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March 1, 2021

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PUBLIC SERVICE COMMISSION

VIA ELECTRONIC FILING

Ms. Linda C. Bridwell
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: In the Matter of: A Review of the Adequacy of Kentucky's Generation Capacity and Transmission System – Administrative Case No. 387 – Supplemental Information provided with Big Rivers' Annual Financial and Statistical Report pursuant to Administrative Case No. 387

Dear Ms. Bridwell:

Big Rivers Electric Corporation ("Big Rivers") hereby files by e-mail to PSCED@ky.gov the following materials:

- 1. This cover letter, which constitutes the Read1st file required by 807 KAR 5:001 Section 8(5);
- 2. Big Rivers' responses to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001, in Administrative Case No. 387 and as amended by Ordering Paragraph No. 5 of the Commission's Order dated March 29, 2004, in Administrative Case 387; and
- 3. A Motion for Confidential Treatment covering certain information filed in Big Rivers' responses.

Big Rivers will file the requisite paper copies of this electronic filing within thirty days after the current state of emergency is lifted, as required by the Commission's Orders in Case No. 2020-00085.

Ms. Linda C. Bridwell Executive Director March 1, 2021 Page 2

The undersigned certifies that, except for the redaction of Confidential Information, the materials in the electronic filing are a true representation of the materials in paper medium, and that, except for the redaction of Confidential Information, the electronic version of the paper filing is a true and accurate copy of each paper filed in paper medium.

Please feel free to contact me should you have any questions regarding this filing.

Sincerely yours,

/s/ Tyson Kamuf

Tyson Kamuf Corporate Attorney tyson.kamuf@bigrivers.com

$\begin{array}{c} 1 \\ 2 \end{array}$	COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY
3	
4 5	In the Matter of:
6	
	A REVIEW OF THE ADEQUACY OF) KENTUCKY'S GENERATION CAPACITY) Administrative
_	AND TRANSMISSION SYSTEM) Case No. 387
7 8	
9	MOTION OF BIG RIVERS ELECTRIC CORPORATION FOR
10 11	CONFIDENTIAL PROTECTION
12	1. Big Rivers Electric Corporation ("Big Rivers") hereby petitions the
13	Kentucky Public Service Commission ("Commission"), pursuant to 807 KAR 5:001
14	Section 13 and KRS 61.878, to grant confidential protection to (i) information
15	contained in Table 1 in its response to Item 8; (ii) portions of its response to Item
16	11; and (iii) the attachment to its response to Item 14 of the supplemental
17	information to Big Rivers' annual Financial and Statistical Report required by the
18	Commission's orders in Administrative Case 387. The information contained in
19	Table 1 in its response to Item 8 that Big Rivers seeks to protect as confidential is
20	projected capacity purchases. The response to Item 11 provides a list of planned
21	scheduled outages from 2021 through 2025. The attachment to Item 14 contains a
22	list of planned transmission system additions from 2021–2030. The information
23	Big Rivers seeks to protect as confidential is hereinafter referred to as the
24	"Confidential Information."
25	2. One (1) sealed copy of the responses to Item 8 and Item 11, with the
26	Confidential Information highlighted with transparent ink, is filed with this

- 1 petition. Ten (10) copies of the responses to Item 8 and Item 11. with the
- 2 Confidential Information redacted, are also filed with this petition. 807 KAR 5:001
- 3 Section 13(2)(a)(3).
- 4 3. The entirety of the attachment to the response to Item 14 is
- 5 confidential. One (1) sealed copy of that attachment is filed with this petition. A
- 6 page noting that the attachment is filed under a petition for confidential treatment
- 7 is attached to the response to Item 14 filed with this petition. 807 KAR 5:001
- 8 Section 13(2)(a)(3)(b).
- 9 4. There are no other parties who are entitled to be served with a copy of
- 10 the petition or a copy of the redacted response. 807 KAR 5:001 Section 13(2)(b).
- 11 5. The Confidential Information is not publicly available, is not
- 12 disseminated within Big Rivers except to those employees and professionals with a
- 13 legitimate business need to know and act upon the information, and is not
- 14 disseminated to others without a legitimate need to know and act upon the
- 15 information.
- 16 6. If and to the extent the Confidential Information becomes generally
 - 7 available to the public, whether through filings required by other agencies or
- 18 otherwise, Big Rivers will notify the Commission and have the information's
- 19 confidential status removed. 807 KAR 5:001 Section 13(10)(b).
- 7. As discussed below, the Confidential Information is entitled to
- 21 confidential protection based upon KRS 61.878(1)(c)(1), which protects "records
- 22 confidentially disclosed to an agency or required by an agency to be disclosed to it,

