

## Transmission Facilities Improvements

To provide service to Customer, Seller anticipates constructing, or causing to be constructed, the following transmission facilities:

<b>Project Description</b>	<b>Estimated Cost of Construction</b>
South Henderson 161 kV Switching Station	\$6,070,000
Henderson Paper Mill (HPM) 161/12.47 kV Substation	\$4,755,000
*South Henderson 161 kV T-Line	\$9,375,000
TOTAL Estimated Transmission Facilities Cost	\$20,200,000

\* A 7.5 mile, 161 kV transmission line circuit from the new South Henderson Switching Station to the new Henderson Paper Mill (HPM) Substation, requiring new right-of-way to and from the new substations and the re-routing and re-termination of three existing 161 kV lines (Henderson, Reid, and HMP&L 4) into the new South Henderson Switching Station.

## EXHIBIT B

### TERMINATION CHARGES

#### A. TRANSMISSION FACILITIES TERMINATION CHARGE

If this Agreement expires or is terminated for any reason, Customer shall pay Seller and Seller shall pay Big Rivers, in addition to any other obligations Customer may have to Seller upon the expiration or termination of this Agreement, a Transmission Facilities Termination Charge equal to Big Rivers' actual cost of the transmission facilities ("Transmission Facilities Costs") constructed to provide service to Customer, which amount is estimated to be \$20.2 million as of August 5, 2021, reduced by [REDACTED] month of demand. For example:

YEAR 1 EXAMPLE		
Transmission Facilities Cost		\$20,200,000
Customer Credit:		
Monthly Demand	[REDACTED]	
x Number of Months	x 12 months	
x Credit Per MW-Month	x [REDACTED]	
Total Credit for Year 1		[REDACTED]
Remaining Transmission Facilities Termination Charge After Year 1		[REDACTED]

If this Agreement expires or is terminated for any reason prior to the completion of the transmission projects required to serve Customer, the Transmission Facilities Cost shall include all costs that Big Rivers has incurred or that are unavoidable as of the date of expiration or termination of this Agreement. Transmission Facilities Costs shall include any costs incurred by Big Rivers to construct the transmission facilities to serve customer prior to the Effective Date of this Agreement.

#### B. EDR TERMINATION CHARGE

If this Agreement expires or is terminated for any reason, Customer shall pay Seller and Seller shall pay Big Rivers, in addition to any other obligations Customer may have to Seller upon the expiration or termination of this Agreement, an EDR Termination Charge equal to all EDR Credits that Customer is required to refund, as specified in Exhibit C hereto.

1 **EXHIBIT C**

2 **Economic Development Rate Credit**

- 3 A. EDR Credit. Customer will receive an EDR credit on its load less 1 MW for five consecutive  
4 years of the term. The EDR credit will equal 90% of the Demand Charge under Big Rivers' LIC  
5 rate schedule. Customer has the option to elect to begin receiving the five-year EDR credit at the  
6 beginning of any of the first six years of the term.
- 7 B. Full-Rate Obligation. For every MW-month that Customer receives an EDR credit, Customer  
8 must take a MW-month at the full tariff rate (i.e., Seller's tariff rate without any EDR credit) (the  
9 "Full-Rate Obligation"). If this Agreement expires or is terminated for any reason before  
10 Customer fulfills its Full-Rate Obligation, Customer shall refund to Seller, and Seller shall refund  
11 to Big Rivers, the EDR credits Customer received for any MW-months for which Customer did  
12 not fulfill its Full-Rate Obligation.
- 13 C. Load receiving the EDR Credit will not be eligible to receive credits under Big Rivers' or Seller's  
14 Members Rate Stability Mechanism ("MRSM") tariffs.

# **EXHIBIT D**

## **Kenergy Rate Schedule 5**



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Eighth Revised SHEET NO. 5

CANCELLING PSC NO. 2

Seventh Revised SHEET NO. 5

CLASSIFICATION OF SERVICE

Schedule 5 – Three-Phase Demand (Non-Residential)
Non-Dedicated Delivery Points (0 – 1,000 KW)

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available for three-phase customers (non-residential) with a metered demand 0 – 1,000 KW for all uses served from non-dedicated delivery points.

TYPE OF SERVICE

The electric service furnished under this schedule will be three-phase, 60 cycle, alternating current at available nominal voltage.

AGREEMENT

An "Agreement for Purchase of Power" may be required of the customer for service under this schedule, in accordance with investment to serve and as mutually agreed to by both parties. For any type of service that is not considered permanent, see tariff Sheet No. 138.

RATE

R Customer Charge per Delivery Point..... \$45.52 per month

Plus:

Demand Charge of:

R Per KW of billing demand in the month..... \$ 5.78

Plus:

Energy Charges of:

R First 200 KWH per KW, per KWH..... \$0.08749

R Next 200 KWH per KW, per KWH..... \$0.06710

R All Over 400 KWH per KW, per KWH..... \$0.05940

DATE OF ISSUE May 14, 2014

Month / Date / Year

DATE EFFECTIVE February 1, 2014

Month / Date / Year

ISSUED BY Steve Thompson

(Signature of Officer)

TITLE Vice President - Finance

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2013-00385 DATED April 25, 2014

KENTUCKY PUBLIC SERVICE COMMISSION

JEFF R. DEROUEN EXECUTIVE DIRECTOR

TARIFF BRANCH

Brent Kirtley

EFFECTIVE

2/1/2014

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Fifth Revised SHEET NO. 5A

CANCELLING PSC NO. 2

Fourth Revised SHEET NO. 5A

CLASSIFICATION OF SERVICE
Schedule 5 - Three-Phase Demand (Non-Residential)
Non-Dedicated Delivery Points (0 - 1,000 KW)

ADJUSTMENT CLAUSES:

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

- Renewable Resource Energy Service Rider Sheets No. 23 - 23D
Fuel Adjustment Rider Sheets No. 24 - 24A
Environmental Surcharge Rider Sheets No. 25 - 25A
Member Rate Stability Mechanism Rider Sheets No. 28 - 28A
Rural Economic Reserve Adjustment Rider Sheet No. 29
Non-FAC Purchased Power Adjustment Rider Sheets No. 30 - 30A
2017 Billing Gap Recovery Plan Rider Sheet No. 31

T N

TAXES AND FEES

School Taxes added if applicable.
Kentucky Sales Tax added if applicable.

FRANCHISE CHARGE

The rate herein provided shall include, where applicable, an additional charge for local government franchise payment determined in accordance with the Franchise Billing Plan as set forth on Sheet No. 105.

DETERMINATION OF BILLING DEMAND

The billing demand shall be the maximum kilowatt load used by the customer for any period of fifteen (15) consecutive minutes during the month for which the bill is rendered as indicated or recorded by a demand meter.

DATE OF ISSUE November 23, 2016
DATE EFFECTIVE January 1, 2017
ISSUED BY [Signature]
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO DATED

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 1/1/2017
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Fourth Revised SHEET NO. 5B

CANCELLING PSC NO. 2

Third Revised SHEET NO. 5B

**CLASSIFICATION OF SERVICE**

**Schedule 5 – Three-Phase Demand (Non-Residential)**

**Non-Dedicated Delivery Points (0 – 1,000 KW)**

POWER FACTOR ADJUSTMENT

The customer agrees to maintain a power factor as nearly as practical to unity. Kenergy will permit the use of apparatus that shall result, during normal operation, in a power factor not lower than 90%. At Kenergy’s option, in lieu of the customers providing the above corrective equipment when power factor is less than 90%, Kenergy may adjust the maximum measured demand for billing purposes in accordance with the following formula:

$$\frac{\text{Max. Measured KW} \times 90\%}{\text{Power Factor (\%)}}$$

The power factor shall be measured at time of maximum load.

PRIMARY SERVICE DISCOUNT

**R** If service is furnished at primary distribution voltage, a discount of \$.65 per KW of Billing Demand will be applied to the monthly bill. Kenergy shall have the option of metering at primary or secondary voltage.

TERMS OF PAYMENT

The above rates are net, the gross rate being five percent (5%) greater. In the event the current monthly bill is not paid within twenty (20) days from the date the bill was rendered, the gross rate will apply.

ALL OTHER RULES AND REGULATIONS

Service will be furnished under Kenergy’s rules and regulations applicable hereto.

DATE OF ISSUE May 14, 2014

Month / Date / Year

DATE EFFECTIVE February 1, 2014

Month / Date / Year

ISSUED BY Steve Thompson  
(Signature of Officer)

TITLE Vice President - Finance

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2013-00385 DATED April 25, 2014

**KENTUCKY  
PUBLIC SERVICE COMMISSION**

**JEFF R. DEROUEN  
EXECUTIVE DIRECTOR**

**TARIFF BRANCH**

**EFFECTIVE**

**2/1/2014**

**PURSUANT TO 807 KAR 5:011 SECTION 9 (1)**

# **EXHIBIT E**

**Kenergy Rate Schedule 7**



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Ninth Revised SHEET NO. 7

CANCELLING PSC NO. 2

Eight Revised SHEET NO. 7

CLASSIFICATION OF SERVICE
Schedule 7 - Three-Phase Demand - 1,001 KW and Over
(Non-Dedicated Delivery Points)

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available for all three-phase customers with a metered or contract demand 1,001 KW & Over served from a non-dedicated delivery point.

Any service provided under this tariff shall be for a minimum of twelve (12) consecutive months, whereby the customer will be billed a minimum of 1,001 KW for next twelve (12) months.

TYPE OF SERVICE

The electric service furnished under this schedule will be three-phase, 60 cycle, alternating current at available nominal voltage.

RATE

Option A - High Load Factor (above 50%):

Customer Charge per Delivery Point 975.27 per month

Plus:

Demand Charge of:

I Per KW of Billing Demand \$12.70

Plus:

Energy Charges of:

I First 200 KWH per KW, per KWH \$0.054069

I Next 200 KWH per KW, per KWH \$0.049666

I All Over 400 KWH per KW, per KWH \$0.047013

Primary Service Discount \$0.65 per KW

Option B - Low Load Factor (below 50%):

Customer Charge per Delivery Point 975.27 per month

Plus:

Demand Charge of:

I Per KW of Billing Demand \$7.15

DATE OF ISSUE November 23, 2016

Month / Date / Year

DATE EFFECTIVE May 20, 2016

Month / Date / Year

ISSUED BY [Signature]

(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2015-00312 DATED September 15, 2016

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 5/20/2016 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Twelfth Revised SHEET NO. 7A

CANCELLING PSC NO. 2

Eleventh Revised SHEET NO. 7A

CLASSIFICATION OF SERVICE

Schedule 7 – Three-Phase Demand – 1,001 KW and Over (Non-Dedicated Delivery Points)

Plus:

Energy Charges of:

First 150 KWH per KW, per KWH.....	\$0.074913
Over 150 KWH per KW, per KWH.....	\$0.065609
Primary Service Discount.....	\$.65 per KW

ADJUSTMENT CLAUSES:

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Renewable Resource Energy Service Rider	Sheets No. 23 - 23D
Fuel Adjustment Rider	Sheets No. 24 - 24A
Environmental Surcharge Rider	Sheets No. 25 - 25A
Member Rate Stability Mechanism Rider	Sheets No. 28 - 28A
Rural Economic Reserve Adjustment Rider	Sheet No. 29
Price Curtailable Service Rider	Sheet No. 42
Non-FAC Purchased Power Adjustment Rider	Sheets No. 30 - 30A
2017 Billing Gap Recovery Plan Rider	Sheet No. 31

TAXES AND FEES

School Taxes added if applicable.
Kentucky Sales Tax added if applicable.

FRANCHISE CHARGE

The rate herein provided shall include, where applicable, an additional charge for local government franchise payment determined in accordance with the Franchise Billing Plan as set forth on Sheet No. 105.

AGREEMENT

An Agreement for Purchase of Power shall be executed by the member for service under this schedule. Existing members before January 1, 2017 will be grandfathered and may not have an agreement. The monthly facilities charge shall be in accordance with the investment to serve and cover cost of service. For any type of service that is not considered permanent, see tariff Sheet No. 138.



DATE OF ISSUE November 23, 2016
Month / Date / Year

DATE EFFECTIVE January 1, 2017
Month / Date / Year

ISSUED BY [Signature]
(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. DATED

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 1/1/2017
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED  
Community, Town or City

PSC NO. 2

Fourth Revised SHEET NO. 7B

CANCELLING PSC NO. 2

Third Revised SHEET NO. 7B

<b>CLASSIFICATION OF SERVICE</b>
<b>Schedule 7 – Three-Phase Demand – 1,001 KW and Over (Non-Dedicated Delivery Points)</b>

OPTION A OR B RATE SELECTION

The option chosen by the customer will remain in effect for a minimum of twelve months. Thereafter, the customer may, upon request, transfer from one option to the other after twelve months of service under the option previously chosen.

DETERMINATION OF BILLING DEMAND

The billing demand shall be the greater of the actual maximum kilowatt demand used by the customer for any period of fifteen (15) consecutive minutes during the month for which the bill is rendered as indicated or recorded by a demand meter or the minimum contract demand, which must equal or exceed 1,001 KW.

POWER FACTOR ADJUSTMENT

The customer agrees to maintain a power factor as nearly as practical to unity. Kenergy will permit the use of apparatus which shall result, during normal operation, in a power factor not lower than 90%.

At Kenergy's option, in lieu of the customers providing the above corrective equipment, when power factor is less than 90%, Kenergy may adjust the maximum measured demand for billing purposes in accordance with the following formula:

$$\frac{\text{Max. Measured KW} \times 90\%}{\text{Power Factor (\%)}}$$

The power factor shall be measured at time of maximum load.

PRIMARY SERVICE DISCOUNT

**R** If service is furnished at primary distribution voltage, a discount of \$.65 per KW of Billing Demand will be applied to the monthly bill. Kenergy shall have the option of metering at primary or secondary voltage.

TERMS OF PAYMENT

The above rates are net, the gross rate being five percent (5%) greater. In the event the current monthly bill is not paid within twenty (20) days from the date the bill was rendered, the gross rate will apply.

ALL OTHER RULES AND REGULATIONS

Service will be furnished under Kenergy's rules and regulations applicable hereto.

DATE OF ISSUE May 14, 2014  
Month / Date / Year

DATE EFFECTIVE February 1, 2014  
Month / Date / Year

ISSUED BY Steve Thompson  
(Signature of Officer)

TITLE Vice President - Finance

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION  
IN CASE NO. 2013-00385 DATED April 25, 2014

<b>KENTUCKY PUBLIC SERVICE COMMISSION</b>
<b>JEFF R. DEROUEN EXECUTIVE DIRECTOR</b>
<b>TARIFF BRANCH</b>  <i>Brent Kirtley</i>
<b>EFFECTIVE 2/1/2014 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)</b>

# **EXHIBIT F**

**Kenergy Rate Schedule 34**



Henderson, Kentucky

FOR ALL TERRITORY SERVED
Community, Town or City
PSC NO. 2
Ninth Revised SHEET NO. 34
CANCELLING PSC NO. 2
Eight Revised SHEET NO. 34

CLASSIFICATION OF SERVICE
Schedule 34 – Large Industrial Customers Served Under Special Contract
(Dedicated Delivery Points) – (Class B)

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

To existing members, Aleris and Kimberly Clark, and new members executing special contracts approved by the Kentucky Public Service Commission for load requirements exceeding 30,000 KW billing demand.

RATE:

Customer Charge.....\$1,028 per month
Plus Demand Charge of:
per KW of Billing Demand in Month.....\$10.715
Plus Energy Charge of:
per KWH.....\$0.038216

ADJUSTMENT CLAUSES:

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Table with 2 columns: Rider Name and Sheet No. Includes Renewable Resource Energy Service Rider, Fuel Adjustment Rider, Environmental Surcharge Rider, Member Rate Stability Mechanism Rider, Price Curtailable Service Rider, and Non-FAC Purchased Power Adjustment Rider.

AGREEMENT

An "agreement for purchase of power" shall be signed by any new member prior to service under the rate.

TAXES AND FEES

School Taxes added if applicable.
Kentucky Sales Taxes added if applicable.

FRANCHISE CHARGE

The rate herein provided shall include, where applicable, an additional charge for local government franchise payment determined in accordance with the Franchise Billing Plan as set forth on Sheet No. 105

DATE OF ISSUE November 23, 2016
DATE EFFECTIVE January 1, 2017
ISSUED BY [Signature]
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. DATED

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 1/1/2017
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED
Community, Town or City
PSC NO. 2
Eight Revised SHEET NO. 34A
CANCELLING PSC NO. 2
Seventh Revised SHEET NO. 34A

CLASSIFICATION OF SERVICE
Schedule 34 – Large Industrial Customers Served Under Special Contract
(Dedicated Delivery Points) – Class B With Self-Generation

APPLICABLE
In all territory served.

AVAILABILITY OF SERVICE
To existing member Domtar, and new members executing special contracts approved by the Kentucky Public Service Commission for load requirements exceeding 30,000 KW billing demand including KWH consumed at site.

Table with 2 columns: RATE: and Rates. Rows include Customer Charge (\$1,028 per month), Demand Charge (\$10.715 per KW), and Energy Charge (\$0.038216 per KWH).

NOTE: Charges for backup and replacement power are billed per contract, which includes a \$0.000166 retail adder per KWH Consumed At Site.

ADJUSTMENT CLAUSES:
The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Table listing riders and their corresponding sheet numbers: Renewable Resource Energy Service Rider (23-23D), Fuel Adjustment Rider (24-24A), Environmental Surcharge Rider (25-25A), Member Rate Stability Mechanism Rider (28-28A), Price Curtailable Service Rider (42-42C), Non-FAC Purchased Power Adjustment Rider (30-30A).

DATE OF ISSUE November 23, 2016
DATE EFFECTIVE January 1, 2017
ISSUED BY [Signature]
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. DATED

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 1/1/2017
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Third Revised SHEET NO. 34B

CANCELLING PSC NO. 2

Second Revised SHEET NO. 34B

**CLASSIFICATION OF SERVICE**

**Schedule 34 – Large Industrial Customers Served Under Special Contract  
(Dedicated Delivery Points) – Class B With Self-Generation**

AGREEMENT

An “agreement for purchase of power” shall be signed by any new customer prior to service under the rate.

TAXES AND FEES

School Taxes added if applicable.  
Kentucky Sales Taxes added if applicable.

FRANCHISE CHARGE

The rate herein provided shall include, where applicable, an additional charge for local government franchise payment determined in accordance with the Franchise Billing Plan as set forth on Sheet No. 105.

DATE OF ISSUE May 14, 2014

Month / Date / Year

DATE EFFECTIVE February 1, 2014

Month / Date / Year

ISSUED BY Steve Thompson

(Signature of Officer)

TITLE Vice President - Finance

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2013-00385 DATED April 25, 2014

**KENTUCKY  
PUBLIC SERVICE COMMISSION**

**JEFF R. DEROUEN  
EXECUTIVE DIRECTOR**

**TARIFF BRANCH**

*Brent Kirtley*

**EFFECTIVE**

**2/1/2014**

**PURSUANT TO 807 KAR 5:011 SECTION 9 (1)**



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Original SHEET NO. 34C

(Page 1 of 4)

CANCELLING PSC NO.

SHEET NO.

<b>CLASSIFICATION OF SERVICE</b>
<b>SCHEDULE 34C – Standby Service</b>

**Applicable:**

In all territory served by Kenergy Corp.

**Availability:**

This schedule is available to any large industrial customer of Kenergy Corp. having generation equipment capable of supplying all or a portion of its power requirements for other than emergency purposes, who requests supplemental, maintenance or backup power, and who has or enters into a special contract that provides rates for electric service other than supplemental, maintenance or backup power (the "Standby Customer").

**Term:**

This rate schedule shall take effect at 12:01 AM CPT on the effective date of this tariff.

**Definitions:**

Supplemental Power Service – a service which provides transmission capacity to the Standby Customer as well as the energy and capacity requirements for use by the Standby Customer’s facility in addition to the electric power which the Standby Customer ordinarily generates on its own.

Maintenance Power Service – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during scheduled outages or interruptions of the Standby Customer’s own generation.

Backup Power Service – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace energy generated by the Standby Customer’s own generation during an unscheduled outage or other interruption of the Standby Customer’s own generation.

DATE OF ISSUE March 9, 2022

Month / Date / Year

DATE EFFECTIVE March 3, 2022

Month / Date / Year

ISSUED BY [Signature]

(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2021-00289 DATED March 3, 2022

**KENTUCKY  
PUBLIC SERVICE COMMISSION**

**Linda C. Bridwell**  
Executive Director

EFFECTIVE

**3/3/2022**

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

N ↓



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Original SHEET NO. 34C

(Page 2 of 4)

CANCELLING PSC NO.

SHEET NO.

CLASSIFICATION OF SERVICE
SCHEDULE 34C - Standby Service

Self-Supply Capacity - the demonstrated capacity of the Standby Customer's generating unit(s), as determined by the reduction in Big Rivers' MISO Planning Reserve Margin Requirement that results from the Standby Customer's own generation.

Billing:

The provisions of the Standby Customer's special contract with Kenergy and Kenergy's tariff schedules applicable to service to Standby Customer and all applicable adjustment clauses and riders shall apply to Supplemental Power Service, Maintenance Power Service and Backup Power Service except where noted otherwise.

Kenergy Corp. shall bill each Standby Customer in accordance with the billing and payment terms set forth in the Billing section of the applicable tariff schedule or the special contract between Kenergy and the Standby Customer.

A. Supplemental Power Service

Requirements

- 1. The level of demand required for Supplemental Power Service shall be the level of demand under the special contract between Kenergy and the Standby Customer.
2. All power not specifically identified as Maintenance Power or Backup Power shall be deemed to be Supplemental Power.
3. The total of the Supplemental Power, Maintenance Power, and Backup Power demand shall not exceed Standby Customer's Maximum Contract Demand in any month. Maintenance Power and Backup Power demand shall not be included in determining minimum demand charges for any month.

Billing

- 1. Supplemental Power energy shall be the actual measured energy excluding Maintenance Power energy and Backup Power energy sold to the Standby Customer in each month.

DATE OF ISSUE March 9, 2022

Month / Date / Year

DATE EFFECTIVE March 3, 2022

Month / Date / Year

ISSUED BY [Signature]

(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2021-00289 DATED March 3, 2022

KENTUCKY PUBLIC SERVICE COMMISSION

Linda C. Bridwell Executive Director

[Signature of Linda C. Bridwell]

EFFECTIVE

3/3/2022

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Original SHEET NO. 34C

(Page 3 of 4)

CANCELLING PSC NO.

SHEET NO.

CLASSIFICATION OF SERVICE

SCHEDULE 34C – Standby Service

- 2. Customer, Demand, and Energy Charges: All Supplemental Power shall be billed under the terms and charges of the Standby Customer’s special contract with Kenergy and Kenergy’s tariff schedules applicable to service to the Standby Customer.

