COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

RESPONSES TO JOINT INTERVENOR'S THIRD INFORMATION REQUEST

TO EAST KENTUCKY POWER COOPERATIVE, INC.

DATED FEBRUARY 6, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Darrin Adams, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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.

Darrin Adams

_____

Subscribed and sworn before me on this 18th day of February, 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:

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

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Nicholas Comer, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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.

Subscribed and sworn before me on this 18th day of February, 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:

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

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Mark Horn, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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.

Mark Horn

_____

Subscribed and sworn before me on this 18th day of February, 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:

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

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 the Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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.

Julia J. Tucker

Subscribed and sworn before me on this 18th day February, 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:

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

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 Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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 18th day of February, 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:

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

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Craig Johnson, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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.

Craig Johnson

Subscribed and sworn before me on this 18th day of February, 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:

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

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 Joint Intervenor's Third Request for Information in the above-referenced case dated February 5, 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 18th day of February, 2025.

Notary Public

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
THIRD REQUEST FOR INFORMATION RESPONSE

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 1
RESPONSIBLE PARTY: Julia J. Tucker

Request 1. Refer to the Direct Testimony of Julia J. Tucker at p. 11 lines 11-13 and 18-20:

a. Clarify the definition of "non-extreme weather day."

b. Explain the basis for stating that Winter Storm Gerri's peak occurred during a non-extreme weather day.

c. Clarify whether EKPC has relied on demand during this or any other non-extreme weather day when calculating its reserve margin.

d. Reconcile this testimony with EKPC's response to Sierra Club's request 1-14(b): "The peak load observed during January 2024 does not represent a 'swing' in demand, but rather the peak demand was caused by saturation of the load within the system due to the cold weather."

Response 1.

a. A day where weather is normal or milder; where normal is defined as -2°F based on historic temperature at LEX weather station from 1980 - 2024.

b. EKPC peaked on two different days during Winter Storm Gerri. The first peak occurred on 1/17/2024 and absolute minimum temperature at LEX was 3. A secondary peak occurred on 1/21/2024 and absolute minimum temperature at LEX was -7. The peak on 1/17/2024 was the highest peak during Winter Storm Gerri and occurred at temperatures milder than normal as defined in response 1a.

c. Reserve margin is calculated as described in the direct testimony of Julia J. Tucker page 13, lines 3 through 23 and page 14 lines 1 through 5.

d. The initial statement is correct. As noted in Tucker's testimony at p. 11 lines 18 – 20, minimum temperature on EKPC's peak day during Winter Storm Gerri was 3F, warmer than normal. Demand during Gerri helped EKPC recognize that its previous LTLFs were under forecasting winter peaks.

The second statement, while accurate, may have been confusing. Cold weather did occur during Winter Storm Gerri although it did not meet the "extreme" threshold at the time of peak. However, EKPC does not consider January 2024 a "swing" in demand. EKPC considers Winter Storm Gerri an indication that winter demand overall for EKPC has shifted higher.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 2
RESPONSIBLE PARTY: Legal Objection

Request 2. Staff's First Request For Information, Response 1.b. ("Staff 1-1.b."), regarding inquiries from "multiple large data centers," and respond to the following requests:

a. Does EKPC track inquiries from large potential customers?

i. If yes, please provide any such tracking information available for large data center inquiries.

ii. If no, why not?

b. What is the basis for the statement that "EKPC does expect that some large data center load will materialize?

c. Do the recent reports of skepticism toward speculative investment in generation to serve data centers in the wake of the debut of the "DeepSeek" app affect the expectation expressed by EKPC regarding large load data center growth?

i. If so, how is EKPC's expectation affected?

ii. If not, why not?

d. Please refer also to EKPC's response to JI 1-13, and the non-disclosure agreement (NDA) between Joint Intervenors and EKPC dated December 05, 2024, and provide a list of all

economic development project inquiries and the stage of each, including any inquiries regarding carbon intensity

Response 2. Objection. This request seeks information not relevant to this proceeding. EKPC did not include any data center load in its LTLF.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 3
RESPONSIBLE PARTY: Julia J. Tucker

Request 3. Refer to EKPC's response to Staff 1-3. With regards to the extreme weather event that EKPC used in quantifying its reserve margin:

a. Explain the basis for the assumed peak producing temperature of -13 degrees Fahrenheit, and identify the number of hours at which you assumed such peak producing temperature would occur.

b. Identify the number of hours during the extreme weather event you assumed load would be at peak levels.

c. Identify the peak producing temperature during Winter Storm Elliott, and the number of hours during which such temperature occurred.

d. Identify the peak producing temperature during Winter Storm Gerri, and the number of hours during which such temperature occurred.

e. Identify the peak producing temperature during Winter Storm Blair in January 2025, and the number of hours during which such temperature occurred.

f. Identify the number of hours during Winter Storm Elliott that EKPC load was at peak levels.

g. Identify the number of hours during Winter Storm Gerri that EKPC load was at peak levels.

h. Identify the number of hours during Winter Storm Blair that EKPC load was at peak levels.

Response 3.

a. For this extreme scenario EKPC analyzed weather data for LEX weather station from 1980 to 2024. Absolute minimum winter temperature ranges from -20F to 13F. Multiple cumulative frequency distributions were calculated from sets of 20 years of data to 44 years. The tenth percentile of each cumulative frequency distribution ranges from -18F to -7F. For this scenario, EKPC used the midpoint of that range rounded to the nearest whole degree. EKPC did not make an assumption for the number of hours of peak producing weather.

b. Prior to Winter Storm Elliott ("WSE"), EKPC's peak was 3507 MW in 2015. During WSE, EKPC's load exceeded its previous peak for 15 straight hours. For this scenario, EKPC assumed a 48-hour event with a load shape similar to EKPC's load shape during WSE.

c. Absolute minimum temperature at LEX during WSE was -5F. Hourly temperature was -5F for three hours. WSE was unique because it included high speed winds driving wind chill down to -31F.

d. Absolute minimum temperature at LEX during Winter Storm Gerri was -7F; however, absolute minimum temperature on EKPC's peak day was 3F. Hourly temperature was 3F for two hours on the peak day.

e. EKPC did not peak during Winter Storm Blair during the first week of January 2025; however, it peaked later in the month during Winter Storm Enzo. Absolute minimum temperature at LEX during Winter Storm Enzo was -4F. Hourly minimum temperature was -3F for one hour. Note that the absolute minimum represents the daily minimum temperature recorded without regard to time while hourly temperatures are recorded at a specific time during each hour (which explains the discrepancy between -4F and -3F).

f. During WSE (3,747 MW), EKPC's load exceeded its 2015 peak (3,507 MW) for fifteen hours.

g. During Winter Storm Gerri (3,754 MW), EKPC load exceeded its 2015 peak (3,507 MW) for ten hours.

h. EKPC did not peak during Winter Storm Blair during the first week of January 2025; however, it peaked later in the month during Winter Storm Enzo (3,744 MW). During Winter Storm Enzo, EKPC load exceeded its 2015 peak (3,507 MW) for ten hours.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 4
RESPONSIBLE PARTY: Julia J. Tucker

Request 4. Please see EKPC's Response to Staff 1-3 and 1-4 and explain the following:

a. The difference between the "Installed Reserve Margin" (IRM) discussed in 1-3, and "planning reserve margin" discussed in 1-4, if any.

b. What effect, if any, does PJM's recommended IRM values for 2024 through 2028 discussed in 1-3 have on EKPC's planning?

c. Provide any modeling analysis, including all input and output files, workpapers, or workbooks, underlying the Company's Loss of Load Expectation (LOLE) analysis referenced in Response to Staff 1-3 in machine-readable format.

d. Does the addition of a reserve margin to planning requirements after reductions in capacity accreditation for Effective Load Carrying Capacity (ELCC) double count the risk of a forced generator outage? If not, explain why not.