- 1 generally recognized as confidential or proprietary, which if openly disclosed would
- 2 permit an unfair commercial advantage to competitors of the entity that disclosed
- 3 the records." KRS 61.878(1)(c)(1); 807 KAR 5:001 Section 13(2)(a)(1).

4 I. Big Rivers Faces Actual Competition.

- 5 8. Big Rivers, as a participant in the credit markets and the wholesale 6 power markets, faces economic competition from other entities.
- 9. Big Rivers competes in the wholesale power market to sell energy it produces in excess of its members' needs. Big Rivers' ability to successfully compete in the wholesale power market is dependent upon a combination of its ability to negotiate the maximum price for the power sold and its ability to keep its cost of production as low as possible. If Big Rivers' cost of producing a kilowatt-hour of energy increases, its ability to sell that kilowatt-hour in competition with other utilities is adversely affected.
- 10. Big Rivers also competes for reasonably priced credit in the credit
 markets, and its ability to compete is directly impacted by its financial results. Any
 event that adversely affects Big Rivers' margins will adversely affect its financial
 results and potentially impact the price it pays for credit. As was described in the
 proceeding before this Commission in the Big Rivers Unwind Transaction, Big
 Rivers expects to be in the credit markets on a regular basis in the future.

¹ See In the Matter of: Joint Application of Big Rivers, E.ON, LG&E Energy Marketing, Inc., and Western Kentucky Energy Corporation for Approval to Unwind Lease and Power Purchase Transactions, Order, P.S.C. Case No. 2007-00455 (March 6, 2009), pages 27-30 and 37-39.

1 11. As is evidenced by these economic pressures, Big Rivers faces actual 2 competition from other market participants in the wholesale power and credit 3 markets.

II. The Confidential Information is Generally Recognized as Confidential or Proprietary.

5 6

- The Confidential Information for which Big Rivers seeks confidential treatment under KRS 61.878(1)(c)(1) is generally recognized as confidential or proprietary under Kentucky law. The Confidential Information consists of (i) projected capacity purchases; (ii) a list of future scheduled outages; and (iii) a list of planned transmission system additions.
- 12 13. Public disclosure of the Confidential Information will allow Big Rivers' suppliers and competitors to know Big Rivers' future maintenance plans and capital improvements. Information about a company's detailed inner workings is generally recognized as confidential or proprietary. See, e.g., Hoy v. Kentucky Indus. Revitalization Authority, 907 S.W.2d 766, 768 (Ky. 1995) ("It does not take a degree in finance to recognize that such information concerning the inner workings of a 17 corporation is 'generally recognized as confidential or proprietary"); Marina 18 Management Servs. v. Cabinet for Tourism, Dep't of Parks, 906 S.W.2d 318, 319 (Ky. 19 1995) (unfair commercial advantage arises simply from "the ability to ascertain the 20 economic status of the entities without the hurdles systemically associated with the 2122 acquisition of such information about privately owned organizations"). Moreover, 23the Commission previously granted confidential treatment to this type of 24 information. See, e.g., In the Matter of: Electronic Application of Kentucky Power

1 Company for (1) a General Adjustment of its Rates for Electric Service; (2) an Order
2 Approving its 2017 Environmental Compliance Plan; (3) an Order Approving its
3 Tariffs and Riders' (4) an Order Approving Accounting Practices to Establish
4 Regulatory Assets and Liabilities; and (5) an Order Granting all other Required
5 Approvals and Relief, Order, P.S.C. Case No. 2017-00179 (June 19, 2018) (granting
6 confidential treatment to maintenance and budget information that could be used
7 to determine scope and timing of planned maintenance outages); letter from the
8 Commission dated August 13, 2019, in Administrative Case No. 387 (granting
9 confidential treatment to a list of future scheduled outages and planned
10 transmission system additions that Big Rivers filed as part of the supplement to its
11 annual report).

