



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

AN ELECTRONIC EXAMINATION OF THE)
APPLICATION OF THE FUEL ADJUSTMENT)
CLAUSE OF BIG RIVERS ELECTRIC) Case No.
CORPORATION FROM NOVEMBER 1, 2022) 2025-00343
THROUGH OCTOBER 31, 2024)

DIRECT TESTIMONY
OF
THOMAS L. MELTON
SENIOR POWER PORTFOLIO OPTIMIZATION ANALYST
ENERGY SERVICES

ON BEHALF OF
BIG RIVERS ELECTRIC CORPORATION
PURSUANT TO ORDERING PARAGRAPH NO. 6
OF THE COMMISSION'S DECEMBER 19, 2025, ORDER

FILED: January 23, 2026

BIG RIVERS ELECTRIC CORPORATION

**AN ELECTRONIC EXAMINATION OF THE APPLICATION OF THE FUEL
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION
FROM NOVEMBER 1, 2022 THROUGH OCTOBER 31, 2024**

CASE NO. 2025-00343

VERIFICATION

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

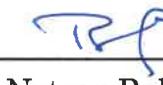


Thomas L. Melton

COMMONWEALTH OF KENTUCKY)

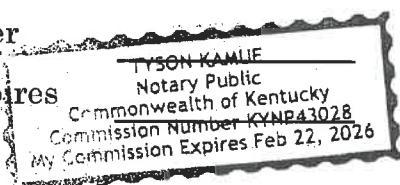
COUNTY OF DAVIESS)

21&2 SUBSCRIBED AND SWORN TO before me by Thomas L. Melton, on this the
day of January, 2026.


Notary Public, Kentucky State at Large

Kentucky ID Number

My Commission Expires



**DIRECT TESTIMONY
OF
THOMAS L. MELTON**

5 Q. Please state your name, business address, and position.

6 A. My name is Thomas L. Melton. I am employed by Big Rivers Electric
7 Corporation (“Big Rivers” or the “Company”), 710 W. Second Street,
8 Owensboro, Kentucky 42301 as the Senior Power Portfolio Optimization
9 Analyst, Energy Services. I report to Micah Bushnell, VP Energy Services.

10

11 Q. Please describe your job responsibilities.

12 A. As Senior Power Portfolio Optimization Analyst, I am responsible for long-
13 term energy and capacity marketing and short-term energy hedging
14 activities at Big Rivers. I am also responsible for coordination of daily
15 Midcontinent Independent System Operator, Inc. (“MISO”) market activities
16 that include unit offer strategy, interface with ACES Power Marketing, and
17 oversight of the market Awards Process. Other responsibilities include
18 scheduling Southeast Power Administration (“SEPA”) energy and capacity,
19 natural gas account management, contract management, interface with the
20 MISO Independent Market Monitor, and performing a variety of official roles
21 within the MISO structure

22

23

1 **Q. Briefly describe your education and work experience.**

2 A. I have bachelor's degrees in business administration and psychology from
3 Kentucky Wesleyan College (2001). I also have a Master of Business
4 Administration (MBA) from Murray State University (2005) with an
5 emphasis in Economic and Financial Analysis.

6 I have approximately 20 years of combined energy industry experience in
7 both gas and electric utilities and non-regulated marketing companies. My
8 primary experience is in natural gas trading and risk/portfolio management.

9 I also have approximately 6 years of supply chain and commodity risk
10 management experience in the consumer-packaged goods sector. I joined Big
11 Rivers Electric Corporation in July 2023 as Senior Power Portfolio
12 Optimization Analyst in Energy Services.

13

14 **Q. Have you previously testified before this Commission?**

15 A. Yes. I sponsored responses to information requests in Case No. 2025-00078,
16 Big Rivers' most recent six-month fuel adjustment clause ("FAC") review.¹

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¹ *In the Matter of: An Electronic Examination of the Application of the Fuel Adjustment Clause of Big Rivers Electric Corporation from November 1, 2023 through April 30, 2024. P.S.C. Case No. 2025-00078.*

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

2 A. The purpose of my testimony is to respond to the following subparts of
3 Ordering Paragraph No. 6 of the Commission's Order dated December 19,
4 2025, in this matter:

5 (f) Any changes in the wholesale electric power market that
6 occurred during the review period or that BREC expects to occur
7 within the next two years that have significantly affected or will
8 significantly affect BREC's electric power procurement practices.