Response 4.

a. The IRM discussed in Staff 1-3 is a PJM developed planning reserve margin for its entire footprint, based on PJM's peak load which occurs during the summer, and not accounting for

specific load zones or for EKPC by itself. The EKPC planning reserve margin of seven percent is developed by EKPC, applies to EKPC's winter peak, and is specific to EKPC's native load needs.

b. The PJM IRM impacts the amount of total capacity reserves procured by PJM within the RPM capacity market. Given the volatility of the PJM capacity market, EKPC and its members could be financially harmed if EKPC does not carry enough available capacity to offset its summer PJM load obligation. This is why EKPC's planning reserve margin of seven percent applies to both winter and summer. The PJM IRM is only impactful to EKPC in the context of summer capacity planning. It does not impact EKPC's winter planning, which is driven by EKPC's peak load forecast plus reserve margin.

c. The LOLE analysis described in Staff 1-3 is PJM's analysis. EKPC did not develop workpapers for PJM's analysis.

d. Yes, if it is being used for capacity expansion analysis. EKPC applied the reserve margin to the summer data only to provide a buffer to ensure that it is adequately hedging its cost of summer load obligations within the PJM RPM market. EKPC will be assigned the cost of PJM''s procurement in the RPM auction based upon EKPC's summer load requirements. EKPC hedges that cost exposure by ensuring that it has more than enough capacity to sell into that RPM market to receive enough revenue to cover its assigned cost from PJM. EKPC applies a reserve margin to this analysis to account for PJM assigning more load obligation than EKPC has projected or if PJM reduces the ELCC value for EKPC generation units. The summer reserve margin is used to gauge if EKPC is adequately hedged against the PJM RPM market clearings.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 5
RESPONSIBLE PARTY: Julia J. Tucker

Request 5. Please refer to EKPC's response to Staff 1-6 and respond to the following requests:

a. provide the discussed resource selection and optimization analyses in machine-readable format, or confirm that there are no such machine-readable inputs or outputs.

b. Identify any resource optimization modeling, production cost modeling, or other modeling that supports or was used in creating any part of the analysis provided in your response to Staff 1-6.

i. For each such modeling you identify, produce all input and output files, workbooks, and workpapers used in or produced by such modeling.

c. Please explain when EKPC first became aware that it would be capacity deficient in the 2025/2026 winter peak period by 200 MWs.

d. Please explain when, assuming the approval of the requested RICE units, the unit(s) would be constructed and generating electricity.

e. Please provide the difference in projected costs for electricity from PPAs v. the cost of electricity from the RICE units.

f. Please provide the source of the "full load average heat rate of 9,717 btu/kWh" for "an 'F' class combustion turbine." Compare that source with the following manufacturer specifications and justify the heat rate used:

i. Mitsubishi America's, F-Class, 8,144 to 9,230 Btu/kWh,2

ii. GE Vernova, 7F gas turbine, 8,871 to 8,873 Btu/kWh,3

iii. Siemens energy, SGT6-5000F gas turbine, 8,530 Btu/kWh.4

g. Explain how the proposed RICE units compare financially and where they would break even with each of the above turbines given the cited heat rates.

h. Please explain why EKPC waited until PPAs were the only alternatives for meeting the capacity needs identified in the 2025/2026 winter peak period, rather than requesting authorization to construct necessary capacity to address capacity deficiencies.

i. Please provide all economic analyses on which EKPC concluded that purchase of the "capacity" and "renewable energy credit products" in the Safe Harbor Hydro "were not deemed to be economically prudent purchases."

j. Please explain the statement that "EKPC's updated 2024 long term load forecast shows a significant increase in expected winter peak loads based on recent experience but it does not report significant changes in expected energy requirements."

i. Explain how it is that the load forecast can show a significant increase in expected winter peak loads while not reporting significant changes in expected energy requirements.

ii. Explain what "recent experience" is being referenced in that sentence, and how it has resulted in a significant increase in expected winter peak loads.

k. Please refer to the following paragraph:

Therefore, EKPC's optimization analyses in its 2022 Integrated Resource Plan ("IRP") continues to be relevant concerning its energy resource needs going forward. That plan indicates that solar resources are economically viable for EKPC and that its next dispatchable resource is expected to be a combustion turbine. EKPC did not include RICE units in its alternatives in the 2022 IRP. EKPC compared the RICE units to a simple cycle combustion turbine only in its analysis for this application, since the detailed optimization studies for the 2022 IRP were still pertinent with regards to energy needs. However, timing of the need for the next resource has changed due to the change in peak load expectations.

i. Please explain whether the EKPC optimization analysis in the 2022 Integrated Resource Plan continues to be relevant, given the addition of the RICE units not having been considered in that plan.

ii. Please explain whether the addition of the RICE

units would change the timeframe in which a combustion turbine addition would be needed.

iii. Please explain whether the combination of solar resources and battery storage was considered as an alternative to the addition of the RICE unit(s).

1. If so, provide any analysis reflecting the relative costs of the two dispatchable resources (solar + battery v. RICE unit).

2. If not, explain why not, and provide any supporting analysis.

iv. Please explain how the 2022 IRP maintains any relevance considering that the RICE units are intended to address energy and capacity needs.

v. Please explain the sentence "the timing of the need for the next resource has changed due to the change in peak load expectations." What are the changes in peak load expectations to which the sentence is referring? When did EKPC become aware of the change, and the extent and nature of the changes in peak load expectations? Why was the 2022 IRP analysis not updated to reflect these changes and to add the RICE units in comparison to other options to meet anticipated load during the planning period?

l. Please refer to the following paragraph:

> Building a resource and ensuring EKPC has steel in the ground provides EKPC with all attributes of a resource, including energy and capacity, at a competitive cost as compared to PPAs and enables EKPC to effectively hedge against PJM market risks such as capacity performance and high energy prices. RICE units also fully comply with current greenhouse gas regulations as more fully described in the direct testimony of Jerry Purvis.

i. Please explain what "attributes of a resource" are evaluated by EKPC, beyond energy and capacity.

ii. Please provide the cost comparison on which the assertion that building the RICE units is "at a competitive cost as compared to PPAs." Please identify which PPAs were used for that comparison, and provide the worksheets for the cost comparison.

iii. Please provide any analysis of the PJM market risks supporting the assertion that the construction of the RICE units provides an effective hedge against such risks.

iv. Please provide any analysis of the costs and benefits of construction of the RICE units relative to a comparable simple or combined cycle gas units assuming that the greenhouse gas regulations referred to in the paragraph are rescinded.

Response 5.

a. Refer to attached excel spreadsheet, *JI3.5 RICE-CT-Economic Analysis.xlsx.*

b. EKPC did not perform resource optimization modeling, as explained in the response to Commission Staff's First Request for Information ("Staff's First Request") Item6, however it did complete a production cost model. Refer to EKPC's supplemental response to Sierra Club's First Request for Information, Item 16 filed on February 14, 2025.

c. EKPC first became concerned about being short on winter power supply after it experienced a higher-than-expected winter load during Winter Storm Elliott. EKPC purchased energy from a hydro facility in Pennsylvania starting in December 2023 and going through two winter seasons, ending May 31, 2025, based on this concern. Results of the 2024 Long Term Load Forecast verified that EKPC's winter peak load is expected to continue to be significantly higher than projected in the 2022 IRP.

d. The Liberty RICE facility is expected to be online in December of 2028.

e. The on-peak average forward price forecast at the AEP-Dayton Hub ("AD-Hub") for December, January, and February for the entire planning horizon is $72.43/MWh. The average all-in cost to generate energy at Liberty RICE over the entire planning horizon is $44.10/MWh. The total difference between purchasing that energy in a PPA or market basis compared to

generating the energy at Liberty RICE is $431.7 million (($72.43 - $44.10) * 15,238,504 MWh) over the 2028-2039 period.

f. i-iii. The source was the 2024 National Reviewable Energy Lan ("NREL") Annual Technical Baseline ("ATB") workbook, tab "Natural Gas_FE", Cell L51. Download the workbook at: https://data.openei.org/files/6006/2024%20v2%20Annual%20Technology%20Baseline%20Workbook%20Errata%207-19-2024.xlsx.