14. Accordingly, the information for which Big Rivers seeks confidential treatment is recognized as confidential or proprietary under Kentucky law and is entitled to confidential protection as further discussed below.

15 III. Disclosure of the Confidential Information Would Permit an Unfair Commercial Advantage to Big Rivers' Competitors.

17

15. Disclosure of the Confidential Information would permit an unfair commercial advantage to Big Rivers' competitors. As discussed above, Big Rivers faces actual competition in the wholesale power market and in the credit market. It is likely that Big Rivers would suffer competitive injury if that Confidential Information was publicly disclosed, and the information should therefore be subject to confidential treatment.

1 16. If the Confidential Information is publicly disclosed, Big Rivers' competitors would have insight into when Big Rivers' generation levels will drop due to maintenance and thus know a crucial input into Big Rivers' need for power and energy during those periods. Further the Confidential Information would provide insight into when Big Rivers' projects a capacity deficit and plans capacity purchases. With that information, potential suppliers to Big Rivers will be able to manipulate the price of power bid to Big Rivers in order to maximize their revenues, and potential market power purchasers could use the information to know when and to the extent Big Rivers is long on power and could use that information to manipulate their bids, leading to lower revenues to Big Rivers. In P.S.C. Case No. 10 2003-00054, the Commission granted confidential protection to bids submitted to 11 Union Light, Heat & Power ("ULH&P"). ULH&P argued, and the Commission 12 implicitly accepted, that if the bids it received were publicly disclosed, contractors on future work could use the bids as a benchmark, which would likely lead to the 14 15 submission of higher bids. In the Matter of: Application of the Union Light, Heat and Power Company for Confidential Treatment, Order, P.S.C. Case No. 2003-16 00054 (August 4, 2003). The Commission also implicitly accepted ULH&P's further 17 argument that the higher bids would lessen ULH&P's ability to compete with other 18 gas suppliers. Id. Similarly, potential power suppliers or purchasers manipulating 19 20 Big Rivers' bidding process would lead to higher costs or lower revenues to Big 21 Rivers and would place it at an unfair competitive disadvantage in the wholesale power market and credit markets. Likewise, knowledge of future capital projects 22

- 1 would allow contractors and suppliers of materials for those projects to manipulate
- 2 their bids, leading to higher costs to Big Rivers and placing it at an unfair
- 3 competitive disadvantage in the wholesale power and credit markets.
- 4 17. Thus, public disclosure of the Confidential Information would permit
- 5 an unfair competitive advantage to Big Rivers' competitors.

6 IV. Time Period

- 7 18. Big Rivers requests that the Confidential Information remain
- 8 confidential until January 1, 2026, at which time the information regarding
- 9 projected capacity purchases will be sufficiently outdated, the scheduled outages
- 10 will have passed and will no longer be confidential, and the list of planned
- 11 transmission projects will be sufficiently outdated so that it could not be used to
- 12 competitively disadvantage Big Rivers. 807 KAR 5:001 Section 13(2)(a)(2).

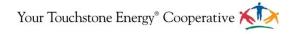
13 V. Conclusion

- 14 19. Based on the foregoing, the Confidential Information is entitled to
- 15 confidential protection. If the Commission disagrees that Big Rivers is entitled to
- 16 confidential protection, due process requires the Commission to hold an evidentiary
- 17 hearing. See Utility Regulatory Comm'n v. Kentucky Water Serv. Co., Inc., 642
- 18 S.W.2d 591 (Ky. App. 1982).
- 19 WHEREFORE, Big Rivers respectfully requests that the Commission
- 20 classify and protect as confidential the Confidential Information.
- On this the 1ST day of March, 2021.

