

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

**In the Matter of:**

<b>AN EXAMINATION OF THE APPLICATION OF</b>	)	
<b>THE FUEL ADJUSTMENT CLAUSE OF EAST</b>	)	
<b>KENTUCKY POWER COOPERATIVE, INC</b>	)	<b>CASE NO.</b>
<b>FROM NOVEMBER 1, 2022 THROUGH APRIL</b>	)	<b>2024-00137</b>
<b>30, 2023</b>	)	

**RESPONSES TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION**  
**TO EAST KENTUCKY POWER COOPERATIVE, INC.**

**DATED SEPTEMBER 9, 2024**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION OF THE	)	
APPLICATION OF THE FUEL ADJUSTMENT	)	CASE NO.
CLAUSE OF EAST KENTUCKY POWER	)	2024-00137
COOPERATIVE, INC FROM NOVEMBER 1,	)	
2022 THROUGH APRIL 30, 2023	)	

CERTIFICATE

STATE OF KENTUCKY )  
 )  
 COUNTY OF CLARK )

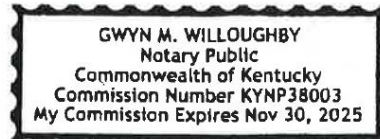
Christopher E. Adams, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Second Request for Information in the above-referenced case dated September 9, 2024, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

*Chris Adams*

\_\_\_\_\_  
Christopher E. Adams

Subscribed and sworn before me on this 19<sup>th</sup> day of September 2024.

*Gwyn M. Willoughby*  
 \_\_\_\_\_  
 Notary Public



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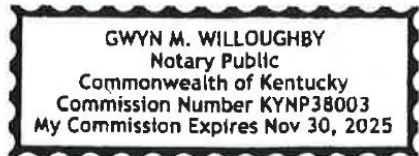
Michelle K. Carpenter, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff’s Second Request for Information in the above-referenced case dated September 9, 2024, and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

*Michelle K. Carpenter*

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Michelle K. Carpenter

Subscribed and sworn before me on this 19<sup>th</sup> day of September 2024.

*Gwyn M. Willoughby*  
\_\_\_\_\_  
Notary Public



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION OF THE	)	
APPLICATION OF THE FUEL ADJUSTMENT	)	CASE NO.
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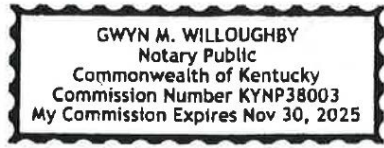
Mark Horn, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff’s Second Request for Information in the above-referenced case dated September 9, 2024, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

*Mark Horn*

\_\_\_\_\_  
Mark Horn

Subscribed and sworn before me on this 19<sup>th</sup> day of September 2024.

*Gwyn M. Willoughby*  
 \_\_\_\_\_  
 Notary Public



EAST KENTUCKY POWER COOPERATIVE, INC.  
CASE NO. 2024-00137  
SECOND REQUEST FOR INFORMATION RESPONSE

COMMISSION'S REQUEST DATED SEPTEMBER 9, 2024

REQUEST 1

RESPONSIBLE PARTY: Christopher E. Adams and Mark Horn

**Request 1.** Refer to EKPC's response to Commission Staff's First Request for Information (Staff's First Request), Item 6. Explain whether EKPC has any long-term contracts for natural gas. If so, provide the vendor and the quantity of the contract. If not, explain why it is more cost beneficial to rely on spot purchases of natural gas rather than entering into a long-term contract.