B. Maintenance Power Service and Backup Power Service

Requirements

- 1. The level of Maintenance Power/Backup Power demand shall equal the Standby Customer’s Self-Supply Capacity.
- 2. The Standby Customer shall be required to cooperate with Big Rivers to schedule Maintenance outages so as to maximize the value of Standby Customer’s Self-Supply Capacity. The Standby Customer’s Maintenance Power requirements for each generating unit must be submitted to Big Rivers at least sixty (60) days prior to the beginning of each calendar year. Within thirty (30) days of such submission, Big Rivers shall respond to the Standby Customer either approving the Maintenance Power schedule or requesting that the Standby Customer reschedule those Maintenance Power requirements. The Standby Customer may adjust the Maintenance Power schedule upon prior notice to Big Rivers.
- 3. The Standby Customer shall notify Big Rivers by telephone within one-hour of the beginning and end of any outage. Within 48 hours of the end of an outage, the Standby Customer shall supply written notice to Big Rivers of the dates and times of the outage with verification that the outage had occurred.

Billing

- 1. Administrative Charge: The Administrative Charge shall be \$150 per month.
- 2. Demand Charges: All Maintenance Power/Backup Power demand shall be billed at the Big Rivers Standard Rate LIC tariff rate, less a credit equal to \$3.80 per kW-month times Standby Customer’s Self-Supply Capacity.
- 3. Energy Charges: All Maintenance Power/Backup Power energy usage shall be billed at the higher of the charges of Big Rivers’ Standard Rate LIC tariff schedule or the market price, which shall include the energy charge Big Rivers would have had to pay to provide service to Kenergy Corp. for the Standby Customer, plus any transmission charges, MISO fees, or other costs

DATE OF ISSUE March 9, 2022

Month / Date / Year

DATE EFFECTIVE March 3, 2022

Month / Date / Year

ISSUED BY

(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2021-00289 DATED March 3, 2022

KENTUCKY PUBLIC SERVICE COMMISSION

Linda C. Bridwell Executive Director

(Signature of Linda C. Bridwell)

EFFECTIVE

3/3/2022

PURSUANT TO 807, KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Original SHEET NO. 34C

(Page 4 of 4)

CANCELLING PSC NO.

SHEET NO.

CLASSIFICATION OF SERVICE
SCHEDULE 34C - Standby Service

- 4. During any period in which the metered output of the Standby Customer's generator is less than its Self-Supply Capacity, Maintenance Power/Backup Power energy shall be the first through the meter, up to the Self-Supply Capacity. Energy consumed above the Self-Supply Capacity for any period shall be Supplemental Power energy.
5. Retail adder: A retail adder of \$0.000166 per KWH shall apply to all KWH consumed at the site, including but not limited to Maintenance Power/Backup Power energy consumed by the Standby Customer.

Terms and Conditions:

- 1. The Standby Customer shall be subject to all adders, riders, terms and conditions, and other provisions of any applicable special contract or schedule of Kenergy Corp.'s tariff under which the Standby Customer takes service.
2. Standby Customer shall be required to adhere to Big Rivers' requirements and procedures for interconnection.
3. The Standby Customer shall be required to allow Big Rivers to meter Standby Customer's generation, and to provide access for Big Rivers to install, operate and maintain the metering equipment, which shall remain the property of Big Rivers.
4. The Standby Customer shall be required to pay the cost of any additional facilities associated with providing service under the provisions of this schedule.
5. The Standby Customer shall be responsible for any MISO charges, fees, penalties, or other costs associated with Standby Customer's generation, outages of Standby Customer's generation, or Maintenance or Backup Power service.
6. The Standby Customer shall not transmit energy to Big Rivers or to Kenergy Corp..
7. Kenergy Corp. may enter into special agreements with Big Rivers and Standby Customers which may deviate from the provisions of this schedule. Such agreements shall address those significant characteristics of service and cost which would influence the need for such an agreement.
8. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Big Rivers' and Kenergy Corp.'s generally applicable rules, terms, or conditions currently in effect, as filed with the Kentucky Public Service Commission.

DATE OF ISSUE March 9, 2022
Month / Date / Year

DATE EFFECTIVE March 3, 2022
Month / Date / Year

ISSUED BY (Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2021-00289 DATED March 3, 2022

KENTUCKY PUBLIC SERVICE COMMISSION

Linda C. Bridwell Executive Director

(Signature of Linda C. Bridwell)

EFFECTIVE

3/3/2022

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

# **EXHIBIT G**

**Kenergy Rate Schedule 35**



Henderson, Kentucky

FOR ALL TERRITORY SERVED
Community, Town or City
PSC NO. 2
Ninth Revised SHEET NO. 35
CANCELLING PSC NO. 2
Eight Revised SHEET NO. 35

CLASSIFICATION OF SERVICE
Schedule 35 - Large Industrial Customers Served Under Special Contract
(Dedicated Delivery Points) - (Class C)

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This rate shall apply to existing large members where service is provided through a dedicated delivery point TT connected to the transmission system of Big Rivers or other accessible system classified as Class C member, or new members executing special contracts approved by the Kentucky Public Service Commission for load levels below 30,000 KW billing demand.

TYPE OF SERVICE

The electric service furnished under this schedule will be three-phase sixty cycle, alternating current at available nominal voltage.

RATE

Customer Charge per Delivery Point \$100.00 per month
Plus:
Demand Charge per KW of Billing Demand in Month \$ 10.715
Plus:
Energy Charges:
Per KWH \$ 0.041050
Facilities Charge 1.15%
(times assigned dollars of Kenergy investment for facilities per month-see Sheet No.35B)

DETERMINATION OF BILLING DEMAND

The Billing Demand in kilowatts shall be the higher of: a) The member's maximum integrated thirty-minute demand at such delivery point during each billing month, determined by meters which record at the end of each thirty-minute period the integrated kilowatt demand during the preceding thirty minutes; or b) the Contract Demand.

POWER FACTOR ADJUSTMENT

The member agrees to maintain a power factor as nearly as practical to unity. Kenergy will permit the use of apparatus that shall result, during normal operation, in a power factor not lower than 90%. At Kenergy's option, in lieu of the members providing the above corrective equipment when power factor is less than 90%, Kenergy may adjust the maximum measured demand for billing purposes in accordance with the following formula:

DATE OF ISSUE November 23, 2016
Month / Date / Year
DATE EFFECTIVE January 1, 2017
Month / Date / Year
ISSUED BY (Signature of Officer)
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. DATED

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 1/1/2017
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED
Community, Town or City
PSC NO. 2
Fourth Revised SHEET NO. 35A
CANCELLING PSC NO. 2
Third Revised SHEET NO. 35A

CLASSIFICATION OF SERVICE
Schedule 35 - Large Industrial Customers Served Under Special Contract
(Dedicated Delivery Points) - (Class C)

Max. Measured KW x 90%
Power Factor (%)

The power factor shall be measured at time of maximum load.

METERING

Electrical usage will be metered at the transmission voltage supplied or at the customer's secondary voltage with a 1.% adder to the metered KWH to account for transformer losses, as determined by Kenergy.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

- Renewable Resource Energy Service Rider Sheets No. 23 - 23D
Fuel Adjustment Rider Sheets No. 24 - 24A
Environmental Surcharge Rider Sheets No. 25 - 25A
Member Rate Stability Mechanism Rider Sheets No. 28 - 28A
Price Curtailable Service Rider Sheets No. 42 - 42C
Non-FAC Purchased Power Adjustment Rider Sheets No. 30 - 30A

D

AGREEMENT

An "agreement for purchase of power" shall be signed by any new customer prior to service under the rate.

TAXES AND FEES

School Taxes added if applicable.
Kentucky Sales Taxes added if applicable.

FRANCHISE CHARGE

The rate herein provided shall include, where applicable, an additional charge for local government franchise payment determined in accordance with the Franchise Billing Plan as set forth on Sheet No. 105.

TERMS OF PAYMENT

The above rates are net, the gross rate being five percent (5%) greater. In the event the current monthly bill is not paid within twenty (20) days from the date the bill was rendered, the gross rate will apply.

DATE OF ISSUE November 23, 2016
DATE EFFECTIVE May 20, 2016
ISSUED BY [Signature]
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. 2015-00312 DATED September 15, 2016

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 5/20/2016
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED

Community, Town or City

PSC NO. 2

Third Revised SHEET NO. 35B

CANCELLING PSC NO. 2

Second Revised SHEET NO. 35B

CLASSIFICATION OF SERVICE

Schedule 35 – Large Industrial Customers Served Under Special Contract (Dedicated Delivery Points) - (Class C)

DETERMINATION OF FACILITIES CHARGE RATE

Table with columns: Line No., Item, Rate Calculation. Includes items like Distribution O & M Expense, Property Tax, Cost of Capital, and General Plant Factor.

DATE OF ISSUE November 23, 2016

Month / Date / Year

DATE EFFECTIVE May 20, 2016

Month / Date / Year

ISSUED BY [Signature]

(Signature of Officer)

TITLE President and CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION

IN CASE NO. 2015-00312 DATED September 15, 2016

KENTUCKY PUBLIC SERVICE COMMISSION

Talina R. Mathews EXECUTIVE DIRECTOR

[Signature]

EFFECTIVE

5/20/2016

PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



Henderson, Kentucky

FOR ALL TERRITORY SERVED
Community, Town or City
PSC NO. 2
Original SHEET NO. 35C
CANCELLING PSC NO. 2
SHEET NO. 35C

CLASSIFICATION OF SERVICE
Schedule 35 - Large Industrial Customers Served Under Special Contract
(Dedicated Delivery Points) - (Class C)

Table with 4 columns: Line Item, Description, Value, and Rate. Includes items like O & M Factor (3.84%), A & G Factor (0.91%), Property Tax Factor (0.62%), Capital Recovery Factor (7.89%), General Plant Factor (0.47%), Total Annual Carrying Cost (13.74%), PSC Assessment (0.998099), Adjusted Annual Carrying Cost (13.76%), and Monthly Fixed Charge Rate Charge (1.15%).

DATE OF ISSUE November 23, 2016
DATE EFFECTIVE May 20, 2016
ISSUED BY [Signature]
TITLE President and CEO
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. 2015-00312 DATED September 15, 2016

KENTUCKY PUBLIC SERVICE COMMISSION
Talina R. Mathews EXECUTIVE DIRECTOR
EFFECTIVE 5/20/2016
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)



201 Third Street  
P.O. Box 24  
Henderson, KY 42419-0024  
270-827-2561  
www.bigrivers.com

December 16, 2022

Mr. Jeff Hohn  
Kenergy Corp.  
6402 Corydon Road  
P.O. Box 18  
Henderson, KY 42419-0018

Re: Retail Electric Service Agreement  
Pratt Paper (KY), LLC

Dear Jeff:

This letter agreement ("*Letter Agreement*") will evidence the concurrence of Big Rivers Electric Corporation ("*Big Rivers*") with the terms of the Agreement for Electric Service between Kenergy Corp. ("*Kenergy*") and Pratt Paper (KY), LLC (the "*Retail Customer*"), a copy of which is attached hereto (the "*Retail Agreement*"), and the agreement between Big Rivers and Kenergy with respect thereto.

(1) **Existing Agreement and Tariffs.** The terms and conditions of the June 11, 1962, wholesale power agreement, as amended, between Big Rivers and Kenergy and Big Rivers' filed tariffs shall continue in full force and effect except as expressly modified by this Letter Agreement.

(2) **Additional Rights and Obligations of Big Rivers.** Big Rivers shall make available to Kenergy the electric power required during the term of the Retail Agreement to perform the power supply obligations assumed by Kenergy in the Retail Agreement, and Big Rivers shall have the benefit of Retail Customer's obligations in such agreement. Big Rivers will supply the facilities required to deliver power to the delivery point, as defined in the Retail Agreement, and to meter electrical usage by Retail Customer.

(3) **Obligations of Kenergy.** Subject to Paragraph 4 below, Kenergy shall take and pay for electric power and energy delivered by Big Rivers in accordance with the Retail Agreement, with demand and energy being measured in accordance with the Retail Agreement.

(4) **Obligation of Kenergy for Minimum Billing Demand Charge and Termination Charge.** Kenergy agrees to bill Retail Customer for any minimum billing demand charges in excess of measured demand, any termination charges, and any other amounts due under the Retail Agreement, and agrees to pay over to Big Rivers all funds

actually collected under such billings. The terms of this paragraph do not affect the obligation of Kenergy to pay Big Rivers in accordance with Big Rivers' tariff as and when billed for the wholesale charges for electric power and energy actually consumed by Retail Customer. However, Kenergy's liability to Big Rivers is limited to funds collected. Big Rivers shall be entitled to enforce any right of Kenergy or any covenant of Retail Customer under the Retail Agreement, by action in Big Rivers' own name or in Kenergy's name, and/or may require Kenergy to enforce such right or covenant for and on behalf of Big Rivers.

(5) **Division of Any Partial Payments.** Kenergy will pay to Big Rivers a pro rata share of any partial payment made to Kenergy by or on behalf of Retail Customer.

(6) **RUS Collateral Assignment.** Notwithstanding any other provision of this Letter Agreement to the contrary, Big Rivers may, without the written consent of Kenergy and without relieving itself from liability hereunder, assign, transfer, mortgage or pledge this Letter Agreement or its rights under this Letter Agreement to create a security interest for the benefit of the United States of America, acting through the Rural Utilities Service ("*RUS*"), or other secured party (directly or through an indenture trustee or other collateral agent; collectively, including such indenture trustee or other collateral agent, a "*Secured Party*"). Thereafter, a Secured Party, without the written consent of Kenergy may (i) cause this Letter Agreement (and all obligations hereunder) to be sold, assigned, transferred or otherwise disposed of to a third party pursuant to the terms governing such security interest, or (ii) if RUS first acquires this Letter Agreement pursuant to 7 U.S.C. § 907 or if any other Secured Party otherwise first acquires this Letter Agreement, sell, assign, transfer or otherwise dispose of this Letter Agreement (and all obligations hereunder) to a third party; provided, however, that in either case (A) Big Rivers is in default of its obligations that are secured by such security interest and that the applicable Secured Party has given Kenergy written notice of such default; and (B) the applicable Secured Party has given Kenergy not less than thirty (30) days' prior written notice of its intention to sell, assign, transfer or otherwise dispose of this Letter Agreement (and all obligations hereunder) indicating the identity of the intended third-party assignee or purchaser.

(7) **Effective Date.** This Letter Agreement will become effective upon approval or acceptance by the Public Service Commission of Kentucky, and upon receipt of any consents or approvals required under Big Rivers' agreements with its creditors. Big Rivers will provide Kenergy written notice when all those required consents and approvals have been received.

(8) **Entire Agreement and Amendment.** This Letter Agreement represents

Mr. Jeff Hohn

Page 3

the entire agreement of the parties on the subject matter herein, and cannot be amended except in writing, duly authorized and signed by Big Rivers and Kenergy. The Retail Agreement shall not be amended without the advance written approval of Big Rivers. Big Rivers shall have the right to approve the terms and issuer(s) of the letter(s) of credit contemplated by the Retail Agreement to secure the obligations of the Retail Customer for minimum demand charges and termination charges.

If this Letter Agreement is acceptable to Kenergy, please indicate that acceptance by signing in the space provided and returning four signed counterparts to us.

Sincerely yours,

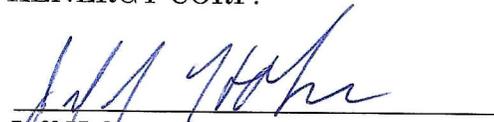
BIG RIVERS ELECTRIC CORPORATION



Robert W. Berry, President/CEO

ACCEPTED:

KENERGY CORP.



Jeff Hohn  
President/CEO

Date: 1/4/2023

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

5 **In the Matter of:**

7

**JOINT SPECIAL CONTRACT FILING OF     )  
BIG RIVERS ELECTRIC CORPORATION     )     TFS No.  
AND KENERGY CORPORATION     )     2023-00\_\_\_\_\_**

8  
9

**DIRECT TESTIMONY RONALD R. REPSHER**

10  
11

**I.     INTRODUCTION**

11 **Q.     Please state your name, your position, and give a summary of  
12 your education and work experience.**

13 A.     My name is Ronald R. Repsher. I am employed by Big Rivers Electric  
14 Corporation (“*Big Rivers*” or the “*Company*”), 201 Third Street,  
15 Henderson, Kentucky 42420, as Vice President Energy Services.<sup>1</sup> I report  
16 to Nathaniel A. Berry, Chief Operating Officer.

17             As Vice President Energy Services, I am responsible for long-term  
18 energy and capacity marketing and short-term energy hedging activities  
19 at Big Rivers. I am also responsible for coordination of daily Midcontinent  
20 Independent System Operator, Inc. (“*MISO*”) commercial market

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<sup>1</sup> Big Rivers is currently constructing a new headquarters facility in Owensboro, Kentucky, pursuant to the authorization granted by the Kentucky Public Service Commission’s Order in Case No. 2021-00314. Big Rivers will provide notice of its updated business address at such time as the transition to the new space is made final.

1 activities that include unit offer strategy, interface with ACES Power  
2 Marketing, and oversight of the market awards process. A staff of seven  
3 professionals report to me. Other responsibilities include scheduling  
4 Southeast Power Administration (“SEPA”) energy and capacity, the  
5 Company’s tri-annual Integrated Resource Plan, contract management,  
6 economic development activities, interface with the MISO Independent  
7 Market Monitor, and performing a variety of official roles within the  
8 MISO structure.

9 I graduated from Jones County Junior College with an Associate of  
10 Applied Science in Electronics. I hold a Bachelor of Science Degree in  
11 Electrical Engineering from Mississippi State University, as well as a  
12 Master’s in Business Administration from Mississippi State University.  
13 Prior to joining Big Rivers, I was employed with Cooperative Energy in  
14 Hattiesburg, Mississippi, as Vice President of Power Supply. I joined  
15 Cooperative Energy in 2005 as an Electrician and held many positions  
16 there, including Relay Technician, Generation Planning Engineer, and  
17 Director of Power Marketing and Fuels. I assumed my current position  
18 with Big Rivers in August 2022. My professional experience is  
19 summarized in Exhibit Repsher-1.

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

22 A. No. I have not.

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

2 A. Yes. I am sponsoring the following exhibits:

3 Exhibit Repsher-1 – Professional Summary of Ronald R. Repsher

4 Exhibit Repsher-2 – Economic Development Rate Guidelines

5 Exhibit Repsher-3 – Big Rivers’ Estimated Available Capacity

6 Exhibit Repsher-4 – Projected Net Margins

7 Exhibit Repsher-5 – Big Rivers Financial Statements

8 Exhibit Repsher-6 – Notice to Economic Development Cabinet

9 **II. BACKGROUND**

10 **Q. Please explain why you are filing testimony.**

11 A. Big Rivers regularly assists its three distribution cooperative members  
12 (the “*Members*”) in their economic development efforts. More specifically,  
13 Big Rivers has been working diligently with its Member Kenergy  
14 Corporation (“*Kenergy*”) to attract new load to Kenergy’s service territory.

15 Kenergy has executed a retail service agreement (the “*Retail*  
16 *Agreement*”) with one of these companies, Pratt Paper (KY), LLC (“*Pratt*”).  
17 Big Rivers, Kenergy, and Pratt engaged in a series of discussions  
18 regarding the future facility. During these discussions, it became  
19 apparent that the assurance of long-term competitive power pricing was a  
20 critical factor in Pratt’s decision-making process in where to locate its  
21 facility. Pratt’s facility would be highly energy-intensive, utilizing up to

1 [REDACTED] beginning in July of 2023. And once in operation, that facility  
2 would face both national and international competition, including  
3 competition from companies receiving significant incentives on their  
4 electric pricing.

5           Consequently, in order to secure Pratt’s investment in Kentucky,  
6 Big Rivers, Kenergy, and Pratt negotiated the Retail Agreement filed with  
7 this testimony. This special contract sets forth fair, just, reasonable rates,  
8 and will help to fulfill the economic development policy objectives of the  
9 Commonwealth.

10           This testimony is being offered in support of the Retail Agreement  
11 and a related wholesale contract letter agreement between Kenergy and  
12 Big Rivers (the “*Wholesale Agreement*”) (collectively, the “*Proposed*  
13 *Contracts*”), which is also being filed with this testimony.

14 **Q. Who is Pratt?**

15 A. Pratt Paper (KY) LLC is part of Pratt Industries, which, according to the  
16 company’s website, is “America’s 5<sup>th</sup> largest corrugated packaging  
17 company and the world’s largest, privately-held 100% recycled paper and  
18 packaging company, with more than 10,000 highly-skilled, green-collar  
19 employees dedicated to the environment and sustainability.”<sup>2</sup>

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20  
<sup>2</sup> See <https://www.prattindustries.com/about-pratt# AboutPrattDivisions> .

1 **Q. Please describe Pratt’s future facility in Kenergy’s service**  
2 **territory.**

3 A. Pratt is constructing a \$500 million facility housing both a paper mill that  
4 will recycle used corrugated containers and other materials to make paper  
5 for new corrugated boxes, and a corrugated box manufacturing plant that  
6 will use paper from the recycling mill to produce boxes.

7 **III. ECONOMIC DEVELOPMENT RATE**

8 **Q. You mentioned above that the Pratt contract contains an**  
9 **economic development incentive rate. Is that correct?**

10 A. Yes. Big Rivers has developed and currently offers an economic  
11 development rate (“*Big Rivers EDR*”) to its Members for their qualifying  
12 retail members or prospective members. The Commission most recently  
13 reviewed the Big Rivers EDR in Case No. 2021-00282, *In the Matter of:*  
14 *Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson*  
15 *Purchase Energy Corporation for Approval and Confidential Treatment of*  
16 *a Special Contract and Cost Analysis Information and a Request for*  
17 *Deviation from the Commission’s September 24, 1990 Order in*  
18 *Administrative Case No. 327.*

19 **Q. The Public Service Commission’s September 24, 1990, order in**  
20 **Administrative Case No. 327 (the “Admin 327 Order”) contains 18**  
21 **findings beginning on page 24 that revise and elaborate on the**

1 **guidelines the Commission had previously issued regarding**  
2 **economic development rates. The Commission directed in the**  
3 **Admin 327 Order that a jurisdictional utility filing an economic**  
4 **development rate contract must comply with Findings 3-17 of the**  
5 **Admin 327 Order, as if the same were individually so ordered.**

6 **Has Big Rivers complied with those findings in this Application?**

7 A. Findings 1, 2, 17, and 18 are policy or procedural statements by the  
8 Commission rather than requirements for an EDR, and Findings 15 and  
9 16 apply only to gas utilities. So, I will focus on Findings 3 through 14.

