BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE ELECTRONIC APPLICATION OF)	
EAST KENTUCKY POWER COOPERATIVE,)	
INC. FOR 1) A CERTIFICATE OF PUBLIC)	CASE NO.
CONVENIENCE AND NECESSITY TO)	2024-00310
CONSTRUCT A NEW GENERATION)	
RESOURCE; 2) A SITE COMPATABILITY)	
CERTIFICATE; AND 3) OTHER GENERAL REL	IEF)	

RESPONSES TO SIERRA CLUB'S POST-HEARING INFORMATION REQUEST TO EAST KENTUCKY POWER COOPERATIVE, INC.

DATED MARCH 21, 2025

BEFORE THE PUBLIC SERVICE COMMISSION

In	the	M	atter	۸f۰

THE ELECTRONIC APPLICATION OF)
EAST KENTUCKY POWER COOPERATIVE,)
INC. FOR 1) A CERTIFICATE OF PUBLIC) CASE NO.
CONVENIENCE AND NECESSITY TO) 2024-00310
CONSTRUCT A NEW GENERATION)
RESOURCE; 2) A SITE COMPATABILITY)
CERTIFICATE; AND 3) OTHER GENERAL RELIEF)

CERTIFICATE

STATE OF KENTUCKY)
COUNTY OF CLARK	<i>)</i>

Scott Drake, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sierra Club's Post-Hearing Request for Information in the above-referenced case dated March 21, 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 25th day of March, 2025.

Notary Public

GWYN M. WILLOUGHBY
Notary Public

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

BEFORE THE PUBLIC SERVICE COMMISSION

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CERTIFICATE

STATE OF KENTUCKY)
COUNTY OF CLARK)

Julia J. Tucker, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Sierra Club's Post-Hearing Request for Information in the above-referenced case dated March 21, 2025, 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.

Julie J. Tucker

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

Notary Public

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

BEFORE THE PUBLIC SERVICE COMMISSION

In	the	M	atter	of.
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THE ELECTRONIC APPLICATION OF)
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CERTIFICATE; AND 3) OTHER GENERAL RELI	EF)

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 Sierra Club's Post-Hearing Request for Information in the above-referenced case dated March 21, 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 25th day of March, 2025.

GWYN M. WILLOUGHBY Notary Public Commonwealth of Kentucky Commission Number KYNP38003

My Commission Expires Nov 30, 2025

EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00310 POST-HEARING REQUEST FOR INFORMATION RESPONSE

SIERRA CLUB'S REQUEST DATED MARCH 21, 2025

REQUEST 1

RESPONSIBLE PARTY:

Julia J. Tucker

Request 1. At the hearing in this matter on March 18, 2025, EKPC Witness Julia Tucker stated that EKPC's Excel spreadsheet, labelled "JI3.5 RICE-CT-Economic Analysis.xlsx," produced in response to Joint Intervenors' Data Request 3-5 a., was prepared after the Informal Conference in this matter dated January 29, 2025. Please provide the date the spreadsheet was prepared by EKPC.

Response 1. The final version of the spreadsheet was completed on February 19, 2025.

EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00310

POST-HEARING REQUEST FOR INFORMATION RESPONSE

SIERRA CLUB'S REQUEST DATED MARCH 21, 2025

REQUEST 2

RESPONSIBLE PARTY:

Julia J. Tucker

Request 2. Please refer to EKPC's Excel spreadsheet, labelled "JI3.5 RICE-CT-

Economic Analysis.xlsx," produced in response to Joint Intervenors' Data Request 3-5 a. For the

RICE unit economic analysis, rows 1-15, please indicate how results shown in Row 15, Columns

B-M, "Net Revenue/(Cost)(\$/MWh)" would change if EKPC used a capacity factor (row 4) of .36

for each year modeled.

Response 2. Objection. This request is unduly burdensome and seeks to have EKPC

develop a model that was not part of this proceeding and does not exist. EKPC is not required to

create documents on behalf of the Sierra Club. In addition, EKPC is not required to perform work

on behalf of the Sierra Club. The Sierra Club could have obtained an expert witness to perform

this modeling on behalf of Sierra Club, but it chose not to do so. The Sierra Club continues to

request information that it knows does not exist and would require EKPC to expend a large amount

of time to develop. Without waiving said objection EKPC states as follows:

EKPC derived the capacity factors used in the comparison from the production cost modeling

output. The RICE capacity factor was a direct output of that model, while the average capacity

factor for Smith Units 9 and 10 were used as a proxy for the F-class capacity factor given their relatively comparable heat rates. The capacity factors are a result of the modeled heat rates, fuel costs, and market prices. EKPC would have to modify one or more of these factors in order to produce a reduced capacity factor. For example, EKPC could reduce the assumptions for market prices in order to forcibly reduce the capacity factors of its units. However, EKPC cannot reduce the capacity factor for RICE without also reducing the capacity factor for the F-class CT. To do so would produce an unfair and biased result. The only way to accomplish this, while retaining a fair comparison, is to run the model with a modified set of inputs, not just simply changing the capacity factor as requested. EKPC cannot reasonably review those inputs, run the model, and thoroughly check and prepare the results within the time allotted for this data request.

EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00310

POST-HEARING REQUEST FOR INFORMATION RESPONSE

SIERRA CLUB'S REQUEST DATED MARCH 21, 2025

REQUEST 3

RESPONSIBLE PARTY:

Julia J. Tucker and Brad Young

Regarding the capacity factor at other reciprocating internal combustion engine (RICE) facilities in the U.S., please state:

- a. The capacity factors at RICE units built or supervised by Burns and McDonald in the U.S.;
 - b. The capacity factors of other Wartsila RICE units in the U.S.;
- c. The capacity factors of other RICE units operating in the U.S., based on publicly-available data from the U.S. Energy Information Administration. Sierra Club believes this information should only take approximately 20 minutes for EKPC to compile and would provide useful information to the Commission, EKPC, and stakeholders regarding whether the capacity factor assumed for EKPC's proposed RICE units is reasonable. The U.S. EIA provides the relevant data on Form 923, Page 4, Generator Data, and EIA Form 860, Schedule 3, Generator Data for Operable Units. These forms can be filtered for the prime mover "internal combustion" or "IC." The capacity factor from EIA Form 860 can be quickly summed up and matched to the generation data from EIA Form 923.

Response 3. Objection. This request asks for information that is not in the possession of EKPC. In addition, the Sierra Club is attempting to introduce evidence that it was unable to introduce at the hearing in this matter. Julia Tucker stated that she did not use or review the information from the EIA. This information appears to be information that is entered by the individual entities and could have input errors, which the Sierra Club admitted at the hearing. EKPC is not required to conduct or create new modeling on behalf of the Sierra Club. Sierra Club states the data is publicly available, therefore it could have taken the publicly available information and performed its own modeling. However, Sierra Club has failed to file any testimony or present any evidence in this proceeding.

EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00310 POST-HEARING REQUEST FOR INFORMATION RESPONSE

SIERRA CLUB'S REQUEST DATED MARCH 21, 2025 REQUEST 4

RESPONSIBLE PARTY: Julia J. Tucker

Regarding electric vehicles and EKPC's 2024 Long Term Load Forecast, please provide EKPC's forecast for electric vehicle growth and the impact of electric vehicles on electricity demand in its service territory through the planning horizon (2025-2039), in terms of:

- a. Electric vehicles sales as a percentage of annual light-duty vehicle sales;
- b. The total number of light-duty electric vehicles on the road;
- c. Forecast electricity demand associated with electric vehicle charging.

Response 4.

- a. See attachment "SC 4 EV Stock. xlsx".
- b. See attachment "SC 4 EV Stock. xlsx".
- c. See EKPC's response to Sierra Club's First Request for Information Item No. 6.

EAST KENTUCKY POWER COOPERATIVE, INC. CASE NO. 2024-00310

POST-HEARING REQUEST FOR INFORMATION RESPONSE

SIERRA CLUB'S REQUEST DATED MARCH 21, 2025

REQUEST 5

RESPONSIBLE PARTY:

Scott Drake

Request 5. Please state whether EKPC has in place electric vehicle-specific time-ofuse rates or managed charging programs to help avoid on-peak residential electric vehicle charging.

a. If any, please provide a brief description of the time-of-use rate or managed charging program.

b. If EKPC tracks the percentage of charging that is on-peak vs. off-peak for residential customers

enrolled in electric vehicle-specific time-of-use rates or managed charging programs, please

provide that information.

Response 5. EKPC and its owner-member cooperatives offer a Residential Off-Peak Home Charging program for EVs. The pilot program's tariff can be found on the Commission's website.

- a. The program provides a \$0.02 incentive per kwh when charging a qualifying EV during off-peak hours. The innovative program design is behavioral peak-load shifting program instead of utilizing hard requirements of a time-of-use rates or utility managed charging.
- b. The pilot program is new and charging data is being collected. It is too soon to report charging information with confidence in the accuracy of the data.