1	Respectfully submitted,
2	/s/ Tyson Kamuf
3	Tyson Kamuf
4	Senthia Santana
5	Gregory E. Mayes, Jr.
6	Big Rivers Electric Corporation
7	201 Third Street, P.O. Box 24
8	Henderson, Kentucky 42419-0024
9	Phone: (270) 827-2561
10	Facsimile: (270) 844-6417
11	tyson.kamuf@bigrivers.com
12	senthia.santana@bigrivers.com
13	gregory.mayes@bigrivers.com

ORIGINAL





COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matters of:

A REVIEW OF THE ADEQUACY OF)	Administrative
KENTUCKY'S GENERATION CAPACITY)	Case No.
AND TRANSMISSION SYSTEM)	387

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387

FILED: March 1, 2021

ORIGINAL

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1	Item 1) Actual and weather-normalized energy sales for the just
2	completed calendar year. Sales should be disaggregated into native load
3	sales and off-system sales. Off-system sales should be further disaggregated
4	into full requirements sales, firm capacity sales, and non-firm or economy
5	energy sales. Off-system sales should be further disaggregated to identify
6	separately all sales where the utility acts as a reseller, or transporter, in a
7	power transaction between two or more other parties.
8	
9	Response) The information originally requested in the above item of Appendix G of
10	the Commission's Order dated December 20, 2001, in Administrative Case No. 387,
11	("the December 2001 Order in Admin. Case 387") is no longer required pursuant to
12	Ordering Paragraph No. 5 of the Commission's Order dated March 29, 2004,
13	amending the December 2001 Order in Admin. Case 387.
14	
15	Respondent) Marlene S. Parsley

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 2) A summary of monthly power purchases for the just completed
2	calendar year. Purchases should be disaggregated into firm capacity
3	purchases required to serve native load, economy energy purchases, and
4	purchases where the utility acts as a reseller, or transporter, in a power
5	transaction between two or more other parties.
6	
7	Response) The information originally requested in the above item of Appendix G of
8	the December 2001 Order in Admin. Case 387 is no longer required pursuant to
9	Ordering Paragraph No. 5 of the Commission's Order dated March 29, 2004,
10	amending the December 2001 Order in Admin. Case 387.
11	
12	
13	Respondent) Marlene S. Parsley
14	

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

- 1 Item 3) Actual and weather-normalized monthly coincident peak
- 2 demands for the just completed calendar year. Demands should be
- 3 disaggregated into
- 4 a. native load demand (firm and non-firm) and
- 5 b. off-system demand (firm and non-firm).

- 7 **Response)** Table 3-G shows the actual and weather normalized native load demand
- 8 and the off-system coincident demand for 2020. Native load is comprised of the rural
- 9 and industrial load of Big Rivers' Members. Big Rivers sells its power into the
- 10 Midcontinent Independent System Operator, Inc. ("MISO") market and, therefore,
- 11 the off-system sales cannot be weather normalized. Off-system demand is comprised
- 12 of three components: (i) forward bilateral sales which are characterized as firm, (ii)
- 13 sales to Nebraska customers which are served in the SPP market and can be
- 14 characterized as firm, and (iii) off-system sales due to generation clearing in the
- 15 MISO market which is in excess of Big Rivers' load and are a result of Big Rivers'
- 16 compliance with its MISO tariff obligations.

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1

2 **Respondent)** Marlene S. Parsley

Big Rivers Electric Corporation Administrative Case No. 387 Table 3-G

Native Peak and Off-System Sales Weather Normalized

Total Native Load and Off-Sytem Coincident Peak Demands 1 (MW)

		Native	e Load		Off-System Sales					
		All Firm Pe	ak Demand		Off-System	n Demand				
			Weather							
Month	Peak Date	Actual	Normalized	Firm ²	Sales to MISO ³	Sales in SPP 4	Non-Firm			
Jan-20	01/20/20	519	563	25	174	72	0			
Feb-20	02/14/20	570	575	100	131	46	0			
Mar-20	03/16/20	401	448	169	0	46	0			
Apr-20	04/15/20	386	354	101	106	55	0			
May-20	05/25/20	453	439	200	0	22	0			
Jun-20	06/29/20	558	574	274	165	42	0			
Jul-20	07/21/20	576	584	249	201	58	0			
Aug-20	08/24/20	540	571	241	229	55	0			
Sep-20	09/10/20	534	549	237	28	38	0			
Oct-20	5 10/11/20	373	391	300	0	32	0			
Nov-20	⁵ 11/18/20	430	453	259	0	38	0			
Dec-20	5 12/16/20	473	506	177	335	51	0			

Notes -

- 1.- Native Load includes Transmission Losses
- 2.- Off System Firm Sales are Pre-arranged bilateral sales
- 3.- Net Sales at generator nodes
- 4.- Off System Sales to Nebraska customers in SPP at Big Rivers' peak hour
- 5.- October, November and December off-system sales subject to slight change due to meter corrections