The NREL ATB is a widely accepted public dataset commonly used for reference in comparing available generation technologies using real-world data.

g. The break-even analysis provided in the direct testimony of Julia J. Tucker is based on the 9,717 btu/kwh heat rate from NREL and used capital and O&M costs sourced from NREL. Using the provided heat rates from each OEM sales brochure, assuming all capital and O&M costs are the same as reported to NREL, will result in a longer duration until break-even. However, it is inaccurate to assume that a unit with a lower (better) heat rate will cost the same as that with a higher (worse) heat rate. Generally, a lower (better) heat rate is more expensive both in terms of capital and O&M. Without specific financial data associated with the three options provided in the request, it is impossible to accurately calculate the break-even operating hours.

h. EKPC did not wait. EKPC is working diligently to shore up its capacity needs. In its 2022 Integrated Resource Plan ("IRP"), EKPC specified the need for an additional 225 MW to be added by 2032 based on the 2020 long-term load forecast. As discussed in the direct testimony of Julia J. Tucker, page 11 line 5-23 and page 12 lines 1-10, EKPC completed the 2024

long-term load forecast. This new forecast has increased winter peak loads by approximately 200 MW over both the 2020 long-term load forecast. The increased peak load forecast has driven the need to install more capacity sooner than previously expected.

i. The hydro owner separately sells each market product from its hydro generation resource to maximize its revenue. EKPC was in need of winter energy to help hedge the price it pays to serve its load. EKPC produces more Renewable Energy Credits ("RECs") than it currently needs to supply the requests of its owner members. Therefore, EKPC had no internal need for the RECs. A purchase of them would be a market speculation purchase to buy for resale and EKPC does not speculate in the market. Similarly, EKPC did not believe it had a need for additional capacity in the time frame of the Power Purchase Agreement. The only reason to purchase the capacity would be to resale it in the market and again, that would be speculative.

j.

j.i. EKPC recognized that its previous LTLFs under-forecast the 2022/23 and 2023/24 winter peaks. It is important to note that demand and energy are both strongly impacted by weather but in different and potentially opposite directions. Energy reflects weather over a period of time while demand often reflects short-lived extreme temperatures.

j.ii. The last 3 winter seasons, including January 2025, have had higher peak loads than previously experienced or forecast. The peaks experienced during winter storms Elliott and Gerri are accounted for in the 2024 long-term load forecast.

k.i. Yes, because the energy needs are comparable between the 2022 IRP, based on the 2020 long-term load forecast, and the new 2024 long-term load forecast.

k.ii. Yes, the addition of the RICE units would be in place of a combustion turbine based on the forecasted need.

k.iii. 1 and 2. EKPC did not consider BESS, either standalone or combined with solar, as capacity options for its system. The technology is relatively new and unproven, it is costly based on the estimates received, and storage systems of any technology that must be re-charged during peak periods are not reliable peak capacity options.

k.iv. The 2022 IRP was based on the 2020 long-term load forecast which has similar energy projections to the 2024 long-term load forecast, however the 2024 long-term load forecast has significantly higher peak-load (demand). The 2022 is relevant because the RICE facility will be used to serve a portion of the forecasted energy needs.

k.v. Refer to EKPC's response to Item 5.h., above. EKPC plans to files its updated 2025 IRP on or before April 1, 2025.

l.i. EKPC evaluates energy, capacity, operational flexibility, fuel availability, backup fuel capability, market value, emissions impact, and fixed and variable costs associated with the project.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 6
RESPONSIBLE PARTY: Julia J. Tucker

Request 6. Has EKPC performed or caused to be performed integrated economic dispatch and/or expansion modeling of its complete system since the 2022 IRP?

a. If so, please provide all reports, background materials, modeling inputs including data and assumptions, and modeling outputs for the most recent modeling performed.

b. If not, please explain how EKPC is comparing costs across approved investments and estimating their combined system impacts?

Response 6. EKPC has supplied the economic dispatch modeling data and results relevant to the Liberty RICE plant in its supplemental response to the Sierra Club's First Request for Information Item 16 filed on February 14, 2025.

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

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 7
RESPONSIBLE PARTY: Julia J. Tucker

Request 7. Please refer to EKPC's response to Staff 1-8.a., stating "Operation of the RICE units could potentially offset the operation of Cooper Station when the station is being dispatched for reliability reasons. The RICE units will not impact the economic dispatch of Cooper Station." Please compare the economic dispatch of Cooper Station and the proposed Liberty RICE, and provide:

a. How EKPC determines the dispatch of the units, and

b. The percent of time that Cooper dispatches economically versus the percent of time that the Liberty RICE units are expected to dispatch

Response 7. All EKPC units are dispatched by PJM on a reliability constrained economic basis. That means, that reliability concerns or limitations can drive the dispatch of units that might not have been dispatched solely on economics. The units that can solve the reliability issue are then dispatched in economic order. Therefore, if both Cooper and Liberty RICE can solve the same reliability problem, the units will be dispatched in economic order. In that case,

Liberty RICE will be dispatched first. If it solves the reliability problem by itself then Cooper would not be dispatched on reliability but would move back to a strictly economic merit dispatch. That is what is meant by the statement "Operation of the RICE units could potentially offset the operation of Cooper Station when the station is being dispatched for reliability reasons." If no reliability issues are in place, then units are dispatched in economic order until the load is served. The unit that will deliver the next MW above the load, sets the marginal cost for the entire system. If a unit's cost is below the marginal cost of the system, you would expect that it is being dispatched. Likewise, if a unit's cost is above the marginal cost of the system, then the unit would not be expected to dispatch. Each individual unit is independently in this analysis; therefore, Liberty RICE would have no effect on the dispatch of Cooper on a purely economic basis, thus explaining the statement "The RICE units will not impact the economic dispatch of Cooper Station." Currently, the Cooper units dispatch less than 20% of the time on an economic basis, while the RICE units are expected to dispatch a high percentage of time.

EAST KENTUCKY POWER COOPERATIVE, INC.
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THIRD REQUEST FOR INFORMATION RESPONSE

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 8
RESPONSIBLE PARTY: Julia J. Tucker

Request 8. Please refer to EKPC's response to Staff Request 1-9, noting that EKPC estimates a 79% ELCC for the Liberty RICE units based on the calculated ELCC for combined cycle generation.

a. Please explain EKPC's basis for expecting the RICE units' ELCC to match combined cycle generation as opposed to any other generation resource, particularly gas combustion turbines.

b. Does EKPC agree that PJM declined to assign an ELCC Class Rating for the Gas Combined Cycle Dual Fuel Class in the 2025/2026 Delivery Year and such units will receive resource-specific ELCC values? If you disagree, please explain why.

c. Does EKPC agree that a RICE unit is likely to be assigned a resource-specific ELCC value as opposed to a ELCC Class Rating? If you disagree, please explain why.

d. To the extent of EKPC's knowledge, what are the resource-specific ELCC values of existing RICE units in PJM?

Response 8. a. RICE units are most directly comparable to combined cycle units due to the relatively high expected capacity factors.

b. Yes, PJM will assign resource-specific ELCC values for combined cycle dual fuel units. Combined cycle units without dual fuel were assigned an ELCC class rating of 78%. This suggests that a comparable unit with the added reliability of on-site fuel would see at least a 1% uplift in reliability. It is reasonable to use the 79% class rating listed by PJM for dual fuel resources as proxy for the RICE units.

c. Yes, it is likely due to the limited number of comparable units within the PJM footprint.

d. EKPC does not have knowledge of resource-specific ELCC values for existing RICE units in PJM.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 9
RESPONSIBLE PARTY: Jerry Purvis

Request 9. Please refer to EKPC's response to Staff 1-13. Has the referenced NEPA environmental assessment been completed as anticipated?

a. If yes, please provide a copy.

b. If no, why not?

Response 9.

EKPC submitted the final draft of the environmental assessment (RICE EA) on 2/11/2025 for the Rural Utilities Services review. EKPC provides a copy and its attachment as *JI3.9 - EKPC RICE Draft EA.pdf*.

a. Completed as anticipated and submitted to RUS for their review and approval.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 10
RESPONSIBLE PARTY: Nick Comer

Request 10. Please refer to EKPC's response to Staff 1-16. Has EKPC solicited comments or notified the public of the opportunity to comment? If so, how? If not, why not?

Response 10. EKPC hosted a public meeting in Liberty, Kentucky on Dec. 11, 2024, regarding the proposed Liberty Station project. At that meeting, project staff were available to answer questions and gather feedback. The meeting was advertised in the local newspaper, the Casey County News, and EKPC mailed letters of invitation to owners of property in the vicinity of the proposed project.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 11
RESPONSIBLE PARTY: Nick Comer

Request 11. Please refer to EKPC's response to Staff 1-22.

a. Please provide an updated response.

b. Has EKPC hosted or planned any public meetings at the time of response regarding the proposed project?

i. Provide any information regarding any such meeting, such as how it was publicized, how invitations were extended to any who requested, attendee list, presentation from the Company, and any feedback received.

ii. If no, why not?

