COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2025 INTEGRATED RESOURCE	**)**	
PLAN OF EAST KENTUCKY POWER	**)**	**CASE NO.**
COOPERATIVE, INC.	**)**	**2025-00087**

RESPONSES TO STAFF'S THIRD INFORMATION REQUEST

TO EAST KENTUCKY POWER COOPERATIVE, INC.

DATED AUGUST 12, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2025 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	)))	**CASE NO. 2025-00087**

CERTIFICATE

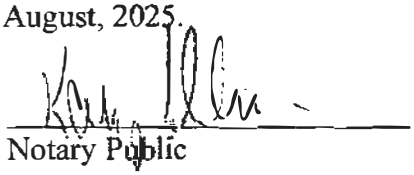
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

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 Third Request for Information in the above-referenced case dated August 12, 2025, 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.

Christopher E. Adams

Subscribed and sworn before me on this 30 day of August, 2025.

KATHY L. MCINTOSH
Notary Public
Commonwealth of Kentucky
Commission Number KYNP96402
My Commission Expires Jan 30, 2029



Notary Public

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2025 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	)))	**CASE NO. 2025-00087**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Scott Drake, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Third Request for Information in the above-referenced case dated August 12, 2025, 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.

Scott Drake

Subscribed and sworn before me on this 26 day of August, 2025.

Notary Public

GWYN M. WILLOUGHBY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP38003
My Commission Expires Nov 30, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2025 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	)))	**CASE NO. 2025-00087**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Jerry Purvis, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Third Request for Information in the above-referenced case dated August 12, 2025, 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.

Jerry Purvis

Subscribed and sworn before me on this 25 day of August, 2025.

Notary Public

KATHY L. MCINTOSH
Notary Public
Commonwealth of Kentucky
Commission Number KYNP96402
My Commission Expires Jan 30, 2029

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2025 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	)))	**CASE NO. 2025-00087**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Brad Young, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Third Request for Information in the above-referenced case dated August 12, 2025, 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.

Brad Young

Subscribed and sworn before me on this 27 day of August, 2025.

KATHY L. MCINTOSH
Notary Public
Commonwealth of Kentucky
Commission Number KYNP96402
My Commission Expires Jan 30, 2029

Notary Public

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 1
RESPONSIBLE PARTIES: Christopher E. Adams and Brad Young

Request 1. Refer to the Integrated Resource Plan (IRP) Table 8-3, page 184. Refer also to Case No. 2025-00140, EKCP's response to Commission Staff's First Request for Information, Item 5b and 5c.[1]

a. Item 5b indicates that a Certificate of Public Necessity and Convenience (CPCN) will be filed with the Commission for a new combustion turbine (CT). The IRP Table 8-3 does not indicate that a CT is warranted. Explain when EKPC's load forecast was updated such that another CT is warranted for resilience and reliability. Include in the response the size of the contemplated CT unit.

b. Item 5b also indicates that EKPC secured options for a third Siemens turbine aside from the two required to build the 745 MW (winter rating) natural gas combined cycle.

1) Explain if and when the Commission was made aware that EKPC secured the option for the third turbine.

[1] Case No. 2025-00140, *Electronic Tariff Filing of East Kentucky Power Cooperative, Inc. to Establish a New Tariff for Data Center Power* (filed July 14, 2025), EKPC's Response to Commission Staff's First Request for Information.

2) Explain whether the price of the option for the third turbine was the same as for the other two turbines to be used for the Natural Gas Combined Cycle (CCGT). Include in the response whether the reservation fee is applicable to the purchase price.

3) When was the deadline for EKPC to notify Siemens that it would exercise its purchase option?

c. Item 5c contemplates the possibility of a fourth turbine. Explain whether EKPC has already secured an option for this turbine, the option cost, and when a final purchase decision must be made.

Response 1.

a. EKPC has not modified its long-term load forecast. As will be set forth in greater detail in the anticipated CPCN application for the third turbine, it's intended use will be to serve new loads that were not included in the 2024 Long Term Load Forecast and therefore, would not be within the scope of the IRP.