Administrative Case No. 387

Attachment for Response to Appendix G - Item 3

Respondent: Marlene S. Parsley

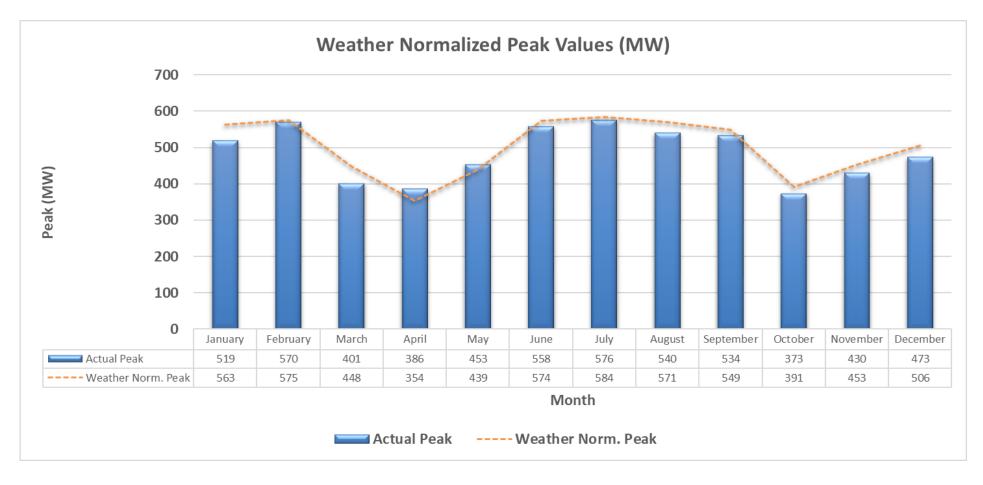
Page 1 of 1

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 4) Load shape curves that show actual peak demands and weather-
2	normalized peak demands (native load demand and total demand) on a
3	monthly basis for the just completed calendar year.
4	
5	Response) Graph 4-G shows the monthly native load demand with the monthly
6	weather normalized native load demand for 2020.
7	
8	
9	Respondent) Marlene S. Parsley
10	

Big Rivers Electric Corporation Administrative Case No. 387 Graph 4-G Actual versus Weather Normalized Peak Demand



Administrative Case No. 387 Attachment for Response to Appendix G - Item 4 Respondent: Marlene S. Parsley

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SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 5)	Load shape curves showing the number of hours that native load
2	demand	exceeded these levels during the just complete calendar year:
3	a.	70% of the sum of installed generating capacity plus firm capacity
4		purchases;
5	b.	80% of the sum of installed generating capacity plus firm capacity
6		purchases;
7	<i>c</i> .	90% of the sum of installed generating capacity plus firm capacity
8		purchases.
9		
10	Respons	se) The information originally requested in the above item of Appendix G of
11	the Dece	mber 2001 Order in Admin. Case 387 is no longer required pursuant to
12	Ordering	Paragraph No. 5 of the Commission's Order dated March 29, 2004,
13	amendin	g the December 2001 Order in Admin. Case 387.
14		
15	Respone	dent) Marlene S. Parsley
16		

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 6) Based on the most recent demand forecast, the base case demand
2	and energy forecasts and high case demand and energy forecasts for the
3	current year and the following four years. The information should be
4	disaggregated into
5	a. Native load (firm and non-firm demand) and
6	b. Off-system load (both firm and non-firm demand).
7	
8	Response) Table 6-G tabulates the forecasted base case and high case demand and
9	energy in the associated demand breakdowns as requested.
10	
11	
12	Respondent) Marlene S. Parsley
13	

Big Rivers Electric Corporation Administrative Case No. 387 Table 6-G

Total Native Load and Off-System Loads Base and High Case Forecasts

		Nat	ive Load	Off-System Load Demand				
	Ва	ise Case	High Case		Base	Case	High Case	
		_		_	Firm	Non-Firm	Firm	Non-Firm
	Demand	Energy	Demand	Energy	Demand	Demand	Demand	Demand
	(MW)	(MWH)	(MW)	(MWH)	(MW)	(MW)	(MW)	(MW)
2021	582	3,329,556	672	3,482,019	362	0	362	0
2022 *	771	4,383,889	883	4,536,537	58	0	58	0
2023	773	4,395,780	884	4,547,873	234	0	234	0
2024	775	4,408,620	886	4,560,136	245	0	245	0
2025	777	4,415,637	887	4,566,702	246	0	246	0