9 (g) Actions taken by BREC to mitigate purchased power related costs
10 for its customers.

11 (h) Any planned outages that extended beyond the estimated
12 time of the outage and how BREC addressed the extended outage,
13 and any resulting capacity and energy shortfalls.

14 (i) Whether BREC engaged in any off systems sales or
15 intersystem sales to offset high fuel or power costs during the
16 period under review.

17 (j) How BREC bids its generating units into MISO energy
18 markets, including, but not limited to the following: how BREC
19 determines the manner in which individual generating units are
20 offered into MISO's day ahead market (must run, economic
21 dispatch etc.); who makes those decisions; and what level of
22 control MISO has over the dispatch of BREC's generating units.

1 (l) Any cost/benefit analysis BREC has performed regarding its
2 participation in MISO.

3

4 Q. Discuss any changes in the wholesale electric power market that
5 occurred during the review period or that BREC expects to occur
6 within the next two years (i.e., 2027 and 2028) that have significantly
7 affected or will significantly affect BREC's electric power
8 procurement practices.

9 A. Market expectations are for IndyHub prices to remain strong with 2026
10 prices currently averaging right at \$60/MWh. IndyHub price projections for
11 2027 and 2028 are currently averaging \$66/MWh and \$70/MWh respectively.
12 Expectations are for pricing to remain strong with market volatility
13 continuing into the 2026-2028 period. Some drivers of this market volatility
14 include forecasted higher fuel costs (coal/natural gas), demand growth from
15 industrial/technology sector expansion (tech data centers), tighter supply
16 markets with demand outpacing supply growth, increased lead times in new
17 generation assets and grid modernization, and higher winter and summer
18 peak demands. Market uncertainty is increasing price volatility as a result.
19 Natural gas prices continue to remain resilient with 2026 prices forecast to
20 remain in the \$4.00-4.25 range. The 2027 and 2028 outlook does show some
21 small price retreat in the forecast to the \$3.75-4.00 range for that period.
22 This price forecast is mostly driven by a strong gas production forecast and

1 the continued rise in renewable power (solar/wind) picking up during peak
2 daytime hours requiring less gas burn to generate electricity. Liquefied
3 natural gas (“LNG”) exports will remain strong and domestic industrial and
4 residential usage is seeing modest growth.

5 The MISO Capacity Market for Zone 6 cleared relatively low for the 2024-
6 2025 planning year with Summer Capacity Prices settling at \$30/MW-Day,
7 Fall Capacity Prices settling at \$15/MW-Day, Winter Capacity Prices settling
8 at \$0.75/MW-Day, and Spring Capacity Prices settling at \$34.10/MW-Day.
9 MISO has since implemented a new process to clear the Planning Resource
10 Auction (“PRA”) utilizing Reliability Based Demand Curves (“RBDC”) which
11 resulted in higher clearing prices for the 2025-2026 planning year. For the
12 2025-2026 planning year the summer season cleared at \$666.50/MW-Day,
13 the fall season at \$91.60/MW-Day, the winter season at \$33.20/MW-Day, and
14 the spring season at \$69.88/MW-Day.

15 For the 2026-2027 planning year we are [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] This is occurring as Wilson will

21 run for economics and SEPA will run when hydrological conditions are
22 favorable, but due to [REDACTED]

1 [REDACTED] the Reid CT remains inoperable due to a catastrophic forced
2 outage.

3

4 Q. Please discuss any actions taken by BREC to mitigate purchased
5 power-related costs for its customers.

6 A. As explained in Big Rivers' response to Item No. 31 of the Commission Staff's
7 First Request for Information in Appendix B of the Commission's December
8 19, 2025 Order, Big Rivers has a natural hedge on our portfolio as we own
9 coal and natural gas resources and have a power purchase agreement with
10 SEPA. These resources (subject to fuel procurement) are balanced against
11 our on and off system load to determine if we are deficient power or have
12 excess power. At that point, we monitor prices over the course of the year to
13 find optimal price points to hedge and then take hedge positions that
14 correspond to the limits mentioned in Big Rivers' Board Policy 111 - Hedge
15 Policy.

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estimated time of the outage and how BREC addressed the extended outage, and any resulting capacity and energy shortfalls.

