

**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 COMPATABILITY )  
CERTIFICATE; AND 3) OTHER GENERAL RELIEF )**

**CASE NO.  
2024-00310**

**RESPONSES TO JOINT INTERVENOR'S POST-HEARING INFORMATION  
REQUEST  
TO EAST KENTUCKY POWER COOPERATIVE, INC.  
DATED MARCH 21, 2025**



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**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 RELIE )**

**CERTIFICATE**

**STATE OF KENTUCKY )**  
**)**  
**COUNTY OF CLARK )**

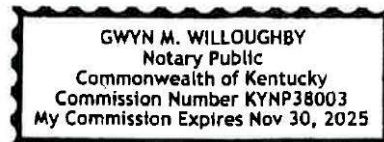
Julia J. Tucker, being duly sworn, states that she has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to Joint Intervenor’s Post-Hearing Request for Information in the above-referenced case dated March 21, 2025, and that the matters and things set forth therein are true and accurate to the best of her knowledge, information and belief, formed after reasonable inquiry.

*Julia J. Tucker*

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

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





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

**JOINT INTERVENOR'S REQUEST DATED MARCH 21, 2025**

**REQUEST 1**

**RESPONSIBLE PARTY: Brad Young**

**Request 1.** Please refer to the testimony of Company Witness Brad Young on March 17 from 11:32 a.m. to 11:35 a.m. during cross-examination by Commissioner Stacy at the hearing held in this matter, and produce any evaluations or discussion of how Candidate Site Evaluation Criteria were established and evaluated not already disclosed.

**Response 1.** All information pertaining to evaluations along with the establishment of the criteria and quantitative scoring process have been disclosed as part of the Site Selection Study that is included in the Site Assessment Report, Attachment BY-2. The quantitative scoring process was initially developed by 1898 & Co., a subsidiary of Burns & McDonnell, working in collaboration with EKPC. The criteria in this quantitative scoring process was used to evaluate each of the proposed candidate sites. The areas of interest were focused within and surrounding Casey County, Kentucky due to EKPC's internal analysis of its transmission system. Siting the proposed generation in this location serves dual purposes, provides the needed generation capacity and remedies the transmission need for additional generation concerns in the region. Analysis was then conducted by 1898 & Co. of the major natural gas pipelines throughout the region that

potentially would have available capacity to support additional generation. For additional detail pertaining to these evaluations, please refer to section 5 of the aforementioned Site Selection Study.

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REQUEST 2

RESPONSIBLE PARTY: Jerry Purvis

Objection - Legal

**Request 2.** Please refer to the testimony of Company Witness Jerry Purvis on March 17 from 2:46 p.m. to 2:47 p.m. at the hearing held in this matter, and provide:

a. Any analysis conducted by the Company on the effects of emissions on concentrations of hazardous air pollutants (HAPs) in the area surrounding the proposed facility, for example using air dispersion modeling or screening methods.

b. Is the Company aware of the US EPA's Integrated Risk Information System (IRIS) (<https://www.epa.gov/iris>)?

c. Did the Company assess the health effects of emissions or concentrations of HAPs in the area? If yes, please produce any such assessment, including assumptions, calculations, inputs and outputs.

d. Did the Company assess the impacts of emissions or concentrations of HAPs on ground and water pollution, soils, vegetation, or livestock in the area? If yes, please produce any such assessment, including assumptions, calculations, inputs and outputs.