Notes and Assumptions

Native Base case:

Demand and Energy include Native Load without Transmission Losses - Note new Industrial load added beginning 1/1/2022*

Demand is Big Rivers' forecasted peak coincident with MISO (MISO Requirement)

Firm Off-System Load Demand consists of executed long term sales to KYMEA, OMU, and Net Bilateral Capacity Sales

Excess generation sales to MISO are not projected as they will be contingent upon unit availability at time of system peak and can vary significantly

Native High Case:

Native High case represents the Extreme Weather Scenario for Demand and Energy Native High case Off-System Firm Demand (MW) same as Base Case

Administrative Case No. 387 Attachment for Response to Appendix G - Item 6

Respondent: Marlene S. Parsley

Page 1 of 1

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 7) The target reserve margin currently used for planning purposes,
2	stated as a percentage of demand. If changed from what was in use in 2001,
3	include a detailed explanation for the change.
4	
5	Response) The current target reserve margin used for planning purposes is 18.3%
6	based on Installed Capacity Ratings of resources, and 9.4% based on Unforced
7	Capacity Ratings, as specified by MISO for the upcoming planning year effective June
8	1, 2021. MISO annually determines a minimum Planning Reserve Margin ("PRM")
9	that would result in the MISO system experiencing a less than one-day loss-of-load
10	event every 10 years per the MISO Tariff. That margin changes over time, and is
11	shown in the Table 5-3 reproduced below, which is from the MISO 2021-2022 Loss of
12	Load Expectation Study Report. That study includes details of how that margin is
13	derived and used and is available at the following link:
14	
15	$\underline{https://cdn.misoenergy.org/PY\%202021\%2022\%20LOLE\%20Study\%20Report489442.pdf}$
16	

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1

Table 5.4: Future Planning Year MISO System Planning Reserve Margins ¹

Metric	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ICAP (GW)	158.3	161.6	160.9	162.1	164.3	166.9	166.9	166.9	166.9	166.9
Demand (GW)	124.5	125.1	125.6	126.2	126.2	126.8	127.4	127.9	128.3	128.8
PRMICAP	18.3%	18.0%	17.8%	17.5%	17.8%	18.1%	17.8%	17.7%	17.7%	17.6%
PRMucap	9.4%	9.3%	9.3%	9.2%	9.0%	8.8%	8.7%	8.6%	8.5%	8.4%

2

3

4 **Respondent**) Marlene S. Parsley

 $^{^{\}mbox{\tiny 1}}$ Years without underlined results indicate PRM values that were calculated through interpolation.

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 -A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1 **Item 8)** Projected reserve margins stated in megawatts and as a 2 percentage of demand for the current year and the following four years. 3 Identify projected deficits and current plans for addressing these. For each 4 year identify the level of firm capacity purchases projected to meet native 5 load demand. 7 **Response)** Please see Table 1 on the following page. Reserve Margin MWs are

6

8 calculated as unforced capacity of available resources minus Base Demand and net 9 Firm Capacity Sales. The unforced capacity of Green Unit 1 and Green Unit 2 are slightly lower beginning in 2022 due to their proposed conversion from coal to natural 11 gas.² This projection includes new industrial load beginning in 2022. The purchase 12 of 260 MW of solar capacity and energy is included as a portion of available unforced

² 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 [Application filed March 1, 2021] (Seeking a CPCN to convert Big Rivers' two coal-fired generating units at Green Station to burn natural gas.).

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1 capacity. Big Rivers will make bilateral capacity purchases or participate in the

2 annual MISO Planning Resource Auction to alleviate any shortages so that we will

3 meet the MISO Planning Reserve Margin Requirements including transmission

4 losses. Big Rivers is not projecting any deficits. Coleman Station and Reid Station

5 Unit 1 are excluded from reserve margin calculation due to their retirement on

6 September 30, 2020.

<u>Year</u>	Reserve Margin (UCAP MW)	Reserve Margin (%)	Table 1 MISO Reserve Margin Requirement 3 (UCAP %)	Firm Capacity Purchases (MW) ⁴	Projected Purchases (MW)	Projected Deficit (MW)
2021	110	19 %	11.0 %	178		0
2022	164	21~%	10.9 %	178		0
2023	84	11 %	10.9 %	178		0
2024	64	8 %	10.8 %	178		0
2025	58	8 %	10.6 %	178		0
8						

³ MISO reserve margin Requirement includes transmission Losses.