The opportunity to utilize the inherent value of the third combustion turbine is prudent and reasonable for EKPC's Owner-Members. The third turbine has inherent value because it was initiated in a timely manner. It is available to EKPC sooner than a new turbine order that would be placed today and at a lower price than what would be contracted today. In a constrained generation capacity environment, such as what is currently in place, the ability to deliver and install a combustion turbine has intrinsic value. The third combustion turbine referenced by EKPC is the same 240 net MW Siemens F-class unit as discussed in 2024-00370 as part of the Cooper CCGT.

EKPC did not include any speculative large loads in it load forecast but stated that it would consider each load as it materialized. EKPC has been approached with multiple large load opportunities and it is reasonable to expect that some of this load will materialize. Additionally, EKPC has an aging combustion turbine fleet at its J. K. Smith Station. Units 1, 2 and 3 were installed in the early 1990's and are over 30 years old. Replacement parts are not readily available for these particular units which creates a supply risk in the event of a major failure. These are all compelling reasons to keep the option for the third combustion turbine viable.

b. 1) The Commission held an informal conference in Case No. 2025-00087 on May 28, 2025. As part of the discussion of the general status of data center inquiries regarding potentially locating in the service territories of EKPC's Owner-Members, EKPC's General Counsel, David Samford, advised the conferees that EKPC had an option for a third combustion turbine. However, at that time, EKPC's Board had not decided whether to exercise that option.

2) On a per unit basis, the pricing for the machine and required ancillary equipment for the third unit was nearly the same as the two units for the CCGT but is forecast to be impacted by market escalation. As a result, the final contract price for the third unit is approximately 14% higher due to the later delivery date (2028) subjecting the unit and related components to the aforementioned market escalation. The reservation fee will apply towards the purchase price once a formal contract is executed.

3) The third unit GT package had an option expiration date of December 12, 2024. The contract execution date is August 22, 2025, and the final notice to proceed date is October 15, 2025.

c. EKPC has not secured an option on a fourth turbine at this time.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 2
RESPONSIBLE PARTY: Christopher E. Adams

Request 2. Refer to EKPC's response to Commission Staff's Second Request for Information (Staff's Second Request) Item 7. Provide an explanation on how electric vehicle charging is expected to contribute 563,000 MWh to total energy requirements when only 12.7 percent of EKPC residential customers are likely to purchase an electric vehicle (EV) within the next five years.

Response 2. The 536,000 MWh noted in Request 7 likely reflects a transposition and should read 563,000 MWh. Survey results indicate that 12.7 percent of EKPC's Owner-Member's residential end-use retail members are likely to purchase an EV within the next five years. Based on a 2022 survey date, this implies 12.7% by the year 2027. Electrical vehicle charging is expected to contribute 563,466 MWh to total energy requirements by 2035, seven years after the date of the end-use survey question. 2035 assumptions assume 15.3% of annual vehicles sales are EVs, a modest increase from 12.7% by 2027, resulting in a stock forecast of 124,049 EVs in EKPC territory in 2035. Total energy for 124,049 EVs is projected at 534,961 MWh. EKPC added 3.3% or average distribution losses and 2.0% for transmission losses to calculate 563,466 MWh for EV

charging in 2035. EV contribution of 563,466 MWh represents only 3% of total requirements in 2035. See *CONFIDENTIAL_Staff 2-32 - EV Stock by Member.xlsx* and *CONFIDENTIAL_Staff 2-32 - EV Energy by Member.xlsx* for additional detail.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 3
RESPONSIBLE PARTY: Christopher E. Adams

Request 3. Refer to the IRP Table 8-2, page 180, and EKPC's Response to Staff's Second Request, Item 23, Staff 2-23 – Table 8-2 (Revised).

a. Compare and explain the differences in capital cost estimates between the National Renewable Energy Laboratory's Annual Technology Baseline (NREL ATB) and EKPC's Owner's Engineer, including the factors contributing to any variances.

b. From a resource assessment and production cost modeling perspective, explain why the various potential resources shouldn't be approximately the same estimated cost level of precision, such as overnight capital costs.

c. If the potential resources are modeled at different levels of precision, such as overnight capital costs for some resources and more detailed known engineering and construction costs for other resources, explain why that would not bias the choice and timing of additional resources selected in the portfolio modeling processes.

d. Refer also to Case No. 2024-00310, EKPC's response to Commission Staff's Second Request for Information, Item 6 page 2 of 4.3 In that case, the assumed capital cost of the reciprocating internal combustion engine (RICE) units was significantly smaller than the assumed

capital cost for the RICE unit in the present proceeding Table 8-2 (Revised). Explain the differences between these capital costs.

e. Confirm that the resource assessment and production cost modeling in Case No. 2024-00310 evaluated potential resources that were at approximately the same level of cost estimation precision.

