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) CASE NO. 2024-00310
GENERATION RESOURCE; 2) A SITE)
COMPATIBILITY CERTIFICATE; AND 3) OTHER)
GENERAL RELIEF)

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

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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 Kentucky Power Coop", or "EKPC", means East Kentucky Power Cooperative, Inc., 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 Mountain Association, Kentuckians for the Commonwealth, and Kentucky Solar Energy Society 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. "IRP" means integrated resource plan.
- 15. "NAAQS" means national ambient air quality standards.
- 16. "PM" means particulate matter
- 17. "PM $_{2.5}$ " means particles with diameters generally less than or equal to 2.5 μ m, also known as fine particulate matter.
- 18. "2024 PM_{2.5} NAAQS" means the EPA *Reconsideration of the National Ambient Air Quality Standards for Particulate Matter*, 89 Fed. Reg. 16,202 (Mar. 06, 2024).
- 19. "GNP" means good neighbor plan.
- 20. "2015 Ozone GNP" means the EPA Federal "Good Neighbor Plan" ("GNP") for the 2015 Ozone National Ambient Air Quality Standards, 88 Fed. Reg. 36,654 (Jun. 05, 2023).
- 21. "Legacy CCR Rule" means the EPA Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments rule, 89 Fed. Reg. 38,950 (May 08, 2024).
- 22. "Section 111 Update" means the EPA New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 89 Fed. Reg. 39798 (May 09, 2024).
- 23. "CAA" means Clean Air Act.

- 24. "CO₂" means carbon dioxide.
- 25. "CCS" means carbon capture and storage.
- 26. "EIR" means the Energy Infrastructure Reinvestment Program.
- 27. "ELCC" means effective load carrying capacity.
- 28. "GRIP" means the Grid Resilience and Innovation Partnerships Program.
- 29. "IRA" means the Inflation Reduction Act of 2022.
- 30. "ITC" means investment tax credits.
- 31. "O&M" means operation & maintenance.
- 32. "PTC" means production tax credits.
- 33. "PV" means solar photovoltaic.
- 34. "PVRR" means present value revenue requirement.
- 35. "TFP" means the Transmission Facilitation Program.
- 36. "SMR" means small modular reactor.
- 37. "UCAP" means unforced capacity.

INSTRUCTIONS

- 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.

INITIAL DATA REQUESTS PROPOUNDED TO EAST KENTUCKY POWER COOPERATIVE BY JOINT MOVANTS FOR JOINT INTERVENTION

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

- 1.1. Please refer to Exhibit 2, Direct Testimony of Don Mosier at page5 line 5 to page 6 line 14; and Exhibit 3, Direct Testimony of Julia Tucker Section III (pages 20-25) generally; and Exhibit 4, Direct Testimony of Brad Young at page 11-12 and answer the following requests:
 - a. Was a request for proposals or "RFP" or other competitive or bidding process conducted by EKPC or its agents, including its Owner's Engineer, to solicit possible resources prior to selection of the Liberty RICE?
 - b. If the answer to a. above is yes, please provide any solicitation or RFP, as well as all responses and evaluation.
 - c. If the answer to a. above is no, why not?
 - d. Who will construct the facilities?
 - e. Were options other than self-build considered?
 - f. How were the specific Wartsila gensets selected as compared to other RICE?
 - g. Please provide all contracts for the reciprocating engines, generator step-up transformers, and other equipment contracted for related to this application.
 - h. Please provide a detailed cost breakdown of the anticipated and known costs of each element of the applied-for facilities, including engineering, procurement, and construction.
- 1.2. Please refer to Exhibit 2, Direct Testimony of Don Mosier at page 6 lines 18-19; and Exhibit 3, Direct Testimony of Julia Tucker at page 4 line 22 to page 5 line 2, and page 7 line 1 to page 8 line 3, and identify each place in EKPC's most recent IRP where planning or need for this project is referenced.
- 1.3. Please refer to Exhibit 2, Direct Testimony of Don Mosier at page 6 lines 3-10; and Exhibit 3, Direct Testimony of Julia Tucker at page 3 lines 6-9, page 14 generally, and page 21 lines 14-18, and answer the following questions:
 - a. Does EKPC participate in PJM under the Fixed Resource Requirement (FRR) option or as a full participant in the PJM Interconnection LLC (PJM) Reliability Pricing Model (RPM) Base Residual Auction (BRA) and Incremental Auction (IA)?
 - b. Please compare penetration of solar production on EKPC, Kentucky, and PJM's systems to penetration in California.
- 1.4. Please refer to Exhibit 2, Direct Testimony of Don Mosier at page 7 lines 4-5; as well as Exhibit 3, Direct Testimony of Julia Tucker at page 4 line 22 to page 6 line 11, and provide the most recent copies of the EKPC Board's Sustainability Plan and its overall Strategic Plan.