Response 11.

a. EKPC continues to share information and seek feedback for the project with adjacent property owners in the area and has provided initial information about the project, including potential impacts and planned mitigation strategies associated with the construction and future operation of the facility. As EKPC continues the development of the project, these identified mitigation strategies will be included into the design and overall project execution (construction) plan.

b. EKPC hosted a public meeting in Liberty, Ky. on Dec. 11, 2024, regarding the proposed Liberty Station project. At that meeting, project staff were available to answer questions and gather feedback. The meeting was advertised in the Dec. 4, 2024, edition of the Casey County News. See attachment *JI3.11 - Newspaper Tearsheet.pdf.*

In addition, EKPC mailed invitations to 32 owners of property in the vicinity of the proposed Liberty Station property. See attachment *JI3.11 - Invitation Letter.pdf.*

More than 50 people attended the meeting. See attachment *JI3.11 - Sign-in Sheet.pdf.*

There were no formal presentations at the meeting. Rather, staff were present to answer questions and gather feedback. See attachment *JI3.11 - Meeting Displays.pdf.*

A summary of feedback received at and following the meeting is attached as *JI3.11 - Summary of all Public Comments.pdf*.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 12
RESPONSIBLE PARTY: Brad Young

Request 12. Please refer to EKPC's response to Staff 1-34, and confirm that, in EKPC's opinion, the Liberty RICE would not meet the criteria of CIP-002-5.1a - Attachment 1, Impact Rating Criteria, Section 1., High Impact Rating (H); or 2. Medium Impact Rating (M).

Response 12. It is currently EKPC's opinion that the Liberty RICE facility would not meet the criteria for either the High Impact Rating (H) or the Medium Impact Rating (M) according to the criterial of CIP-002-5.1a - Attachment 1.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 13
RESPONSIBLE PARTY: Darrin Adams

Request 13. Please refer to EKPC's response to Staff 1-42, and compare the statement in subpart e. that "the new transmission line is expected to be within 300 feet" of the nearest residence and subpart g. that "the new transmission line extension is expected to be within 150 feet of that residence at the closest proximity," and explain the apparent discrepancy.

Response 13. The response in subpart e. should have stated that "the new **substation** is expected to be within 300 feet" of the nearest residence. The statement in subpart g is accurate, because the new transmission line extension will exit the substation to the east, thereby coming in closer proximity to the residence than the substation.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 14
RESPONSIBLE PARTY: Craig Johnson

Request 14. Please refer to EKPC's response to Staff 1-43, at the first table, which bases maintenance requirements on assumed operation of 5,256 hours annually, and the Direct Testimony of Julia J. Tucker at page 24 line 1, which states the units "are expected to run as much or more than 6,000 hours per year," and explain the discrepancy.

Response 14. As stated in Craig Johnson's Direct Testimony on page 9, line 15-17, EKPC estimates that this station will operate at capacity factors greater than 20% with some models showing capacity factors as high as 70%. A high-capacity factor case associated with 5,256 engine operating hours was chosen as the basis for estimating the operation and maintenance cost. The actual capacity factor will depend upon fuel price, system needs and the market.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 15
RESPONSIBLE PARTY: Darrin Adams

Request 15. Please refer to EKPC's response to Staff 1-44, and respond to the following requests:

a. Provide updated tables with the full headings.

b. Explain why the combination of upgrades in tables 44-2 and 44-3 would not both be needed under any scenario.

Response 15.

a.

Table 44-1: Required Physical Interconnection Transmission Facilities	
Project Description	**Planning-Level Estimated Cost**
Construct a new 161 kV switching station ("Liberty RICE Substation") at the Liberty RICE generation facility location.	$12,000,000
Construct necessary transmission line facilities to loop the existing Casey County-Liberty Junction 161 kV line through the new Liberty RICE Substation. The estimated distance of these extensions is 2,000 feet.	$1,500,000
Replace the existing overhead steel ground wire on the Liberty RICE-Casey County 161 kV line (6.6 miles) with optical ground wire for communications and relaying purposes.	$800,000

Replace the existing overhead steel ground wire on the Liberty RICE-Liberty Junction 161 kV line (7.4 miles) with optical ground wire for communications and relaying purposes.	$1,005,000
TOTAL	**$15,305,000**

Table 44-2: Transmission Network Upgrade Projects Expected with No Additional Merchant Generation Additions in the Liberty Area	
Project Description	**Planning-Level Estimated Cost**
Increase the maximum operating temperature of the conductor in the Liberty RICE Substation-Casey County 161 kV transmission line (6.6 miles) to 212 degrees Fahrenheit.	$1,950,000
Rebuild the Liberty RICE-Liberty Junction 161 kV transmission line (7.4 miles) using 795 MCM ACSR conductor.	$13,700,000
Increase the maximum operating temperature of the conductor in the Marion County-Marion County Industrial Park Tap 161 kV line (4.0 miles) to 212 degrees Fahrenheit.	$1,150,000
Rebuild the Marion County-LG&E/KU Lebanon 138 kV line (0.1 mile) using 795 MCM ACSR conductor.	$200,000
TOTAL	**$17,000,000**

Table 44-3: Transmission Network Upgrade Projects Expected with All PJM Queued Merchant Generation Additions in the Liberty Area	
Project Description	**Planning-Level Estimated Cost**
Upgrade the limiting terminal equipment (bushing CTs and disconnect switches) at Denny substation associated with the Denny-Wiborg Tap 69 kV line.	$450,000
Upgrade the limiting equipment (disconnect switches at the Liberty KU Tap point) associated with the Liberty KU-Peytons Store 69 kV line.	$150,000
Rebuild the Mt. Olive Junction-Highland-Broughtontown-Tommy Gooch Tap 69 kV line (17.3 miles) using 556 MCM ACSR conductor.	$23,750,000

Rebuild the Peytons Store-Casey County 69 kV line using 795 MCM ACSR conductor.	$6,400,000
TOTAL	**$30,750,000**

b. As explained in the referenced response to Staff 1-44, and in further detail in Attachment DA-1 to Exhibit 6 of the Application, the methodology that EKPC used to determine the expected lower and upper boundaries for required upgrades was to perform power-flow analysis for two scenarios:

- Including only PJM generation-interconnection queue projects with executed Generator Interconnection Agreements in the EKPC zone.
- Including all known PJM generation-interconnection queue projects in the EKPC zone (i.e., all projects with executed Generator Interconnection Agreements plus all other projects that have submitted applications for interconnection that are either still in the study process or pending study).

For the latter scenario, EKPC began by modeling the PJM generator-interconnection queue projects without the Liberty RICE facility in order to identify expected thermal overloads caused by those projects. EKPC then added assumed transmission reinforcements to address those thermal overloads, since those projects are currently in earlier study clusters than the Liberty RICE facility. The Liberty RICE facility was then added to the models that included those reinforcements in order to determine the incremental thermal overloads expected due to the Liberty RICE facility only. Table 44-3 represents the transmission reinforcements required to address those incremental thermal overloads only. Based on the methodology used, these would be the only transmission reinforcements attributable to the Liberty RICE facility for the maximum generation-interconnection queue addition scenario.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 16
RESPONSIBLE PARTY: Jerry Purvis

Request 16. Please refer to EKPC's response to Staff 1-45, and provide support for the statement that "EPA has indicated that it plans to regulate RICE under the GHG Rule in the future…."

Response 16. EPA has not put forth a proposed or final GHG RICE regulation. EKPC cannot speculate as to when or the content of an unknown outcome at this time.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 17
RESPONSIBLE PARTY: Darrin Adams

Request 17. Please refer to EKPC's response to Staff 1-46, and provide updated tables up to the date of the response, and include the following additional information:

a. Provide the total load on EKPC's system at the time of the violation or issue.

b. Provide the load on the Southern Portion of EKPC's system at the time of the violation or issue.

c. Identify which voltage violations or issues planned transmission upgrades, including those for which a CPCN has been sought and received or which are ordinary extensions in the course of business, could have prevented, if any, assuming full availability at the time of the violation or issue.

d. Identify which voltage violations or issues the Liberty RICE unit could have prevented, if any, assuming full availability at the time of the violation or issue.

e. Identify which voltage violations or issues the CCGT proposed in Case No. 2024-00370 could have prevented, if any, assuming full availability at the time of the violation or issue

Response 17.

a. See the tables below with the EKPC system load value range during the duration of the violation included in the right-most column.