10 **Q. Please review each of those findings, beginning with Finding #3,**  
11 **which provides that an economic development rate should be**  
12 **implemented by special contract negotiated between a utility and**  
13 **its large industrial customer. Has that been done?**

14 A. Yes. Kenergy and Big Rivers, in their respective roles, are proposing to  
15 implement the Big Rivers EDR through the Retail Agreement between  
16 Kenergy and Pratt. The Big Rivers EDR is based upon the EDR  
17 guidelines Big Rivers has established, a copy of which is attached as  
18 Exhibit Repsher-2 to my testimony.

19 **Q. Finding #4 in the Admin 327 Order is that an EDR contract should**  
20 **specify all terms and conditions of service including, but not**  
21 **limited to (1) the applicable rate discount and other discounts**  
22 **provision; (2) the number of jobs and capital investments to be**

1           **created as a result of the EDR: (3) customer-specific fixed costs**  
2           **associated with serving a customer; (4) minimum bill; (5)**  
3           **estimated load; (6) estimated load factor: and (7) length of**  
4           **contract. Do the contracts in this case satisfy the requirements of**  
5           **this finding?**

6 A.       Yes. The Retail Agreement with Pratt specifies all terms and conditions  
7           of service. I will address the requirements of the Admin 327 Order's  
8           Finding #4 individually and in order.

9                       (1) The Big Rivers EDR, including the discount, is described in  
10           detail in the Exhibit C to the Retail Agreement. The discount is 90% of  
11           the demand charge under Big Rivers' standard LIC rate schedule for the  
12           eligible kilowatts purchased by Pratt during the applicable incentive  
13           periods, as set forth in Exhibit C to the Retail Agreement.

14                      (2) The number of jobs and amount of capital investments to be  
15           created by Pratt are described in Section 9.02(c) of the Retail Agreement.  
16           In that section, Pratt represents that its Henderson facility will involve an  
17           estimated capital investment of approximately \$465 million, and  
18           employment at its facility of approximately 321 full-time persons.

19                      (3) As stated in Section 2.09 and Exhibit A of the Retail  
20           Agreement, the customer-specific fixed costs to Big Rivers associated with  
21           serving Pratt are estimated to be \$20.2 million. These fixed costs are  
22           related to construction of new transmission facilities that are further

1 described in Exhibit A to the Retail Agreement. The actual amount of  
2 these Transmission Facilities Costs becomes a “Transmission Facilities  
3 Termination Charge,” as provided in Sections 2.12 and 3.04 and Exhibit B  
4 to the Retail Agreement. The amount of the Transmission Facilities  
5 Termination Charge is reduced [REDACTED] of demand. In the  
6 event the Retail Agreement is terminated or expires before the  
7 Transmission Facilities Termination Charge is reduced to \$0, then Pratt  
8 would be required to pay this termination charge. Pratt has provided a  
9 surety bond of \$20.2 million as credit support for this termination charge.

10 (4) Pratt’s minimum monthly demand for billing purposes is 60% of  
11 the Maximum Contract Demand, which is a fixed amount set in Section  
12 2.04(b) of the Retail Agreement.

13 (5) Pratt’s estimated load once it is at full load is shown in Section  
14 2.04 and the table on Exhibit B to the Retail Agreement.

15 (6) The estimated load factor is 90%.

16 (7) Section 11.01 of the Retail Agreement provides that the  
17 Agreement shall remain in effect for twenty years from the Service  
18 Commencement Date. At the end of the initial twenty-year term, the  
19 Term will automatically be extended for successive one-year evergreen  
20 renewal terms unless terminated in accordance with Section 6.02 or  
21 Section 11.02 of the Retail Agreement

1 **Q. The Admin 327 Order provides in Finding #5 that an EDR would**  
2 **only be offered during periods of excess capacity. Will the load**  
3 **expected to be served by Kenergy, and supported by wholesale**  
4 **power from Big Rivers, cause Big Rivers to fall below a reserved**  
5 **margin that is considered to be essential for system reliability?**

6 A. No. Under MISO's seasonal resource adequacy construct, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] See Exhibit

11 Repsher-3, showing Big Rivers' currently-anticipated available capacity  
12 over the first ten years of the Pratt Retail Agreement.

13 The expected Pratt load accounts for a small percentage of Big  
14 Rivers' total load obligation during the [REDACTED] period.

15 **Q. The Admin 327 Order requires in Finding #6 that Big Rivers and**  
16 **Kenergy demonstrate that the discounted rate offered to Pratt**  
17 **exceeds the marginal cost associated with serving Pratt. Is that**  
18 **the case?**

19 A. Yes. John Wolfram, Principal with Catalyst Consulting, performed a  
20 marginal cost of service study on behalf of Big Rivers, which study is  
21 attached as Exhibit Wolfram-2 to his direct testimony in this matter. The

1 study demonstrates that the discounted rate to Pratt produces revenues  
2 that exceed the marginal cost associated with serving Pratt.

3 In fact, in Case No. 2022-00012, in which the Commission granted  
4 a certificate of public convenience and necessity for the transmission  
5 system improvements necessary to serve Pratt, Big Rivers provided an  
6 exhibit demonstrating the benefits of the Proposed Contracts,<sup>3</sup> a copy of  
7 which is attached as Exhibit Repsher-4. That exhibit shows that the net  
8 present value (“NPV”) of the gross margins over the first twenty years of  
9 the Pratt Retail Agreement from sales to Pratt versus what Big Rivers  
10 could have realized in the MISO market is [REDACTED]

11 Big Rivers’ Members will not only benefit from the [REDACTED] in  
12 added gross margins over what would have been earned in the MISO  
13 market, they will also benefit from the upgrades in the transmission  
14 infrastructure in Big Rivers’ footprint that strengthen the transmission  
15 system in that area. Additionally, as noted previously, Pratt’s facility will  
16 involve an estimated capital investment of approximately \$465 million,  
17 and employment of approximately 321 full-time persons.

18 **Q. Will Big Rivers commit to file an annual report with the**  
19 **Commission detailing revenues received from Pratt and any other**

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<sup>3</sup> See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line in Henderson County, Kentucky*, P.S.C. Case No. 2022-00012, Big Rivers’ Response to Item 3 of the Commission Staff’s First Request for Information (Mar. 21, 2022).

1 individual EDR customers and the marginal costs associated with  
2 serving those individual customers as required by Commission  
3 Finding #7?

4 A. Yes. Big Rivers currently files this annual report, and will continue to file  
5 the report.

6 Q. As required by Commission Finding #8, during any rate  
7 proceedings by Big Rivers filed subsequent to the effective date of  
8 the proposed agreements related to Pratt, and during a period  
9 when Big Rivers still has an active EDR contract, will Big Rivers  
10 demonstrate through detailed cost-of-service analysis that the  
11 Members' non-EDR rate payers are not adversely affected by the  
12 EDR rate to Pratt and any other EDR customers that may be on  
13 the Big Rivers system at that time?

14 A. Yes.

15 Q. Does the retail electric service agreement with Pratt provide for  
16 the recovery of EDR customer-specific fixed costs over the life of  
17 the contract as required by Commission Finding #9?

18 A. Yes. As described above, the Retail Agreement with Pratt establishes a  
19 Termination Charge that assures the recovery of EDR customer-specific  
20 fixed costs over the life of the Retail Agreement. That obligation of Pratt  
21 is secured by a surety bond as is also required in the Retail Agreement.

1 **Q. Does the Retail Agreement impose any specific job creation and**  
2 **capital investment requirements on Pratt as discussed in**  
3 **Commission Finding #10?**

4 A. No.

5 **Q. Does Big Rivers commit to filing an annual report with the**  
6 **Commission pursuant to Commission Finding #11, providing the**  
7 **information shown in Appendix A to the Admin 327 Order for so**  
8 **long as Big Rivers is providing wholesale service to one of its**  
9 **Members with an active EDR contract?**

10 A. Yes.

11 **Q. Does the EDR proposed in the Pratt Retail Agreement apply only**  
12 **to load which exceeds a minimum base level as required by**  
13 **Commission Finding #12?**

14 A. Yes. If you will refer to Exhibit C to the proposed Retail Agreement,  
15 Section A provides that Pratt will receive an EDR credit on its load less 1  
16 MW equal to 90% of the Demand Charge under Big Rivers' LIC rate  
17 schedule.

18 **Q. Is the EDR contract designed to retain the load of an existing**  
19 **customer, so that the requirements of Commission Finding #13**  
20 **apply to this Application?**

21 A. No. The Big Rivers EDR in the proposed Retail Agreement with Pratt is  
22 designed to encourage Pratt to locate in Kentucky. Pratt represents in

1 Section 9.02(c) to the Retail Agreement that the rates offered and  
2 incorporated in the Retail Agreement were a necessary factor in its  
3 decision to locate its operations in Kentucky.

4 **Q. The Admin 327 Order states in Finding #14 that the term of an**  
5 **EDR contract should be for a period of twice the length of the**  
6 **discount period, with the discount period not exceeding 5 years.**  
7 **It also states that during the second half of an EDR contract, the**  
8 **rates charged to the customer should be identical to those**  
9 **contained in a standard rate schedule that is applicable to the**  
10 **customer's rate class and usage characteristics. Does the Retail**  
11 **Agreement comply with these requirements?**

12 **A.** Yes. Exhibit C to the Retail Agreement allows Pratt to receive the EDR  
13 credit for five consecutive years, and the minimum contract terms is  
14 twenty years. Exhibit C also requires Pratt to pay full tariff rates on a  
15 number of MW-months that is equal to or greater than the number of  
16 MW-months on which Pratt received the EDR discount. If Pratt does not  
17 fulfill this Full-Rate Obligation, Pratt will owe an EDR Termination  
18 Charge pursuant to Exhibit B. This EDR Termination Charge will be  
19 secured by an appropriate cash deposit or irrevocable bank of credit. *See*  
20 Section 2.12, Section 3.04, and Exhibit B to the Retail Agreement.

1 **Q. Why is Big Rivers offering an economic development rate?**

2 A. Big Rivers is offering the Big Rivers EDR to increase economic activity in  
3 the service area of its Members, which the Commission notes on page 10  
4 of the Admin 327 Order is the “major objective of EDRs.” Big Rivers is  
5 encouraged that the Big Rivers EDR has contributed to Pratt’s decision to  
6 locate its business in Kenergy’s service area, and hopes that it will  
7 produce further beneficial economic activity on the Big Rivers system.  
8 This benefits Big Rivers and its Members.

9 **Q. Are there any issues with Big Rivers’ finances that would cause**  
10 **questions about whether Big Rivers can afford to give the**  
11 **discount provided by the EDR?**

12 A. No. Big Rivers’ financial condition is good, as shown by a copy of Big  
13 Rivers’ Financial Statements December 31, 2021 and 2020 (with  
14 Independent Auditors’ Report Thereon), which is attached to my  
15 testimony as Exhibit Repsher–5. As I testified earlier, even after the EDR  
16 discount is applied, Big Rivers still receives a contribution to fixed costs  
17 from the rate to Pratt.

18 **IV. WHOLESALE AGREEMENT**

19 **Q. Please describe the Wholesale Agreement.**

20 A. The Wholesale Agreement is a letter agreement that supplements Big  
21 Rivers’ wholesale power contract with Kenergy to accommodate the issues

1 peculiar to service to Pratt, such as the minimum demand obligations and  
2 the EDR. For several years, Big Rivers has utilized a letter agreement  
3 similar in form to the proposed letter agreement to supplement the  
4 wholesale power contracts with its Members, including Kenergy, for the  
5 Members' retail service to any Large Industrial Customer that is served  
6 directly from Big Rivers' transmission system. Big Rivers continues to  
7 believe that this practice is reasonable.

8 **V. OTHER CONSIDERATIONS**

9 **Q. Are Big Rivers and Kenergy required to obtain any creditor**  
10 **approval for the Retail Agreement and the Wholesale Agreement**  
11 **to become effective?**

12 **A.** Yes. Big Rivers must submit the Wholesale Agreement to the United  
13 States Department of Agriculture's Rural Utilities Service ("*RUS*") for  
14 review in accordance with requirements of Big Rivers' loan contract with  
15 RUS. That submittal will be made on or about the date the Wholesale  
16 Agreement is filed with the Commission. The obligations of Kenergy  
17 under the Retail Agreement are not effective against it, unless and until  
18 all required approvals are received, including RUS approval of the  
19 Wholesale Agreement.

20 **Q. Did Big Rivers give notice of the filing of the application in this**  
21 **matter to the Kentucky Cabinet of Economic Development?**

1 A. Yes. That notice is being given on the same day the Proposed Contracts  
2 are being filed with the Commission. A copy of that notice is attached as  
3 Exhibit Repsher-6 to my testimony.

4 **VI. CONCLUSION**

5 **Q. Do you believe the Retail and Wholesale Agreements are**  
6 **reasonable?**

7 A. Yes. The Proposed Contracts are reasonable. The EDR incentive provides  
8 an appropriate incentive for a new Large Industrial Customer to locate a  
9 new facility in Kentucky that will benefit Big Rivers and its Members,  
10 while at the same time providing protections against the risk of  
11 substantial stranded assets.

12 **Q. Please summarize your conclusions and recommendations.**

13 A. The Proposed Contracts support economic development in Henderson,  
14 Kentucky, and the Commonwealth's interest in encouraging economic  
15 growth. Big Rivers and Kenergy negotiated the terms of the Proposed  
16 Contracts to include an appropriate discounted rate to encourage Pratt to  
17 locate in the Commonwealth and appropriate performance assurance  
18 provisions to protect Big Rivers' Members' other ratepayers. For the  
19 above-stated reasons, the Commission should approve the Proposed  
20 Contracts.

21

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

2 **A.** Yes.

**BIG RIVERS ELECTRIC CORPORATION**

**JOINT SPECIAL CONTRACTS OF  
BIG RIVERS ELECTRIC CORPORATION  
AND KENERGY CORP.**

TFS No. 2023-00\_\_

**VERIFICATION**

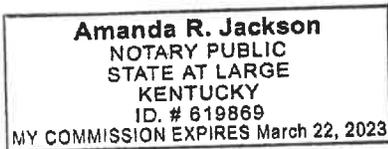
I, Ronald R. Repsher, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that this Direct Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

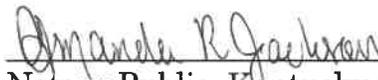


\_\_\_\_\_  
Ronald R. Repsher

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON COUNTY )

5<sup>th</sup> SUBSCRIBED AND SWORN TO before me by Ronald R. Repsher on this the  
day of January, 2023.



  
\_\_\_\_\_  
Notary Public, Kentucky State at Large

Kentucky ID Number 619869

My Commission Expires March 22, 2023

## **Professional Summary**

Ronald R. Repsher  
Vice President Energy Services  
Big Rivers Electric Corporation  
201 Third Street  
Henderson, KY 42420<sup>1</sup>  
Phone: 270-844-6009

### **Professional Experience**

Big Rivers Electric Corporation  
Vice President Energy Services - August 2022 to present

Cooperative Energy in Hattiesburg, Mississippi  
Vice President of Power Supply – 2021 to 2022  
Director of Power Marketing and Fuels – 2017 to 2021  
Generation Planning Engineer – 2012 to 2017  
Relay Engineer – 2010 to 2012  
Relay Technician – 2005 to 2010

### **Education**

Master of Business Administration  
Mississippi State University

Bachelor Degree (Electrical Engineering)  
Mississippi State University

Associate of Applied Science in Electronics  
Jones County Junior College – Ellisville, Mississippi

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<sup>1</sup> Big Rivers is currently constructing a new headquarters facility in Owensboro, Kentucky, pursuant to the authorization granted by the Kentucky Public Service Commission's Order in Case No. 2021-00314. Big Rivers will provide notice of its updated business address at such time as the transition to the new space is made final.

**December 16, 2022**

## **Economic Development Rate (“EDR”) Terms and Conditions Guidelines**

Big Rivers and its Member Cooperatives will offer special economic development rate credits to qualifying new and expanding commercial and industrial customers in Big Rivers’ Member Cooperatives’ service territories. The economic development incentive will be offered through a special contract with a maximum credit period of five years. The following additional eligibility guidelines apply:

- Applies to all qualifying new or expansion load above 1,000 kW billing demand.
- The retail customer’s total bill for service in a month will be credited by an amount equal to 90% of the Big Rivers standard LIC tariff Demand Rate applied to the billing demand in that month, before application of other adjustments.
- The energy rate during the term of the EDR contract that is charged by Big Rivers to its Member Cooperative related to an EDR contract, and by the Member Cooperative to the EDR contract retail customer, will be the energy rates in their respective applicable tariffs.
- Available to businesses engaged in manufacturing or similar (Division D of the Standard Industrial Classification Code) or engaged in commercial mining of cryptocurrency, as defined by House Bill 230 and Senate Bill 255.
- The term for the credit period will not exceed five (5) years.
- The minimum EDR contract term is twice the term of the credit period. Commencing with the expiration of the credit period, the retail customer will be required to pay applicable tariff demand rates, but in any event no less than the Big Rivers standard LIC tariff Demand Rate, for a period equal to the length of the credit period, with a minimum billing demand that is the greater of 60% of the contract maximum demand or the monthly average number of kilowatts on which the retail customer received a credit during the credit period. The credit period and the corresponding period at applicable tariff demand rates cannot exceed ten years.
- For expansion load, the credit will only be applicable to the incremental load of the retail customer above the “Base Demand.” The Base Demand will be the average monthly demand of the retail customer during the 24 consecutive months as close as practical to the execution date of the EDR contract, plus 1,000 kW.
- A 50% minimum load factor must be achieved each month in the credit period or the applicable demand rate will apply with no credit in that month.
- If Big Rivers and the Member Cooperative agree that a retail customer may add new or expanded load in phases, each phase will be treated separately, except that any credit period provided for in an EDR contract must commence no later than five (5) years after the effective date of the EDR contract. Big Rivers’ standard tariff rates apply to wholesale service provided prior to the commencement of a credit period. If a retail customer elects to postpone commencement of a credit period in order to optimize the credit; the retail customer will still be subject to all obligations/requirements.
- Additional consideration may be given for the retail customer loads that are fully or partially interruptible.

**December 16, 2022**

**Economic Development Rate (“EDR”)  
Terms and Conditions Guidelines**

- Customer-specific fixed cost recovery will be determined on a case-by-case basis. Preference will be given to utilizing the current methodology of providing a credit of \$0.90/kW-month credit against a termination fee equal to the amount of the customer-specific fixed costs. This must be accompanied by appropriate security for the termination fee obligation. New or expanded load will be eligible for the MRSB benefit along with the EDR credit.
- The economic development incentive rate is not automatically available to any new or expanded commercial or industrial load otherwise qualifying for the incentive. The retail customer must demonstrate that the economic development rate incentive was an important factor in the retail customer’s decision to locate in Kentucky or to expand its operations in Kentucky.
- The contract should contain a good faith representation by the retail customer specifying the estimated number of jobs and amount of capital investment to be created by the new or expanded operation, although achievement of those estimates is not a condition to continuing to receive the economic development incentive.
- The continued availability of the economic development incentive will depend upon the availability of economic excess capacity on the Big Rivers system.
- The retail customer must commit to provide Big Rivers on a timely basis the information that enables it to comply with the EDR contract filing and reporting requirements of the Kentucky Public Service Commission (“Commission”).

The following information will be provided or evaluated to allow for reporting to the Commission on the economic development incentive on an annual basis.

- MW Size – Annual peak demand along with timing of the peak,
- Load factor – Annual load factor,
- Capital cost – Total Big Rivers capital (including transmission costs) cost/MW of peak demand,
- Economic Impact – Evaluation of potential economic impact to the western Kentucky region as a result of this load,
- Credit risk/rating – The credit risk based on the prospects credit rating and outlook,
- Rate shift – The impact on overall Member Cooperative rates, measured as the average \$/MWh shift in rates for the first five years of operation.
- SIC Code and NAICS code of proposed facility.

Big Rivers will provide evidence to the Commission demonstrating it has adequate capacity to meet anticipated load growth and all marginal costs will be covered by the transaction (current marginal cost of service study required).

Big Rivers and its Member Cooperatives will use special contracts for all eligible retail customers seeking the economic development credit. It is recognized that many of the framework criteria are based on the information provided at the time of the retail customer

**December 16, 2022**

**Economic Development Rate (“EDR”)  
Terms and Conditions Guidelines**

contact, not actual results. Big Rivers will seek to verify such information to the extent practical.

All special contracts require Board, RUS, and PSC approval.

**Big Rivers Electric Corporation  
 Planning Reserve Margins/Load Comparison 2023-2034**

Planning Year 2023 Summer Planning Reserve Margin Requirement (PRMR) target is 10.1% based on unforced capacity (UCAP) 7.4% plus 2.7% Transmission Losses

Source of PRMR MISO Planning Year 2023-2024 Loss of Load Expection Study Report available at: <https://cdn.misoenergy.org/PY%202023%202024%20LOLE%20Study%20Report626798.pdf>

Planning Year	Forecasted Summer Coincident peak in megawatts (Native + 2.7% Losses)	Summer Peak plus Planning Reserve Margin of 7.4%	Capacity in megawatts	Excess over PRMR	Short Term Capacity Hedges	Contracted Non-Member Sales (Net Capacity)	Excess over PRMR and Net Contracted Non-Member Sales
2023							
2024**							
2025							
2026**							
2027							
2028							
2029							
2030							
2031							
2032*							
2033							
2034							

**TFS No 2023-00\_\_**

**Exhibit Repsher-4**

**Big Rivers Electric Corporation  
Calculation of Member Benefits  
Pratt Paper Mill**

	2023	2024	2025	2026	2027
MW					
MWh					
Demand					
<b>Revenue</b>					
Energy					
FAC					
Environmental					
Surcharge					
Non-FAC PPA					
MRSM					
Total Energy					
Demand Revenue					
EDR					
Energy					
Add Back MRSM					
Total Revenue					

**Big Rivers Electric Corporation  
Calculation of Member Benefits  
Pratt Paper Mill**

	2028	2029	2030	2031	2032
MW					
MWh					
Demand					
<b>Revenue</b>					
Energy					
FAC					
Environmental					
Surcharge					
Non-FAC PPA					
MRSM					
Total Energy					
Demand Revenue					
EDR					
Energy					
Add Back MRSM					
Total Revenue					

**Big Rivers Electric Corporation  
Calculation of Member Benefits  
Pratt Paper Mill**

<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
-------------	-------------	-------------	-------------	-------------

**Expenses**

---

Capacity	\$3.80	
Energy		
MISO Market Expenses		
Total Market Value		
Net Margin		

**Big Rivers Electric Corporation  
Calculation of Member Benefits  
Pratt Paper Mill**

	2028	2029	2030	2031	2032
--	------	------	------	------	------

**Expenses**

---

Capacity	\$3.80				
Energy					
MISO Market Expenses					
Total Market Value					
Net Margi					

# Big Rivers Electric Corporation Calculation of Member Benefits Pratt Paper Mill

## CALCULATION

MW/Months [REDACTED] Present Value at: [REDACTED]  
 Present Value of MWh

NPV Total Revenue [REDACTED]  
 NPV Total Market Value [REDACTED]  
 NPV 10 Year Net Margin [REDACTED]

\*Cash Flow for Years 11-20 [REDACTED]  
 Transmission Investment           (20,200,000)

Net Present Value [REDACTED]

\*Cash Flow of Years 11-20 Calculation:

$$\frac{\text{(Present Value of an Annuity Beginning in 2033)} \times \text{(The Calculated Net Margin for Year 2032)}}{1.04^{10}} = \text{[REDACTED]}$$



**BIG RIVERS ELECTRIC CORPORATION**

Financial Statements

December 31, 2021 and 2020

(With Independent Auditors' Report Thereon)



KPMG LLP  
Suite 2400  
400 West Market Street  
Louisville, KY 40202

## Independent Auditors' Report

The Board of Directors and Members  
Big Rivers Electric Corporation:

### Report on the Audit of the Financial Statements

#### *Opinion*

We have audited the financial statements of Big Rivers Electric Corporation, which comprise the balance sheets as of December 31, 2021 and 2020, and the related statements of operations, comprehensive income (loss), equities, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes to the financial statements.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of Big Rivers Electric Corporation, as of December 31, 2021 and 2020, and the results of operations, and cash flows thereof for each of the years in the three-year period ended December 31, 2021 in accordance with U.S. generally accepted accounting principles.

