COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY PUBLIC SERVICE COMMISSION STAFF, INC. FOR 1) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A NEW GENERATION RESOURCE; 2) A SITE COMPATIBILITY CERTIFICATE; AND 3) OTHER GENERAL RELIEF))) CASE NO. 2024-00370))
)

RESPONSES OF JOINT INTERVENORS
APPALACHIAN CITIZENS' LAW CENTER,
KENTUCKIANS FOR THE COMMONWEALTH, AND
MOUNTAIN ASSOCIATION,
TO KENTUCKY PUBLIC SERVICE COMMISSION STAFF'S
FIRST REQUESTS FOR INFORMATION
DATED MARCH 4, 2025

Public Version

Dated: March 17, 2025

RESPONSE TO KENTUCKY PUBLIC SERVICE COMMISSION STAFF'S FIRST DATA REQUEST Dated March 4, 2025

Case No. 2024-00370

Question No. 1.1

Q-1.1. Refer to the Direct Testimony of Elizabeth Stanton (Stanton Direct Testimony), generally.

As opposed to how East Kentucky Power Cooperative, Inc. (EKPC) forecasted its short term and long-term large customer load, explain specifically how EKPC should have forecasted its short term and long term load.

RESPONSE:

EKPC should base its short-term forecast of new large customer load on concrete evidence that there is a high likelihood that such load will actually come online, while discounting or excluding possible large customer load that is merely speculative or has a low likelihood of materializing. Such concrete evidence includes whether the potential new large customer has submitted permit applications, acquired necessary real estate, initiated construction, and entered into contracts for electric service. With regards to existing large customers, increases in load should be accounted for only on the basis of documented claims that such customers have concrete plans to increase operations or otherwise have a reasonable basis to conclude that their load will increase. Conversely, if there is a high likelihood that an existing large customer will reduce or cease operations in the short-term, that load should accordingly be subtracted from the short-term forecast.

It is unclear the extent to which the above differs from the basis of EKPC's short-term large customer load forecast because, as explained in my testimony, that short-term forecast is "unverified and opaque." EKPC states that its short-term (i.e. through 2029) large customer load forecast "rel[ies] on the input of the owner-members. Owner-members, having knowledge of their key accounts and the presence of industrial parks, project usage for existing large loads, and advise of new consumers or consumers that are leaving. Additional input from EKPC's Economic Development staff may also be included." Direct Testimony of Julia J. Tucker, Attachment JJT-2 at 16. While EKPC provided aggregate projected new large customer counts, demand, and energy use, see EKPC Response to JI 1.31(c), it has not identified what, if any, steps EKPC or its owner-members took to determine whether there was a high likelihood that

such new large customer load would actually come online. Notably, however, EKPC conceded that none of the large commercial class customers projected to come online in 2025, 2026, and 2027 had executed any contracts with EKPC or its owner-members for any of those years. EKPC Response to JI 1.35(c).

EKPC also explains that after incorporating input from its owner-members, a preliminary load forecast "is revised based on mutual agreement of EKPC staff and owner-members' President/CEO and staff." Attach. JJT-2 at 12. EKPC acknowledged that "meaningful revisions to the preliminary forecast" were made for the large commercial class forecasts, but refused to identify what the revisions were or to provide any documentation or explanation for such revisions, claiming instead that all such information is confidential between the Owner-Members and large commercial customers. EKPC Response to JI 2.22. Such lack of transparency once again makes it difficult to evaluate the extent to which EKPC's short-term large customer load forecasting differs from the approach to such forecasting I recommend above.

As I noted at page 12 of my testimony, for long-term large customer load forecasting, EKPC uses a regression analysis based on historical industrial growth in member territories. I do not in my testimony critique that long-term forecasting approach.

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Question No. 1.2

Q-1.2. Refer to the Stanton Direct Testimony page 14 lines 4-9 and page 15, Figure 4. Explain PJM Interconnection, LLC (PJM) forecasting methodology. Include in the response the reasons for PJM's winter peak and winter peak load forecast for EKPC to be lower than EKPC's actual peak.RESPONSE:

Explain whether the Joint Intervenors are aware of the Commission's prior decisions regarding retail electric utilities having sufficient capacity to serve native load.