Table 17-1: PJM Issued PCLLRW for Voltage Violations in the Southern Portion of EKPC's System with EKPC System Load Range

Substation	PJM PCLLRW ID Number	Start Date/Time	End Date/Time	Total Duration of PCLLRW (hours)	EKPC System Load Range (MW)
Brodhead 69 kV	103743	12/1/2022 @ 19:30	12/3/2022 @ 02:55	31.4	1,220 to 2,055
Brodhead 69 kV	103943	7/13/2023 @ 15:40	7/14/2023 @ 09:40	18.0	1,250 to 2,225
Russell County 69 kV	104091	11/29/2023 @ 06:56	11/29/2023 @ 08:35	1.7	2,386 to 2,559
Sewellton 69 kV	104161	3/26/2024 @ 11:16	3/29/2024 @ 16:44	77.5	1,073 to 1,935
Russell County 69 kV	104327	9/20/2024 @ 16:14	9/21/2024 @ 07:34	15.3	964 to 1,958
Liberty Junction 69 kV	104331	9/21/2024 @ 15:42	9/24/2024 @ 20:15	76.6	940 to 1,881
Laurel County 69 kV	104431	12/11/2024 @ 09:56	12/11/2024 @ 14:57	4.5	1,850 to 2,025
Liberty Junction 69 kV	104461	1/20/2025 @ 07:37	1/20/2025 @ 09:03	1.4	3,251 to 3,396

Table 17-2: EKPC-Identified Real-Time Voltage Issues in the Southern Portion of EKPC's System

Substation	Start Date/Time	End Date/Time	Total Duration of Voltage Issue (hours)	EKPC System Load Range (MW)
Three Links Junction 69 kV	11/3/2022 @ 07:45	11/9/2022 @ 02:30	138.75	868 to 1,494
Three Links Junction 69 kV	1/5/2023 @ 04:45	1/5/2023 @ 05:30	0.75	1,491 to 1,668

Three Links Junction 69 kV	3/11/2023 @ 07:15	3/11/2023 @ 08:30	1.25	1,721 to 1,728
Three Links Junction 69 kV	4/10/2023 @ 21:00	4/10/2023 @ 21:15	0.25	1,405
Three Links Junction 69 kV	4/15/2023 @ 17:15	4/15/2023 @ 17:30	0.25	1,414
Shopville 69 kV	7/11/2023 @ 14:00	7/11/2023 @ 16:15	2.25	1,741 to 1,982
Walnut Grove 69 kV	7/11/2023 @ 14:00	7/11/2023 @ 16:15	2.25	1,741 to 1,982
Shopville 69 kV	7/12/2023 @ 13:45	7/12/2023 @ 14:00	0.25	1,783
Walnut Grove 69 kV	7/12/2023 @ 13:45	7/12/2023 @ 14:00	0.25	1,783
Three Links Junction 69 kV	3/4/2024 @ 12:00	3/4/2024 @ 12:15	0.25	1,363
Three Links Junction 69 kV	10/22/2024 @ 07:00	10/22/2024 @ 07:15	0.25	1,501

b. Load values for the southern portion of EKPC's system for these dates and times are not available.

c. Power-flow analysis simulating the exact real-time operating conditions that were occurring when these voltage violations occurred has not been conducted. The following completed and planned projects are expected to assist in addressing the voltage violations at the noted substations, but EKPC cannot definitively say that these violations would not have occurred with the projects in-service:

- Floyd-Woodstock 69 kV Line Addition (actual in-service date of 9/27/2023, impacts voltage violations at Shopville and Walnut Grove 69 kV substations).
- Rebuild of the Three Links Junction-Three Links 69 kV line section (actual in-service date of 6/1/2024, impacts voltage violations at Three Links Junction 69 kV substation).

- Addition of 69 kV, 30.6 MVAR capacitor bank at the Liberty Junction substation (planned in-service date of 5/1/2025, impacts voltage violations at Liberty Junction 69 kV substation).

d. The Liberty RICE facility is expected to support voltages in the southern portion of the EKPC system, particularly in Casey and surrounding counties. Therefore, it is expected that the Liberty RICE facility could have impacted the voltage violations at the Liberty Junction, Russell County, and Sewellton 69 kV substations due to its proximity to these locations.

e. Given the more central location of the Cooper Combined-Cycle Gas Turbine facility and its higher real and reactive power capability, it is anticipated that all of the voltage violations listed in the tables above could have been positively impacted by operation of the proposed Cooper facility.

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THIRD REQUEST FOR INFORMATION RESPONSE

JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 18
RESPONSIBLE PARTY: Darrin Adams

Request 18. Please refer to EKPC's response to Staff 1-48, and respond to the following requests:

a. Regarding the referenced 69 kV capacitor bank at Cooper Station

i. Provide the cost of the referenced capacitor bank at Cooper Station.

ii. Identify which of the voltage violations and issues identified in response to the updated tables provided in response to the previous question could have been prevented by the addition of the capacitor bank.

b. Regarding "adding generation in the area," is the proposed Liberty RICE the only solution referenced? If not, identify each other generation resource being referenced.

c. Please list the "other transmission options that have been previously considered to provide additional support for the area."

d. State whether both the Liberty RICE units, and the Cooper CCGT plant proposed in Case No. 2024-00370, are needed to address the voltage issues in the southern region of the EKPC system.

i. If so, explain why and produce any analysis supporting such answer.

ii. If not, explain why not.

Response 18.

a. i. The estimated cost is $960,000.

ii. The capacitor bank could potentially have improved voltages at all locations listed in the tables in Response 17 above, particularly at the Liberty Junction, Sewellton, and Russell County 69 kV substations due to the closer electrical proximity to those locations and the locations of existing capacitor banks in the region.

b. This references EKPC's current plans as filed in this proceeding and in Case No. 2024-00370 to add new generation facilities at the Liberty RICE facility and at Cooper Station.

c. The following are potential transmission projects that have been considered by EKPC to help provide additional support to the area for periods when local generation is not available:

- Install a 69 kV, 53 MVAR capacitor bank at Cooper Station
- Construct a 161 kV line between the McCreary County and Cooper substations (26 miles)
- Construct a 345 kV line between the West Garrard and Cooper substations (48 miles)
- Construct a 161 kV line between the West Garrard and Cooper substations (48 miles)
- Construct a 345 kV line between the West Garrard and Liberty Junction substations (29 miles)

- Construct a 345 kV line between the KU Alcalde and Cooper substations (5 miles)
- Construct a 161 kV line between the Wayne County and Cooper substations (29 miles)

d. For conditions assumed in transmission-planning studies, it is not necessary for both the Liberty RICE and Cooper CCGT generators to be operating at full output simultaneously. However, the availability of local generation in the southern region of Kentucky provides a high degree of reliability of service for electric demand in the area. Generally, the more generation located in an area, the better the reliability will be. The redundancy provided by multiple generating units, particularly at different locations, is valuable to service reliability. For conditions assumed in transmission-planning studies, it is not necessary for both the Liberty RICE and Cooper CCGT generators to be operating at full output simultaneously. Real-time operational conditions occasionally deviate significantly from the conditions assumed in transmission-planning studies – for instance, actual load levels during recent winter-peak periods have substantially exceeded EKPC's 50/50 probability forecasted levels used in transmission-planning studies. Furthermore, pre-existing transmission and/or generation outages often exist in real-time operations that create the potential for voltage and/or thermal violations for a subsequent outage on the system. As a result, the presence of generation facilities at both Liberty and Cooper provides additional margin to withstand more severe real-time operating conditions that have historically occurred and are expected to continue to occur.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 19
RESPONSIBLE PARTY: Thomas J. Stachnik

Request 19. Information to East Kentucky Power Cooperative, Inc., Response 1-3 ("AG 1-3"), and respond to the following requests:

a. Produce any rate impact analysis conducted, including all input files and output files in machine-readable format, workpapers, workbooks, and other documents used in or produced by such analysis for

i. The Liberty RICE project, and

ii. EKPC's capacity expansion plan in total.

b. Referring to the statement in AG 1-3.a. that "[o]ther components such as the capacity sales in the PJM market, the value of off-system sales, and lower operating costs of the new units versus existing generation or purchases could ultimately result in a savings to the average consumer's monthly bill," produce any analysis conducted, including all input files and output files in machine-readable format, workpapers, workbooks, and other documents used in or produced by such analysis of:

i. Capacity sales in the PJM market,

ii. Off-system sales, and

iii. Lower operating costs of the new units versus existing generation or purchases.

c. Provide the current heat rate for each combustion turbine on the EKPC system.

d. Provide the current annual operating time and capacity factors for each combustion turbine on the EKPC system.

e. Given the statement that "the plant will be offsetting less efficient units most of the time," does EKPC have plans to retire any of these less efficient units?

f. Why does EKPC project savings based on "214 MW of energy 2,500 hours per year" in response to AG 1-3.b.?