Response 3.

a. The overnight capital cost ("OCC") listed in Table 8-2 as originally filed in the 2025 IRP was incorrect and did not match what was modeled in the resource optimizer. This was subsequently corrected in Table 8-2 (Revised). The 2024 NREL ATB lists an OCC of $1,228.9/kW (2024$) for a 2-on-1 F-frame natural gas combined cycle ("CCGT"). This estimate was derived from a study completed in 2022 by the Department of Energy ("DOE") and the National Energy Technology Laboratory ("NETL")[2]. There will be differences in costs given the span in time between the estimates given.

b. The costs in Table 8-2 represent the best information available at the time. For both RICE and Combined Cycle, the Project Scoping Reports filed in 2024-00310 and 2024-00370 were yet to be completed but were well underway. Therefore, to provide the most up to date information, a hybrid of the pricing that had been received from vendors as part of the scoping report and best engineering assumption filing in the gaps was utilized for the costs in Table 8-2

[2]https://netl.doe.gov/projects/files/CostAndPerformanceBaselineForFossilEnergyPlantsVolume1BituminousCoalAndNaturalGasToElectricity_101422.pdf

(Revised). The final Project Scoping Reports were completed later (including the cost estimate) and submitted with the new generation cases and is the most accurate information available.

EKPC ran the resource optimizer for the 2025 IRP using the estimates for the RICE and CCGT options in Table 8-2 (Revised). EKPC also included an estimate from its Owner's-Engineer for the 7EA SCGT, but EKPC does not have direct price comparisons for the balance of the resources listed in Table 8-2 (Revised) and therefore chose the publicly available NREL ATB estimates.

c. EKPC chose to model the most accurate capital costs available at the time. The OCC estimates published by NREL in the ATB are compiled from sources published in different years. NREL notes that, "Estimates of cost and performance for currently available fossil-fueled electricity generating technologies are representative of current commercial offerings and/or projects that began commercial service within the past 10 years." Even if EKPC used NREL ATB values for all resources listed in Table 8-2 (Revised), the estimates would inherently be at different levels of precision.

d. The costs estimates provided in 2024-00310 were at a more accurate level of precision than the initial estimates provided in Table 8-2 (Revised), which were used in the Resources Optimizer selection process in the 2025 IRP. The refined cost estimate between the initial and final estimate provided for 2024-00310 yielded a significant reduction in estimated costs for the RICE units. The RICE unit listed in Table 8-2 (Revised) is a representative unit and is not meant to represent Liberty RICE explicitly. The resource optimization for the IRP is not assessing whether Liberty RICE is economic; it is assessing whether an additional RICE facility is economic given that Liberty RICE and Cooper CCGT are both assumed to be built.

e. Yes, the resource assessment and production cost modeling in 2024-00310 was performed with the best-known estimates. The total project cost for Liberty RICE, including transmission, has not changed from the 2024-00310 CPCN.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 4
RESPONSIBLE PARTY: Christopher E. Adams

Request 4. Refer to EKPC's response to Staff's Second Request Item 23 page 2. EKPC stated,

> [T]he RICE and Combined Cycle costs do not match the CPCNs submitted in Case Nos. 2024-00310 and 2024-00370 because the capital costs do not represent those costs submitted for Liberty RICE or Cooper CCGT. The resources in Table 8-2 (Revised) represent costs estimates for each resource and does not include transmission expenses that would be incurred for any future project.

Confirm that the capital costs in Case Nos. 2024-00310 and 2024-00370 also did not include transmission costs.

Response 4. Total project costs included network transmission upgrades in both 2024-00310 and 2024-00370. The capital costs included in Table 8-2 (Revised) do not include network transmission costs as the resource optimizer is intended to select the most efficient generation resource for the portfolio. The resource optimization for the IRP is not assessing whether Liberty

RICE or Cooper CCGT is economic; it is assessing whether an additional RICE or CCGT facility is economic given that Liberty RICE and Cooper CCGT are both assumed to be built.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 5
RESPONSIBLE PARTY: Christopher E. Adams

Request 5. Refer to EKPC's response to Staff's Second Request, Item 25a. Confirm that the reason environmental compliance costs that were included as base assumptions to the IRP modeling were not included in the plans represented in Table 8-4 is because modeling for the specific plans in Table 8-4 had already accounted for or included the environmental costs, so including environmental costs in modeling in those specific plans would have been "double counting." If not confirmed, explain.