**Response 2.** Objection. EKPC objects to this request. The request seeks information that is outside the scope of this proceeding and is not part of the record. The Kentucky Public Service Commission's jurisdiction is limited by statute to "rates" and "service". The agency with jurisdiction over environmental requirements is the Kentucky Energy and Environment Cabinet. The Joint Intervenors are attempting to introduce new evidence through this post-hearing request without the proper foundation or support. However, without waiving said objection, EKPC states as follows:

a. As part of the air permit application submitted to KDAQ, EKPC performed air dispersion modeling, as described in the Class II Modeling Protocol, to assess the impact of the HAP emissions from the project. The results of the modeling are presented in section 6.7 AIR TOXICS ANALYSIS. In addition to the air toxics analysis, EKPC demonstrated that emissions from the project would not cause or contribute to an exceedance of any national ambient air quality standard (NAAQS), which are established to be protective of human health and welfare. Although there are no NAAQS specifically for HAP emissions, particulate and volatile organic HAP are indirectly assessed as species of particulate matter with an aerodynamic size of 10 micrometers (PM<sub>10</sub>) and 2.5 micrometers (PM<sub>2.5</sub>) and volatile organic compounds (VOC). The results of the NAAQS modeling are presented in section 6.3 PROJECT SOURCE MODELING.

b. Yes, EKPC is aware of EPA's Integrated Risk Information System (IRIS) Program.

c. Yes, as presented in Section 6.7, EKPC assessed the health effects of the project's HAP emissions using EPA's Regional Screening Level (RSL) values for Resident Air.

d. As required for the air permit application, EKPC demonstrated that emissions from the project would not cause or contribute to an exceedance of any NAAQS, including the secondary



NAAQS which are established to protect the public welfare (i.e., flora and fauna). The results of the NAAQS modeling are presented section 6.3 PROJECT SOURCE MODELING. Particulate and volatile organic HAP are indirectly included in that demonstration as species of PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC. Likewise, particulate and volatile organic HAP are indirectly included in the required assessment of impacts on soils and vegetation. The soils and vegetation analysis is presented in section 6.6.2 SOILS AND VEGETATION.

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**REQUEST 3**

**RESPONSIBLE PARTY:            Julia J. Tucker**

**Request 3.**            Please refer to the testimony of Company Witness Julia Tucker on March 18 from 9:18 a.m. to 9:19 a.m. at the hearing held in this matter, and produce the hourly load experienced by EKPC for each of the past 5 years.

**Response 3.**            See attached file "*JI 3 - 2020 - 2025 Hourly Load.xlsx*".

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**REQUEST 4**

**RESPONSIBLE PARTY:                Julia J. Tucker**

**Request 4.**                Please refer to the testimony of Company Witness Julia Tucker on March 18 from 9:21 a.m. to 9:42 a.m. at the hearing held in this matter, and produce or identify:

a.                The diagram discussed by Ms. Tucker regarding the load served by the EKPC PJM zone, other Kentucky PJM zones, and other Kentucky utilities.

b.                As a load serving entity, EKPC's PJM daily unforced capacity obligation and obligation peak load for each of the past 5 delivery years;