#### *Basis for Opinion*

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Big Rivers Electric Corporation, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### *Responsibilities of Management for the Financial Statements*

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Big Rivers Electric Corporation's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### *Auditors' Responsibilities for the Audit of the Financial Statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and Government Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a



substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Big Rivers Electric Corporation's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Big Rivers Electric Corporation's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

**Other Reporting Required by *Government Auditing Standards***

In accordance with Government Auditing Standards, we have also issued our report dated March 31, 2022 on our consideration of Big Rivers Electric Corporation's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and contracts, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Big Rivers Electric Corporation's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Big Rivers Electric Corporation's internal control over financial reporting and compliance.

*KPMG LLP*

Louisville, Kentucky  
March 31, 2022

**BIG RIVERS ELECTRIC CORPORATION**

Balance Sheets

December 31, 2021 and 2020

(Dollars in thousands)

Assets	2021	2020
Utility plant – net	\$ 892,988	771,622
Intangible plant	15,000	15,000
Restricted investments – Member rate mitigation	—	666
Other deposits and investments – at cost	16,643	22,377
Current assets:		
Cash and cash equivalents	29,913	20,400
Restricted cash – construction funds trustee	—	353
Short-term investments	352	6,603
Accounts receivable	47,920	40,736
Fuel inventory	17,198	20,391
Nonfuel inventory	18,329	17,457
Prepaid expenses and other assets	5,250	5,129
Total current assets	118,962	111,069
Deferred charges and other assets:		
Regulatory assets	361,521	435,252
Long-term accounts receivable	8,293	—
Deferred charges and other	11,618	2,249
Total deferred charges and other assets	381,432	437,501
Total	\$ 1,425,025	1,358,235
<b>Equities and Liabilities</b>		
Capitalization:		
Equities	\$ 460,226	531,539
Long-term debt	669,295	663,780
Total capitalization	1,129,521	1,195,319
Current liabilities:		
Current maturities of long-term obligations	27,999	32,962
Line of credit	60,000	—
Purchased power payable	5,087	3,713
Accounts payable	42,698	23,535
Accrued expenses	18,567	9,345
Accrued interest	1,135	903
Regulatory liabilities – member rate mitigation	16,332	12,223
Total current liabilities	171,818	82,681
Deferred credits and other:		
Regulatory liabilities – member rate mitigation	1,485	1,111
Regulatory liabilities – TIER credit	35,726	20,000
Asset retirement obligations	72,760	40,410
Deferred credits and other	13,715	18,714
Total deferred credits and other	123,686	80,235
Commitments and contingencies (note 13)		
Total	\$ 1,425,025	1,358,235

See accompanying notes to financial statements.

**BIG RIVERS ELECTRIC CORPORATION**

Statements of Operations

Years ended December 31, 2021, 2020, and 2019

(Dollars in thousands)

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Operating revenue	\$ 393,144	328,708	378,727
Total operating revenue	<u>393,144</u>	<u>328,708</u>	<u>378,727</u>
Operating expenses:			
Operations:			
Fuel for electric generation	130,019	83,939	119,831
Power purchased and interchanged	37,436	35,756	37,893
Production, excluding fuel	46,945	40,616	45,918
Transmission and other	34,735	37,042	38,078
Maintenance	32,082	36,947	39,066
Depreciation and amortization	172,136	54,630	49,356
Total operating expenses	<u>453,353</u>	<u>288,930</u>	<u>330,142</u>
Electric operating margin (loss)	<u>(60,209)</u>	<u>39,778</u>	<u>48,585</u>
Interest expense and other:			
Interest	28,575	33,393	36,937
Income tax benefit	—	(448)	(28)
Other – net	684	830	696
Total interest expense and other	<u>29,259</u>	<u>33,775</u>	<u>37,605</u>
Operating margin (loss)	<u>(89,468)</u>	<u>6,003</u>	<u>10,980</u>
Nonoperating margin:			
Interest income and other	14,072	4,192	5,735
Total nonoperating margin	<u>14,072</u>	<u>4,192</u>	<u>5,735</u>
Net margin (loss)	\$ <u>(75,396)</u>	<u>10,195</u>	<u>16,715</u>

See accompanying notes to financial statements.

**BIG RIVERS ELECTRIC CORPORATION**  
**Statements of Comprehensive Income (Loss)**  
**Years ended December 31, 2021, 2020, and 2019**  
(Dollars in thousands)

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net margin (loss)	\$ (75,396)	10,195	16,715
Other comprehensive income (loss):			
Defined-benefit plans:			
Actuarial gain (loss)	3,066	(779)	1,506
Amortization of (gain) loss	<u>(1,289)</u>	<u>296</u>	<u>559</u>
Defined-benefit plans	<u>1,777</u>	<u>(483)</u>	<u>2,065</u>
Postretirement benefits other than pensions:			
Prior service cost	(112)	(112)	(414)
Actuarial gain (loss)	2,418	(1,205)	(820)
Amortization of gain	<u>—</u>	<u>(20)</u>	<u>(198)</u>
Postretirement benefits other than pensions	<u>2,306</u>	<u>(1,337)</u>	<u>(1,432)</u>
Other comprehensive income (loss)	<u>4,083</u>	<u>(1,820)</u>	<u>633</u>
Comprehensive income (loss)	\$ <u><u>(71,313)</u></u>	<u><u>8,375</u></u>	<u><u>17,348</u></u>

See accompanying notes to financial statements.

**BIG RIVERS ELECTRIC CORPORATION**  
**Statements of Equities**  
Years ended December 31, 2021, 2020, and 2019  
(Dollars in thousands)

	Retained margin	Other equities		Accumulated other comprehensive income/(loss)	Total equities
		Donated capital and memberships	Consumers' contributions to debt service		
Balance – December 31, 2017	\$ 486,800	764	3,681	(358)	490,887
Net margin	15,230	—	—	—	15,230
Pension and postretirement benefit plans	—	—	—	(301)	(301)
Balance – December 31, 2018	502,030	764	3,681	(659)	505,816
Net margin	16,715	—	—	—	16,715
Pension and postretirement benefit plans	—	—	—	633	633
Balance – December 31, 2019	518,745	764	3,681	(26)	523,164
Net margin	10,195	—	—	—	10,195
Pension and postretirement benefit plans	—	—	—	(1,820)	(1,820)
Balance – December 31, 2020	528,940	764	3,681	(1,846)	531,539
Net margin (loss)	(75,396)	—	—	—	(75,396)
Pension and postretirement benefit plans	—	—	—	4,083	4,083
Balance – December 31, 2021	\$ 453,544	764	3,681	2,237	460,226

See accompanying notes to financial statements.

**BIG RIVERS ELECTRIC CORPORATION**

Statements of Cash Flows

Years ended December 31, 2021, 2020, and 2019

(Dollars in thousands)

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Cash flows from operating activities:			
Net margin (loss)	\$ (75,396)	10,195	16,715
Adjustments to reconcile net margin (loss) to net cash provided by operating activities:			
Depreciation and amortization	172,641	55,329	49,407
Interest compounded – RUS Series B Note	12,242	11,557	10,911
Interest income compounded – RUS Cushion of Credit (advance payments unapplied)	(111)	(169)	(169)
Forgiveness from long-term obligations	(9,941)	—	—
Noncash member rate mitigation revenue	—	(9,532)	(15,578)
Changes in certain assets and liabilities:			
Accounts receivable	(15,477)	(3,470)	(3,876)
Fuel and nonfuel inventory	2,321	13,333	(1,289)
Prepaid expenses and other	(121)	(831)	2,663
Deferred charges	(4,650)	(12,042)	(13,162)
Purchased power payable	1,374	1,011	(2,632)
Accounts payable	7,620	(3,706)	46
Accrued expenses	9,454	(2,085)	(3,115)
Other – net	(11,518)	6,619	15,113
Net cash provided by operating activities	<u>88,438</u>	<u>66,209</u>	<u>55,034</u>
Cash flows from investing activities:			
Capital expenditures	(149,396)	(61,154)	(23,281)
Proceeds from restricted investments and deposits	8,322	43,902	21,655
Purchases of restricted investments and other deposits and investments	(2,320)	(12,854)	(22,462)
Proceeds of short-term investments	6,994	11,074	11,334
Purchases of short-term investments	(744)	(8,239)	(11,165)
Net cash used in investing activities	<u>(137,144)</u>	<u>(27,271)</u>	<u>(23,919)</u>
Cash flows from financing activities:			
Principal payments on long-term obligations	(26,314)	(141,337)	(38,495)
Proceeds from long-term obligations	24,542	93,241	—
Proceeds from line of credit	75,000	83,300	—
Payments on line of credit	(15,000)	(83,300)	—
Payments on debt issuance costs	(362)	(1,175)	—
Net cash provided by (used in) financing activities	<u>57,866</u>	<u>(49,271)</u>	<u>(38,495)</u>
Net increase (decrease) in cash and cash equivalents	9,160	(10,333)	(7,380)
Cash and cash equivalents – beginning of year	<u>20,753</u>	<u>31,086</u>	<u>38,466</u>
Cash and cash equivalents – end of year	\$ <u>29,913</u>	\$ <u>20,753</u>	\$ <u>31,086</u>
Supplemental cash flow information:			
Cash paid for interest	\$ 19,358	24,801	26,487
Cash paid for income taxes	1	—	2
Supplemental schedule of non-cash financing and investing activities:			
Change in regulatory assets associated with asset retirement obligations	\$ 22,319	13,476	2,897
Change in regulatory assets associated with utility plant	(99,315)	156,122	83,616
Change in deferred charges associated with asset retirement obligations	3,378	—	—
Purchases of utility plant in accounts payable	8,675	4,694	582

See accompanying notes to financial statements.

## **BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

### **(1) Organization and Summary of Significant Accounting Policies**

#### **(a) General Information**

Big Rivers Electric Corporation ("Big Rivers" or the "Company"), an electric generation and transmission cooperative, supplies wholesale power to its three member distribution cooperatives (Jackson Purchase Energy Corporation, Kenergy Corp. ("Kenergy"), and Meade County Rural Electric Cooperative Corporation ("Meade County RECC")) under all requirements contracts. Big Rivers also markets power to nonmember utilities, power marketers, and the Midcontinent Independent System Operator ("MISO"). The members provide electric power and energy to industrial, residential, and commercial customers located in portions of 22 western Kentucky counties. The wholesale power contracts with the members remain in effect until December 31, 2043. Rates to Big Rivers' members are established by the Kentucky Public Service Commission ("KPSC") and are subject to approval by the Rural Utilities Service ("RUS"). The financial statements of Big Rivers include the provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 980, *Regulated Operations*, and give recognition to the ratemaking and accounting practices of the KPSC and RUS.

#### **(b) Estimates**

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and disclosure of contingent assets and liabilities. The estimates and assumptions used in the accompanying financial statements are based upon management's evaluation of the relevant facts and circumstances as of the date of the financial statements. Significant items subject to such estimates and assumptions include intangible asset recoverability, asset retirement obligations, pension and postretirement obligations, and other contingencies. Actual results may differ from those estimates.

#### **(c) System of Accounts**

Big Rivers maintains its accounting records in accordance with the Uniform System of Accounts as prescribed by RUS Bulletin 1767B-1, as adopted by the KPSC. These regulatory agencies retain authority and periodically issue orders on various accounting and ratemaking matters. Adjustments to RUS accounting have been made to make the financial statements consistent with generally accepted accounting principles in the United States of America.

#### **(d) Revenue Recognition**

Revenues generated from the Company's wholesale power sales are based on month-end meter readings and are recognized as earned when electricity is delivered. Capacity revenues are recognized in the period in which the Company provides capacity to a counterparty.

## BIG RIVERS ELECTRIC CORPORATION

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

In May 2014, the FASB issued Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The main principle of the ASU is that an entity should recognize revenue to depict the transfer of promised goods or services to its customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 became effective for the Company for its annual reporting period beginning on January 1, 2019.

### (e) *Utility Plant and Depreciation*

Utility plant is recorded at original cost, which includes the cost of contracted services, materials, labor, and overhead. In accordance with FASB ASC 835-20, *Interest – Capitalization of Interest*, the Company also includes capitalized interest on projects with an estimated total cost of \$250 or more before consideration of capitalized interest. The interest capitalized is determined by applying the effective rate of Big Rivers’ weighted average debt to the accumulated expenditures for qualifying projects included in construction in progress. Replacements of depreciable property units, except minor replacements, are charged to utility plant.

Depreciation of utility plant in service is recorded using the straight-line method over the estimated remaining service lives, as approved by the RUS and KPSC. During 2012, a depreciation study was completed to evaluate the remaining economic lives of the Company’s assets and establish new depreciation rates. The study was approved by the RUS in 2012 and by the KPSC in 2014, with the rates becoming effective February 1, 2014. The annual composite depreciation rates used to compute depreciation expense are as follows:

Electric plant	0.35%–25.38%
Transmission plant	1.36%–2.29%
General plant	3.76%–9.88%

For 2021, 2020, and 2019, the average composite depreciation rates were 3.09%, 3.19%, and 2.41%, respectively. At the time utility plant is disposed of, the original cost plus cost of removal less salvage value of such utility plant is charged to accumulated depreciation, as required by the RUS. For 2021, 2020 and 2019, Big Rivers TIER credit was charged to depreciation and amortization as discussed in Note 5.

### (f) *Intangible Plant*

Intangible plant was recorded as a result of the resolution from a certified dispute amongst Big Rivers, Meade County RECC, and Louisville Gas and Electric in KPSC Case No. 2019-00370. The amount was paid during 2020 and the certified territorial rights do not expire. Intangible plant is subject to impairment testing and if impaired, the carrying value is accordingly reduced. Intangible plant has an indefinite life and is not subject to amortization. There was no impairment recorded in 2021 or 2020.

## BIG RIVERS ELECTRIC CORPORATION

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

### **(g) Impairment Review of Long-Lived Assets**

Long-lived assets are reviewed as facts and circumstances indicate that the carrying amount may be impaired. FASB ASC 360, *Property, Plant, and Equipment*, requires the evaluation of impairment by comparing an asset's carrying value to the estimated future cash flows the asset is expected to generate over its remaining useful life. If this evaluation were to conclude that the future cash flows were not sufficient to recover the carrying value of the asset, an impairment charge would be recorded based on the difference between the asset's carrying amount and its fair value (less costs to sell for assets to be disposed of by sale) as a charge to net margin.

### **(h) Asset Retirement Obligations**

FASB ASC 410-20, *Asset Retirement and Environmental Obligations – Asset Retirement Obligations*, requires legal obligations associated with the retirement of long-lived assets to be recognized at fair value when incurred and capitalized as part of the related long-lived asset. The liability is accreted each period based on the credit-adjusted risk-free rate of return that existed when the liability, or portion thereof, was initially measured. The period accretion is recognized as an increase in the carrying amount of the liability, and the capitalized cost is depreciated over the useful life of the related asset. When the asset is retired, the entity settles the obligation for its recorded amount or incurs a gain or loss.

Big Rivers has recorded liabilities in its financial statements for asset retirement obligations ("AROs") related to the requirements of the U.S. Environmental Protection Agency's ("EPA") Disposal of Coal Combustion Residuals from Electric Utilities Rule ("CCR Final Rule") and Effluent Limitations Guidelines Rule ("ELG Final Rule") for the coal ash ponds located at its Green Station and the City of Henderson's Station Two ("Station Two") generating units. In 2021, Big Rivers also recorded AROs for the closure of the landfill located at its Sebree Station and closure of Phase Two of the landfill located at its Wilson Station. The Wilson Station landfill is divided into three sections. The Company has begun closure activities for the Phase One section, which will be complete in 2022. The CCR Final Rule and the ELG Final Rule do not apply to the Phase One section, and it is not recorded as part of the ARO. By-product produced as a result of current operations is being deposited into the Phase Two section. Phase Three of the landfill is not expected to be utilized given the remaining useful life of the Wilson Station facility.

The CCR Final Rule was published in the Federal Register on April 17, 2015 and provides a comprehensive set of requirements for the safe disposal of CCRs, commonly known as coal ash, from coal-fired power plants. The EPA subsequently published an update to the CCR Final Rule, effective on September 28, 2020, allowing facilities to submit a demonstration for an extension to the deadline for unlined CCR surface impoundments to stop receiving waste. The Company submitted the demonstration in November 2020 requesting approval to operate its Green Station ash pond until June 2022, with closure commencing at that time. The ELG Final Rule was published in the Federal Register on November 3, 2015 and sets limits on the levels of toxic metals in wastewater that can be discharged from power plants. See Note 3 for further discussion of the Company's AROs.

## **BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

### ***(i) Inventory***

Inventories are carried at average cost and include coal, lime, limestone, oil and gas used for electric generation, and materials and supplies used for utility operations. Purchased emission allowances are recorded in inventory at actual cost by each vintage year. Allowances issued by the EPA are recorded at zero cost by each vintage year. Total purchased and EPA issued allowances are carried in inventory at a weighted average cost by each vintage year. Issuances of allowances are accounted for on a vintage basis using a monthly weighted average cost.

### ***(j) Restricted Investments***

In 2020, the KPSC issued an order that eliminated the restricted investments that had been reserved for Member rate mitigation and required distribution of the remaining reserve funds to Members in 2021.

The 2012 loan agreement with the National Rural Utilities Cooperative Finance Corporation ("CFC") required as a condition of the extension of credit, that an equity ownership position be established by all borrowers. During 2020, the CFC agreed to Big Rivers utilizing the equity ownership position to pay off the 2012B CFC Equity Note. The equity investments did not have readily determinable fair values and were accounted for at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment. No impairment or observable price changes were recorded during 2021, 2020, or 2019.

### ***(k) Cash and Cash Equivalents***

Big Rivers considers all short-term, highly liquid investments with original maturities of three months or less to be cash equivalents.

### ***(l) Restricted Cash***

Big Rivers had restricted cash related to proceeds from the sale of utility plant as required by the RUS loan contract for the year ended December 31, 2020, and no restricted cash for year-ending 2021. The restricted cash was used to pay RUS principal in 2021 on the 2018 RUS Guaranteed FFB W8 and X8 loans.

### ***(m) Short-Term Investments***

Short-term investments include investments in debt securities. The aforementioned short-term investments have original maturities greater than three months and less than one year.

### ***(n) Regulatory Assets and Liabilities***

FASB ASC 980 applies to regulated entities for which rates are designed to recover the costs of providing service. In accordance with this FASB topic, certain items that would normally be reflected in the statement of operations are deferred on the balance sheet. Regulatory assets represent probable future revenues associated with certain incurred costs, which will be recovered from members through the regulated rate-making process. Regulatory assets are reduced during the period(s) in which the related costs are recovered through rates or when future recovery is no longer probable. Conversely, regulatory liabilities represent future reductions in revenues associated with amounts that are to be

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credited, or refunded, to members through the regulated rate-making process. Regulatory liabilities are reduced during the period(s) in which the related amounts are refunded to members through rates or when future refunding of the amounts is no longer probable.

#### **(o) Long-Term Accounts Receivable**

During 2021, the Company amended a market-based rate partial and full requirements contract with an existing non-member customer. The amendment included deferral of charges incurred by the customer during 2021. As of December 31, 2021, the total due from the customer was \$9,958, with \$8,293 recorded as long-term accounts receivable and \$1,665 recorded in accounts receivable. The customer began making monthly installment payments during 2021 and will continue these payments through May 2027. An allowance for doubtful accounts is recorded if it is determined it is probable that the Company will not collect all principal and interest contractually due. There is no allowance recorded at December 31, 2021.

#### **(p) Other Deposits and Investments**

Other deposits and investments consist primarily of patronage capital, cash collateral/margin call deposits, investments in associated organizations, and investments held in trust for a deferred compensation plan. Investments held in trust consist primarily of equities and money market accounts and are carried at fair value. Remaining deposits are recorded at their original cost as their cost approximates fair value due to the nature of the deposit.

#### **(q) Income Taxes**

Big Rivers was formed as a tax-exempt cooperative organization as described in Internal Revenue Code Section 501(c)(12). To retain tax-exempt status under this section, at least 85% of Big Rivers' annual income must be generated from transactions with the Company's members. In 1983, sales to nonmembers resulted in Big Rivers failing to meet the 85% requirement. Until Big Rivers can meet the 85% member income requirement, the Company will not be eligible for tax-exempt status and will be treated as a taxable cooperative.

As a taxable cooperative, Big Rivers is entitled to exclude the amount of patronage allocations to members from taxable income. Income and expenses related to nonpatronage-sourced operations are taxable to Big Rivers. Big Rivers files a federal income tax return and certain state income tax returns.

Under the provisions of FASB ASC 740, *Income Taxes*, Big Rivers is required to record deferred tax assets and liabilities for temporary differences between amounts reported for financial reporting purposes and amounts reported for income tax purposes on the tax return. Deferred tax assets and liabilities are determined based upon these temporary differences using enacted tax rates for the year in which these differences are expected to reverse. Deferred income tax expense or benefit is based on the change in assets and liabilities from period to period, subject to an ongoing assessment of realization. Tax benefits associated with income tax positions taken, or expected to be taken, in a tax return are recorded only when the more-likely-than-not recognition threshold is satisfied and measured at the largest amount of benefit that is greater than 50% likely of being realized upon settlement.

