COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A 161 KV TRANSMISSION LINE IN PULASKI COUNTY, KENTUCKY AND OTHER GENERAL RELIEF	))))))	**CASE NO. 2025-00311**

RESPONSES TO STAFF'S FIRST INFORMATION REQUEST

TO EAST KENTUCKY POWER COOPERATIVE, INC.

DATED DECEMBER 4, 2025

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF A 161 kV TRANSMISSION LINE IN PULASKI COUNTY, KENTUCKY AND OTHER GENERAL RELIEF	)	**CASE NO. 2025-00311**

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 Commission Staff's First Request for Information in the above-referenced case dated December 4, 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 17th day of December, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF A 161 kV TRANSMISSION LINE IN PULASKI COUNTY, KENTUCKY AND OTHER GENERAL RELIEF	))))))))	**CASE NO. 2025-00311**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Nick Comer, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's First Request for Information in the above-referenced case dated December 4, 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.

Nick Comer

Subscribed and sworn before me on this 16th day of December, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF A 161 kV TRANSMISSION LINE IN PULASKI COUNTY, KENTUCKY AND OTHER GENERAL RELIEF	))))))))	**CASE NO. 2025-00311**

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Lucas Spencer, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's First Request for Information in the above-referenced case dated December 4, 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.

Lucas Spencer

Subscribed and sworn before me on this 16th day of December, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 1
RESPONSIBLE PARTY: Darrin Adams

Request 1. Refer to the Application, Direct Testimony of Darrin Adams (Adams Direct Testimony), Attachment DA-1, page 6. Between the 2022 and 2025 Transmission Series models, confirm and describe any transmission studies/analyses associated with the 2,200 MW load added in the Maysville area, south of EKPC's Spurlock Station specifically, which were performed.

Response 1. EKPC performed various studies associated with the 2,200 MW load added in the Maysville Area. These studies included N-1 contingency analysis to adhere to EKPC's planning criteria, as filed in Form 715, and preliminary N-1-1 contingency analysis to identify transmission reinforcements needed to meet PJM's planning criteria. EKPC presented the transmission need for connection of this load and the associated solution projects at PJM's Transmission Expansion Advisory Committee (TEAC) in March 2025 and May 2025, respectively. EKPC is awaiting PJM's results from its Do-No-Harm analysis associated with this need/solution. The results of this analysis may identify additional transmission reinforcements needed or modifications to the transmission reinforcements presented in order to accommodate the proposed 2,200 MW load. Due to this 2,200 MW load being far removed

geographically (and electrically) from Cooper Station, there are no transmission reinforcements introduced or removed due to the addition of this load in the 2025 models. The modelling items noted in the Application, Direct Testimony of Darrin Adams (Adams Direct Testimony), Attachment DA-1, page 6 listed significant changes to the overall system models used, but this particular change is not impactful to the transmission plan required to accommodate the Cooper CCGT addition.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
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STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 2
RESPONSIBLE PARTY: Darrin Adams

Request 2. Provide the transmission studies/analyses associated with the 2,200 MW load added in the Maysville area, south of EKPC's Spurlock Station, and explain any indicated upgrades to the transmission system and capacity additions or purchases to specifically serve the modeled 2,200 MW load. Explain whether the additional generation capacity needs would be satisfied solely through generation being built/owned by EKPC or in combination with a capacity purchase.

Response 2. EKPC's analysis identified several transmission system reinforcement projects needed to connect the 2,200 MW load in the Maysville area. As illustrated in EKPC's May 2025 TEAC presentation, the transmission projects are split into four phases. The slides presented to PJM stakeholders can be seen in Attachment *PSC DR1 Response 2 – EKPC TEAC Supplemental Projects.pdf.* For the first phase, EKPC will construct two approximately 1.5-mile 138 kV line extensions to the load center site in order to serve up to 110 MW at 138 kV initially. The second phase will connect to the existing Spurlock – North Clark 345 kV line and loop it into a 345/138 kV switching station to serve an additional 530 MW load. In the third phase, EKPC will

construct an approximately 4-mile, double circuit 345 kV line from Spurlock Station to the customer site. This phase will include constructing a second 345/138 kV switching station to serve a total 960 MW. Lastly, the final phase consists of constructing an approximately 11-mile, double circuit 345 kV line from the Dayton Power and Light (DP&L) Stuart station near Aberdeen, Ohio to the load site in order to provide necessary infrastructure to serve up to 2,200 MW of customer demand.