Response 5. No, the specific plans listed in listed in Table 8-4 are derived using the resource optimizer given the capital cost assumptions listed in Table 8-2 (Revised). The costs in the resource optimizer include the overnight capital cost ("OCC") to build the generation resource and the variable production costs, including fuel and variable operations and maintenance costs. The costs do not include network transmission upgrades or environmental costs. Once a "top case" has been identified, it is then modeled in detail using the production cost model. Any environmental compliance costs, if applicable, would have been accounted for during this step in

the modeling. In the 2025 IRP, the top case included only seasonal energy purchases and therefore, did not include environmental compliance costs.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 6
RESPONSIBLE PARTY: Jerry Purvis

Request 6. Refer to EKPC's response to Staff's Second Request Item 26.

a. Confirm which Mercury and Air Toxics Standards (MATS) filterable particulate matter numeric emission limitation EKPC is required to maintain compliance with for each generation unit.

b. Explain whether EKPC has been granted the Presidential Exemption (Exemption) upon the signing of the proclamation dated April 8, 2025,4 or whether EKPC must go through a formal request process to have the Exemption, and which specific environmental regulations are affected by the Exemption.

c. Explain whether the Exemption means that EKPC could cease compliance with existing current environmental regulations, and if yes, identify which environmental regulations it would create noncompliance with.

d. Once EKPC has the Exemption, explain the specific actions EKPC will take to meet each environmental compliance limitation that is applicable to the Exemption and the date by which EKPC must be in compliance.

e. Explain why EKPC needed the exemption, including the specific reasons EKPC would have been unable to comply without the Exemption.

f. Provide a list of the Environmental Protection Agency (EPA) rules pertaining to the Spurlock Units to which EKPC must still comply and the compliance standards that must be attained, or if in compliance already, must be maintained.

Response 6.

a. EPA put forth a final rule May 7, 2024, applicable to coal-fired generation units above 25 MWs in nameplate capacity to control hazardous air pollutants (HAPs) called the Mercury and Air Toxics Standards (MATs). EPA regulates 188 hazardous air pollutants under this rule that include mercury, non-mercury HAP metals, and acid gases. EPA chose to regulate HAPs as particulate matter. EKPC coal-fired units will have to comply with EPA's 2024 MATs, dated May 7, 2024, three years from the appearance in the Federal Register on July 8,2027. EKPC's coal-fired units at Spurlock and Cooper Stations will have to comply with the numeric emission limits for particulate matter at 0.010 lbs./MMBtu.

b. The President of the United States, under his executive authority to preserve coal capacity, put forth a Presidential Exemption for the MATs rule in April 2025 for electrical generating units (EGUs) to apply for the exemption that would essentially grant two additional years to comply with MATs or from July 2027 to July 2029. EKPC applied and was granted a Presidential Exemption for MATs for Spurlock and Cooper Stations. See attachments *PSC DR3 Response 6b - FR-2025-04-21.pdf* and Letter EKPC to *PSC DR3 Response 6b - EPA Adm Zeldin.pdf*.

c. EKPC is complying with the 2012 MATs rule today at its coal-fired plant facilities. Furthermore, the EKPC coal-fired units will remain in compliance unless, otherwise notified by EPA rulemaking revisions to MATs post June 11, 2025, repeal. The new Administration EPA opened the docket and proposed to repeal the 2024 MATs rule June 11, 2025. EKPC submitted comments in August 2025 to support the repeal. EKPC remains in compliance with MATs via the Presidential Exemption until July 8, 2029.

d. EKPC remains in compliance with the 2012 MATs rule by use of continuous emission monitoring, stack testing, and operating the environmental controls 24 hours a day, nearly 365 days a year, unless on a planned or forced outage. EKPC coal-fired units meet the numeric limitations for particulate matter 0.030 lbs./ MMBtu, non-mercury limitations, and acid gases via stack testing as required and witnessed by the Division for Air Quality.