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### **(r) Patronage Capital**

As provided in the Company's bylaws, Big Rivers accounts for each year's patronage-sourced income, both operating and non-operating, on a patronage basis. Notwithstanding any other provision of the bylaws, the amount to be allocated as patronage capital for a given year shall not be less than the greater of regular taxable patronage-sourced income or alternative minimum taxable patronage-sourced income.

### **(s) Derivatives**

Management has reviewed the requirements of FASB ASC 815, *Derivatives and Hedging*, and has determined that certain contracts to which the Company is a party to meet the definition of a derivative under FASB ASC 815. The Company has elected the Normal Purchase and Normal Sale exception for these contracts, and therefore, the contracts are not required to be recognized at fair value in the financial statements.

### **(t) Fair Value Measurements**

FASB ASC 820, *Fair Value Measurement*, defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal, or most advantageous, market for the asset or liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires entities to maximize the use of observable inputs when possible. The three levels of inputs used to measure fair value are as follows:

- Level 1 – quoted prices in active markets for identical assets or liabilities;
- Level 2 – observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and
- Level 3 – unobservable inputs that are supported by little or no market activity and that are significant to the fair values of the assets or liabilities, including certain pricing models, discounted cash flow methodologies, and similar techniques that use significant unobservable inputs.

### **(u) Deferred Loan Costs**

The Company capitalizes costs incurred in connection with long-term debt. These costs are amortized using the effective interest method over the term of the respective debt financing agreements.

In accordance with ASU 2015-03, *Interest-Imputation of Interest (Subtopic 835-30)*, deferred loan costs related to a recognized debt liability are presented on the balance sheet as a direct deduction from the carrying amount of the related debt liability instead of being presented as an asset.

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#### **(v) *Deferred Credits and Other***

Deferred credits and other includes employee-related benefits and capacity revenue sales billed but not yet earned. Employee related benefits include, but are not limited to, pension and post-retirement benefit costs and amounted to \$13,465 and \$18,474 at December 31, 2021 and 2020, respectively. Deferred capacity revenue, which will be recognized within the next year, amounted to \$250 and \$240 at December 31, 2021 and 2020, respectively.

#### **(w) *New Accounting Guidance***

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (ASU 2016-02). The main principle of this ASU requires that lessees recognize all leases (other than leases with a term of twelve months or less) on the balance sheet as lease liabilities, based upon the present value of the lease payments, with corresponding right of use assets. ASU 2016-02 also makes targeted changes to other aspects of the current guidance, including the lease classification criteria and the lessor accounting model. In May 2020, the FASB delayed the required implementation date of ASU 2016-02 for private entities by one year. The amendments in ASU 2016-02 will be effective for the Company for annual reporting periods beginning after December 15, 2021. The Company is currently assessing the impact of adopting the guidance but does not believe it will have a material effect.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which allows a company to irrevocably elect the fair value option on certain financial instruments. Subsequently, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments* and ASU 2019-05, *Financial Instruments – Credit Losses (Topic 326): Targeted Transition Relief* in May 2019; ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses* in November 2019; and ASU 2020-03, *Codification Improvements to Financial Instruments*, in March 2020. The effective date of the guidance for the Company will be for annual reporting periods beginning after December 15, 2022. The Company is currently assessing the impact of adopting the guidance but does not believe this guidance will have a material effect.

#### **(x) *Reclassification***

Certain items in 2020 have been reclassified on the financial statements for comparative purposes to conform with presentation in the current year financial statements. Specifically, the intangible plant is presented separately on the Balance Sheet in the current year and was included in Utility plant, net in the 2020 financial statements. The amount of the intangible plant is \$15,000 in both 2021 and 2020. The reclassification has no impact on net margins.

#### **(y) *Risks and Uncertainties***

The outbreak of the COVID-19 pandemic has resulted in governments and customers enacting emergency measures to combat the spread of the virus. These measures have included the implementation of travel bans, self-imposed quarantine periods, social distancing, additional safety protocols, and temporary customer facility shutdowns. There is unprecedented uncertainty surrounding the duration of the pandemic, its potential economic ramifications, and any government actions to mitigate them. The Company met its financial targets in 2020 and 2021, and did not experience any

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material adverse impacts. Continued restrictive measures put in place in order to mitigate the virus could adversely affect the Company's financial results. Additionally, the recent events in the Ukraine have had a negative impact on commodity prices. It is not currently possible to estimate the length, severity, or financial impact of these developments in the future.

**(2) Utility Plant**

The Company retired Coleman Station and Reid Station Unit 1 on September 30, 2020. The utility plant, net, associated with Coleman Station and Reid Station Unit 1 in the amount of \$124,210 and \$6,731, respectively, were retired and recorded as a regulatory asset. See Note 5 for further discussion of the Company's regulatory asset balances related to the Coleman Station and Reid Station Unit 1 retirement costs. At December 31, 2021 and 2020, utility plant is summarized as follows:

	<u>2021</u>	<u>2020</u>
Classified plant in service:		
Production plant	\$ 1,484,121	1,460,252
Transmission plant	324,393	311,898
General plant	61,130	56,845
Other	<u>67</u>	<u>67</u>
	1,869,711	1,829,062
Less accumulated depreciation	<u>1,151,975</u>	<u>1,102,333</u>
	717,736	726,729
Construction in progress	<u>175,252</u>	<u>44,893</u>
Utility plant – net	<u>\$ 892,988</u>	<u>771,622</u>

Big Rivers' secured long-term debt obligations and 2020 Amended and Restated Syndicated Senior Secured Credit Agreement, dated June 11, 2020, are secured under Big Rivers' Indenture dated as of July 1, 2009, as supplemented and amended (the "Indenture"), between Big Rivers and U.S. Bank National Association, as trustee (the "Indenture Trustee"). Obligations are secured under the Indenture by a mortgage lien on substantially all of Big Rivers' owned tangible, and certain intangible, properties including Big Rivers' production, transmission, general, and other Utility Plant. See Note 4 for further discussion of Big Rivers' Debt and Other Long-Term Obligations secured under its Indenture.

Depreciation expense on utility plant for the years ended December 31, 2021, 2020 and 2019, was \$41,187, \$21,119 and \$20,748, respectively. The increase in depreciation expense on utility plant, net, in 2021 is related to the discontinuation of the deferral of depreciation expense on the Wilson plant as of January 1, 2021. See Note 5 for discussion of Wilson plant depreciation.

Interest capitalized for the years ended December 31, 2021 and 2020, was \$3,246 and \$587, respectively.

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The Company has identified certain legal obligations, as defined in FASB ASC 410, *Asset Retirement and Environmental Obligations*, associated with the retirement of long-lived assets that require the recognition of a liability. See Note 3 for further discussion of the Company's asset retirement obligations.

As of December 31, 2021 and 2020, the Company had recorded an estimated \$50,862 and \$48,683, respectively, related to nonlegal removal costs included in accumulated depreciation as required by the RUS.

**(3) Asset Retirement Obligations**

The Company has AROs arising from legal obligations associated with the retirements of certain long-lived assets. The liabilities were initially measured at fair value and subsequently adjusted for accretion expense and changes in estimated future cash flows. The corresponding asset retirement costs are capitalized as part of the carrying amount of the related long-lived assets and depreciated over their remaining useful lives. The following table presents the activity for the ARO liabilities for the years ended December 31, 2021 and 2020:

	<b>2021</b>		<b>2020</b>
ARO balance at beginning of year	\$ 40,410		34,557
Additional obligations incurred	22,442 (a)		—
Changes in estimated timing or cost	143 (b)		4,421 (c)
Accretion expense	10,020 (d)		1,732 (d)
Actual costs incurred	(255)		(300)
ARO balance at end of year	\$ 72,760		40,410

(a) An ARO liability was recorded in 2021 for closure costs associated with the Sebree Station landfill and Phase Two of the Wilson Station Landfill.

(b) During 2021, a favorable ruling was received in the final order of Case No. 2019-00269, which states the City of Henderson is liable for its share of closing the Station Two ash pond. As a result of this ruling, Big Rivers recorded an adjustment to the Station Two ash pond ARO liability to reflect both a change in cost estimate and extension of the final closure date. See Note 5 for further discussion of litigation with the City of Henderson.

(c) During 2020, the EPA issued an update to the CCR Final Rule which shortened the deadline to close the ash pond at Green Station. In order to comply with federal regulations, the settlement date for closure of this ash pond was reduced by approximately three years. Accordingly, in 2020, Big Rivers recorded an adjustment to the Green Station ARO liability to reflect the change in the federal regulations. The revised regulations did not impact the ARO liability recorded for the ash pond located at the retired Station Two facility.

(d) The 2021 and 2020 annual ARO accretion expense of \$7,935 and \$1,732, respectively, was deferred and included in the Regulatory Assets amount reported on the Company's balance sheet as of December 31, 2021 and 2020. The remaining 2021 ARO accretion expense of \$2,085 was deferred

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and included in the Deferred Charges amount reported on the Company's balance sheet as of December 31, 2021. The KPSC final order in Case No. 2019-00435, the Environmental Compliance Plan, approved the recovery of the capital costs for ash pond closure through the environmental surcharge mechanism ("ESM") based on non-levelized amortization of the actual ash pond closure spending-to-date, allocable over a rolling 10-year period. This method ensures that cost recovery from Members through the ESM is based on actual project spending while also allowing Big Rivers to match its amortization expense with ESM revenue.

**(4) Debt and Other Long-Term Obligations**

A detail of long-term debt at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
CFC Refinance Promissory Note, Series 2012B, serial note pricing, 4.30% effective interest rate, final maturity date of May 2032	\$ 187,540	201,380
RUS 2009 Series B Promissory Note, stated amount of \$245,530, no stated interest rate, 5.80% imputed interest rate, maturing December 2023	218,827	206,585
CoBank Promissory Note, Series 2012A, 4.30% fixed interest rate, final maturity date of June 2032	150,333	161,137
2018 RUS Guaranteed FFB Loan, W8, 2.83% fixed interest rate, final maturity date of January 2033	22,322	23,585
2018 RUS Guaranteed FFB Loan, X8, 2.94% fixed interest rate, final maturity date of December 2043	16,900	17,308
2021 RUS Guaranteed FFB Loan, Y8A, 1.94% fixed interest rate, final maturity date of December 2043	24,542	—
CFC Promissory Note, Series 2020B, 2.49% fixed interest rate, final maturity date of February 2031	83,300	83,300
Old National Bank, Paycheck Protection Program Loan, 1.00% fixed interest rate, maturing in 18 months if determined ineligible (see Note 4(j))	—	9,941
<b>Total long-term debt</b>	<b>703,764</b>	<b>703,236</b>
Less current maturities	27,999	32,962
Less unamortized deferred debt issuance costs	2,701	2,836
Less advance payments unapplied – RUS cushion of credit	3,769	3,658
<b>Total long-term debt – net of current maturities, deferred debt issuance costs, and advance payments</b>	<b>\$ 669,295</b>	<b>663,780</b>

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The following are scheduled maturities of long-term debt at December 31, 2021:

	<u>Amount</u>
Year:	
2022	\$ 27,999
2023	248,026
2024	32,356
2025	32,861
2026	34,291
Thereafter	<u>328,231</u>
Total	<u>\$ 703,764</u>

**(a) National Rural Utilities Cooperative Finance Corporation (CFC) Refinance and Equity Promissory Notes, 2012B**

In July 2012, Big Rivers issued new debt with CFC in the form of a secured term loan in the amount of \$302,000 (the "Refinance Note") and a CFC Equity Note in the amount of \$43,156. The Refinance Note is secured under Big Rivers' Indenture, dated July 1, 2009 between the Company and U.S. Bank National Association, and consists of twenty individual notes with different fixed interest rates ranging from 3.05% to 5.35%. The Refinance Note has an effective interest rate of 4.30% and a final maturity date of May 2032.

The Equity Note was prepaid during 2020 utilizing proceeds received from the sale of Capital Term Certificates previously held with the CFC.

**(b) RUS Notes**

On July 15, 2009, Big Rivers' previous RUS debt was replaced with the RUS 2009 Promissory Note Series A (the "RUS Series A Note") and the RUS 2009 Promissory Note Series B (the "RUS Series B Note"). The RUS Series A Note was repaid in full in 2018.

The RUS Series B Note has no stated interest rate, is recorded at an imputed interest rate of 5.80%, and is secured under Big Rivers' Indenture. The \$245,530 stated amount of the RUS Series B Note is due December 2023.

**(c) CoBank, ACB (CoBank) Promissory Note, Series 2012A**

In July 2012, Big Rivers issued new debt with CoBank in the form of a secured term loan in the amount of \$235,000, which is secured under Big Rivers' Indenture. The loan has a fixed interest rate of 4.30% and a final maturity date of June 2032.

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### **(d) Pollution Control Bonds**

In June 2010, the County of Ohio, Kentucky, issued \$83,300 of Pollution Control Refunding Revenue Bonds, Series 2010A ("Series 2010A Bonds"), the proceeds of which were supported by a promissory note from Big Rivers, bearing the same interest rate as the bonds and secured under Big Rivers' Indenture. These bonds had a fixed interest rate of 6.00% and maturity date of July 2031. These bonds were subject to an optional redemption on or after July 15, 2020, which Big Rivers exercised on July 15, 2020, utilizing proceeds from a CFC loan to pay off the bonds. See Note 4(i) for additional information regarding the 2020 CFC loan used to redeem the Series 2010A Bonds.

### **(e) 2018 RUS Guaranteed FFB Loan, W8**

In April 2018, Big Rivers received a \$25,630 loan from the Federal Financing Bank ("FFB") (the "W8 Loan") which is guaranteed by the RUS and secured under Big Rivers' Indenture. The W8 Loan is for long-term financing of capital projects included in Big Rivers' 2012 Environmental Compliance Plan ("ECP") to comply with the EPA's Mercury and Air Toxics Standards ("MATS") rule. These capital projects were completed in 2016 and were originally funded with Big Rivers' general funds. Accordingly, the proceeds of the W8 Loan were used to replenish Big Rivers' general funds. The W8 Loan has a fixed interest rate of 2.828%, which includes a 0.125% RUS administration fee, and has a final maturity date of January 2033.

### **(f) 2018 RUS Guaranteed FFB Loan, X8**

In April 2018, Big Rivers received a \$17,965 loan from the FFB, (the "X8 Loan") which is guaranteed by the RUS and secured under Big Rivers' Indenture. The X8 Loan is for long-term financing of capital projects included in Big Rivers' 2013-2015 Transmission Construction Work Plan, which were completed in 2017 and were originally funded with Big Rivers' general funds. Accordingly, the proceeds of the X8 Loan were used to replenish Big Rivers' general funds. The X8 Loan has a fixed interest rate of 2.935%, which includes a 0.125% RUS administration fee, and has a final maturity date of December 2043.

### **(g) 2021 RUS Guaranteed FFB Loan, Y8 A**

In November 2021, Big Rivers received a \$24,542 loan from the FFB, (the "Y8 A Loan") which is guaranteed by the RUS and secured under Big Rivers' Indenture. The Y8 A Loan is for long-term financing of capital projects included in Big Rivers' 2016-2019 Transmission Construction Work Plan, which were completed in 2020 and were originally funded with Big Rivers' general funds. Accordingly, the proceeds of the Y8 A Loan were used to replenish Big Rivers' general funds. The Y8 A Loan has a fixed interest rate of 1.936%, which includes a 0.125% RUS administration fee, and has a final maturity date of December 2043.

### **(h) Line of Credit (CFC Syndicated Line, Series 2020A)**

On March 5, 2015, Big Rivers entered into a \$130,000 Syndicated Senior Secured Credit Agreement (the "2015 Agreement") with CFC, CoBank, Fifth Third Bank, KeyBank National Association, and Regions Bank. In conjunction with the 2015 Agreement, Big Rivers issued secured promissory notes (the "Series 2015A Notes"), equal to each lender's commitment, which are secured under Big Rivers' Indenture.

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On September 19, 2017, the 2015 Agreement was amended to, among other things, reduce the total facility amount from \$130,000 to \$100,000, and extend the maturity date from March 5, 2018 to September 18, 2020.

On July 11, 2020, the existing 2015 Agreement, that was previously amended and restated in 2017, was replaced with a \$150,000 Syndicated Secured Credit Agreement (the "2020 Agreement") with CFC, CoBank, Fifth Third Bank, KeyBank National Association, Regions Bank, and Bank of America. In conjunction with the 2020 Agreement, Big Rivers issued secured promissory notes (the "Series 2020A Notes"), equal to each lender's commitment, which are secured under Big Rivers' Indenture.

As of December 31, 2021, Big Rivers had outstanding borrowings of \$60,000 under the 2020 Agreement and \$37,190 in issued letters of credit outstanding, which reduced its available borrowing capacity under the 2020 Agreement from \$150,000 to \$52,810.

As of December 31, 2020, Big Rivers had no outstanding borrowings under the 2020 Agreement and \$4,729 in issued letters of credit outstanding, which reduced its available borrowing capacity under the 2020 Agreement from \$150,000 to \$145,271.

**(i) CFC Promissory Note, 2020B**

On December 23, 2020, Big Rivers issued new debt with CFC in the form of a secured balloon note in the amount of \$83,300 for the purpose of early redemption of the Series 2010A Bonds. This note is secured under Big Rivers' Indenture, with a fixed interest rate of 2.49% and a final maturity date of February 2031.

**(j) Old National Bank, Paycheck Protection Program ("PPP") Note**

In response to the COVID-19 pandemic, the federal government passed and signed the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") into law on March 27, 2020. This act allowed qualified businesses to borrow money through the Paycheck Protection Program administered by the Small Business Administration ("SBA") to cover payroll and other related expenses. On April 7, 2020, Big Rivers applied for PPP funds in the amount of \$9,941. The unsecured loan was approved, and funds were received on April 21, 2020. On August 18, 2020, Big Rivers submitted an application requesting forgiveness of the \$9,941 loan. Big Rivers received notice on August 17, 2021, that the PPP loan principal and accrued interest was forgiven in full and is recorded in the Interest income and other line on the statement of operations.

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### ***(k) RUS Cushion of Credit***

In 2018, Big Rivers began participating in the cushion of credit program administered by the RUS in conjunction with the execution of the 2018 W8 and X8 RUS Guaranteed FFB Loans. Under the cushion of credit program, RUS borrowers may make voluntary irrevocable deposits into the cushion of credit account. Per the terms of the RUS' commitment to guarantee Big Rivers' W8 and X8 Loans, Big Rivers agreed to make an initial deposit of \$3,200 to the cushion of credit account upon receipt of the loan funds and to make additional deposits, as needed, so that the balance at the beginning of each year going forward is equal to or greater than the annual payments due on the W8 and X8 Loans during the year. The interest rate dropped from 5% to 4% on October 1, 2020 and became a variable rate, which is equal to the one-year Treasury rate as of October 1 of each year. The rate in effect as of December 31, 2021 is 0.09%. During 2021, the cushion of credit account accrued interest at an annual rate of 2.99%.

Big Rivers' amounts in the cushion of credit account (deposits and accrued interest) may only be used to make scheduled principal and interest payments on the W8 and X8 Loans. As of December 31, 2021 and 2020, Big Rivers' balance in the RUS cushion of credit account was \$3,769 and \$3,658, respectively, which is included on the Company's balance sheet as a reduction to long-term debt.

### ***(l) Covenants***

Big Rivers is in compliance with all debt covenants associated with both its long-term and short-term debt obligations. The Company's Indenture and other debt agreements require that a Margins for Interest Ratio ("MFIR") of at least 1.10 be maintained for each fiscal year. The 2020 Agreement requires that Big Rivers, throughout the duration of the agreement, maintain a minimum Members' Equities' Balance at the end of each fiscal quarter-end and as of the last day of each fiscal year in an amount at least equal to \$417,000 plus 50% of the cumulative positive net margin for the period from December 31, 2019 to the end of the Borrower's most recently ended fiscal year. Big Rivers' MFIR for the fiscal year ended December 31, 2021 was 1.30, and its Equities balance was \$480,226.

An MFIR of less than 1.10, per the Indenture and other debt agreements, may result in the following actions, restrictions, or consequences: Big Rivers may not secure additional debt under the Indenture; the Company must seek rates that are reasonably expected to yield a 1.10 MFIR; the Company must provide a written plan satisfactory to the RUS setting forth actions to be taken to achieve the specified MFIR on a timely basis; an event of default may occur; interest rates may increase; and its line of credit may be terminated with an acceleration of any outstanding amounts becoming due immediately.

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**(5) Rate Matters**

In connection with the rate matters discussed below, the following tables provide a summary of Regulatory Assets and Liabilities reflected in the Balance Sheet as of December 31, 2021 and 2020:

	<u>Regulatory assets</u>	
	<u>2021</u>	<u>2020</u>
Coleman plant deferred depreciation	\$ 13,870	13,870
Wilson plant deferred depreciation	32,364	141,353
Non-FAC PPA	12,863	7,772
Asset retirement obligations	31,899	26,645
Environmental costs (CCR)	13,814	15,583
ECP case expense	233	289
Station Two contract termination	92,957	92,102
Coleman plant retire/decommission	132,615	129,869
Reid 1 plant retire/decommission	9,342	7,769
Green plant gas conversion	21,564	—
Total regulatory assets	<u>\$ 361,521</u>	<u>435,252</u>
	<u>Regulatory liabilities</u>	
	<u>2021</u>	<u>2020</u>
Economic reserve-member rate mitigation	\$ 17,817	13,334
TIER Credit	35,726	20,000
Total regulatory liabilities	<u>\$ 53,543</u>	<u>33,334</u>

The rates charged to Big Rivers' members consist of a demand charge per kilowatt ("kW") and an energy charge per kilowatt-hour ("kWh") consumed as approved by the KPSC. The rates include specific demand and energy charges for its two classes of customers, the large industrial customers and the rural customers, under its jurisdiction. For the large industrial customers, the demand charge is generally based on each customer's maximum demand during the current month. For the rural customers, the demand charge is based on Maximum Adjusted Net Local Load (as defined in Big Rivers' tariff).

The Company has certain KPSC approved tariff riders; including a fuel adjustment clause and an environmental surcharge. The net effect of these tariffs is recognized as revenue on a monthly basis with an offset to the Regulatory Liability – Member Rate Mitigation described below.

*Coleman plant depreciation and Wilson plant depreciation:*

The net impact of the tariff riders to members' rates is currently mitigated by a Member Rate Stability Mechanism ("MRSM"). An offsetting regulatory liability – member rate mitigation reflects the obligation associated with the funding of these reserve accounts. As described below, on June 25, 2020, the KPSC approved several changes to the MRSM beginning in January 2021.