1 A. The majority of Big Rivers' planned maintenance outages during this
2 review period stayed within their scheduled window, with few
3 exceptions. Planned or scheduled outages that fell outside their planned
4 window included a Wilson scheduled outage from December 2, 2022 to
5 December 4, 2022, due to ID fan balancing and repairs. Similarly,
6 another Wilson scheduled outage for March 17, 2023, to March 19, 2023,
7 addressed ID fan balancing and precipitator hopper cleanup.
8 Replacement energy was purchased from the market for these periods.

9

10 **Q. Discuss whether BREC engaged in any off-system sales or**
11 **intersystem sales to offset high fuel or power costs during the**
12 **period under review.**

13 A. Big Rivers did engage in off-system sales during the period under review
14 as we sold off excess power either bilaterally or directly to the MISO
15 market.

16

17 **Q. Please describe how BREC bids its generating units into MISO**
18 **energy markets, including, but not limited to:**

19 **a. how BREC determines the manner in which individual**
20 **generating units are offered into MISO's day ahead**
21 **market (must run, economic dispatch etc.);**

22 **b. who makes those decisions; and**

c. what level of control MISO has over the dispatch of Big Rivers' generating units

3 A.

4 a. Big Rivers offers its generating units into the MISO market each day
5 through the Generation Offer process. Big Rivers provides MISO with a
6 great deal of data on each unit's operating characteristics (availability,
7 minimum and maximum generation levels, ramp rate, start costs, etc.) and
8 a cost curve, which provides a formula for determining the variable operating
9 cost at various points within a unit's operating range. If a unit is available
10 (i.e., not unavailable due to an outage), the default setting would be to set the
11 Commitment Status² on the Generation Offer to "Economic," to ensure
12 recovery of costs if MISO commits the unit.

13 For coal units expected to operate economically at a steady state for
14 long periods of time (“Baseload Units”), Big Rivers will frequently set the
15 Commitment Status to “Must Run.” “Must Run” status is used to minimize
16 starting and stopping the unit and associated increased maintenance
17 costs. Must Run status might also be used to minimize expensive starts, such
18 as when a unit is projected to generate economically on Friday and Monday,
19 but not on the intervening weekend or during any period when prices are
20 volatile and a stop and start is considered operationally problematic. Big

² MISO Commitment Statuses include: Outage, Emergency, Economic, Must-Run, and Not Participating, as defined in the MISO Business Practice Manual.

1 Rivers might also offer a unit as Must Run if a steady generation level is
2 needed for performance or environmental testing or to manage coal
3 inventories as units approach retirement. Big Rivers also offers Baseload
4 Units as “Must Run” if a long period of elevated Locational Marginal Prices
5 (“LMP’s”) is expected.

6 b. Big Rivers’ VP of Generation, Manny Zeringue, makes the decisions.
7 c. Generation qualifying as capacity for Resource Adequacy purposes
8 has a daily “must offer” requirement. Big Rivers must make its generation
9 available to MISO each day, and MISO may call upon that generation for
10 economic or reliability reasons. Big Rivers is free to impose operating
11 restrictions on the unit if it is unavailable or de-rated, but that will affect
12 the amount of capacity MISO accredits to that unit in the future. The
13 MISO Market Monitor will watch for restrictions that fall outside of
14 established guidelines and question them. Beyond that, MISO is free to
15 operate the unit consistent with the unit’s operating characteristics and
16 restrictions. MISO combines Big Rivers’ generation offers with those of all
17 other market participants and chooses the combination of assets that meets
18 load while minimizing cost and maintaining reliability.

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1 **Q.** Please discuss any cost/benefit analysis BREC has performed
2 regarding its participation in MISO.

3 A. A cost/benefit analysis was performed by Charles River Associates in 2010.
4 It concluded that Big Rivers had no viable options for meeting its
5 Contingency Reserve requirement other than a stand-alone, self-supply
6 plan or by joining MISO.³ The main benefit that we experience in the
7 MISO Market is not having to carry Operating Reserves. At this point in
8 time, we do not believe that it is cost feasible to build the additional
9 generators to carry these Operating Reserves. Another option is for Big
10 Rivers to join the PJM Market, but we are not interconnected with their
11 system. This option is not a viable alternative to participation in MISO at
12 this time.

13

14 Q. Does this conclude your testimony?

15 A. Yes.

16

³ See *In the Matter of: Application of Big Rivers Electric Corporation for Approval to Transfer Functional Control of its Transmission System to Midwest Independent Transmission System Operator, Inc.*, Case No. 2010-00043.