⁴ Southeastern Power Administration ("SEPA") is at full 178 MW capacity for Planning Years 2021 and beyond following its return from Force Majeure status in January 2020.

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1
2
3 Respondent) Marlene S. Parsley

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 9) By date and hour, identify all incidents during the just completed
2	calendar year when reserve margin was less that the East Central Area
3	Reliability Council's ("ECAR") 1.5% spinning reserve requirement. Include
4	the amount of capacity resources that were available, the actual demand on
5	the system, and the reserve margin, stated in megawatts and as a percentage
6	of demand. Also, identify system conditions at the time.
7	
8	Response) The information originally requested in the above item of Appendix G of
9	the December 2001 Order in Admin. Case 387 is no longer required pursuant to
10	Ordering Paragraph No. 5 of the Commission's Order dated March 29, 2004,
11	amending the December 2001 Order in Admin Case 387.
12	
13	
14	Respondent) Marlene S. Parsley
15	

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 10) A list identifying and describing all forced outages in excess of
2	two hours in duration during the just completed calendar year.
3	
4	Response) The information originally requested in the above item of Appendix G of
5	the December 2001 Order in Admin. Case 387 is no longer required pursuant to
6	Ordering Paragraph No. 5 of the Commission's Order dated March 29, 2004,
7	amending the December 2001 Order in Admin Case 387.
8	
9	
10	Respondent) Ronald D. Gregory
11	

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1 Item 11) A list that identifies scheduled outages or retirements of

2 generating capacity during the current year and the following four years.

3

4 Response) HMP&L Units 1 and 2 were retired on February 1, 2019 and,

5 consequently, there are no outage schedules provided for them. Big Rivers retired

6 Coleman Station and Reid Station Unit 1 effective September 30, 2020.

7 The planned maintenance outage schedule for 2021 through 2025 is being filed

8 with a Motion for Confidential Treatment. The schedule is regularly modified based

9 on actual operating conditions, forced outages, changes in the schedule required to

10 meet environmental regulation compliance, fluctuation in wholesale capacity and

11 energy prices, and other unforeseen events that may affect unit reliability or

12 generation capacity. The scheduled outages for all units are listed in the tables which

13 follow.

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Wilson Unit 1	
	2021	
	2022	
	2023	
	2024	
	2025	
2		
3	Green Unit 1	
	2021	
	2022	
	2023	
	2024	
	2025	
4		
5	Green Unit 2	
	2021	
	2022	
	2023	
	2024	
	2025	
6		

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

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March 1, 2021

Reid Combustion Turbine

2021	
2022	
2023	
2024	
2025	

2

1

3

4 **Respondent)** Ronald D. Gregory

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1 Item 12) Identify all planned base load or peaking capacity additions to
2 meet native load requirements over the next 10 years. Show the expected in3 service date, size, and site for all planned additions. Include additions
4 planned by the utility, as well as those by affiliates, if constructed in

5 Kentucky or intended to meet load in Kentucky.

6

Response) In Big Rivers' 2020 Integrated Resource Plan ("2020 IRP") filed in September, 2020, the optimal (least cost) plan resulted in (i) Big Rivers adding three solar PPAs totaling 260 MWs of new solar capacity, (ii) Big Rivers adding 90 MWs of a new 592 MW natural gas combined cycle unit located at Sebree (NGCC – Sebree) in 2024, and (iii) Big Rivers idling both the Green coal units. Big Rivers will keep its Wilson unit as a coal-fired station, keep its Reid CT available as a natural gas peaking unit, and stay in its contract with SEPA. Because the NGCC alternative was dependent upon participation by other counterparties, Big Rivers ran a sensitivity assuming this coalition of partners was not found and the NGCC unit was not available as a resource option. Big Rivers' 2020 IRP was the plan at a point in time