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The KPSC entered an order on October 29, 2013, granting Big Rivers an annual revenue increase of \$54,227, effective August 20, 2013 (Case No. 2012-00535). In its order, the KPSC excluded the Coleman plant depreciation from rate recovery. The KPSC directed the Company to defer this depreciation expense and record the deferred amounts in a regulatory asset account. The KPSC's order indicated this action was being taken due to the planned temporary idling of Coleman, the length of time the plant would be idled, and the impact of the rate increase on customers. As of December 31, 2021, cumulative depreciation expense of \$13,870 was deferred for the Coleman plant, which includes the TIER credit reduction from 2019, as discussed below. Management believes the remaining balance is probable of recovery in future rates. The Coleman plant was retired September 30, 2020, as described below for Case No. 2020-00064.

The KPSC entered an order on April 25, 2014, granting Big Rivers an annual revenue increase of \$36,160, effective February 1, 2014 (Case No. 2013-00199). In its order, the KPSC approved Big Rivers' 2012 Depreciation Study, but excluded Wilson plant depreciation from rate recovery. The KPSC directed the Company to defer the Wilson depreciation expense and record in a regulatory asset account, similar to the Coleman depreciation expense deferral per the KPSC's order in Case No. 2012-00535. As of December 31, 2021, cumulative depreciation expense of \$32,364 was deferred for the Wilson plant, which is recoverable in future rates. The KPSC also approved Big Rivers' proposal to temporarily offset the rate increase by utilization of the MRSM. The KPSC further granted Big Rivers' proposed accounting treatment for transmission revenues related to the Hawesville smelter and authorized Big Rivers to pass the transmission revenues to its members through the MRSM. The net effect of this accounting treatment was the recognition of revenue on a monthly basis with an offset to the applicable regulatory liability accounts as the reserve funds were used to offset the impact of the base rate increase on the members' monthly bills.

### *Non-FAC PPA:*

Effective July 17, 2009, the KPSC approved the implementation of the Non-Fuel Adjustment Clause-Purchased Power Adjustment ("Non-FAC PPA") which is a rate mechanism allowing Big Rivers to recover certain costs of purchased power that are not recoverable through its Fuel Adjustment Clause ("FAC"). An accrual is recorded monthly to a regulatory asset or liability account based on the difference between the actual purchased power costs recoverable through the Non-FAC PPA and the purchased power base cost included in base rates. The balance in the regulatory asset or liability account as of June 30 each year is billed or refunded to members during the following twelve-month period beginning September 1 through August 31 of the following year.

### *Asset Retirement Obligations:*

The CCR Final Rule requires Big Rivers to address the eventual permanent closures of its Green Station coal ash pond and the coal ash pond at the City of Henderson, Kentucky's Station Two, as well as its landfills at Sebree Station and Wilson Station. Big Rivers recorded asset retirement obligations for its ash ponds at its Green Station and Station Two generating stations and for its landfills at Sebree Station and Wilson Station. See Note 3 for further discussion of the Company's asset retirement obligations. In accordance with FASB ASC 410-20, *Asset Retirement and Environmental Obligations – Asset Retirement Obligations* and under the RUS Uniform System of Accounts, Big Rivers initially recognized its coal ash pond AROs at fair value and subsequently adjusted for accretion expense and changes in estimated timing of pond closures and changes in estimated costs as of December 31, 2021 (Note 3).

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On January 5, 2016, the KPSC issued an order in Case No. 2015-00333 approving Big Rivers' request to establish regulatory assets for the deferral of certain expenses it would incur for compliance with the CCR Final Rule, including accretion and depreciation expense related to the Green Station and Station Two ash ponds AROs and other incremental expenses. On June 11, 2021, the KPSC issued an order in Case No. 2021-00079 approving Big Rivers' request to establish a regulatory asset for the deferral of certain expenses related to the Green Station. The new ARO for the Sebree Station landfill is recorded in this regulatory asset. The new ARO for the Wilson Station landfill is deferred pending an application requesting a regulatory asset.

### *Environmental Costs (CCR) and ECP Case Expense:*

On August 6, 2020, the KPSC approved Big Rivers' 2020 Environmental Compliance Plan ("2020 ECP"), (1) granting Big Rivers the authority to close the Green Station and Station Two ash ponds; (2) granting Big Rivers the authority to move the Coleman Station flue gas desulfurization system ("FGD") to Wilson Station to replace Wilson's FGD; (3) conditionally granting Big Rivers' request to establish regulatory assets for the accretion and depreciation expense related to the Coleman Station legacy ash ponds, should the CCR Final Rule be extended to apply to such legacy ash ponds; (4) conditionally granting Big Rivers the authority to close the Coleman Station ash ponds, should the CCR Final Rule be extended to apply to such legacy ash ponds; (5) authorizing Big Rivers to amortize the Green Station and Station Two ash pond AROs through its environmental surcharge; (6) conditionally authorizing Big Rivers to amortize the costs incurred to close the Coleman Station ash pond through its environmental surcharge should the CCR Final Rule be extended to apply to the Coleman Station ash ponds; (7) authorizing Big Rivers to amortize the regulatory asset for CCR-related expenses through its environmental surcharge; and (8) authorizing Big Rivers to establish a regulatory asset for the costs of preparing and prosecuting the 2020 ECP case, the recovery of which regulatory asset was approved in Case No. 2021-00061.

As of December 31, 2021, the total amount of CCR-related expenses and costs for asset retirement obligations deferred and included in Regulatory Assets on the Company's balance sheet was \$31,889, and the costs of preparing and prosecuting the ECP case that have been deferred and included in Regulatory Assets on the Company's balance sheet was \$233.

### *Station Two Contract Termination:*

On August 29, 2018, the KPSC entered an order (Case No. 2018-00146) (i) finding that the Station Two units were no longer capable of the normal, continuous, reliable operation for the economically competitive production of electricity; (ii) finding that the Station Two contracts, except for the Joint Facilities Agreement, have therefore terminated pursuant to their own terms; (iii) granting Big Rivers' request for authority to continue to operate Station Two under terms of the Station Two contracts for a period up to May 31, 2019; and (iv) reserving a ruling on Big Rivers' request for authority to establish a Station Two regulatory asset. The remaining issues in this case were resolved with a Settlement Agreement between the Office of the Attorney General, the Kentucky Industrial Utility Customers ("KIUC"), and Big Rivers. The Settlement Agreement provided that the KPSC would approve the Station Two regulatory asset, that Big Rivers would establish a Station Two Depreciation Credit, starting in the month that Station Two is retired, to reduce customer bills based on the revenues Big Rivers would receive associated with depreciation expense on Station Two, that Big Rivers would establish a TIER Credit to reduce existing regulatory assets in the event Big Rivers achieves a TIER in excess of 1.45 in 2020 or 2021, and that in Big Rivers' next general rate

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case, the intervenors would support Big Rivers' recovery of the Station Two, Wilson plant, and, conditionally, the Coleman plant regulatory assets. On October 23, 2018, the KPSC issued a final order approving the Settlement Agreement in full. RUS approved the Settlement Agreement on February 22, 2019. Big Rivers retired Station Two on January 31, 2019. On February 26, 2019, Big Rivers filed revised tariff sheets with the KPSC to incorporate the Station Two Depreciation Credit. As of December 31, 2021, the total amount of the Station Two contract termination included in the Regulatory Assets on the Company's balance sheet was \$92,957. This includes Station Two assets transferred from utility plant to Regulatory Assets, Station Two Depreciation Credit and the Company's portion of decommissioning costs incurred to date.

On December 12, 2018, the KPSC approved Big Rivers' request to phase out its existing Demand Side Management ("DSM") programs, to establish a new Low-Income Weatherization Program, and to establish a regulatory liability for the savings associated with the phase out of the existing DSM programs. As of December 31, 2021, the DSM savings were no longer recorded in a Regulatory Liability based on the ruling received in Case No. 2020-00064, as discussed below.

#### *Coleman Plant and Reid 1 Plant Retire/Decommission:*

On June 25, 2020, the KPSC entered an order in Case No. 2020-00064 approving a Settlement Agreement, as modified by the Commission, between Big Rivers, KIUC and the Attorney General, which approved Big Rivers' requests to: (1) establish regulatory assets for the remaining net book value of Coleman Station and Reid Station Unit 1 at retirement, and for the costs to decommission those units; (2) cease charging DSM savings to a regulatory liability; (3) utilize the existing DSM regulatory liability in 2020 and 80% of equity headroom in 2021 to reduce certain regulatory assets (the Wilson and Coleman depreciation regulatory assets; the Coleman, Reid 1, and Station Two retirement and decommissioning regulatory assets; and a regulatory asset through which the costs related to a focused management audit were deferred); and (4) recover the amounts deferred in those regulatory assets through amortization. The KPSC also approved replacing the TIER Credit mechanism in Big Rivers' MRSRM tariff with a new TIER Credit mechanism. Under the new TIER Credit, in years in which Big Rivers earns in excess of a 1.30 TIER, 40% of the excess margins will be returned to Big Rivers' members over the following year through a monthly bill credit. The remaining 60% of the excess margins will be deferred in regulatory liability accounts, with a minimum required balance of \$9,000, to be utilized in a year in which Big Rivers does not achieve a 1.30 TIER or to further decrease the balance of the regulatory assets with KPSC approval. The first \$700 of the bill credit each year will be allocated to Rural customers, and any bill credit over \$700 will be allocated between the Rural and Large Industrial customers based on revenues.

On March 8, 2022, Big Rivers filed a motion for clarification of the KPSC's Order entered on June 25, 2020, in Case No. 2020-00064. Specifically, Big Rivers asked the KPSC to clarify that the utilization of equity headroom to reduce the Smelter Load Mitigation (SLM) regulatory assets is not recoverable from its members. The KPSC issued an order on March 15, 2022, clarifying the June 25, 2020 Order, by stating that Big Rivers' member equity headroom in 2021 to record a one-time amortization of the SLM regulatory assets is not recoverable from Big Rivers' members in current or future rates. Big Rivers recorded \$84,945 for utilization of its equity headroom as a charge to amortization expense in 2021. During 2021 and 2020, the Company reduced the SLM regulatory asset balances by recording amortization of \$108,989 against Wilson Plant deferred depreciation and \$705 against focused management audit, respectively. The

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amortization recorded was ordered in Case No. 2020-00064 and includes the equity headroom adjustment, annual TIER credit allocation, monthly amortization and phase out of the DSM programs.

### *Green Plant Gas Conversion:*

On June 11, 2021, the KPSC granted Big Rivers a certificate of public convenience and necessity ("CPCN") to convert Big Rivers' two existing coal-fired generating units at its Green Station to run on natural gas, authorized the gas conversion assets to be depreciated over a seven-year period, and granting Big Rivers the authority to establish a regulatory asset to defer recognition of the costs that Big Rivers expects to incur as a result of the retirement of certain Green Station assets that will no longer be utilized after the conversion. As of December 31, 2021, the total amount of this regulatory asset incurred to date was \$21,564.

### *Regulatory Liabilities:*

In years in which Big Rivers earns in excess of a 1.30 TIER, excluding the utilization of equity headroom, 40% of the excess margins will be returned to Big Rivers' members over the following year through a monthly bill credit. The remaining 60% of the excess margins will be deferred in regulatory liability Big Rivers' new TIER Credit was \$44,543 for 2021, with 40%, or \$17,817 to be returned to members over a twelve-month period beginning February 2022. This amount is recorded as a regulatory liability at December 31, 2021 presented between current and long-term maturities based on the timing of future bill credits expected to be provided to the members. The remaining 60%, or \$26,726, was also deferred in regulatory liability accounts and is expected to offset the regulatory assets, as described above, pending KPSC approval. The regulatory liability of \$9,000 remaining from 2021 will continue to remain as a minimum required balance as described above. The new TIER Credit was recorded as depreciation and amortization expense on the statement of operations.

On February 28, 2022, Big Rivers filed an application with the KPSC, Case No. 2022-00028, for review of its MRSM charge for calendar year 2021. In its application, Big Rivers proposed to use the regulatory liability amount in excess of the minimum required balance of \$9,000, or \$26,726 that was established in Case No. 2020-00064, discussed above, to further reduce the SLM Regulatory Assets in 2022. This case is pending.

## **(6) Income Taxes**

At December 31, 2021, Big Rivers had a Non-Patron Net Operating Loss ("NOL") Carryforward of approximately \$35,280 expiring at various times between 2029 and 2037 which was entirely offset by a full valuation allowance.

On January 16, 2020, the Internal Revenue Service issued News Release IR 2020-12 announcing that it would refund all amounts sequestered from refundable AMT credits under IRC Section 168(k)(4) since 2013. The Company received a refund of \$449 and recorded a benefit to federal income tax expense during 2020.

On March 27, 2020, H.R. 748, the CARES Act was signed into legislation which includes tax provisions relevant to businesses. The CARES Act provides that any unused Alternative Minimum Tax ("AMT") credits can be claimed fully in tax years beginning in 2018 and 2019. The Company claimed a refund of the

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remaining AMT credit carryforward of \$107 on its 2019 federal tax return and received the refund during fiscal 2020.

The components of the net deferred tax assets as of December 31, 2021 and 2020 were as follows:

	<u>2021</u>	<u>2020</u>
Deferred tax assets:		
Net operating loss carryforward	\$ 8,802	10,213
Fixed asset basis difference	6,901	5,906
Total deferred tax assets	<u>15,703</u>	<u>16,119</u>
Deferred tax liabilities:		
RUS Series B Note	(3,343)	(3,343)
Bond refunding costs	(51)	(56)
Total deferred tax liabilities	<u>(3,394)</u>	<u>(3,399)</u>
Net deferred tax asset (pre-valuation allowance)	12,309	12,720
Valuation allowance	<u>(12,309)</u>	<u>(12,720)</u>
Net deferred tax asset	\$ <u>—</u>	<u>—</u>

A reconciliation of the Company's effective tax rate for 2021, 2020, and 2019 is as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Federal rate	21.0 %	21.0 %	21.0 %
State rate – net of federal benefit	4.0	4.0	4.0
Permanent differences	—	0.2	0.5
Patronage allocation to members	(25.0)	(25.2)	(25.4)
Alternative minimum tax credit recovery	—	(4.6)	(0.3)
Effective tax rate	<u>— %</u>	<u>(4.6)%</u>	<u>(0.2)%</u>

The Company files a federal income tax return, as well as certain state income tax returns. The years currently open for federal income tax examination are 2018 through 2020. The major state tax jurisdiction currently open for income tax examination is Kentucky for years 2017 through 2020. The Company has not recorded any unrecognized tax benefits or liabilities related to federal or state income taxes.

The Company classifies tax-related interest and penalties as an operating expense on the statement of operations and accrued expenses on the balance sheet. No material tax-related interest or penalties have been recorded during 2021, 2020, or 2019.

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### (7) Pension Plans

#### (a) Defined-Benefit Plans

Big Rivers has a noncontributory defined-benefit pension plan covering substantially all employees who meet minimum age and service requirements and who were employed by the Company prior to the plan closure dates cited below. The plan provides benefits based on the participants' years of service and the five highest consecutive years' compensation during the last ten years of employment. Big Rivers' policy is to fund such plan in accordance with the requirements of the Employee Retirement Income Security Act of 1974.

Prior to January 1, 2014, Big Rivers had two separate defined-benefit pension plans. The salaried employees' defined-benefit plan was closed to new entrants effective January 1, 2008, and the bargaining employees' defined-benefit plan was closed to new hires effective November 1, 2008. The Company simultaneously established base contribution accounts in the defined-contribution thrift and 401(k) savings plans, which were renamed as the retirement savings plans. The base contribution account for an eligible employee, which is one who meets the minimum age and service requirements, but for whom membership in the defined-benefit plan is closed, is funded by employer contributions based on graduated percentages of the employee's pay, depending on his or her age.

In order to meet minimum participation requirements, Big Rivers' salaried employees defined benefit plan was merged into the bargaining employees defined benefit plan. The merger was effective January 1, 2014 for purposes of Internal Revenue Code and effective December 31, 2014 for all other purposes. Effective January 1, 2017, participation was frozen in the merged plan for highly compensated employees in order to comply with IRS code section 401(a)(26).

Effective December 31, 2021, all employees within the defined benefit plan were frozen. No employee shall accrue any benefits under the plan on or after December 31, 2021. The employees impacted will subsequently become eligible for the base contribution accounts described above.

The Company has adopted FASB ASC 715, *Compensation – Retirement Benefits*, including the requirement to recognize the funded status of its pension plan and other postretirement plans (Note 11 – Postretirement Benefits Other than Pensions). ASC 715 defines the funded status of a defined-benefit pension plan as the fair value of its assets less its projected benefit obligation, which includes projected salary increases and defines the funded status of any other postretirement plan as the fair value of its assets less its accumulated postretirement benefit obligation.

ASC 715 also requires an employer to measure the funded status of a plan as of the date of its year-end balance sheet and requires disclosure in the notes to the financial statements of certain additional information related to net periodic benefit costs for the next fiscal year. The Company's pension and other postretirement benefit plans are measured as of December 31, 2021 and 2020.

The following provides an overview of the Company's noncontributory defined-benefit pension plan.

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A reconciliation of the Company's benefit obligations of its noncontributory defined-benefit pension plan at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Benefit obligation – beginning of period	\$ 23,439	21,620
Service cost – benefits earned during the period	649	597
Interest cost on projected benefit obligation	469	625
Plan curtailments	(4,437)	—
Benefits paid	(8,837)	(2,194)
Actuarial loss	<u>1,860</u>	<u>2,791</u>
Benefit obligation – end of period	\$ <u>13,143</u>	<u>23,439</u>

Big Rivers' defined-benefit pension plan provides retirees and terminated employees with a lump-sum payment option. Benefits paid in 2021 include lump-sum payments totaling \$8,749 – the result of nine former employees electing the lump-sum payment option. Benefits paid in 2020 include lump-sum payments totaling \$2,154 – the result of three former employees electing the lump-sum payment option.

The accumulated benefit obligation for the defined-benefit pension plan was \$13,143 and \$18,998 at December 31, 2021 and 2020, respectively.

A reconciliation of the Company's pension plan assets at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Fair value of plan assets – beginning of period	\$ 22,255	20,898
Employer contributions	47	222
Actual return on plan assets	1,711	3,329
Benefits paid	<u>(8,837)</u>	<u>(2,194)</u>
Fair value of plan assets – end of period	\$ <u>15,176</u>	<u>22,255</u>

The funded status of the Company's pension plan at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Benefit obligation – end of period	\$ (13,143)	(23,439)
Fair value of plan assets – end of period	<u>15,176</u>	<u>22,255</u>
Funded status	\$ <u>2,033</u>	<u>(1,184)</u>

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Components of net periodic pension costs for the years ended December 31, 2021, 2020, and 2019 were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Service cost	\$ 649	597	599
Interest cost	469	625	834
Expected return on plan assets	(1,221)	(1,318)	(1,194)
Amortization of prior service cost	(33)	(33)	(33)
Amortization of actuarial loss	130	41	325
Settlement and curtailment (gain) loss	<u>(1,386)</u>	<u>289</u>	<u>268</u>
Net periodic benefit cost	\$ <u>(1,392)</u>	<u>201</u>	<u>799</u>

A reconciliation of the pension plan amounts in accumulated other comprehensive income at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Prior service cost	\$ —	(11)
Unamortized actuarial loss	<u>(1,301)</u>	<u>(3,068)</u>
Accumulated other comprehensive income	\$ <u>(1,301)</u>	<u>(3,079)</u>

In 2021, \$0 of prior service credit and \$0 of actuarial loss is expected to be amortized to periodic pension benefit cost.

The recognized adjustments to other comprehensive income at December 31, 2021 and 2020 are as follows:

	<u>2021</u>	<u>2020</u>
Prior service cost	\$ —	—
Unamortized actuarial gain/(loss)	<u>(1,777)</u>	<u>483</u>
Other comprehensive (income)/loss	\$ <u>(1,777)</u>	<u>483</u>

At December 31, 2021 and 2020, amounts recognized in the balance sheets were as follows:

	<u>2021</u>	<u>2020</u>
Deferred credits and other	\$ 2,033	(1,184)

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Assumptions used to develop the projected benefit obligation and determine the net periodic benefit cost were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Discount rate – projected benefit obligation	2.57 %	2.05 %	2.99 %
Discount rate – net periodic benefit cost	2.05	2.99	4.12
Rates of increase in compensation levels	4.00	4.00	4.00
Expected long-term rate of return on assets	5.75	6.50	6.50

The expected long-term rate of return on plan assets for determining net periodic pension cost for each fiscal year is chosen by the Company from a best estimate range determined by applying anticipated long-term returns and long-term volatility for various asset categories to the target asset allocation of the plan. The expected long-term rate of return on assets is based on the median expected rate of return for a passively-managed portfolio plus the incremental return from active management.

Big Rivers utilizes a third-party investment manager for the plan assets, and has communicated thereto the Company's Retirement Plan Investment Policy which was revised in 2021, including a target asset allocation mix of 10% U.S. equities (an acceptable range of 5%–15%), 10% international equities (an acceptable range of 5%–15%), 60% Long-Term Government Fixed Income (an acceptable range of 50%-70%), and 20% U.S. Credit (an acceptable range of 10%–30%). The former policy in effect during 2020 included a target asset allocation mix of 50% U.S. equities (an acceptable range of 45%–55%), 15% international equities (an acceptable range of 10%–20%), and 35% fixed income (an acceptable range of 30%–40%). As of December 31, 2021, the investment allocation was 10% in U.S. equities, 9% in international equities, 62% in Long Term Government Fixed income and 19% in U.S. Credit. As of December 31, 2020 the investment allocation was 57% U.S. Equities, 13% International Equities and 30% Fixed income. The objective of the investment program seeks to (a) maximize return on investment, (b) minimize volatility, (c) minimize Company contributions, and (d) provide the employee benefit in accordance with the plan. The portfolio is well diversified and of high quality. The average quality of the fixed income investments must be "A" or better. The equity portfolio must also be of investment grade quality. The performance of the investment manager is reviewed semiannually.