Explain the relevance of PJM's winter peak forecast when the forecasts as represented in Figure 4 appear to under forecast the experienced winter peak by hundreds of MWs in multiple years. For capacity planning purposes for EKPC, explain whether the Joint Intervenors are advocating that the PJM winter load forecast methodology for EKPC should be employed.

a. Descriptions of PJM's load forecasting methodologies can be found here: https://www.pjm.com/planning/resource-adequacy-planning/load-forecast-dev-process.aspx. PJM's forecast is for the EKPC Zone, which, EKPC recently explained in a data response in Case No. 2024-00310, includes load from other entities that are served from the EKPC transmission system, such as Kentucky Utilities, Louisville Gas and Electric, AEP, and Duke, and does not include EKPC load that is served from other transmission systems, such as those same entities listed in the previous sentence. Case No. 2024-00310, EKPC Response to JI 3.38. EKPC's load forecast is of the total expected load that EKPC serves regardless of the transmission system from which it is served. This distinction, however, does not provide a full explanation of the fairly consistent ~400 MW difference between the historical loads

- reported by PJM and EKPC. The two forecasts follow the same pattern of growth rates (positive and negative) very closely but differ in levels.
- b. Assuming this request is referring to the Commission orders in case numbers 2021-00198, 2023-00102, 2022-00402, 2023-00153, and 2023-00159 stating that "This Commission has no interest in allowing our regulated, vertically-integrated utilities to effectively depend on the market for generation or capacity for any sustained period of time," then, yes, Joint Intervenors are aware of those prior decisions. Respectfully, Joint Intervenors believe that those prior decisions do not foreclose EKPC from addressing peak demands during extreme winter weather conditions through continued reliance on PJM membership (potentially in combination with increased demand response, solar+storage, or other peaking resources) rather than a new 7% winter reserve margin and \$1.1 billion gas CCGT. Each of the prior Commission decisions arose in one of two contexts: (1) setting avoided capacity costs on the basis of the cost of building or contracting for firm capacity, or (2) rejecting the idea that RTO membership standing alone, or market purchases for a long period of time, should be used to replace major retiring or contracted-for generation. None of those decisions foreclose EKPC from continuing to rely on PJM membership to avoid the need for significant winter reserve margins, which as Witness Stanton explains in response to EKPC Request 1.1(c), EKPC has long recognized is a primary and significant benefit of PJM membership. In addition, as Witness Stanton explains at page 17, lines 4 to 15 of her Revised Direct Testimony, the extreme winter peaks at issue tend to be of relatively limited duration. As such, Joint Intervenors posit that reliance on PJM membership to cover EKPC's winter reserve margin would not constitute market reliance for a "sustained period of time."
- c. The difference in PJM and EKPC's historical loads is relevant to the level of forecasted future loads but not to their growth rates. From 2024 to 2039 (approximating from their graph), PJM's forecast rises from 2,700 to 2,850 MW (a 6 percent increase). In contrast, over the same period, EKPC's 2024 forecast rises from 3,500 to 3,900 MW (an 11 percent increase).
- d. PJM's method forecasts load for EKPC's transmission system. EKPC's method forecasts load for its customers. Both methods are necessary. The two methods, however, should be reconciled to identify what factors are resulting in EKPC's forecast of load growing twice as fast as PJM expects. EKPC needs to have sufficient owned or contracted resources to meet its PJM load obligations. To the extent that EKPC forecasts need for additional load beyond the PJM obligations, it can

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and should evaluate whether to rely on the PJM market versus its owned generation.

RESPONDENT: Elizabeth A. Stanton

Counsel as to response 2.b.

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Question No. 1.3

Q-1.3. Refer to the Stanton Direct Testimony page 15, lines 5-10. Since PJM is adopting a new Effective Load Carrying Capability (ELCC) generation unit accreditation rating for its members' generation units, explain whether it is required if not incumbent on the PJM members to adopt the ELCC ratings to fulfill their current and forecast load obligation

RESPONSE:

To the best of my knowledge, PJM members are required to adopt PJM ELCCs for use in determining whether they satisfy their PJM load obligations. No such requirement is incumbent on utilities in evaluating satisfaction of any customer load beyond their PJM load obligations.

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Question No. 1.4

Q-1.4. Refer to the Stanton Direct Testimony page 16, lines 12-15. In addition to PJM's new ELCC capacity accreditation ratings reducing renewables and Battery Storage System's (BESS) projected contribution to Winter Peak supply, explain whether the ELCC ratings lowered the capacity accredited ratings of fossil fueled or any other generation technology. If so, provide a list of generation technologies with the capacity ratings prior to and after PJM applied ELCC ratings.

RESPONSE:

Yes, the ELCC ratings lowered the capacity accredited ratings of all EKPC resources, as shown in EKPC's response attachment *JI 1-22_- EFORD_to_ELCC_Comparison*.

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Question No. 1.5

Q-1.5. Refer to Stanton Direct Testimony, page 45, lines 20-24 and page 46, lines 1-2. Provide additional data to support the Joint Intervenors' claim that the EKPC Cooper Unit 2 costs continue to exceed its revenue from 2019 through 2024.