Regarding the power supply for this load, EKPC is working with the potential customer to determine the preferred resource solutions. The initial solution will require purchases to be made since physical generation cannot be installed as soon as the load anticipates building. A potential purchase has been identified and is being vetted.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 3
RESPONSIBLE PARTY: Darrin Adams

Request 3. Refer to the Application, Adams Direct Testimony, Attachment DA-1, Figure 6.2.2, page 24, and Figure 6.3.2, page 25.

a. Explain whether Alternative 2 or Alternative 3 is intended to mitigate the indicated Overload Elements on lines (upper left) that include the Liberty RICE units. If not, explain what additional measures does EKPC intend.

b. For Figure 6.3.2, explain whether the two indicated Alternative Overload Elements (center and center right) that remain after the double circuit is added to the model still require additional mitigation and if so, what measures does EKPC intend.

Response 3.

a. Alternative 2 or 3 was not intended to specifically mitigate Overload Elements associated with the Liberty RICE units. However, due to the transmission network between the Liberty RICE and Cooper CCGT facilities, the potential impacts of Alternatives 2 and 3 to the Liberty RICE Overload Elements were holistically considered. In the Application, Adams Direct Testimony, Attachment DA-1, comparison of Table 5.1 on page 18, and Table 6.2 on page

22 shows that the following project is eliminated for Alternative 2 due to changes in the power flows on facilities in the region compared to Alternative 1.

Project	**Estimated Cost ($MM)**
Green River Plaza-Campbellsville- 69 kV: Increase MOT and verify from 150F to 170F for 0.52 miles of line.	$0.47

In the Application, Adams Direct Testimony, Attachment DA-1, comparison of Table 5.1 on page 18, and Table 6.3 on page 24 shows that the following projects are eliminated for Alternative 3 due to changes in the power flows on facilities in the region compared to Alternative 1.

Project	**Estimated Cost ($MM)**
Install a 100 MVA transformer at Liberty Jct to replace the existing 93 MVA unit.	$4.00
Green River Plaza-Campbellsville- 69 kV: Increase MOT and verify from 150F to 170F for 0.52 miles of line.	$0.47

While the intent of the Alternatives considered was not to mitigate Overloaded Elements associated with the Liberty RICE units, the recommended Alternative 3 that includes the Cooper – Alcalde double circuit 161 kV line does eliminate one project when compared to the single circuit Alternative 2, and two projects when compared to Alternative 1 – i.e, addressing all thermal overload violations for transmission lines by increasing the conductor's maximum operating

temperature ("MOT") or rebuilding the existing line with a new conductor capable of handling the anticipated flows).

b. The Overload Elements shown in the Application, Adams Direct Testimony, Attachment DA-1, Figure 6.3.2, page 25 (center and center right) illustrates the remaining mitigation required after the Cooper-Alcalde double circuit 161 kV line was added to the models for the general area surrounding Cooper Station. These project descriptions and estimate costs can be seen below.

Project	**Estimated Cost ($MM)**
Replace all 161 kV circuit breakers at Cooper with 63 kA breakers	$3.00
Rebuild the Cooper-Elihu 161 kV line (4.2 miles) using 1272 ACSS conductor	$10.33
Increase the MOT of the Laurel Dam-Laurel County 161 kV line (13.5 miles) to 212F	$3.85
KU constructs a 345 kV bus at the Alcalde substation and installs a 2nd Alcalde 345/161 kV transformer	$24.60
KU expands the 161 kV bus at the Alcalde substation to accommodate the new Cooper – Alcalde 161 kV double circuit	$4.00
Alcalde-Farley 161 kV: Increase MOT of the existing line 27.19 miles	$20.40
Corbin East-Sweet Hollow 69 kV line: reconductor 2.2 miles on the using a minimum of 556 ACSR conductor	$5.50

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 4
RESPONSIBLE PARTY: Lucas Spencer

Request 4. Refer to the Direct Testimony of Lucas Spencer (Spencer Direct Testimony) Attachment LS-4. On each map, identify the parcel of property affected by the project, including the right-of-way, with corresponding identification of the property owner(s).