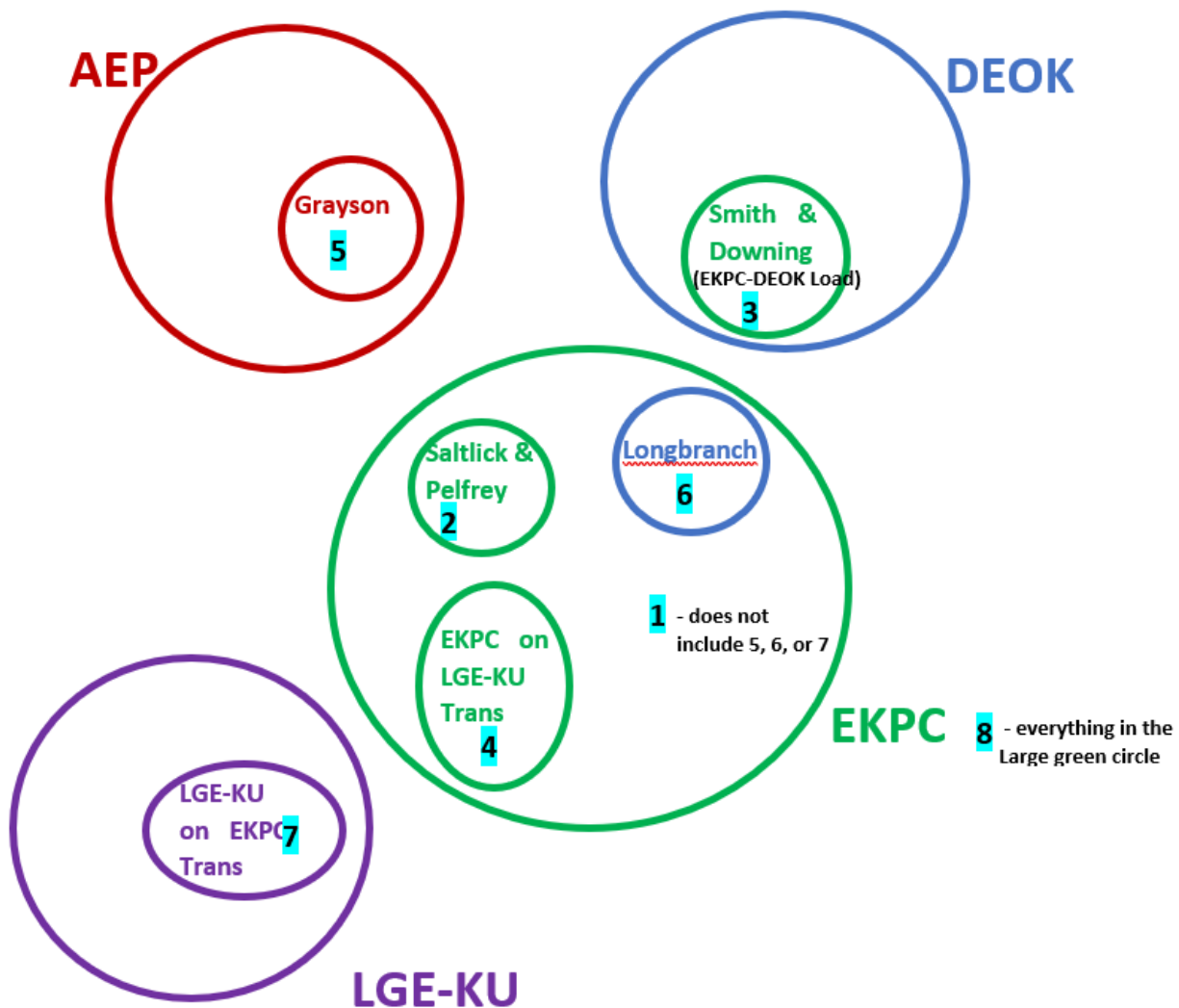
c.                As a load serving entity, EKPC's forecasted PJM daily unforced capacity obligation and obligation peak load for each of the next 5 delivery years;

d.                For each of the delivery years in subpart a., and b., above, and by month, please provide the amount of the Company's unforced capacity obligation and obligation peak load serving other utilities' customers (in Kentucky or otherwise), broken down by utility.

e.                For each of the delivery years in subpart a., and b., above, and by month, please provide the amount of EKPC customer demand served by another utility's transmission system, broken down by utility.

Response 4. a.

Market System Definition:



b-d. See attached file, “JI 4 - UCAP and Obligation Peak Load.xlsx”. EKPC has provided the past five completed delivery years beginning with the 2018/2019 delivery year and ending with the 2023/2024 delivery year. EKPC has included the next two delivery years, 2024/2025 and 2025/2026, as those are the only current and future delivery years to have cleared

in a Base Residual Auction. Both Unforced Capacity Obligation and Obligation Peak Load values do not vary from month to month within any given delivery year (defined as June 1 through May 31). Therefore, the data is listed by delivery year instead of by month, to reduce repetitive values for the eight delivery years included in this response.