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At December 31, 2021 and 2020, the fair value of Big Rivers' defined-benefit pension plan assets by asset category are as follows:

	<u>Level 1</u>	<u>Level 2</u>	<u>December 31, 2021</u>
Cash and money market	\$ 578	—	578
Equity securities:			
Common stock	1,217	—	1,217
Mutual funds	1,667	—	1,667
Fixed:			
Corporate bonds and notes	—	11,714	11,714
	<u>\$ 3,462</u>	<u>11,714</u>	<u>15,176</u>
	<u>Level 1</u>	<u>Level 2</u>	<u>December 31, 2020</u>
Cash and money market	\$ 1,006	—	1,006
Equity securities:			
Common stock	9,494	—	9,494
Preferred stock	290	—	290
Mutual funds	6,025	—	6,025
Fixed:			
Tax exempt bonds and notes	—	54	54
Corporate bonds and notes	—	5,386	5,386
	<u>\$ 16,815</u>	<u>5,440</u>	<u>22,255</u>

Expected retiree pension benefit payments projected to be required during the next ten years following 2021 are as follows:

	<u>Amount</u>
Year ending December 31:	
2022	\$ 633
2023	515
2024	821
2025	721
2026	1,069
Thereafter	<u>5,687</u>
Total	<u>\$ 9,446</u>

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### ***(b) Defined-Contribution Plans***

Big Rivers has two defined-contribution retirement plans covering substantially all employees who meet minimum age and service requirements. Each plan has a thrift and 401(k) savings section allowing employees to contribute up to 75% of pay on a pretax and/or after-tax basis, with employer matching contributions equal to 60% of the first 6% contributed by the employee on a pretax basis.

A base contribution retirement section was added and the plan name changed from Thrift and 401(k) Savings to Retirement Savings, effective January 1, 2008, for the salaried plan and November 1, 2008, for the bargaining plan. The base contribution account is funded by employer contributions based on graduated percentages of pay, depending on the employee's age.

The Company's expense under these plans was \$4,583, \$4,518, and \$4,749 for the years ended December 31, 2021, 2020 and 2019, respectively, recorded as operating expenses on the statement of operations.

### ***(c) Deferred Compensation Plan***

Big Rivers sponsors a nonqualified deferred compensation plan for its eligible employees who are members of a select group of management or highly compensated employees. The purpose of the plan is to allow participants to receive contributions or make deferrals that they could not receive or make under the salaried employees qualified defined-contribution retirement savings plan (formerly, the thrift and 401(k) savings plan) as a result of nondiscrimination rules and other limitations applicable to the qualified plan under the Internal Revenue Code. The nonqualified plan also allows a participant to defer a percentage of his or her pay on a pretax basis.

The nonqualified deferred compensation plan is unfunded, but the Company has chosen to finance its obligations under the plan, including any employee deferrals, through a rabbi trust. The trust assets remain a part of the Company's general assets, subject to the claims of its creditors. The employer contribution for December 31, 2021 and 2020 was \$222 and \$214, respectively, and the deferred compensation expense for December 31, 2021, 2020, and 2019 was \$364, \$388, and \$248, respectively. As of December 31, 2021 and 2020, the trust assets were \$1,653 and \$1,333, and the deferred liability was \$1,653 and \$1,333, respectively.

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**(8) Restricted Investments**

The amortized costs and fair values (Level 1 measurement) of Big Rivers' restricted investments held for Member rate mitigation at December 31, 2021 and 2020 were as follows:

	2021		2020	
	Amortized costs	Fair values	Amortized costs	Fair values
Debt securities:				
U.S. Treasury – Money Market	\$ —	—	666	666
Total	\$ —	—	666	666

There were no gross unrealized gains or losses on restricted investments at December 31, 2021 and 2020.

	2021		2020	
	Gains	Losses	Gains	Losses
Debt securities:				
U.S. Treasury – Money Market	\$ —	—	—	—
Total	\$ —	—	—	—

Debt securities at December 31, 2021 and 2020 mature, according to their contractual terms, as follows (actual maturities may differ due to call or prepayment rights):

	2021		2020	
	Amortized costs	Fair values	Amortized costs	Fair values
In one year or less	\$ —	—	666	666
Total	\$ —	—	666	666

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Gross unrealized losses on investments and the fair values of the related securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2021 and 2020 were as follows:

	2021		2020	
	Less than 12 months		Less than 12 months	
	Losses	Fair values	Losses	Fair values
Debt securities:				
U.S. Treasury – Money Market	\$ —	—	—	666
Total	\$ —	—	—	666

There are no restricted investments as of December 31, 2021. None of the Company’s restricted investments held for Member rate mitigation were in an unrealized loss position as of December 31, 2020.

In conjunction with the CFC \$302,000 secured term loan (Note 4), Big Rivers was required to invest in CFC capital term certificates (“CTCs”) equal to 14.29% of the Refinance Note. Proceeds of the Equity Note were used to purchase the investments in CTCs as required under the loan agreement. The interest rate on the CTCs was fixed at 4.28% and was equal to 80% of the Equity Note rate of 5.35%. The CTCs cannot be traded in the market, and therefore, they do not have readily determinable fair values and were accounted for at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. During 2020, the Company sold the investments and used the proceeds to pay off the CFC Equity Note (see Note 4(a)).

**(9) Short-Term Investments**

At December 31, 2021, the Company’s short-term investments included \$353 of investments in debt securities which are included in the Company’s balance sheet at amortized cost. At December 31, 2020, the Company’s short-term investments included \$5,103 of investments in debt securities and \$1,500 of investments in certificates of deposit (“CDs”), which are both included in the Company’s balance sheet at amortized cost. The investments in debt securities are classified as held-to-maturity, based on management’s intent and ability to hold them to maturity. Both CDs and investments in debt securities are included in “Cash and Cash Equivalents” (if the original maturity date is less than or equal to three months) or “Short-term-investments” (if the original maturity date is greater than three months but less than one year).

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

The amortized costs and fair values (Level 1 measurement) of Big Rivers' short-term investments at December 31, 2021 and 2020, were as follows:

	2021		2020	
	Amortized costs	Fair values	Amortized costs	Fair values
Debt securities:				
Corporate notes	\$ —	—	1,201	1,196
U.S. Treasuries	353	352	3,902	3,894
Total debt securities	353	352	5,103	5,090
Other:				
Certificates of deposit	—	—	1,500	1,502
Total short-term investments	\$ 353	352	6,603	6,592

Gross unrealized gains and losses on short-term investments at December 31, 2021 and 2020, were as follows:

	2021		2020	
	Gains	Losses	Gains	Losses
Debt securities:				
Corporate notes	\$ —	—	—	(5)
U.S. Treasuries	—	(1)	—	(8)
Total debt securities	—	(1)	—	(13)
Other:				
Certificates of deposit	—	—	2	—
Total short-term investments	\$ —	(1)	2	(13)

**(10) Fair Value of Other Financial Instruments**

FASB ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measures. It applies under other accounting standards that require or permit fair value measurements and does not require any new fair value measurements.

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

The carrying value of accounts receivable and accounts payable approximate fair value due to their short maturity. The carrying value of long-term accounts receivable is the net amount deemed certain of collection, which approximates fair value. At December 31, 2021 and 2020, the Company's cash and cash equivalents included short-term investments in an institutional U.S. government money market portfolio account classified as trading securities under ASC 320, *Investments – Debt and Equity Securities*, that were recorded at fair value which was determined using quoted market prices for identical assets without regard to valuation adjustment or block discount (a Level 1 measure), as follows:

	2021	2020
Institutional U.S. government money market portfolio	\$ 3,926	11,000

It was not practical to estimate the fair value of patronage capital included within other deposits and investments due to these being untraded companies.

Big Rivers' long-term debt at December 31, 2021, consisted of CFC notes totaling \$270,840, a CoBank note in the amount of \$150,333, an RUS note totaling \$218,827, and RUS guaranteed FFB loans totaling \$63,764 (Note 4). The CFC, CoBank, RUS, and FFB debt is carried at amortized cost which approximates fair value.

**(11) Postretirement Benefits Other than Pensions**

Big Rivers provides certain postretirement medical benefits for retired employees and their spouses. Generally, except for generation bargaining retirees, Big Rivers pays 85% of the premium cost for all retirees age 62 to 65. The Company pays 25% of the premium cost for spouses age 55 to 61. Beginning at age 65, the Company pays 25% of the premium cost if the retiree is enrolled in Medicare Part B. For each generation bargaining retiree, Big Rivers establishes a retiree medical account at retirement equal to \$1.40 per year of service up to 30 years. The account balance is credited with interest based on the 10-year treasury rate subject to a minimum of 2% and a maximum of 4%. The account is to be used for the sole purpose of paying the premium cost for the retiree and spouse.

The discount rates used in computing the postretirement benefit obligation and net periodic benefit cost were as follows:

	2021	2020	2019
Discount rate – projected benefit obligation	2.77%	2.44%	3.34%
Discount rate – net periodic benefit cost	2.44	3.34	4.34

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

The healthcare cost trend rate assumptions as of December 31, 2021 and 2020 were as follows:

	<u>2021</u>	<u>2020</u>
Initial trend rate	5.48 %	5.73 %
Ultimate trend rate	4.50	4.50
Year ultimate trend is reached	2038	2038

A one-percentage-point change in assumed healthcare cost trend rates would have the following effects:

	<u>2021</u>	<u>2020</u>
One-percentage-point decrease:		
Effect on total service and interest cost components	\$ (103)	(110)
Effect on year-end benefit obligation	(1,160)	(1,529)
One-percentage-point increase:		
Effect on total service and interest cost components	\$ 133	142
Effect on year-end benefit obligation	1,424	1,927

A reconciliation of the Company's benefit obligations of its postretirement plan at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Benefit obligation – beginning of period	\$ 15,808	14,674
Service cost – benefits earned during the period	491	490
Interest cost on projected benefit obligation	354	472
Participant contributions	405	340
Benefits paid	(978)	(1,373)
Actuarial loss (gain)	<u>(2,418)</u>	<u>1,205</u>
Benefit obligation – end of period	\$ <u>13,662</u>	<u>15,808</u>

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

Big Rivers revised the eligibility requirements for postretirement medical with regard to age and service. Beginning January 1, 2013, eligibility for retirement is age 62 with 10 years of service. The service requirement is waived for active employees on December 31, 2012 who will not have 10 years of service at age 62. A reconciliation of the Company's postretirement plan assets at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Fair value of plan assets – beginning of period	\$ —	—
Employer contributions	573	1,033
Participant contributions	405	340
Benefits paid	<u>(978)</u>	<u>(1,373)</u>
Fair value of plan assets – end of period	\$ <u>—</u>	<u>—</u>

The funded status of the Company's postretirement plan at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Benefit obligation – end of period	\$ (13,662)	(15,808)
Fair value of plan assets – end of period	<u>—</u>	<u>—</u>
Funded status	\$ <u>(13,662)</u>	<u>(15,808)</u>

The components of net periodic postretirement benefit costs for the years ended December 31, 2021, 2020, and 2019 were as follows:

	<u>2021</u>	<u>2020</u>	<u>2019</u>
Service cost	\$ 491	490	447
Interest cost	354	472	544
Amortization of prior service cost	(112)	(112)	(138)
Amortization of gain	—	(20)	(198)
Curtailement recognized	—	—	(49)
Special termination benefits	<u>—</u>	<u>—</u>	204
Net periodic benefit cost	\$ <u>733</u>	<u>830</u>	<u>810</u>

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

A reconciliation of the postretirement plan amounts in accumulated other comprehensive income at December 31, 2021 and 2020 is as follows:

	<u>2021</u>	<u>2020</u>
Prior service credit	\$ 381	493
Unamortized actuarial gain	<u>3,155</u>	<u>737</u>
Accumulated other comprehensive income	\$ <u>3,536</u>	<u>1,230</u>

In 2022, \$112 of prior service cost and \$137 of actuarial gain is expected to be amortized to periodic benefit cost.

The recognized adjustments to other comprehensive income (loss) at December 31, 2021 and 2020 are as follows:

	<u>2021</u>	<u>2020</u>
Prior service cost	\$ (112)	(112)
Unamortized actuarial gain/(loss)	2,418	(1,205)
Amortization of net gain	<u>—</u>	<u>(20)</u>
Other comprehensive income/(loss)	\$ <u>2,306</u>	<u>(1,337)</u>

At December 31, 2021 and 2020, amounts recognized in the balance sheets were as follows:

	<u>2021</u>	<u>2020</u>
Accounts payable	\$ (1,262)	(1,424)
Deferred credits and other	<u>(12,400)</u>	<u>(14,384)</u>
Net amount recognized	\$ <u>(13,662)</u>	<u>(15,808)</u>

**BIG RIVERS ELECTRIC CORPORATION**

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

Expected retiree benefit payments projected to be required during the years following 2021 are as follows:

	<u>Amount</u>
Year:	
2022	\$ 1,262
2023	1,120
2024	925
2025	945
2026	916
Thereafter	<u>4,414</u>
Total	<u>\$ 9,582</u>

In addition to the postretirement plan discussed above, Big Rivers has another postretirement benefit plan, which vests a portion of accrued sick leave benefits to salaried employees upon retirement or death. To the extent an employee's sick leave hour balance exceeds 480 hours, such excess hours are paid at 20% of the employee's base hourly rate at the time of retirement or death. The accumulated obligation recorded for the postretirement sick leave benefit is \$767 and \$766 at December 31, 2021 and 2020, respectively. The postretirement expense recorded was \$141, \$96, and \$61, for 2021, 2020, and 2019, respectively, and the benefits paid were \$140, \$7, and \$67 for 2021, 2020, and 2019, respectively.

**(12) Related Parties**

For the years ended December 31, 2021, 2020, and 2019, Big Rivers had tariff sales to its members of \$221,959, \$226,152, and \$256,280, respectively. In addition, for the years ended December 31, 2021, 2020, and 2019, Big Rivers had certain sales to Kenergy for the Domtar Paper Co. load of \$4,673, \$3,013, and \$4,182, respectively.

At December 31, 2021 and 2020, Big Rivers had accounts receivable from its members of \$19,912 and \$20,926, respectively.

**(13) Commitments and Contingencies**

Big Rivers is involved in ongoing litigation with the City of Henderson and the City of Henderson Utility Commission doing business as Henderson Municipal Power and Light (collectively, "HMP&L") in which Big Rivers is seeking damages from HMP&L relating to HMP&L's refusal to pay the costs associated with Excess Henderson Energy produced at Station Two. HMP&L has filed a counterclaim alleging that if HMP&L is required to pay the costs of the Excess Henderson Energy, it is entitled to an offset for the revenues related to that energy. In December 2017, Big Rivers and HMP&L entered into an agreement to settle all claims relating to Excess Henderson Energy. Under the settlement agreement, HMP&L agreed to be responsible for all costs related to Excess Henderson Energy generated after the effective date of the settlement agreement. Big Rivers does not dispute that HMP&L is entitled to the Excess Henderson Energy-related revenues after the payment date in the settlement agreement if it pays the costs of that energy.

## BIG RIVERS ELECTRIC CORPORATION

Notes to Financial Statements

December 31, 2021 and 2020

(Dollars in thousands)

On May 1, 2018, the contracts under which Big Rivers was operating Station Two terminated as a result of the Station Two units no longer being capable of the economically competitive production of electricity. To allow HMP&L time to make alternate arrangements for its power supply, Big Rivers continued to operate the units under the terms of the Station Two contracts until the units were retired on January 31, 2019. The termination of the Station Two contracts has given rise to disputes between the parties, including (i) a declaratory judgment action HMP&L has filed relating to the interpretation of the deed to the real estate on which the Station Two units were constructed; (ii) a claim HMP&L has filed seeking amounts HMP&L claims it is owed as a result of the annual budget settlement process that occurred during the term of the Station Two contracts; (iii) a claim HMP&L filed seeking a declaratory judgment on the percentage owed by each party for the decommissioning and post-closure compliance costs for the Station Two Ash Pond; (iv) a separate action HMP&L filed seeking a declaratory order that the December 2017 settlement agreement only applies to some of the Excess Henderson Energy; and (v) a proceeding Big Rivers filed with the KPSC to resolve all outstanding disputes between it and HMP&L arising out of the Station Two contracts (KPSC Case No. 2019-00269). HMP&L's claims relating to the annual budget settlement process, the Station Two Ash Pond, and the settlement agreement are being held in abeyance pending the outcome of the KPSC case and all appeals therefrom. On August 2, 2021, the KPSC entered a final order in Case No. 2019-00269, largely in Big Rivers' favor. HMP&L appealed that order to the Franklin Circuit Court, which is pending. On September 29, 2021, Big Rivers filed a proceeding with the KPSC asking the KPSC to enforce its final order from Case No. 2019-00269. That proceeding is pending. The Company believes there will be no material adverse effect to its financial statements when the litigation and disputes with HMP&L are resolved.

Big Rivers is involved in other litigation arising in the normal course of business. While the results of such litigation cannot be predicted with certainty, management, based upon advice of counsel, believes that the final outcome will not have a material adverse effect on the financial statements.

### (14) Subsequent Events

In February 2022, Russia invaded the Ukraine. As of the date of this filing, the Company does not expect the invasion of the Ukraine to materially affect its 2022 results of operations or financial position. However, the Company cannot reasonably estimate the overall length or severity of this war, or the extent to which a prolonged war may affect the Company's financial position or results of operations beyond 2022.

See Note 5 relating the KPSC's March 15, 2022 clarification order for the KPSC's Order entered on June 25, 2020 in Case No. 2020-00064, *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*.

Management evaluated subsequent events up to and including March 31, 2022, the date the financial statements were available to be issued.



201 Third Street  
P.O. Box 24  
Henderson, KY 42419-0024  
270-827-2561  
www.bigrivers.com

January 13, 2023

Secretary Jeff Noel  
Cabinet for Economic Development  
Old Capitol Annex  
300 West Broadway Street  
Frankfort, KY 40601  
502-564-7140

Re: *In the Matter of Joint Special Contract Filing of Big Rivers Electric Corporation and Kenergy Corp.* Tariff Filing System No. 2023-00\_\_\_\_\_

Dear Secretary Noel:

This letter is notice to the Economic Development Cabinet ("*Cabinet*") that Big Rivers Electric Corporation and Kenergy Corp. have today filed electric service agreements with the Kentucky Public Service Commission including, among other things, an economic development rate for the electric load of Pratt Paper (KY), LLC ("*Pratt*") related to a paper mill and box recycling plant being constructed in Henderson, Kentucky. A copy of the joint special contract filing of those agreements is attached for your information.

This notice is given in accordance with the September 24, 1990, order of the Kentucky Public Service Commission ("*Commission*") in Administrative Case No. 327 in which the Commission notes, at page 24, the interest of the Cabinet in special contracts for retail electric service that contain an economic development rate, and grants the Cabinet no more than twenty (20) days after the filing of such a contract in which to prepare and file written comments.

Comments regarding the joint application may be submitted to the Public Service Commission through its website, or by mail to Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602

Sec. Jeff Noel  
January 13, 2023  
Page 2 of 2

Please feel free to contact me with any questions you may have about the application.

Sincerely,

*/s/ Tyson Kamuf*

Tyson Kamuf  
General Counsel  
[tyson.kamuf@bigrivers.com](mailto:tyson.kamuf@bigrivers.com)

Enclosure





1 generation and transmission cooperatives, municipal utilities and  
2 investor-owned utilities. I have performed economic analyses, rate  
3 mechanism reviews, ISO/RTO membership evaluations, and wholesale  
4 formula rate reviews. I have also been employed by the parent companies  
5 for Louisville Gas and Electric Company and Kentucky Utilities  
6 Company, by the PJM interconnection, and by the Cincinnati Gas &  
7 Electric Company. A more detailed description of my qualifications is  
8 included in Exhibit Wolfram-1.

9 **Q. Have you ever testified before the Kentucky Public Service  
10 Commission (the “Commission”)?**

11 A. Yes. I have testified in numerous regulatory proceedings before the  
12 Commission. A listing of my testimony in other proceedings is included in  
13 Exhibit Wolfram-1.

14 **II. PURPOSE OF TESTIMONY**

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

16 A. The purpose of my testimony is to sponsor the marginal cost analysis that  
17 Big Rivers submits with this application pursuant to the Commission’s  
18 findings in its investigation into Economic Development Rates (“EDRs”).  
19 *See In the Matter of: An Investigation Into the Implementation of*  
20 *Economic Development Rates by Electric and Gas Utilities, Administrative*  
21 *Case No. 327, Order dated September 24, 1990 (“Admin 327 Order”).*

22

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

2 A. Yes. I have prepared the following exhibits to support my testimony:

3 Exhibit Wolfram-1 – Qualifications of John Wolfram

4 Exhibit Wolfram-2 – Marginal Cost Analysis

5 Exhibit Wolfram-3 – Rate Comparison

6 **III. MARGINAL COST ANALYSIS**

7 **Q. Please describe the requirement to submit a marginal cost**  
8 **analysis in conjunction with this filing.**

9 A. In Admin 327 Order, the Commission noted the following in Finding #6:

10 Upon submission of each EDR contract, a utility should  
11 demonstrate that the discounted rate exceeds the marginal cost  
12 associated with serving the customer. Marginal cost includes both  
13 the marginal cost of capacity as well as the marginal cost of energy.  
14 In order to demonstrate marginal cost recovery, a utility should  
15 submit, with each EDR contract, a current marginal cost-of-service  
16 study. A current study is one conducted no more than one year  
17 prior to the date of the contract.

18  
19 **Q. Did you perform a marginal cost analysis for Big Rivers?**

20 A. Yes. I performed a marginal cost analysis for Big Rivers. The study is  
21 provided in Exhibit Wolfram-2.

22 **Q. How did you perform the marginal cost analysis for Big Rivers?**

23 A. I performed the analysis consistent with accepted industry guidelines  
24 included in the NARUC Electric Utility Cost Allocation Manual dated  
25 January 1992. I describe particular aspects of the approach in Exhibit  
26 Wolfram-2. I also relied upon information from a recent Big Rivers study

1 related to the proposed conversion of the Green units to natural gas. *See*  
2 *In the Matter of: Electronic Application Of Big Rivers Electric Corporation*  
3 *For A Certificate Of Public Convenience And Necessity Authorizing The*  
4 *Conversion Of The Green Station Units To Natural Gas Fired Units And*  
5 *An Order Approving The Establishment Of A Regulatory Asset*, Case No.  
6 2021-00079, filed February 28, 2021 (“*Green Conversion docket*”).

7 **Q. Do the results of the analysis demonstrate that in this case, the**  
8 **discounted rate in the proposed special contract exceeds the**  
9 **marginal cost associated with serving the customer, pursuant to**  
10 **the requirement of the Admin 327 Order?**

11 A. Yes. The discounted rate in the proposed special contract exceeds the  
12 marginal cost associated with serving the customer. *See* Exhibit Wolfram-3.

13 **IV. CONCLUSION**

14 **Q. Please summarize your conclusion and recommendation.**

15 A. The marginal cost analysis provided is consistent with industry standards  
16 and provides a reasonable determination of Big Rivers’ marginal costs of  
17 providing service. The analysis shows that the discounted rate in the  
18 proposed special contract exceeds the marginal cost associated with  
19 serving the customer. For this reason, the Commission should find that  
20 the discounted rate meets the requirements of Finding #6 of the Admin  
21 327 Order.