Response 19.

a. Other than providing responses to AG 1-3.b. specifically regarding capital and fuel costs, EKPC did not perform a specific rate impact analysis on the individual project.

b. Please see attached for the Long-Range Financial Forecast ("LRFF") Summary. EKPC is also uploading an Excel spreadsheet of the last page of the LRFF Summary which is the LRFF. Both of these attachments are being filed under seal pursuant to a motion for confidential treatment. See attachments *Confidential-JI3.19.b1.pdf* and *Confidential-JI3.19.b2.xlsx.* Which are the same documents that were filed under seal in response to Joint Intervenors' Second Request for Information Item 8c in Case No. 2024-00370.

EKPC's forecast was prepared using UIPlanner software. As such the inputs, outputs, etc. are not simple excel calculations. The software is a multidimensional database with a calculation engine to prepare the detailed forecast. Our forecast data resides in this proprietary software model. The

key outputs of the model are in the forecast file attached. Off-systems sales revenue, capacity revenues, purchased power, MWh sales to members, etc. are included in the financial summary on the final page thereof. The capital expenditures chart on page 5 reflects accurately the capital expenditures that are included in the model, including expenditures on new generation assets as well as ongoing generation and transmission capital expenditures.

c. See attached excel spreadsheet, *Confidential - JI3.19.c - CT Heat Rates.xlsx*, subject to motion for confidential treatment.

d. See attached excel spreadsheet, *JI3.19.d - Capacity_Factor_Operating_Hours_CTs_2024.xlsx*.

e. No, the less efficient units are still utilized and needed.

f. EKPC projects savings based on "214 MW of energy 2,500 hours per year" by considering its market energy purchases and the impact of the new unit. Since EKPC buys about 50% of its energy from the PJM market, and the unit offsets combustion turbine energy for roughly 20% of the time, that leaves about 30% of the year—around 2,500 hours—where the unit reduces the need for market purchases. This estimate helps illustrate the cost savings of generating energy versus buying it.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 20
RESPONSIBLE PARTY: Julia J. Tucker

Request 20. Please refer to paragraph 2 of EKPC's response to AG 1-8, and explain how "it also receives the benefit of lower carbon emission through those economic purchases."

Response 20. By purchasing from the PJM market, instead of generating from a higher carbon emitting resource, EKPC is producing less carbon emissions.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 21
RESPONSIBLE PARTY: Julia J. Tucker

Request 21. Please refer to EKPC's Responses to Mountain Association and Kentuckians For The Commonwealth's First Request for Information, Response 1-1., ("JI 1-1") and respond to the following requests:

a. Case No. 2024-00129, Application Exhibit 2, Direct Testimony of Julia J. Tucker, Attachment JJt-1 Solar RFP Responses and Evaluations, referenced in response to JI 1-1.b. is a confidential document in that docket. Please produce each RFP referenced in response to JI 1-1.a., as well as all responses, EKPC's evaluation of each, and the ultimate outcome of the RFP.

b. Has EKPC put out any RFPs other than those exclusively for renewable energy resources, e.g. all-source or thermal-only RFPs?

i. If yes, please provide those RFPs, along with all responses, EKPC's evaluation of each, and the ultimate outcome of the RFP.

ii. If no, why not?

c. Explain how EKPC's experience with RFPs for renewable resources informs its determination not to seek competitive bids for all sources or thermal only resources.

d. Does EKPC allow for self-bids in RFPs?

e. Please provide the contracts referenced in Response to JI 1-1.d.

f. Please produce the solicitation for bids and bids referenced in response to JI 1-1.f.

Response 21.

a. The requested RFP information and results of those RFPs have been fully vetted and the requests proposed by EKPC have been approved by the Commission in Case No. 2024-00129. That information is not relevant to this proceeding.

b. No. As stated in EKPC's Responses to Mountain Association and Kentuckians For The Commonwealth's First Request for Information, Response 1-1., ("JI 1-1"), EKPC could not risk spending months, or years, in evaluations and negotiations to only determine at the end of the process that the developer could not deliver on its proposal, as has happened with the two solar developers.

c. See Response 21b.

d. EKPC has conducted RFPs that do allow self-bids and some that do not allow self-bids.

e. Please see attached. The attachments, *Confidential-JI3.21e RICE Engines Contract* and *Confidential-JI3.21e Wartsila Offer - Contract* are being filed under seal pursuant to the Motion for Confidential Treatment.

f. Please see the response to Sierra Club's Third Request Items 15a and 15b which are being filed under seal pursuant to a Motion for Confidential Treatment.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 22
RESPONSIBLE PARTY: Julia J. Tucker

Request 22. Please refer to EKPC's Response to JI 1-3.b., and the Direct Testimony of Julia Tucker at page 21, lines 14-18, and explain how "California's experience" informs this application given that "EKPC has no knowledge of the solar penetration in California."

Response 22. California's solar penetration and the result of it on their load curve has been highly publicized and discussed. In many public documents, the effect is known as the "duck curve". EKPC references this phenomenon to say that a similar expectation for impact on the load curve in the PJM region could occur with enough solar penetration. EKPC is looking forward in a strategic manner to make decisions on generation resources today that could provide additional value in the future if that phenomenon does in fact occur.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 23
RESPONSIBLE PARTY: Julia J. Tucker

Request 23. Please refer to EKPC's Response to JI 1-4 and confirm that Exhibit JJT-1 constitutes the entirety of EKPC's Sustainability Plan and overall Strategic Plan. If anything but confirmed, please provide any documents constituting EKPC's Sustainability Plan and overall Strategic Plan.

Response 23. Yes.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 24
RESPONSIBLE PARTY: Julia J. Tucker

Request 24. Please refer to EKPC's Response to JI 1-6.c., and provide reference to any "Industrial sustainability plans" for manufacturers or others who have inquired about or indicated interest in service from EKPC.

Response 24. EKPC has a tariff available to all of its 16 Owner Members that they can utilize to assist their consumers with the consumer's sustainability plan.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 25
RESPONSIBLE PARTY: Julia J. Tucker

Request 25. Please refer to JI 1-8.e., and confirm that the application filed in Case No. 2024-00370 is the "CPCN filing that EKPC anticipates filing at the Commission later this fall."

Response 25. Confirmed.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 26
RESPONSIBLE PARTY: Julia J. Tucker

Request 26. Please refer to EKPC's response to JI 1-10.a., and explain why the ELCC Class Rating for Smith 9 and 10 are different from the other gas combustion turbines.

Response 26. Smith 9 and 10 are not capable of burning fuel oil if natural gas is not available. All other EKPC gas combustion turbines are capable of burning fuel oil and receive ELCC credit for being dual fuel.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 27
RESPONSIBLE PARTY: Julia J. Tucker

Request 27. Please refer to JI 1-15.a., does the 2024 LTLF account for the demand side management proposal in Case No. 2024-00370?

Response 27. Yes

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 28
RESPONSIBLE PARTY: Julia J. Tucker

Request 28. Please refer to EKPC's response to JI 1-15, and respond to the following requests:

a. Did EKPC consider pairing renewable and storage resources? If yes, provide any evaluation. If not, explain why not.

b. Explain why, if EKPC "does not currently have enough solar generation to justify energy storage to complement that resource," the proposed RICE units are most appropriate given the statement in Direct Testimony of Julia Tucker at page 21 that:

> The flexibility in operating levels and fast start / ramp times, along with efficient heat rates … when considering load following requirements for solar generation as more units are added to the system. California's experience has demonstrated a very marked change in load, and therefore generation needs, based on the availability of irradiance for solar generation. The load pattern is called a "duck curve" and shows a steep drop in generation needs in

the morning as the sun becomes fully available and a steep incline in the evening when the sun sets and is no longer available.