- e. See attached file "*JI 4 - 2020 - 2025 Demand on Foreign Transmission.xlsx*"

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**REQUEST 5**

**RESPONSIBLE PARTY:                Julia J. Tucker**

**Request 5.**                Please state whether each of the following statements is accurate. If a statement is inaccurate, or warrants clarification, please explain.

a.                As a full member of PJM and a load serving entity, EKPC purchases every kilowatt hour of energy needed to serve its customers through participation in PJM energy markets.

b.                Energy is delivered to some of the retail customers served by EKPC using the transmission systems of Louisville Gas & Electric, Kentucky Utilities, AEP, and/or Duke Energy Ohio.

c.                When energy is delivered to a retail customer served by EKPC using the transmission system of another utility, EKPC still purchased every kilowatt hour of that energy through PJM energy markets.

d.                When another utility delivers energy to its retail customer using EKPC's transmission system, that utility pays EKPC for that service.

e.                When another utility delivers energy to its retail customers using EKPC's transmission system, those kilowatt hours do contribute to peak load in PJM's EKPC Zone.

f. When another utility delivers energy to its retail customers using EKPC's transmission system, those kilowatt hours are not incorporated into the calculation of EKPC's unforced capacity obligation.

**Response 5.**

a. Yes, EKPC purchases 100% of its energy needed to serve its Owner-Members from the PJM energy markets. EKPC offers its Owner-Member's generation assets into the PJM energy markets on an economic basis. Revenue from the generation is netted against the purchase expense.

b. Correct.

c. Correct.

d. Correct. That service is known as network integrated transmission service (“NITS”).

e. Correct.

f. Correct.

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REQUEST 6

RESPONSIBLE PARTY:           **Julia J. Tucker**

**Request 6.**           Please refer to the testimony of Company Witness Julia Tucker on March 18 from 2:08 p.m. to 2:09 p.m. at the hearing held in this matter and state whether the EKPC 2024 Long Term Load Forecast has been approved by the Rural Utilities Service (RUS).

- a.     If yes, please provide documentation of this approval.
- b.     If no, please provide an update on the status of review, including potential timeline for approval.
- c.     Please provide any correspondence between the Company and RUS regarding the LTLF.

**Response 6.**

- a.     RUS has not approved EKPC's 2024 LTLF as of the date of this response.
- b.     EKPC contacted RUS on 3/24/2025 for an update.
- c.     See attachment "*JI 6 – RUS LTLF correspondence\_Redacted.pdf*".



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**REQUEST 7**

**RESPONSIBLE PARTY:                Julia J. Tucker**

**Request 7.**                Please refer to the Company’s supplemental response to JI 1-6, attaching a March 3, 2025 article, “Reciprocating Engine Technology Supports Grid Flexibility and Renewables Integration” by Aaron Larson, and answer the following questions:

a.                What publications does the Company rely on in determining resources to pursue?  
Please list.

b.                Did the Company evaluate the following articles from the same author, published in Power Magazine in 2025 while determining what resource to choose:

i. “How Virtual Power Plants Enhance Grid Operations and Resilience,” (Mar. 19, 2025), available at <https://www.powermag.com/how-virtual-power-plants-enhance-grid-operations-and-resilience/>;

ii. “Geothermal Energy Storage: The Clean Power Solution You Haven’t Heard Of,” (Feb. 24, 2025), available at <https://www.powermag.com/geothermal-energy-storage-the-clean-power-solution-you-havent-heard-of/>; iii. “A New Paradigm for Power Grid Operation,” (Feb. 10, 2025); available at <https://www.powermag.com/a-new-paradigm-for-power-grid-operation/>;

c. Has the Company evaluated the possibility of implementing a virtual power plant, geothermal energy, or a combination of wind turbines, battery storage systems, and advanced control systems to replicate the stabilizing effects traditionally provided by conventional power plants?

i. If yes, please provide any such evaluation and documentation of the process for evaluating.

ii. If no, why not?

**Response 7.**

a. EKPC reads many industry publications, no specific publications are used to determine resources to pursue.

b. Objection. The articles cited in this request are not part of the record in this proceeding and the Joint Intervenors are attempting to introduce new evidence through these post-hearing data requests that is not included in the record.

c. EKPC has supplied all of the data for the resources it evaluated and why in this case.