22

1 Q. Does this conclude your testimony?

2 A. Yes.

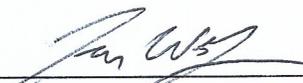
**BIG RIVERS ELECTRIC CORPORATION**

**JOINT SPECIAL CONTRACTS OF  
BIG RIVERS ELECTRIC CORPORATION  
AND KENERGY CORP.**

TFS No. 2023-00\_\_

**VERIFICATION**

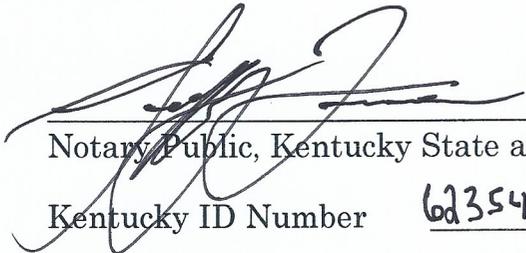
I, John Wolfram, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that this Direct Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
\_\_\_\_\_  
John Wolfram

COMMONWEALTH OF KENTUCKY     )  
COUNTY OF JEFFERSON COUNTY    )

SUBSCRIBED AND SWORN TO before me by John Wolfram on this the 5  
day of January, 2023.

**GEOFFREY LEASE**  
Notary Public - State at Large  
Kentucky  
My Commission Expires June 09, 2023  
Notary ID 623546

  
\_\_\_\_\_  
Notary Public, Kentucky State at Large  
Kentucky ID Number 623546  
My Commission Expires 06-09-2023



## JOHN WOLFRAM

### Summary of Qualifications

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

### Employment

#### CATALYST CONSULTING LLC

Principal

June 2012 – Present

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

#### THE PRIME GROUP, LLC

Senior Consultant

March 2010 – May 2012

#### LG&E and KU, Louisville, KY

(Louisville Gas & Electric Company and Kentucky Utilities Company)

Director, Customer Service & Marketing (2006 - 2010)

Manager, Regulatory Affairs (2001 - 2006)

Lead Planning Engineer, Generation Planning (1998 - 2001)

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

1997 - 2010

#### PJM INTERCONNECTION, LLC, Norristown, PA

Project Lead – PJM OASIS Project

Chair, Data Management Working Group

1990 - 1993; 1994 - 1997

#### CINCINNATI GAS & ELECTRIC COMPANY, Cincinnati, OH

Electrical Engineer - Energy Management System

1993 - 1994

### Education

Bachelor of Science Degree in Electrical Engineering, University of Notre Dame, 1990

Master of Science Degree in Electrical Engineering, Drexel University, 1997

Leadership Louisville, 2006

### Associations

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

### Articles

“FERC Formula Rate Resurgence” *Public Utilities Fortnightly*, Vol. 158, No. 9, July 2020, 34-37.

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

## **Presentations**

“New Developments in Kentucky Rate Filings” presented to Kentucky Electric Cooperatives Accountants' Association Summer Meeting, Jun. 2022.

“Avoiding Shock: Communicating Rate Changes” presented to APPA Business & Financial Conference, Sep. 2020.

“Revisiting Rate Design Strategies” presented to APPA Public Power Forward Summit, Nov. 2019.

“Utility Rates at the Crossroads” presented to APPA Business & Financial Conference, Sep. 2019.

“New Developments in Kentucky Rate Filings” presented to Kentucky Electric Cooperatives Accountants' Association Summer Meeting, Jun. 2019.

“Electric Rates: New Approaches to Ratemaking” presented to CFC Statewide Workshop for Directors, Jan. 2019.

“The Great Rate Debate: Residential Demand Rates” presented to CFC Forum, Jun. 2018.

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

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

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

“Emerging Rate Designs” presented to CFC Independent Borrowers Executive Summit, Nov. 2016.

“Optimizing Economic Development” presented to Grand River Dam Authority Municipal Customer Annual Meeting, Sept. 2016.

“Tomorrow's Electric Rate Designs, Today” presented to CFC Forum, Jun. 2016.

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

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

“Ratemaking for Environmental Compliance Plans” presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, Sep. 2015.

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

“Economic Development and Load Retention Rates” presented to NARUC Staff Subcommittee on Accounting and Finance Fall Conference, Sep. 2013.

“Rates for Distributed Generation” presented to 2010 Electric Cooperative Rate Conference, Oct. 2010.

“What Utilities Can Do to Advance Energy Efficiency in Kentucky” panel session of Second Annual Kentucky Energy Efficiency Conference, Oct. 2007.

### **Expert Witness Testimony & Proceedings**

#### **FERC**

Submitted direct testimony for Black Hills Colorado Electric, LLC in FERC Docket No. ER22-2185 regarding a proposed Transmission Formula Rate.

Submitted testimony for Evergy Kansas Central, Inc. and Evergy Generating, Inc. in FERC Docket Nos. ER22-1974-000, ER22-1975-000 and ER22-1976-000 regarding revised capital structures under transmission and generation formula rates.

Submitted affidavit for Constellation Mystic Power, LLC in FERC Docket No. ER18-1639-000 in response to arguments raised in formal challenges to an informational filing required for a cost-of-service rate for the operation of power plants in ISO New England.

Submitted direct testimony for El Paso Electric Company in FERC Docket No. ER22-282 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for TransCanyon Western Development, LLC in FERC Docket No. ER21-1065 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cleco Power LLC in FERC Docket No. ER21-370 regarding a proposed rate schedule for Blackstart Service under Schedule 33 of the MISO Open Access Transmission, Energy and Operating Reserve Markets Tariff.

Submitted direct testimony for Constellation Mystic Power, LLC in FERC Docket No. ER18-1639-005 supporting a compliance filing for a cost-of-service rate for compensation for the continued operation of power plants in ISO New England.

Submitted direct testimony for DATC Path 15, LLC in FERC Docket No. ER20-1006 regarding a proposed wholesale transmission rate.

Submitted direct testimony for Tucson Electric Power Company in FERC Docket No. ER19-2019 regarding a proposed Transmission Formula Rate.

Submitted direct testimony for Cheyenne Light, Fuel & Power Company in FERC Docket No. ER19-697 regarding a proposed Transmission Formula Rate.

Supported Kansas City Power & Light in FERC Docket No. ER19-1861-000 regarding revisions to fixed depreciation rates in the KCP&L SPP Transmission Formula Rate.

Supported Westar Energy and Kansas Gas & Electric Company in FERC Docket No. ER19-269-000 regarding revisions to fixed depreciation rates in the Westar SPP Transmission Formula Rate.

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

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

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

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

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

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

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

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

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

#### Kansas

Submitted report for Westar Energy, Inc. in Docket No. 21-WCNE-103-GIE regarding plans and options for funding the decommissioning trust fund, depreciation expenses, and overall cost recovery in the event of premature closing of the Wolf Creek nuclear plant.

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

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

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

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

#### Kentucky

Submitted direct and rebuttal testimony and responses to data requests on behalf of Jackson Purchase Energy Corporation in Case No. 2021-00358 regarding revenue requirements, adjustments, cost of service and rate design in a base rate case.

Submitted direct and rebuttal testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2021-00289 regarding a Large Industrial Customer Standby Service Tariff.

Submitted direct testimony on behalf of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation in Case No. 2021-00282 regarding a marginal cost of service study in support of an economic development rate for a special contract.

Submitted direct testimony, responses to data requests, and rebuttal testimony on behalf of sixteen distribution cooperative owner-members of East Kentucky Power Cooperative in Case Nos. 2021-00104 through 2021-00119 regarding rate design for the pass-through of a proposed wholesale rate revision.

Submitted direct testimony and responses to data requests on behalf of Kenergy Corp. in Case No. 2021-00066 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony on behalf of Big Rivers Electric Corporation in Case No. 2021-00061 regarding two cost of service studies in a review of the Member Rate Stability Mechanism Charge for calendar year 2020.

Submitted direct testimony and responses to data requests on behalf of Licking Valley R.E.C.C. in Case No. 2020-00338 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Cumberland Valley Electric in Case No. 2020-00264 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Taylor County R.E.C.C. in Case No. 2020-00278 regarding the cost support and tariff changes for the implementation of a Prepay Metering Program.

Submitted direct testimony and responses to data requests on behalf of Meade County R.E.C.C. in Case No. 2020-00131 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Clark Energy Cooperative in Case No. 2020-00104 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Big Rivers Electric Corporation in Case No. 2019-00435 regarding an Environmental Compliance Plan and Environmental Surcharge rate mechanism.

Submitted direct testimony and responses to data requests on behalf of Jackson Energy Cooperative in Case No. 2019-00066 regarding revenue requirements, cost of service and rate design in a streamlined rate case.

Submitted direct testimony and responses to data requests on behalf of Jackson Purchase Energy Corporation in Case No. 2019-00053 regarding revenue requirements, pro forma adjustments, cost of service and rate design in a streamlined rate case.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Submitted discovery responses for Kentucky Utilities in Case No. 2005-00405 regarding the transfer of a utility hydroelectric power plant to a private developer.

Submitted discovery responses for Louisville Gas & Electric Company and Kentucky Utilities Company in Case No. 2005-00162 for the 2005 Joint Integrated Resource Plan.

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

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

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

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

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

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

#### Missouri

Submitted direct, rebuttal and surrebuttal testimony for Evergy Metro, Inc. in Case No. ER-2022-0130 regarding a jurisdictional cost allocation analysis in a retail rate case.

#### Virginia

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

# Big Rivers Electric Corporation

## 2022 Marginal Cost Analysis

October 2022

*Prepared By*

**CATALYST**  
CONSULTING LLC



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## I. Executive Summary

This report describes the methods for estimating marginal production and transmission costs for Big Rivers Electric Corporation (“Big Rivers”). For production, the fixed marginal cost and the variable marginal cost are evaluated independently. Marginal distribution costs are not calculated because Big Rivers is a Generation and Transmission cooperative (“G&T”) with no distribution assets.

The analysis is largely based on a recent study related to the proposed conversion of the Green units to natural gas. See *In the 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*, Case No. 2021-00079, filed February 28, 2021 (“Green Conversion docket”).

The analysis in the Green Conversion docket demonstrates that Big Rivers’ marginal production demand cost is \$3.80 per kW per month and the marginal production energy cost is [REDACTED] per kWh. Because of the existing capabilities of the electric transmission grid, as designed prior to the termination of the smelter contracts, retirement of other Big Rivers facilities and proposed conversion of the Green units, the marginal transmission cost is zero.

## II. Introduction

Marginal cost is defined as the change in total cost with respect to a small change in demand. In this report “output” will be used in place of “demand” to avoid confusion with the standard way that the term “demand” is used in the industry to represent the maximum amount of power utilized during any interval over a specified period of time. Therefore, in this study, output refers to the total megawatts of capacity or megawatt-hours of energy, so that marginal cost is the change in total system cost relative to a small change in total system capacity or energy.

## III. Marginal Cost Theory

Marginal cost is defined as an infinitesimal change in total cost with respect to an infinitesimal change in output. Mathematically, marginal cost can be represented as the partial derivative of total cost to output, and can be stated as follows:

$$MC = \frac{\partial C}{\partial q}$$

where

MC	=	Marginal Cost
$\partial C$	=	Infinitesimal change in Total Cost
$\partial q$	=	Infinitesimal change in Output

In the context of discrete cost and output, marginal cost can be *estimated* as follows:

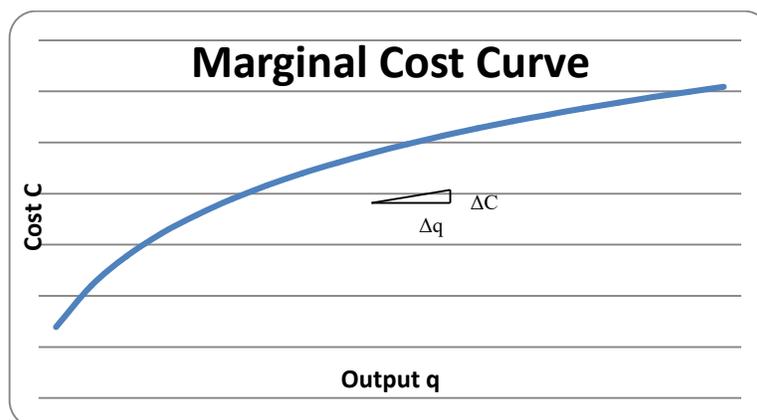
$$MC = \frac{\Delta C}{\Delta q}$$

where

MC = Marginal Cost  
 $\Delta C$  = Change in Total Cost  
 $\Delta q$  = Change in Output

Graphically, the marginal cost is the slope of the line resulting from the graph of the total cost  $C$  and the total output  $q$ , as shown in Figure 1.

**Figure 1. Cost vs. Output Curve**



In the figure, "output" refers to total megawatts of capacity or megawatt-hours of energy required, so that marginal cost is the change in total system cost relative to a small change in total system output.

#### IV. Application of Marginal Cost Theory to Big Rivers

The application of Marginal Cost theory here is influenced by Big Rivers' present resource acquisition plans.

Big Rivers explained its current net capacity position and future net capacity position in a recent filing with the Commission. In Case No. 2021-00079, Big Rivers requested a certificate of public convenience and necessity ("CPCN") to convert Big Rivers' two existing coal-fired generating units at its Robert D. Green generating station ("Green Station") to run on natural gas.<sup>1</sup>

Big Rivers owns and operates the Green Station, the Robert A. Reid Plant ("Reid Station"), and the D.B. Wilson Plant ("Wilson Station"). Big Rivers retired the Reid 1 coal-fired generating unit and the three coal-fired generating units at its Kenneth C. Coleman Plant ("Coleman Station") in September 2020. With the retirement of Reid 1 and Coleman Station, Big Rivers' total power capacity is 1,114 MW. The additional 260 MW of power capacity from the three solar Power

<sup>1</sup> See *In The 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*, Case No. 2021-00079, February 28, 2021.

Purchase Agreements (“Solar PPAs”) that the Commission recently approved will bring Big Rivers’ total generation resources to 1,374 MW once the solar facilities are operational by 2024.<sup>2</sup>

Big Rivers’ Member peak demand requirement is approximately 627 MW. The Commission recently approved Big Rivers’ and Meade County RECC’s joint request in Case No. 2019-00365 for approval of contracts to provide electric service to a new steel mill in Bradenburg, Meade County, Kentucky, to be owned and operated by Nucor Corporation (“Nucor”). Big Rivers’ Member peak demand requirements are projected to increase from ██████ in 2020 to ██████ in 2022 with the addition of the Nucor load and then grow slowly to about ██████ (including transmission losses) by the summer of 2039.<sup>3</sup> These amounts do not include any Planning Reserve Margins (“PRMs”), which are established at 9 percent for planning purposes.

However, Big Rivers must cease coal-fired generation at Green Station by June 1, 2022, in order to meet the October 31, 2023, deadline for the closure of the Green Station ash pond. Big Rivers idling Green Station’s coal fired units ██████ even after the Solar PPAs are added and after the termination of the Owensboro Municipal Utilities (“OMU”) and Kentucky Municipal Energy Agency (“KyMEA”) agreements. Post Green Station conversion, there is a small short-term capacity deficit even with the new solar contracts.

The conversion of the Green units to natural gas will provide Big Rivers over 90% of the capacity it needs through owned generation and long-term PPAs to serve its native load and to satisfy its obligations under its power sales contracts with OMU and KyMEA. Big Rivers will hedge the remaining small capacity deficit with market capacity purchases.<sup>4</sup>

With the conversion of the Green Station units to natural gas, Big Rivers anticipates no base load or peaking capacity additions to meet its native load requirements over the next 10 years.

The key point of this review is that Big Rivers’ plan to convert the Green Station units to natural gas is the only resource acquisition anticipated to meet incremental load requirements over the next decade.

## V. Marginal Production Demand Cost

The marginal demand costs for production are the changes in capacity costs associated with serving changes in demand on the electric system.

Recall that marginal cost is broadly defined as the change in total cost with respect to a small change in output--so that marginal cost is the change in total system capacity cost relative to a small change in total system demand.

Marginal production demand cost and its calculation is best looked at from the perspective of the electrical system utility planner. The planner begins by developing a schedule of resource

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<sup>2</sup> See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Approval of Solar Power Contracts*, P.S.C. Case No. 2020-00183, Order (Sept. 28, 2020). Big Rivers also maintains seven small solar arrays for educational purposes, which generate a combined 165,000 kWh each year.

<sup>3</sup> Big Rivers 2020 IRP at page 49-50 and Table 3.4 (September 21, 2020).

<sup>4</sup> Case No. 2021-00079, Application Exhibit A, Direct Testimony of Michael T. Pullen, Page 9.

acquisitions which allows the utility to meet its forecasted demand obligations. The planner then must address how any incremental demand will be met. Perhaps most often, anticipated additional demand is met by taking the existing plan for generation expansion and accelerating it.<sup>5</sup>

Ordinarily, to evaluate the change in capacity costs, a base case is defined that specifies the capacity (and associated capacity cost) required to meet Big Rivers' base demand forecast for the planning period. Other scenarios are then developed in which the total system demand is increased by set increments, and the capacity acquisitions required to meet those incremental demands are determined. The net present value of the capacity costs in the base case is then compared to the net present value of the capacity costs for the incremental cases to determine the change in capacity cost associated with the change in total system demand. This is known as the Generation Resource Plan Expansion Method.<sup>6</sup>

In this case, Big Rivers' current resource plans consist only of the conversion of Green to natural gas. Thus, the marginal production demand cost is the capacity cost of the Green conversion as specified in the Green Conversion docket, or \$3.80 per kW per month.

## VI. Marginal Production Energy Cost

Marginal energy cost refers to the change in costs of operating and maintaining the utility generating system in response to a change in customer usage. Marginal energy costs consist of incremental fuel or purchased power costs and variable operation and maintenance expenses incurred to meet the change in customer usage.<sup>7</sup>

In this instance, the marginal production energy cost is derived from the projection of total system costs for Big Rivers included in the Green Conversion docket. The same seven year period used to determine the marginal production capacity cost with non-firm gas is used to determine the average annual energy cost. The annual energy cost increases from [REDACTED]. The average of the energy costs over this period is [REDACTED]. Note the energy costs under the firm gas scenario is considerably lower, ranging from [REDACTED], with an average [REDACTED].

Based on the more conservative value consistent with the marginal production demand costs, the marginal production energy cost per kWh of additional energy [REDACTED].

## VII. Marginal Transmission Cost

Recall that marginal costs are defined as the change in total cost with respect to a small change in output. For discrete costs and output, the formula is:

$$MC = \frac{\Delta C}{\Delta q}$$

<sup>5</sup> Charles J. Cicchetti, et al, *The Marginal Cost and Pricing of Electricity: An Applied Approach* (Cambridge, MA: Ballinger Publishing Co., 1977), 8.

<sup>6</sup> NARUC Electric Utility Cost Allocation Manual (Washington, DC: NARUC, January 1992), 117.

<sup>7</sup> *Id* at 110.

where

MC	=	Marginal Transmission Cost
$\Delta C$	=	Change in Total Cost of Transmission Plant
$\Delta q$	=	Change in system demand

Here again the current state of Big Rivers capacity and load must be considered. The Big Rivers system is currently designed to accommodate a peak load higher than that which Big Rivers anticipates through the long term planning horizon. The system was designed to accommodate supply from the Coleman Station and Reid Station that have since retired. The system was also designed to handle supply from Green Station operating on coal; with its conversion to gas-fired units, Green Station is expected to experience a capacity reduction from 454 MW to 414 MW.<sup>8</sup>

For this reason, any small incremental load addition will not automatically create a need for incremental plant investment.

It is possible that the particular siting of an incremental load could create transmission reliability or stability issues for Big Rivers for which investment is required. This may be characterized as a “local” issue which Big Rivers would work with the customer to resolve. Local issues of this nature are not pertinent to the calculation of an overall, system-wide marginal transmission cost.

For these reasons, Big Rivers’ marginal transmission costs are effectively zero.

## VIII. Summary

The marginal costs for Big Rivers for Production Demand, Production Energy, and Transmission for 2016 are summarized below.

#	Item	Amount
1	Marginal Production Demand Cost (\$/kW-month)	3.80
2	Marginal Production Energy Cost (\$/kWh)	0.04108
3	Marginal Transmission Cost (\$/kW-month)	0.00

<sup>8</sup> Green Conversion docket, Application Page 6.

## IX. Resources

- 1) Lowell E. Alt, Jr., *Energy Utility Rate Setting* (Lexington, KY: Lulu.com, 2006).
- 2) James C. Bonbright, Albert Danielson, and David Kamerschen, *Principles of Public Utility Rates* (Arlington, VA: Public Utilities Reports, Inc., 1988) pp. 408-442.
- 3) Metin Celebi and Philip Q Hanser, *Marginal Cost Analysis in Evolving Power Markets*, Energy 2010 Issue 02 (Cambridge, MA: The Brattle Group, 2010).
- 4) Charles J. Cicchetti, et al, *The Marginal Cost and Pricing of Electricity: An Applied Approach* (Cambridge, MA: Ballinger Publishing Co., 1977).
- 5) Kenneth Gordon and Wayne P. Olsen, *Retail Cost Recovery and Rate Design in a Restructured Environment* (Washington DC: Edison Electric Institute, 2004).
- 6) Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* (Cambridge, MA: MIT Press, 1988), pp. 67-86.
- 7) Jonathan A. Lesser and Leonardo R. Giacchino, *Fundamentals of Energy Regulation, 2<sup>nd</sup> Edition* (Arlington, VA: Public Utilities Reports, Inc., 2013), p. 418.
- 8) National Association of Regulatory Utility Commissioners, *Electric Utility Cost Allocation Manual* (Washington DC: NARUC, 1992) pp. 108-119.
- 9) Hethie Parmesano and William Bridgman, *The Role and Nature of Marginal and Avoided Costs in Ratemaking: A Survey* (National Economic Research Associates, Inc., 1992), pp 3-6.
- 10) Charles E. Phillips, *The Regulation of Public Utilities: Theory and Practice, 2<sup>nd</sup> Edition* (Arlington, VA: Public Utilities Reports, Inc., 1988), pp. 418-425.

**Big Rivers Electric Corporation**  
**TFS No. 2023-00\_\_\_\_\_**  
**Rate Comparison**

#	Period	Usage		Marginal Cost				Discount	Comparison	
		Demand (MW)	Energy (MWH)	Demand (\$)	Energy (\$)	Total (\$)	Total Rate (\$/kWh)	Discounted Rate (\$/kWh)	Disc less Marg Rate (\$/kWh)	Disc > Marg?
				3.80						
1	2023									Yes
2	2024									Yes
3	2025									Yes
4	2026									Yes
5	2027									Yes
6	2028									Yes
7	2029									Yes
8	2030									Yes
9	2031									Yes
10	2032									Yes