e. EKPC had concerns about Spurlock unit 3 being able to meet the numeric emission limitations of 0.010 lbs. PM / MMBtu on a daily basis. When the units are stressed during hot and cold temperatures during the summer and winter months, the equipment stresses during full load operations. A pinky sized hole in a baghouse can lead to an outage or violation of this particulate limitation set rate 0.010 lbs./MMBtu. Additionally, should the unit come offline, PJM can penalize EKPC for not delivering its full load capacity; so, there exists a financial risk associated with the new emission limitation not given consideration by the former Administration EPA. So EKPC filed for the Presidential Exemption and was awarded it on April 21, 2025. See attachment *PSC DR3 Response 6e – North Dakota v. EPA –States-Stay-Motion pages 541-544.pdf.*

f. EKPC Spurlock Station must be in compliance with all of its EPA delegated authority operating permits in Kentucky by the Division for Air Quality, Division of Waste Management, and the Division of Water. The State of Kentucky issued the operating title V air permit, the landfill permit, and the KPDES water permit which folded the federal EPA regulations and obligations into its operating permits. EKPC works diligently daily to remain in compliance with all its obligations and requirements of its operating permits.

Additionally, EKPC is working with EPA and the Energy and Environmental Cabinet (EEC) and its agencies listed above to follow EPA rulemaking for Greenhouse Gases (GHG), MATs, Cross State Air Pollution Rule / Good Neighbor FIP, Effluents Limitation Guidelines (ELG), and legacy coal combustion residual rule. As EPA rulemaking occurs, EKPC will keep the KY Public Service Commission informed.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 7
RESPONSIBLE PARTY: Christopher E. Adams

Request 7. Refer to EKPC's response to Staff's Second Request Item 27b, attachment Staff 2-27b.pdf.

a. In the Total Capacity column, identify and explain the sources of winter capacity additions that will support increases of 100 MWs in 2026, 50 MWs in 2027, and 50 MWs in 2028.

b. Explain whether the 300 MW Hydro Power Purchase Agreement (PPA) listed in both winter and summer means that the modeled/assigned capacity factor is at or near 100 percent year-round.

Response 7.

a. The additions listed in the winter capacity column are intended to be one or more physically delivered, energy-only, purchased power agreements ("PPAs").

b. Table 8-3 (Revised) lists the Hydro PPA at 300 MW because that was the maximum energy offtake. However, EKPC modeled the Hydro PPA in the production cost model using an energy profile based on the resource's historical output. The Hydro PPA energy profile resulted in a 38% annual capacity factor.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 8
RESPONSIBLE PARTY: Christopher E. Adams

Request 8. Refer to EKPC's response to Staff's Second Request, Item 27b, attachment Staff 2-27b.pdf, and Item 28b, attachment Staff 2-28b – EKPC IRP 2025 Resource Expansion Plan.pdf.

a. In Staff 2-28b – EKPC IRP 2025 Resource Expansion Plan.pdf, there are capacity addition purchases, but in attachment Staff 2-27b.pdf, the purchases appear to be listed under Energy additions. Explain the differences and whether Table 8-3 (Revised) should be updated to reflect the capacity purchases.

b. Explain whether EKPC has already signed contracts for the capacity purchases illustrated in the Staff 2-28b – EKPC IRP 2025 Resource Expansion Plan.pdf.

c. Confirm that these winter capacity purchases are for resource capacity only and explain how EKPC recovers the cost of the winter capacity purchases.

Response 8.

a. It is accurate to list these purchases as energy as shown in Table 8-3 (Revised). They are listed under the "CAPACITY ADDITIONS" column in the resource expansion plan as these purchases would be physical, not financial, purchases on an annual or seasonal basis which would hedge the load at a known quantity and price. The purchases would not provide a PJM RPM capacity benefit as they would be energy only. The intent is to procure enough capacity and/or energy resources to meet EKPC's peak load plus planning reserves until capacity can be built.

b. EKPC has not purchased capacity for 2026. EKPC has signed a purchased power agreement ("PPA") for 2026 for 100 MW of around-the-clock energy physically backed by several nuclear assets located within PJM.

c. Not confirmed. These purchases are energy-only (plus emission-free energy certificates), not capacity purchases, and will be recovered through the fuel adjustment clause.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 9
RESPONSIBLE PARTY: Christopher E. Adams

Request 9. Refer to EKPC's response to Staff's Second Request, Item 28, page 2 of 3.

a. In the Long-Range Forecast chart, the amount of Coal – Co-Fire generation declines from 2031–2033 and then remains stable beginning in 2034. Explain whether the decline is due to lower ELCC values attributable to co-firing or the retirement of the Cooper coal units.

b. Explain whether the co-firing of Cooper Unit 2 is necessary due to EKPC receiving the Presidential Exemption.

