COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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 COMPATIBILITY CERTIFICATE; AND 3) OTHER GENERAL RELIEF

) CASE NO. 2024-00310

SECOND SUPPLEMENTAL REQUESTS FOR INFORMATION OF KENTUCKIANS FOR THE COMMONWEALTH AND MOUNTAIN ASSOCIATION TO EAST KENTUCKY POWER COOPERATIVE, INC.

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Counsel for Joint Intervenors Kentuckians for the Commonwealth and Mountain Association

Dated: February 06, 2025

DEFINITIONS

- "Document" means the original and all copies (regardless of origin and whether or not including additional writing thereon or attached thereto) of any memoranda, reports, books, manuals, instructions, directives, records, forms, notes, letters, or notices, in whatever form, stored or contained in or on whatever medium, including digital media.
- 2. "Study" means any written, recorded, transcribed, taped, filmed, or graphic matter, however produced or reproduced, either formally or informally, a particular issue or situation, in whatever detail, whether or not the consideration of the issue or situation is in a preliminary stage, and whether or not the consideration was discontinued prior to completion.
- 3. "Person" means any natural person, corporation, professional corporation, partnership, association, joint venture, proprietorship, firm, or the other business enterprise or legal entity.
- 4. A request to identify a natural person means to state his or her full name and business address, and last known position and business affiliation at the time in question.
- 5. A request to identify a document means to state the date or dates, author or originator, subject matter, all addressees and recipients, type of document (e.g., letter, memorandum, telegram, chart, etc.), identifying number, and its present location and custodian. If any such document was but is no longer in the Company's possession or subject to its control, state what disposition was made of it and why it was so disposed.
- 6. A request to identify a person other than a natural person means to state its full name, the address of its principal office, and the type of entity.
- 7. "And" and "or" should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.
- 8. "Each" and "any" should be considered to be both singular and plural, unless specifically stated otherwise.
- 9. Words in the past tense should be considered to include the present, and words in the present tense include the past, unless specifically stated otherwise.
- 10. "You" or "your" means the person whose filed testimony is the subject of these data requests and, to the extent relevant and necessary to provide full and complete answers to any request, "you" or "your" may be deemed to include any other person with information relevant to any interrogatory who is or was

employed by or otherwise associated with the witness or who assisted, in any way, in the preparation of the witness' testimony.

- 11. "Company", "East Kentucy Power Cooperative, Inc.", or "EKPC", means East Kentucy Power Cooperative, Inc., its parents or subsidiaries, and/or any of its officers, directors, employees or agents who may have knowledge of the particular matter addressed, and affiliated companies including member cooperatives.
- 12. "Joint Intervenors," or "Joint Movants" means Kentuckians for the Commonwealth and Mountain Association who have moved for the status of full intervention as joint intervenors in this matter.
- 13. Unless otherwise specified in each individual request the term "tariff" means the tariff as filed in this matter by EKPC.
- 14. "ELCC" means effective load carrying capacity.
- 15. "IRM" means installed reserve margin.
- 16. "IRP" means integrated resource plan.
- 17. "LTLF" means long term load forecast.
- 18. "NDA" means non-disclosure agreement.

INSTRUCTIONS

- 1. If any matter is evidenced by, referenced to, reflected by, represented by, or recorded in any document, please identify and produce for discovery and inspection each such document.
- 2. These requests for information are continuing in nature, and information which the responding party later becomes aware of, or has access to, and which is responsive to any request is to be made available to Joint Intervenors. Any studies, documents, or other subject matter not yet completed that will be relied upon during the course of this case should be so identified and provided as soon as they are completed. The Respondent is obliged to change, supplement and correct all answers to interrogatories to conform to available information, including such information as it first becomes available to the Respondent after the answers hereto are served.
- 3. Unless otherwise expressly provided, each data request should be construed independently and not with reference to any other interrogatory herein for purpose of limitation.
- 4. The answers provided should first restate the question asked and also identify the person(s) supplying the information.
- 5. Please answer each designated part of each information request separately. If you do not have complete information with respect to any interrogatory, so state and give as much information as you do have with respect to the matter inquired about and identify each person whom you believe may have additional information with respect thereto.
- 6. In the case of multiple witnesses, each interrogatory should be considered to apply to each witness who will testify to the information requested. Where copies of testimony, transcripts, or depositions are requested, each witness should respond individually to the information request.
- 7. Wherever the response to a request consists of a statement that the requested information is already available to Joint Intervenors, please provide a detailed citation to the document that contains the information. This citation shall include the title of the document, relevant page number(s), and, to the extent possible, paragraph number(s) and/or chart/table/figure number(s).
- 8. If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any discovery request, please describe the basis for your claim of privilege in sufficient detail so as to permit Joint Intervenors or the Commission to evaluate