Response 4. Please see attachment *PSC DR1 Response 4 – Maps of Affected Properties*.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 5
RESPONSIBLE PARTY: Lucas Spencer

Request 5. Refer to the Spencer Direct Testimony page 4, line 17. Provide a breakdown of the cost elements comprising the $1,108,966 annual operating & maintenance (O&M) cost.

Response 5. This forecasted annual operating and maintenance expense is based on an estimated O&M expense of 5.51% of the facility's net book value (the net book value is assumed to be the capital cost for a new facility). The 5.51% value is EKPC's current system-wide O&M expense percentage, which is determined as the actual O&M expenses EKPC incurred in 2024 for all of its transmission lines divided by the total net book value of EKPC's transmission lines at end-of-year 2024. The Rural Utilities Service accounts that comprise the annual O&M expenses used to determine this percentage are:

- Supervision and Engineering – Transmission Operations (Account 560)
- Overhead Line Expenses – Transmission Operations (Account 563)
- Miscellaneous Expenses – Transmission Operations (Account 566)
- Supervision and Engineering – Transmission Maintenance (Account 568)
- Overhead Lines – Transmission Maintenance (Account 571)

- Miscellaneous Transmission Plant – Transmission Maintenance (Account 573)

Applying this system-wide O&M expense percentage to the expected capital cost of the Cooper-Alcalde double-circuit line provides a proxy estimated annual O&M expense that should be a representative average over the life of the facility. In the first few years of the facility's life, the O&M expense specific to the facility should be lower, since it will be at the beginning of its life cycle. Over time, the expenses specific to the facility will increase as the equipment ages. In addition to these facility-specific expenses, the estimated annual O&M expenses include spreading expenses that EKPC charges to its transmission line O&M accounts on a system-wide basis (for instance, system-wide aerial patrols) across all of its transmission line assets, so there is a component of the annual O&M expenses that are not due specifically to the operation and maintenance of the Cooper-Alcalde line.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 6
RESPONSIBLE PARTY: Lucas Spencer

Request 6. Refer to the Spencer Direct Testimony, Table 1 page 5. The table includes "Miscellaneous (7400)" cost category totaling $1,988,983.

a. Provide a complete and itemized breakdown of all individual cost components included in the Miscellaneous (7400) category.

b. For each item identified, provide the vendor's name or internal EKPC department responsible for the charge, a detailed description of the purpose of the expenditure and the cost of the expenditure.

c. Explain why each item identified in the Miscellaneous (7400) category was not recorded to a more specific and applicable FERC (Federal Energy Regulatory Commission) construction account. Provide references to EKPC's accounting policies or FERC Uniform System of Accounts guidance that supports such classification.

d. State whether any portion of the Miscellaneous (7400) category includes contingency amounts. If so, identify the contingency amount and describe the methodology used to allocate contingency to this category.

Response 6. All costs estimated for this project were included in the overall cost of $1.37 billion which the Commission approved in Case No. 2024-00370.[1]

a. The estimate for costs that will hit the 7400-budget code is comprised of sales and use tax of $746,569, Stores allocation $309,680, Environmental $180,000, a general overhead of $462,645, and a contingency estimate of $290,089.

b. EKPC does not yet have major contracts awarded for this project and, as such, does not know all vendors that will be awarded work on the Cooper-KU Alcalde project .

1. Sales and Use Tax: Kentucky sales and use tax on materials used for transmission lines and related contract labor are incurred at a rate of 6%.

2. Stores Allocation: Account 163 is used to accumulate the costs of operating and maintaining utility stores that are not directly assignable at the time incurred to a specific functional O&M account or construction project. It includes items such as warehouse labor, payroll taxes, and benefits related to stores personnel and inventory handling and receiving costs. The costs accumulated are allocated to various expense and capital projects based on the materials charged out.

3. Environmental: Potential environmental concerns that may need to be address related to the project.

[1] *Electronic Application of East Kentucky Power Cooperative, Inc. for 1) Certificates of Public Convenience and Necessity to Construct a New Generation Resource; 2) for a Site Compatibility Certificate Relating to the Same; 3) Approval of Demand Side Management Tariffs; and 4) Other General Relief*, Case No. 2024-00370, July 3, 2025 Order (Ky. PSC. July 3, 2025).