**Response 1.** EKPC does not have any long-term contracts for natural gas. EKPC has purchased physical spot and physical forward natural gas, which is included in the response and categorized as Spot in Staff's First Request, Item 6. EKPC defines Spot natural gas as having a term of seven (7) days or less. EKPC defines Forward natural gas as having a term of one (1) year or less. EKPC views Spot and Contract differently, with one factor being the Term. A long-term natural gas Contract is contemplated to be a multi-year supply agreement, which EKPC does not currently have, due to the intermittent nature of EKPC's natural gas generating assets that are classified as Simple Cycle Combustion Turbines ("CTs"). CTs do not dispatch as baseload units, conversely they often only operate at peak demand periods or to help with electric transmission congestion within the PJM. A Contract for natural gas would commit EKPC to a daily defined

quantity of natural gas, including periods of time or days when the natural gas is not needed. This “take or pay” arrangement introduces the risk of dispatching the CTs uneconomically to burn committed gas or financially settling the contracted position at a loss. To mitigate risk, EKPC routinely manages its natural gas position by buying and scheduling natural gas on an as-needed basis for the CTs. The physical Spot and/or Forward natural gas purchases can be utilized if an extended period of extreme hot or cold weather is in the forecast.

**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**CASE NO. 2024-00137**  
**SECOND REQUEST FOR INFORMATION RESPONSE**

**COMMISSION'S REQUEST DATED SEPTEMBER 9, 2024**

**REQUEST 2**

**RESPONSIBLE PARTY: Christopher E. Adams and Michelle K. Carpenter**

**Request 2.** Refer to EKPC's response to Staff's First Request, Item 7. During Winter Storm Elliot, EKPC explained that interstate pipeline was curtailed due to frozen pipelines.

a. Provide a detailed response for if EKPC curtailed load with its interruptible customers.

If so, then provide which customers and the specific MWs for each customer that were curtailed.

b. Explain whether any of EKPC's generation units were out during Winter Storm Elliot or if they all were operating. If the units were generating, then provide the capacity factor for each operating unit and the price(s) for each unit that was called to run in the PJM market. If the units were out, provide the reasoning for why they were out and the hours they were out.

c. If EKPC was required to purchase energy from the PJM market during Winter Storm Elliot, provide the average price of energy as well as the total amount of MWs purchased.

**Response 2a.** PJM declared emergency interruptions for the entire RTO on December 23, 2022 and December 24, 2022. Each interruptible member has a defined notification period in their contract.

This is the amount of time that EKPC must provide notice prior to them actually having to interrupt their operations. The interruptible members were dispatched to curtail load according to their assigned notification times (30, 60 or 120 minutes):

December 23, 2022

- 30-minute 18:00 – 22:15
- 60-minute 19:00 – 22:15

December 24, 2022

- 30-minute 06:00 – 19:30
- 60-minute 06:00 – 19:30
- 120-minute 06:00 – 19:30

Please refer to the Excel spreadsheet “Response 2a Curtailed Load kW.xlsx” for specific interruptible customers and associated curtailed MW.

**Response 2b.** Refer to EKPC’s response to Staff’s First Request, Item 15 and related *Response 15 Attachment.pdf* which describes all generator forced outages during the review period. Refer to EKPC’s response to Staff’s First Request, Item 17 and related *Response 17 Attachment.pdf* which describes all generator capacity factors during the review period. See attachment *Response 2b.xlsx* for those forced outages that occurred specifically during Winter Storm Elliott, which most heavily impacted the PJM footprint during December 23-25, 2022.

**Response 2c.** EKPC’s net hourly purchases from PJM during Winter Storm Elliott (December 23-25, 2022) were 56,065 MWh at an average price of \$662.95 per MWh. It should be noted that this cost per MWh is before forced outage and highest cost unit exclusions.



EAST KENTUCKY POWER COOPERATIVE, INC.  
CASE NO. 2024-00137  
SECOND REQUEST FOR INFORMATION RESPONSE

COMMISSION'S REQUEST DATED SEPTEMBER 9, 2024

REQUEST 3

RESPONSIBLE PARTY: Christopher E. Adams

**Request 3.** Refer to EKPC's response to Staff's First Request, Item 16. Provide the following in Excel spreadsheet format with all formulas, rows, columns, and cells unprotected and fully accessible:

- a. The hourly energy purchased (MW's) and at what price.
- b. The day ahead and real time locational marginal price (LMP) at each hour.
- c. The hourly bids for Spurlock, Cooper, Bluegrass, and Smith units broken out by cost. Include in the response a breakdown for how much of the cost-based offer is fuel costs.
- d. The price that PJM called each unit to run.
- e. Hourly generation hours for Spurlock, Cooper, Bluegrass, and Smith units for each

month.