Response 28. No, EKPC did not consider pairing renewable and storage resources for this application. The 2022 IRP showed a need for solar generation and a combustion turbine. EKPC is working towards developing the solar generation in parallel with this application to meet the need for a combustion turbine identified in the 2022 IRP. The need for a reliable, dispatchable generation source was identified as a combustion turbine in the 2022 IRP. Solar generation is not dispatchable. Adding storage to solar helps address the dispatchable issue but not on a dependable, reliable and economic basis. EKPC seeks to develop a highly reliable, dispatchable resource in this application. The North American Electric Reliability Corporation ("NERC") published its 2024 Long-Term Reliability Assessment ("LTRA") on December 17, 2024. The 2024 LTA shows a high risk of capacity and energy shortfalls in the MISO area, and elevated risk of capacity and energy shortfalls in ten other regions including PJM. Refer to attached report in PDF format, *JI3.28 - NERC_Long Term Reliability Assessment_2024.pdf.*

Due to its concern that its region will not be resource adequate at the end of the decade, PJM filed a proposal with the Federal Energy Regulatory Commission ("FERC") to expedite the interconnection study of 50 projects that score high in measures it has identified as contributing to addressing reliability needs. The 50 projects that best meet the criteria PJM proposed are those that: (1) will provide substantial amounts of Unforced Capacity, (2) have high reliability ratings, (3) are located in areas in which capacity is scarce and (4) can be constructed and achieve commercial operation quickly to meet PJM's near-term resource adequacy needs. Dispatchable

generation should receive higher weighting under these criteria than intermittent generation. FERC just recently approved this proposal. PJM will soon begin taking applications for these 50 projects and EKPC plans to submit this RICE project to be considered.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 29
RESPONSIBLE PARTY: Craig Johnson

Request 29. Please refer to EKPC's response to JI 1-19, providing an average annual net plant heat rate of 8,381 btu/kWh (HHV).

a. Please provide supporting documentation for the claimed heat rate.

b. Please explain whether and how the heat rate varies depending on fuel type.

Response 29. A and b Note that the estimated annual net plant heat rate has been updated to 8,423 BTU/kWh (HHV) as shown in Attachment BY-1 (Table 1-3 and Table 4-1) based on the latest input and guarantees from the RICE supplier. The following is additional information related to the claimed heat rate:

a. Basis of values shown in Table 4-1 noted above are for Natural Gas Operation and are as follows (ULSD operation utilizes same methodology):

1) Unit Electrical Output: Information provided by Wärtsilä (18,132 kW per engine)

2) Plant Gross Electrical Output: Unit Electrical Output * Number of Engines Operating (12 Engines, 217,584 kW total)

3) OEM Auxiliary Loads: Sum of auxiliary loads for equipment provided by Wärtsilä while engines are in operation. Values are based on experience as well as information provided by Wärtsilä (e.g., motor sizes, electrical loads, etc.) This sums up to be approximately 1,984 kW in full load operation.

4) Estimated BOP Auxiliary Loads: Sum of Auxiliary loads for remaining equipment at the facility, including but not limited to process equipment (e.g., fuel oil unloading pumps, air compressors), HVAC equipment, electrical equipment, lighting, freeze protection systems, building cranes, security. This sums up to be approximately 2,230 kW in full load operation.

5) Calculate Total Plant Net Output: Plant Gross Electrical Output – Total of OEM and BOP Auxiliary Loads = 213,370 kW

6) Calculate total fuel consumption based on Wärtsilä provided Unit Heat Rate of 8,260 BTU/kWh (HHV). Total Fuel Consumption = 1,797 MMBtu/hr

7) Calculate Plant Net Heat Rate = Total Fuel Consumption in BTU/hr / Total Plant Net Output = 8,423 BTU/kWh.

b. Please refer to Attachment BY-1 Tables 4-1 and 4-2 for a comparison of heat rates between natural gas and diesel operation. The annual average heat rate for diesel is slightly higher at 8,817 Btu/kWh versus 8,423 BTU/kWh for natural gas.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 30
RESPONSIBLE PARTY: Jerry Purvis

Request 30. Please refer to EKPC's response to JI 1-20.b., and provide the minimum downtime after a complete stop for the proposed RICE units

Response 30. According to the manufacturer specification sheet, the required downtime is one minute after initiating a "stop" or shutdown.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 31
RESPONSIBLE PARTY: Jerry Purvis

Request 31. Please refer to EKPC's response to JI 1-20.c., and explain the impact of startup and shutdown on the estimated emissions of air pollutants of the proposed RICE units.

Response 31.

EPA regulates air quality emissions on three fronts: new source performance standards (NSPS), national ambient air quality standards (NAAQs), and new source review (NSR) under the prevention of significant deterioration program/title V under the Clean Air Act (CAA).

EKPC has proposed in the form of an air permit application to construct a Reciprocating Internal Combustion Engine (RICE) generation facility at a greenfield site near Liberty, Kentucky in Casey County, which is in attainment or unclassifiable for all criteria pollutants under NAAQS. EKPC used the manufacturer's emissions data for this analysis, including startups and shutdowns, operational duration for the facility and determined that the RICE engine plant will be a major source subject to Prevention of Significant Deterioration (PSD). Accordingly, air quality dispersion modeling was required and submitted to address the ambient air impacts of pollutants from the project that triggered PSD. The Kentucky Division for Air Quality and EPA are reviewing our air permit application that clearly demonstrated that the facility will be a major source under

the PSD program; thus, the air quality impact that includes the startup and shutdowns for the proposed RICE units.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 32
RESPONSIBLE PARTY: Julia J. Tucker

Request 32. Please refer to EKPC's response to JI 1-21.

a. Confirm that the proposed RICE units are expected to operate 6,316 hours per year at full capacity (1,351,637 MWh / 214 MW = 6316 h).

b. State whether the expected average annual operating rate of 1,351,637 MWh was determined through economic dispatch modeling.

i. If so, produce all input and output files, workpapers, and workbooks use in or produced by such modeling.

ii. If not, explain how the identified operating rate was determined, and produce any supporting documentation.

Response 32. a. Confirmed.

b. See EKPC's Supplemental Response to Sierra Club's First Request for Information Item 16 filed on February 14, 2025.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 33
RESPONSIBLE PARTY: Mark Horn and Brad Young

Request 33. Please refer to EKPC's response to JI 1-26.c. & d., and the NDA between Joint Intervenors and EKPC dated December 05, 2024 and produce the referenced confidential materials to allow full evaluation of the application.

Response 33. Please see attached for the information relevant to Liberty RICE. There are multiple attachments beginning with *Confidential – JI3.33.* The information is being filed under seal pursuant to a Motion for Confidential Treatment.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 34
RESPONSIBLE PARTY: Jerry Purvis

Request 34. Please refer to EKPC's response to JI 1-32, and respond to the following requests:

a. Disclose where the PSD/Title V application is publicly-accessible or provide a copy.

b. Please provide a copy of any additional requests for approval filed since the time of EKPC's original response.

Response 34.

a. Please request to the Division for Air Quality, Michael Kennedy, a freedom of information (FOIA) request to acquire the EKPC permit application for RICE. An email to the Director may be sufficient or view the permit application from KDAQ's web site at:

   https://dep.gateway.ky.gov/eSearch/Approvals/Index

b. No official air permit notice of deficiencies (NOD's) have been requested by KDAQ at this time. Should KDAQ request additional information, I recommend FOIA to obtain those records.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 35
RESPONSIBLE PARTY: Julia J. Tucker

Request 35. Please refer to EKPC's response to Sierra Club's First Request for Information, response 6.e. ("SC 1-6.e."), and explain how distributed generation has a dampening effect on consumer usage through the forecast period, as well as how current installation numbers are extrapolated.