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March 1, 2021

1 (September, 2020); subsequent analysis has concluded the best option is to convert
2 Green Unit 1 and Green Unit 2 to Natural Gas in 2022, until such time that
3 counterparties for the construction of the NGCC can be secured.
4 At this time, Big Rivers anticipates no base load or peaking capacity additions
5 to meet native load requirements over the next 10 years.
6
7
8 Respondent) Marlene S. Parsley

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 13)	The following transmission energy data for the just completed
2	calendar	year and the forecast for the current year and the following four
3	years:	
4		
5	a. '	Total energy received from all interconnections and generation
6	8	sources connected to the transmission system;
7	b. 2	Total energy delivered to all interconnections on the transmission
8	8	system;
9	c.	Peak load capacity of the transmission system; and
10	d. I	Peak demand for summer and winter seasons on the transmission
11	8	system.
12		

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

1	Response)				
2	a.				
			Transmission Sy	ystem Energy Received (N	<u>/IWh)</u>
		2020	<u>Generation</u> 3,433,504	Interconnections 12,136,252	Total 15,569,756
			Projected Syst	em Energy Received (MV	Vh)
3		2021 2022 2023 2024 2025	<u>110,0000 2,50</u>	om Energy Westerved (111)	16,570,000 17,170,000 17,170,000 17,170,000 17,170,000
4	b.				
	<u>]</u>	<u> Transmissi</u>		gy Delivered at Interconr MWh) Total	$\frac{nections}{nections}$
		2020		6,185,189	
		<u>Projecte</u>		y Delivered at Interconne MWh)	<u>ction</u>
		2021	_	6,000,000	
		2022		6,000,000	
		2023		6,000,000	

6,000,000 6,000,000

5 c.

2024

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

March 1, 2021

<u>Transmission Peak Capacity (MW)</u> 2020 2,903

<u>Projected Transmissi</u>	on Peak Capacity (MW)
2021	2,903
2022	2,903
2023	2,903
2024	2,903
2025	2,903

1

2 d.

<u>Transn</u>	<u> 118810n System Peak</u>	<u>Demand (MW)</u>
	<u>Winter</u>	Summer
2020	1,334	1,264

Projected System Peak Demand (MW)

	<u>Winter</u>	Summer
2021	1,417	1,417
2022	1,684	1,682
2023	1,688	1,685
2024	1,689	1,686
2025	1,691	1,688

3

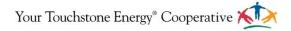
4 **Respondent)** Christopher S. Bradley

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Item 14) Identify all planned transmission capacity additions for the next
2	ten years. Include the expected in-service date, size and site for all planned
3	additions and identify the transmission need each addition is intended to
4	address.
5	
6	Response) A CONFIDENTIAL listing of Big Rivers' planned Transmission
7	Capacity Additions for 2021 through 2030 is being filed with a Motion for Confidential
8	Treatment.
9	
10	
11	Respondent) Christopher S. Bradley
12	





In the Matter of:

A REVIEW OF THE ADEQUACY OF)	Administrative
KENTUCKY'S GENERATION CAPACITY)	Case No.
AND TRANSMISSION SYSTEM)	387

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387

CONFIDENTIAL RESPONSE

Attachment to Item 14 of the Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001 FILED: March 1, 2021

INFORMATION FILED WITH
MOTION FOR CONFIDENTIAL TREATMENT

SUPPLEMENTAL INFORMATION PROVIDED WITH BIG RIVERS' ANNUAL FINANCIAL AND STATISTICAL REPORT PURSUANT TO ADMINISTRATIVE CASE NO. 387 – A REVIEW OF THE ADEQUACY OF KENTUCKY'S GENERATION CAPACITY AND TRANSMISSION SYSTEM

Response to Commission Staff's Information Request as set forth in Appendix G of the Commission's Order dated December 20, 2001

1	Supplemental Item 1) Provide a detailed discussion of the consideration
2	$given\ to\ price\ elasticity\ in\ the\ forecasted\ demand,\ energy,\ and\ reserve\ margin$
3	information above.
4	
5	Response) This supplemental information, originally requested pursuant to a May
6	31, 2013, letter request from Commission Staff, is no longer required pursuant to a
7	January 13, 2017, letter from the Commission's Executive Director.
8	
9	
10	Respondent) Marlene S. Parsley
11	