the validity of the claim. With respect to documents for which a privilege is claimed, please produce a "privilege log" that identifies the author, recipient, date, and subject matter of the documents or interrogatory answers for which you are asserting a claim of privilege and any other information pertinent to the claim that would enable Joint Intervenors or the Commission to evaluate the validity of such claims.

- 9. Whenever the documents responsive to a discovery request consist of modeling files (including inputs or output) and/or workpapers, the files and workpapers should be provided in machine-readable electronic format (e.g., Microsoft Excel), with all formulas and cell references intact.
- 10. The interrogatories are to be answered under oath by the witness(es) responsible for the answer.

SECOND SUPPLEMENTAL REQUESTS FOR INFORMATION OF KENTUCKIANS FOR THE COMMONWEALTH AND MOUNTAIN ASSOCIATION TO EAST KENTUCKY POWER COOPERATIVE, INC.

Joint Intervenors hereby tender the following supplemental requests for information to the Company:

- 3.1. 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."
- 3.2. Please refer to East Kentucky Power Cooperative, Inc. (EKPC's) Responses to 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?¹
 - 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.

¹ See, e.g., Eva Dou et al., *Trump calls China's DeepSeek AI app a 'wake-up call' after tech stocks slide*, Washington Post, <u>https://www.washingtonpost.com/business/2025/01/27/deep-seek-ai-markets-nvidia/</u> (last updated Jan. 27, 2025); Brian Martucci, *Generator, advanced nuclear stocks reel as low-cost DeepSeek chills AI load growth outlook*, UtilityDive, (Jan. 28, 2025), <u>https://www.utilitydive.com/news/ipp-stocks-reel-as-low-cost-deepseek-chills-ai-load-growth-thesis/73848</u> 2/.

- 3.3. 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.
- 3.4. 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.
- 3.5. 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, the

² <u>https://power.mhi.com/regions/amer/products/gas-turbines/fclass</u> (under "simple-cycle performance").

³ https://www.gevernova.com/gas-power/products/gas-turbines/7f.

⁴ <u>https://www.siemens-energy.com/us/en/home/products-services/product/sgt6-5000f.html#/</u>.

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.
- I. 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.
- 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.

- 3.6. 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?
- 3.7. 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
- 3.8. 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?
- 3.9. 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?
- 3.10. 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?
- 3.11. 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?
- 3.12. 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).
- 3.13. 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.
- 3.14. 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.
- 3.15. 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.
- 3.16. 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...."
- 3.17. 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.

- 3.18. 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.
- 3.19. Please refer to EKPC's Response to Attorney General's First Request for 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.?

- 3.20. 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."
- 3.21. 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.
- 3.22. 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."
- 3.23. 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.
- 3.24. 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.
- 3.25. 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."
- 3.26. 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.
- 3.27. Please refer to JI 1-15.a., does the 2024 LTLF account for the demand side management proposal in Case No. 2024-00370?

- 3.28. 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.

- 3.29. 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.
- 3.30. 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
- 3.31. 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.
- 3.32. 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.
- 3.33. 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.

- 3.34. 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.
- 3.35. 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.
- 3.36. 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.
- 3.37. 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.
- 3.38. 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:

⁵ <u>https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/</u>

⁶ <u>https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf</u>.

- 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.
- 3.39. 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.
- 3.40. 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.
- 3.41. Identify EKPC's actual peak demand during January 2025.
- 3.42. 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."
- 3.43. 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.

Respectfully Submitted,

Byroh L. Gary

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CERTIFICATE OF SERVICE

In accordance with the Commission's July 22, 2021 Order in Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19*, this is to certify that the electronic filing was submitted to the Commission on February 06, 2025; that the documents in this electronic filing are a true representation of the materials prepared for the filing; and that the Commission has not excused any party from electronic filing procedures for this case at this time.

Byron L. Gary