Response 9.

a. Yes. The PJM ELCC forecast used to produce the chart shows a decline for those units from 86% in 2032 to 83% in 2033, and another decline to 79% in 2034. The 2034 number is the last year in the forecast and thus the 79% value is used for the remainder of the planning period through 2039. In addition, Cooper 1 was assumed to be "mothballed" beginning January 2032.

b. The Presidential Exemption for MATs does not require EKPC to co-fire coal and natural gas for Cooper Unit 2. The EPA GHG rulemaking from 2024 requires EKPC to make

business decisions whether or not to retire, co-fire, or install carbon capture and sequestration by January 1, 2030, for its coal-fired capacity. EKPC elected to co-fire Cooper Unit 2 to reduce GHG emissions and to increase economic ability to dispatch in the PJM markets. This strategy will minimize future risk of compliance should the rule be reinstated and will reduce the unit's dispatch cost by roughly half as compared to today's costs. This dispatch cost reduction allows EKPC to hedge market prices at a lower price point for its Owner-Members and ultimately its Owner-Members' end-use retail members.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 10
RESPONSIBLE PARTY: Christopher E. Adams

Request 10. Refer to EKPC's response to Staff's Second Request, Item 30b. Confirm that when EKPC states that the RICE and Cooper Combined Cycle Gas Turbine (CCGT) were added as base case assumptions, for capacity and energy modeling and forecasting purposes that means that these units were treated as already part of EKPC's existing resource portfolio along with the existing Cooper and Spurlock units.

Response 10. Liberty RICE and Cooper CCGT were included in the base case assumptions as planned, not existing, resources. EKPC already determined the Liberty RICE and Cooper CCGT would be needed and filed CPCNs to meet the burden of proof for those resources prior to filing the 2025 IRP. The resource optimizer is used to assist in determining the next most-economic resource(s), not resource(s) that have already been committed.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 11
RESPONSIBLE PARTY: Christopher E. Adams

Request 11. Refer to EKPC's response to Staff's Second Request, Item 14b. Conduct and provide an analysis of the effects of the potential expiration or termination of federal financial stimuli.

Response 11. EKPC contacted GDS Associates regarding the analysis of potential expiration or termination of federal financial stimuli. GDS could start the analysis in September and expects it would take 3 weeks and cost approximately [redacted]. The analysis would include secondary research on expected impacts to EV adoption rates which would be used to make adjustments to the adoption curves. Another component would be to identify how the cost comparison between EVs and internal combustion engines ("ICE") extend further into the future, damaging uptake in early years. Load attributed to EVs made up just 1-3% of the total forecasted energy sales in the 2024 Long Term Load Forecast.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 12
RESPONSIBLE PARTY: Scott Drake

Request 12. Refer to EKPC's response to Staff's Second Request, Item 16. Explain how EKPC plans to advertise the improvements made to the Button-up Program to end-use members and local contractors.

Response 12. EKPC will highlight the efficiency programs on www.togetherwesaveky.com and provide DSM program marketing materials, program informational pieces, and articles encouraging efficiency to EKPC's Owner-Members for distribution to their end-use members and contractor contacts.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00087
THIRD REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED AUGUST 12, 2025
REQUEST 13
RESPONSIBLE PARTY: Scott Drake

Request 13. Refer to EKPC's response to Staff's Second Request, Item 16. Explain how EKPC calculated the "estimation of how the Button-up Program will grow once knowledge of the program with end-use members and local contractors improves along with reflecting the impact of an increased incentive."

Response 13. EKPC referenced the Button-Up Program participant data from 2018 (EKPC 2018 DSM Annual Report) to develop a participation estimate for the newest Button-Up Program. In 2018, all of the Button-Up Program measures that were just added to the newest Button-Up Program tariff were available in 2018. Therefore, EKPC felt that actual participant data from 2018 was a reliable estimate source.