- 1.5. Please refer to Exhibit 2, Direct Testimony of Don Mosier at page 7 lines 11 to 13, and identify each engine of this type or natural gas fired combustion turbine engine evaluated, along with the capacity, pricing, and construction timeline for each.
- 1.6. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 6 lines 5-9 and detail the referred to:
 - a. Legal pressures to decarbonize,
 - b. Regulatory pressures to decarbonize, and
 - c. Industry pressures to decarbonize the fleet.
- 1.7. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 8 lines 5-16, and provide a copy of EKPC's 2024 Long Term Load Forecast, along with any supporting documentation and workpapers.
- 1.8. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 8 line 17 to page 10 line 1, and answer the following questions:
 - a. With regard to "The impact of those plans" referenced at page 9 line 2, explain
 - i. What plans are being referenced,
 - ii. How the referenced plans were incorporated into the load forecast, and
 - iii. How the forecast was modified downward;
 - b. Please provide the "extensive review of DSM/EE programs" referenced at page 9 line 8, and any report, market analysis or potential study along with supporting documentation and workpapers;
 - c. Does EKPC intend to file an update to its approved DSM/EE plan with the Public Service Commission?
 - d. Why was
 - e. For what plant, equipment, property, or facility for furnishing service to the public is the "CPCN filing that EKPC anticipates filing at the Commission later this fall," referenced at page 9 lines 11-12?
- 1.9. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 10 line 20 to page 11 line 4 and provide any report or analysis from the referenced consultant retained to "forecast EV growth and energy requirements," along with any supporting workpapers.
- 1.10. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 13 to page 14, and respond to the following requests:
 - a. Provide the ELCC applicable to each of EKPC's generating facilities.
 - b. Provide any documentation and supporting workpapers for how the current Reserve Margin of 7% was developed.
- 1.11. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 15 to page 18, and provide the underlying workpapers in machine-readable format for Figures 2 and 3.

- 1.12. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 18 line 1 to page 19 line 2; and Exhibit 7, Direct Testimony of Jerry Purvis at page 4 lines 5-10, and respond to the following requests:
 - a. Is EKPC aware of the EPA non-regulatory docket, *Reducing Greenhouse Gas Emissions from New and Existing Fossil Fuel-Fired Stationary Combustion Turbines*, Docket ID EPA-HQ-OAR-2024-0135?
 - i. Has EKPC considered the possibility of EPA adding RICE to the source category list for this potential rulemaking?
 - ii. If yes, what would the method and cost of compliance be?
 - iii. If no, has EKPC considered the possibility of additional EPA rulemaking requiring control of greenhouse gas emissions from RICE?
- 1.13. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 20 lines 1-10, and provide a list of economic development project inquiries regarding carbon intensity.
- 1.14. In selecting the RICE generating option proposed through the instant application, did EKPC incorporate into the planning process any assessment of risk of early retirement? If yes, how was the risk assessment developed and incorporated? If no, please explain why not.
- 1.15. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 20 lines 17-20, and respond to the following requests:
 - a. What demand response options were evaluated, and how?
 - b. What intermittent resources were evaluated, and how?
 - c. Were any energy storage options considered?
- 1.16. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 23 lines 8-10, and provide the current financing rate available to EKPC through RUS?
- 1.17. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 23 lines 5-21 and answer the following requests:
 - a. Provide any supporting documentation or workpapers for the narrative economic operations calculations.
 - b. What is the expected lifetime of an "F" class CT?
 - c. What is the expected lifetime of the Liberty RICE?
- 1.18. Please compare Exhibit 3, Direct Testimony of Julia Tucker at page 23 lines 10-13, which states "The capital cost for the proposed RICE engine is \$500 million including network transmission expenses. Without network transmission expenses, it averages \$1,995/kW, which equates to annual fixed charges of approximately \$215,500/MW-year;" with Exhibit 6, Direct Testimony of Darrin Adams at Attachment DA-1 pages 6-7 (Table 2.1), 10-12 (Tables 4.1 and 4.2), detailing "Identified Transmission Network Upgrades and Estimated Costs;" and answer the following requests:

- a. Which of the network transmission expenses detailed in Mr. Adams' supporting documentation (Attachment DA-1) are the network transmission expenses discussed in Ms. Tucker's testimony?
- b. Please confirm that each of the expenses detailed in Attachment DA-1 Tables 2.1, 4.1, and 4.2 would be cumulative, not alternative options. If anything other than confirmed, please explain.
- c. According to the Application the net output of the proposed RICE would be 214 MW. Please confirm that at \$1,995/kW this means the anticipated cost without network transmission expenses would be \$426,930,000. If anything but confirmed please explain.
- d. If confirmed.
 - i. Detail the network transmission expenses that make up the the net difference of \$73,070,000 implied in Ms. Tucker's testimony; and
 - ii. Reconcile that amount with the amounts listed in Attachment DA-1.
- 1.19. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 23 lines 16-19 and provide the full load heat rate of the proposed RICE engine.
- 1.20. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 23 line 22 through page 24 line 3 and answer the following questions:
 - a. How many hours is the proposed RICE anticipated to operate annually?
 - b. How many starts and stops are anticipated for the proposed RICE each year?
 - c. Please refer to the statement on page 24 lines 2-3 that "CTs are typically limited in their air permits to a much lower number of run hours and / or starts per year."
 - i. How many hours of operation are anticipated to be allowed in the Liberty RICE air permit?
 - ii. How many starts are anticipated to be allowed in the Liberty RICE air permit?
 - iii. What regulations limit the number of run hours of a CT?
 - iv. How many hours of operation and starts would be anticipated to be allowed in an air permit for a similarly-sized CT?
 - v. What limitations on hours of operation or starts are currently imposed on
 - 1. J. K. Smith Station;
 - 2. Bluegrass Generating Station; and
 - 3. EKPC's landfill gas-to-energy facilities in Boone County, Greenup County, Hardin County, Pendleton County and Barren County?
- 1.21. Please refer to Exhibit 3, Direct Testimony of Julia Tucker at page 25 lines 20-23, and provide the expected annual operation rate in MWh for the Liberty RICE to operate on natural gas, and the expected MWh to be produced relying on diesel.
- 1.22. Please refer to Exhibit 4, Direct Testimony of Brad Young at page 4 lines 2-4 and respond to the following questions:

- a. What regulatory approvals does EKPC anticipate needing for the "separate project" consisting of the new natural gas supply pipeline, dew point heater, and metering and regulating station to require?
- b. Does EKPC anticipate filing a separate CPCN for any of the equipment described? If yes, when? If not, why not?
- 1.23. Please refer to Exhibit 4, Direct Testimony of Brad Young at page 10 and page 12 line 17 through page 13 line 4 and respond to the following requests:
 - a. Regarding the "property value impact study" referenced, and included at Appendix B to Attachment BY-2, Site Assessment Report, provide the size in MW of each similar facility studied as the abscess for the property valuation assessment.
 - b. Was the frequency of malfunctions at similar facilities documented, investigated, or otherwise considered? If so, please provide any study, report, or other documentation of such evaluation. If not, why not?
 - c. Provide diagrams or maps of all locations trees are intended to be planted, including size and species of trees to be planted.
 - d. Provide information on the "noise attenuation provisions" to be purchased and installed with the diesel engines, including model, design, quantity, and price information.
 - e. What is the anticipated cost of purchasing additional adjacent residential property? How many parcels are anticipated to be purchased?
 - f. What is the intent of the recommended USEPA and ANSI S12.9 guidelines?
 - g. How would the project be "consistent with the intent" of those guidelines if exceeding them?
 - h. Please provide a detailed description of the implementation and cost of each of the sound mitigation measures mentioned.
- 1.24. Please refer to Exhibit 4, Direct Testimony of Brad Young at page 11 lines 18-20, and respond to the following questions.
 - a. When and how was Burns & McDonnell chosen as EKPC's Owner's Engineer?
 - b. Please provide a copy of the most recent contract for EKPC's Owner's Engineer, and describe the scope of responsibility of the Owner's Engineer.
- 1.25. Please refer to Exhibit 5, Direct Testimony of Craig Johnson at page 5, lines 11-13. Did the Company study the impact of the rejected heat from the outdoor radiators on neighboring properties or surrounding vegetation?
 - a. If so, please provide any documentation or analysis.
 - b. If not, why not?
- 1.26. Please refer to Exhibit 5, Direct Testimony of Craig Johnson at pages 7-8 and respond to the following requests:
 - a. Explain whether the "proposed facility" referred to at page 7 line 4 is the totality of the Liberty RICE facility, or the pipeline needed to serve the Liberty RICE facility, or some other portion of the applied for project.

- b. Confirm it is "standard procurement practice" for all facilities to be procured by EKPC to include issuance of a written RFP, and the evaluation process described at page 7 lines 4-10. If anything other than confirmed please explain.
- c. Provide a copy of each bid received through the referenced RFP, as well as any evaluation, and/or summary by EKPC.
- d. Provide the model referenced at page 7 lines 10-11.
- e. Did the RFP include construction and operation of a pipeline to the Liberty RICE facility?
- f. Provide any site assessment, map, or diagram of the mainline proposed by CGT.
- g. Regarding the statement at page 8 lines 1-3 that "[t]he mainline operating pressures for CGT meet or exceed the needs of the proposed Liberty RICE Facility, which means that additional compression is not needed," did EKPC consider the possibility of a failure of the pressure on the pipeline?
- h. Is EKPC familiar with the FERC, NERC and Regional Entity Staff Report from October 2023, *Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliott* (available at https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-during-december-2022)?
- i. Is EKPC familiar with the Commission's Investigation in Case No. 2023-00422, Electronic Investigation of Louisville Gas & Electric Company and Kentucky Utilities Company Service Related to Winter Storm Elliott?
- 1.27. Please refer to Exhibit 5, Direct Testimony of Craig Johnson at page 8 line 22 to page 9 line 1, as well as Exhibit 3, Direct Testimony of Julia Tucker at page 14 and provide the ELCC applicable to the proposed Liberty RICE.
- 1.28. Please refer to Exhibit 6, Direct Testimony of Darrin Adams at page 5 line 23, and provide the referenced basic engineering analysis and preliminary design work.
- 1.29. Please refer to Exhibit 6, Direct Testimony of Darrin Adams at page 10 lines 19-22, and indicate each place in EKPC's last IRP where the reliability concerns discussed were identified or information was provided.
- 1.30. Please refer to Exhibit 6, Direct Testimony of Darrin Adams attachment DA-1, page 5, and list each instance of thermal loading or low-voltage issues in the area.
- 1.31. Please refer to Exhibit 6, Direct Testimony of Darrin Adams attachment DA-1, page 7, with regard to the "120 generation projects"
 - a. Would be in the southern portion of the EKPC system?
 - b. For each project, what portion of related needed transmission system upgrades with the project owner be responsible for?

1.32. Please refer to Exhibit 7, Direct Testimony of Jerry Purvis at page 4-6, and Attachment JP-1, and provide copies of applications or other requests for approval for the Liberty RICE related to any of the environmental permits or approvals listed.

Respectfully Submitted,

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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 October 28, 2024; 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