**Response 3a-e.** See requested data within attachment *Response 3a-e - CONFIDENTIAL.xlsx*, subject to motion for confidential treatment.

EAST KENTUCKY POWER COOPERATIVE, INC.  
CASE NO. 2024-00137  
SECOND REQUEST FOR INFORMATION RESPONSE

COMMISSION'S REQUEST DATED SEPTEMBER 9, 2024

REQUEST 4

RESPONSIBLE PARTY: Christopher E. Adams and Michelle K. Carpenter

**Request 4.** Explain if EKPC was subject to PJM Performance Assessment Interval penalties during the review period. If so, include an explanation for why, the penalty assessment date(s) and the amount(s) of the penalties.

**Response 4.** PJM declared emergency events that resulted in Performance Assessment Intervals on December 23, 2022 for hours 17:30 – 23:00, and on December 24, 2022 for hours 04:25 – 22:00. During the Performance Assessment Intervals, the generators below experienced forced outages or derates:

- Cooper 1 had a forced derate due to wet coal that was adhering to the lower sections of the bunkers in transition to the pulverizers. 12/23/2022 07:32 – 12/27/2022 12:00
- Spurlock 4 had a forced outage due to no lube oil flow to the out board bearing of the primary air fan. 12/23/2022 07:22 – 22:08
- JK Smith 4 had a forced outage due to frozen instrumentation. 12/23/2022 13:45 – 18:12
- JK Smith 4 had a forced outage due to unit control system issues 12/23/2022 21:52 – 12/24/2022 06:48

- Bluegrass 1 had a forced outage due to the unit tripping on lube oil warm up resulting in an automatic voltage regulator issue. 12/23/2022 09:28 – 18:20
- Bluegrass 1 had a forced outage due to natural gas curtailment by Texas Gas Transmission. After the natural gas curtailment, the unit had a start failure on fuel oil. 12/23/2022 18:20 – 20:08
- Bluegrass 1 had a forced outage due to the emergency shutdown valve opening after Bluegrass 2 was lined up to start. This resulted in a decrease in fuel oil header pressure. 12/23/2022 20:53 – 12/24/2022 13:55
- Bluegrass 1 had a forced outage due to the emergency shutdown valve opening after Bluegrass 2 was lined up to start. This resulted in a decrease in fuel oil header pressure. 12/24/2022 15:05 – 16:16
- Bluegrass 2 had a forced outage due to natural gas curtailment by Texas Gas Transmission. After the natural gas curtailment, the unit had a start failure on fuel oil. 12/23/2022 15:51 – 12/24/2022 17:16

These outages or derates led to an initial capacity performance penalty of \$19,935,547.93 which EKPC paid in March through May of 2023. Minor credit adjustments in 2023 totaling \$215,798.46 reduced that total to \$19,319,749.47. A settlement at FERC further reduced the total by \$6,124,659.42, for a final penalty assessment after all adjustments of \$13,195,090.05.

<b>Performance Assessment</b>		
Estimated Amount Recorded for YE 12/31/22		\$ 19,512,175.00
Amount Originally Assessed & Paid March-May 2023		\$ 19,535,547.93
Subsequent Adjustments in 2023 (Before Settlement)		\$ (215,798.46)
<b>Final Assessment (Before FERC Settlement)</b>		<b>\$ 19,319,749.47</b>
31.7% Reduction Per FERC Settlement		\$ (6,124,659.42)
<b>Final Assessment (After FERC Settlement)</b>		<b>\$ 13,195,090.05</b>