4. General Overhead: Included as an allowance to capture costs given uncertainty for various items for the Cooper-Alcalde project including but not limited to: labor, tariffs, easements and materials.

c. Capital projects are coded to account 107200 in accordance with the FERC Uniform System of Accounts. Category 7400 (Miscellaneous) represents a budget code as opposed to an account number. Use of budget codes is a preferred business method of tracking types of costs. It is not feasible to set up a budget code for every specific item, so smaller, random items are grouped together in budget code 7400.

d. As shown in Response 7(c) Table 1, EKPC assumed a contingency amount for the General Overhead portion of budget code 7400 of $290,089 which is approximately 15% of the estimate for budget code 7400. As mentioned in Response b. above, major contracts have not yet been awarded for this project, so the contingency for budget code 7400 is to cover cost uncertainty regarding methodology for material procurement. EKPC plans to move expeditiously upon granting of the CPCN. Contingency is further discussed in Response 7 below.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 7
RESPONSIBLE PARTY: Lucas Spencer

Request 7. Refer to the Spencer Direct Testimony, Table 1, page 5.

a. Identify the total contingency amount included in the $20,126,432 cost estimate.

b. Provide the contingency percentage and explain how this percentage was developed.

c. State which cost categories include a contingency and provide a breakdown showing the contingency allocation by the category.

d. Provide all internal or consultant documents supporting the contingency determination.

Response 7.

a. The total contingency amount included in the $20,126,432 cost estimate is $3,376,706.

b. The contingency percentage is based off of typical project experience per cost category. The project contingency for the efforts directly related to the major construction, major materials, engineering services, and internal costs is 22%. The 22% is based on market volatility

and uncertainty in construction pricing. EKPC has seen costs trending up for line construction, due to the large amount of transmission line construction work in the state, making construction resources sparse – causing construction costs to go up. This is also true of the material costs, with large amounts of work on utility infrastructure in the state and nation as a whole. EKPC will mitigate these risks by working expeditiously in Q1 of 2026 to award contracts upon Commission approval of the CPCN.

EKPC assumed a project contingency of approximately 15% for Budget Code 7400 based on the anticipated material procurement approach for this project. This contingency reflects uncertainty associated with the final procurement methodology, including whether materials are procured through the construction contractor or via EKPC's in-house supply chain. EKPC will evaluate these options during early project execution to manage cost and procurement risk effectively.

The contingency for right of way acquisition is reduced to ~10.3% ($175,000). EKPC's experience is that there is less contingency needed for right of way acquisition. The total contingency for right of way acquisition of $175,000 is utilized for right of way negotiations, as well as legal fees associated with potential litigation.

c. See the table below, summarizing contingency by budget code.

TABLE 1

EKPC Labor (1000)	$11,306
Benefits (1800)	$29,408
Overtime 1400)	$6,558
Travel (2200)	$6,580
Consulting Services (4800)	$678,287
MISC. (7400)	$290,089
Materials (9000)	$1,356,084
Contract Labor (9100)	$823,394
Site Acquisition (9200)	$175,000
Total All Contingency	$3,376,706

d. EKPC does not have any documents supporting the contingency determination, and traditionally relies on industry experience. For example, typical weekly rates for construction labor have increased from $50,000 to as much as $90,000 and higher on recent bids. Likewise, with steel poles, EKPC has seen increases in cost per pound of steel as well as large variance between vendors. EKPC is working to mitigate these factors by expanding approved bidder lists in an attempt to improve competition.

EAST KENTUCKY POWER COOPERATIVE, INC.
CASE NO. 2025-00311
FIRST REQUEST FOR INFORMATION RESPONSE

STAFF'S REQUEST DATED DECEMBER 4, 2025
REQUEST 8
RESPONSIBLE PARTY: Nick Comer

Request 8. Refer to the Application, Exhibit 6. Provide documentation, such as registered mail receipts or signature cards, showing that each affected property owner has received notice of the planned construction.

Response 8. The notification letters were delivered via First Class U.S. Mail and did not require receipts or signature card from recipients. EKPC also provided notice via newspaper, which was provided in Exhibit 6.