RESPONSE:

Cooper 2's total revenues for 2019-2024 are provided in EKPC Responses to JI 1.5(k), (m) for energy and ancillary services revenues, and response attachment *CONFIDENTIAL - Staff1-25 - Coal CP Benefits 2016-26.xlsx* for capacity revenues. Total costs for Cooper 1 and 2 together are provided for those same years in EKPC Responses to JI.5(a)-(d). I estimated Cooper 2's historical costs as total costs multiplied by Cooper 2's share of total Cooper generation, as provided in EKPC Response to JI.5(f). The figure below graphs Cooper 2's total cost and total revenue for years 2019-2024.



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Question No. 1.6

Q-1.6. Refer to Stanton Direct Testimony, page 26, line 6. Explain why the actual EKPC January 2025 peak load exceeded the January 2025 PJM EKPC Regional forecast.

RESPONSE:

See response to 2(a) above.

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Question No. 1.7

Q-1.7. Refer to Stanton Revised Direct Testimony, filed February 20, 2025, at page 14, lines 6-9. Explain in detail why it is appropriate to compare territory forecast to EKPC's company specific forecasts.

RESPONSE:

See responses to 2(a), (c), and (d).

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Question No. 1.8

Q-1.8. Refer to the Stanton Revised Direct Testimony, filed February 20, 2025, page 18, lines 5-10. Explain whether it is possible for EKPC to purchase capacity for 1–8 hours per year only and how EKPC would pinpoint with any surety the time period during the winter heating season when those hours should be purchased.

RESPONSE:

No, there is no hourly capacity product available in the PJM market. The referenced question should have asked "Could EKPC instead purchase energy from PJM or invest in alternative peaking resources to meet that 1- to 8-hour per year shortfall?". The answer to that question is yes given that EKPC, as a PJM participant, "sells all of its generation into the market, and purchases all of its load from the market". EKPC Resp. to Staff 1-7(a). When EKPC's load exceeded its generation capacity and interruptible loads potential during Winter Storm Elliott, it was able to serve its load requirements because it purchases all energy needs from the PJM energy market. Case No. 2024-00310, EKPC Resp. to Staff 3.9. My point is that EKPC does not appear to have adequately explored through resource optimization modeling whether it would be lower cost for customers to address the limited duration shortfalls identified by EKPC through continued reliance on PJM membership for winter reserves combined with increased demand response and solar+storage, rather than a baseload gas CCGT.

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Question No. 1.91

Q-1.9. Refer to the Stanton Direct Testimony, page 7 line 18 through page 8, line 2. Refer also to page 17, lines 1-3. Explain the reasoning behind the assumption of duplication regarding the 7 percent Winter Reserve Margin with the knowledge that EKPC has not provided an explanation or calculation of how the Winter Reserve Margin increase, winter load increase, and PJM's ELCC interact.

RESPONSE:

The cited testimony does not assume that duplication is actually occurring but, instead, states that EKPC's new 7% Winter Reserve Margin "appears to duplicate" other efforts by the Company and PJM to react to recent Winter storms. EKPC assumed no winter reserve margin in its 2022 IRP, and as recently as July 2024 explained that due to its membership in PJM it is able to have only a "minimal reserve margin." Yet even as PJM has taken steps to further ensure reliability in the wake of Winter Storms Elliott and Gerri, and EKPC has increased its winter load forecast, it is proposing a 7% winter reserve margin. EKPC should have, but did not, present an assessment of whether these developments have duplicative impacts on winter reliability that would render a 7% reserve margin higher than needed or even unnecessary. See also Joint Intervenors response to EKPC request 5.a.

¹ There were two discovery requests labeled as "8". The numbering used here is in the form of the sequential order.

² Annual Report, *In the Matter of: The Application of East Kentucky Power Cooperative, Inc. to Transfer Functional Control of Certain Transmission Facilities to PJM Interconnection, L.L.C.*, Case No. 2012-00169, at 4 (July 31, 2024), https://psc.ky.gov/PSCSCF/Post%20Case%20Referenced%20Correspondence/2012%20cases/2012-00169/20240731 East%20Kentucky%20Power%20Cooperative,%20Inc.%20Annual%20Report%20and%20Request%20for%20Confidential%20Treatment.pdf.

VERIFICATION

The undersigned, Elizabeth Stanton, being first duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data responses and that the information contained therein is true and correct to the best of her information, knowledge, and belief, after reasonable inquiry.

Ungloth Stanton

Subscribed and sworn to before me by Elizabth Stanton this 17th day of March, 2025.

MATHEW LEONAGEO
Notary Public

My commission expires: 04/22/2026