Response 35. Distributed generation reduces the amount of energy provided by the utility. The reduced utility provided energy due to distributed generation is embedded in the historical energy sales. Current installations are not extrapolated.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 36
RESPONSIBLE PARTY: Legal Objection

Request 36. Refer to EKPC's response to JI 2-23 and AG 2-1. With regards to the New ERA projects that are part of the "well-designed, comprehensive resource plan" for which "change in any one component of the plan will have an impact on all aspects":

a. Explain how cancellation or modification of the New ERA projects would impact the Liberty RICE aspects of the plan

b. State whether EKPC still intends to apply in early 2025 for a CPCN for the New ERA projects in light of the "pause" on the disbursement of funds under the Inflation Reduction Act that the Trump Administration instituted in Section 7 of its January 20, 2025 "Unleashing American Energy" Executive Order.5

c. State whether you anticipate that the aforementioned "pause" on the disbursement of IRA funds will delay or otherwise impact the New ERA projects. If not, explain why not.

d. State whether there is a signed contract between RUS, USDA, or any other federal government agency and EKPC obligating the payment of the "budgeted funds offered by RUS" for the New ERA projects.

e. Identify and produce any communication that EKPC has received from RUS, USDA, or any other federal government agency since January 19, 2025 regarding the New ERA funds offered by RUS or the aforementioned "pause" on disbursements of IRA funds.

Response 36. **Objection.** The NewERA projects are not part of this proceeding and information regarding same is not relevant to this proceeding.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 37
RESPONSIBLE PARTY: Julia J. Tucker

Request 37. Please refer to EKPC's Responses to JI Request 2-17 and Staff Request 1-6. Confirm that EKPC has not evaluated the potential cost impacts of gas price sensitivity or volatility on solar, battery, or hybrid solar + storage resource alternatives.

a. If confirmed, explain why not.

b. If anything but confirmed, please produce each such evaluation, with supporting documentation and workpapers.

Response 37. Confirmed

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 38
RESPONSIBLE PARTY: Mark Horn

Request 38. Please refer to PJM's 2025 Long-Term Load Forecast Report, posted Jan. 24, 2025, and prepared by PJM Resource Adequacy Planning Department,6 and respond to the following requests:

a. At Slide 33, for the EKPC Zone, PJM forecasts 10/15/20 Year Load Growth in Summer of 0.3%, 0.5%, and 0.5%. Please compare to EKPC's 2024 LTLF summer load growth assumptions and explain differences.

b. At Slide 33, for the EKPC Zone, PJM forecasts 10/15/20 Year Load Growth in Winter of 0.3%, 0.4%, and 0.4%. Please compare to EKPC's 2024 LTLF winter load growth assumptions and explain differences.

c. At Slide 33, for the EKPC Zone, PJM graphs the Winter Peak, which appears to remain below 3,000 MW throughout the study period. Please compare PJM's forecasted Winter Peak for the EKPC Zone to the Winter Peak forecast provided in EKPC's LTLF and explain differences.

d. At Slide 33, for the EKPC Zone, PJM graphs the Summer Peak, which appears to remain below 2,400 MW throughout the study period. Please compare PJM's forecasted Summer Peak

for the EKPC Zone to the Summer Peak forecast provided in EKPC's LTLF and explain differences

Response 38. The referenced report forecasts the EKPC Zone as load that is directly connected to the EKPC transmission system. This forecast includes load from other entities that are served from the EKPC transmission system, such as Kentucky Utilities, Louisville Gas and Electric, AEP, and Duke. That forecast does not include EKPC load that is served from other transmission systems, such as those same entities listed in the previous sentence. EKPC's load forecast is of the total expected load that EKPC serves regardless of what transmission system it is served from.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 39
RESPONSIBLE PARTY: Julia J. Tucker

Request 39. Please identify the gas supply sources that EKPC would be able to access if the Liberty RICE units are served by the Columbia Gas Transmission Co system. (e.g., access to Marcellus gas supply; Haynesville Shale, San Juan Basin, etc.).

a. Please identify each existing generation unit owned or operated by EKPC and served by the Columbia Gas Transmission Co system.

b. Please explain the extent to which EKPC's existing generating units would share the same or similar mainline gas supply risks as the Liberty RICE units.

c. Please explain the extent to which the other gas projects included in EKPC's "plan in total" or 2024 Expansion Plan (i.e., proposed Cooper CCGT, Cooper Unit co-fire, and Spurlock Units co-fire projects) would share the same or similar mainline gas supply risks as the Liberty RICE units.

d. If EKPC's 2024 Expansion Plan is approved in its entirety, please state what portion of EKPC's gas generation portfolio (on an ELCC basis) would be supplied by the Columbia Gas Transmission Co. system as compared to each other gas transmission system serving EKPC generating units.

Response 39. EKPC will have access to a sundry of natural gas supply sources for the Liberty RICE units. Although cited in Request 39, Columbia Gas Transmission Co. is not the interstate pipeline company that will transport natural gas to the Liberty RICE facility. The interstate pipeline company's existing mainline identified in prior testimony, that EKPC will interconnect to for the natural gas supply for the Liberty RICE facility, will have access to multiple natural gas basins that will include, but not limited to Marcellus, Utica, Haynesville shale plays. Additional natural gas supply sources could theoretically make it to the primary receipt point for Liberty RICE facility via the existing pipeline network.

a.) There are no existing generating units owned or operated by EKPC that are currently served by the Columbia Gas Transmission Co. System

b.) The mainline gas supply risks for the Liberty RICE units is projected to be less than gas supply risks for the existing natural gas generating units. This is primarily attributable to the type of the natural gas transportation contracts. EKPC's existing natural gas generating units have an Interruptible Transportation contract whereas the new Liberty RICE units will have a Firm Transportation ("Firm") contract. The Firm contract establishes a high priority for the scheduled fuel to reach the generating units. The supply or delivery of natural gas cannot be curtailed under a Firm contract except under unforeseeable circumstances.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 40
RESPONSIBLE PARTY: Thomas J. Stachnik

Request 40. Since its 2022 IRP, has EKPC attempted to identify portions of its service territory that would qualify as "energy communities" under IRA Section 13101? If so, please provide the results of that analysis and explain how it informed the resource evaluation process resulting in the decision to pursue the projects included in the 2024 Expansion Plan. If not, please explain why not.

Response 40. Yes. EKPC has determined which portions of its service territory qualify as energy communities by utilizing the Department of Energy (DOE) mapping tool which can be located at the following link:
https://arcgis.netl.doe.gov/portal/apps/experiencebuilder/experience/?id=a2ce47d4721a477a8701bd0e08495e1d

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 41
RESPONSIBLE PARTY: Julia J. Tucker

Request 41. Identify EKPC's actual peak demand during January 2025.

Response 41. EKPC experienced a peak of 3,744 MW during Winter Storm Enzo in January 2025.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 42
RESPONSIBLE PARTY: Julia J. Tucker

Request 42. Compare the Direct Testimony of Don Mosier at p. 5 lines 11-14 in this proceeding with the Direct Testimony of Don Mosier at p. 5 lines 15-19 in Case No. 2024-00370. Explain why the former testimony refers to peak demand during Winter Storms Elliott and Gerri exceeding EKPC's installed capacity by "nearly 300 MW," while the latter refers to peak demand during those winter storms exceeding EKPC's installed capacity by "over 400 MW."

Response 42. As stated on pages 4 and 5 of the Direct Testimony of Don Mosier in this proceeding, EKPC owns and operates approximately 3,265 MW of net winter generating capacity. EKPC purchases 170 MW of hydropower from SEPA. The highest peak referenced in Mr. Mosier's testimony is 3,754 MW. The difference between EKPC's owned and operated generation capacity of 3,265 MW and the peak is 489 MW. If the SEPA purchase is included in the calculation, the difference is 319 MW. The different reference is whether or not the long term PPA from SEPA is included in the values. The reference was to make the point that peak loads already experienced have exceeded the installed capacity that EKPC has under its control.

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JOINT INTERVENOR'S REQUEST DATED FEBRUARY 6, 2025
REQUEST 43
RESPONSIBLE PARTY: Julia J. Tucker

Request 43. Please see EKPC's responses to Staff requests 1-19, 1-21.a. and 1-24, and Joint Intervenor requests 1-25 and 2-33 in Case No. 2024-00370. With regards to the modeling referenced therein, produce all modeling input files and output files in machine-readable format, workpapers, workbooks, and other documents used in or produced by such modeling.

Response 43. See EKPC's Supplemental Response to Sierra Club's First Request for Information Item 16 filed on February 14, 2025.