

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR 1) A CERTIFICATE)	
OF PUBLIC CONVENIENCE AND NECESSITY)	Case No. 2026-00001
TO CONSTRUCT A MECHANICAL DRAFT)	
COOLING TOWER AT THE MITCHELL)	
PLANT 2) APPROVAL OF CERTAIN)	
REGULATORY AND ACCOUNTING)	
TREATMENTS, AND 3) ALL OTHER)	
REQUIRED APPROVALS AND RELIEF)	

**SIERRA CLUB’S TENDERED INITIAL REQUESTS FOR INFORMATION TO
KENTUCKY POWER COMPANY**

Sierra Club hereby submits this Tendered Initial Requests for Information to Kentucky Power Company (“the Company”). Please provide responses to these data requests below to the undersigned counsel.

GENERAL INSTRUCTIONS

1) Definitions: For the purposes of these data requests, the following definitions shall apply:

- a) The terms “Kentucky Power Company,” “Kentucky Power,” or “the Company” means and include any and all affiliates and/or subsidiaries, successors, predecessors, agents, consultants, and witnesses in this proceeding, and any and all of their affiliates, subsidiaries, or predecessors.

- b) The term “Company” means Kentucky Power Company and any and all affiliates and/or subsidiaries, successors, predecessors, agents, consultants, and witnesses in this proceeding, and any and all of their affiliates, subsidiaries, or predecessors.
- c) “Document” means all written, recorded or graphic matters, however produced or reproduced, pertaining in any manner to the subject of this proceeding, whether or not now in existence, without limiting the generality of the foregoing, all originals, copies and drafts of all writings, correspondence, telegrams, notes or sound recordings of any type of personal or telephone communication, or of meetings or conferences, minutes of directors or committee meetings, memoranda, inter-office communications, studies, analyses, reports, results of investigations, reviews, contracts, agreements, working papers, statistical records, ledgers, books of account, vouchers, bank checks, x-ray prints, photographs, films, videotapes, invoices, receipts, computer printouts or other products of computers, computer files, stenographer’s notebooks, desk calendars, appointment books, diaries, or other papers or objects similar to any of the foregoing, however denominated. If a document has been prepared in several copies, or additional copies have been made, and the copies are not identical (or which, by reasons of subsequent modification of a copy by the addition of notations, or other modifications, are no longer identical) each non-identical copy is a separate “document.”
- d) “And” or “or” shall be construed conjunctively or disjunctively as necessary to make the requests inclusive rather than exclusive.
- e) The terms “you” and “your” refer to “Kentucky Power Company.”
- f) The term “person” means any natural person, corporation, corporate division, partnership, limited liability company, other unincorporated association, trust, government agency, or entity.
- g) The term “regarding” means consisting of, containing, mentioning, suggesting, reflecting, concerning, regarding, summarizing, analyzing, discussing, involving, dealing with, emanating from, directed at, pertaining to in any way, or in any way logically or factually connected or associated with the matter discussed.
- h) The singular as used herein shall include the plural and the masculine gender shall include the feminine and the neuter.
- i) “Identify” or “identifying” or “identification” when used in reference to a person that is a natural person means to state: the full name of the person and any names under which he conducts business; the current employer of the person, the person’s job title and classification, the present or last known work address of the person; and, the present or last known telephone number of the person.
- j) “Identify” or “identifying” or “identification” when used in reference to a person other than a natural person means to state: the full name of the person and any

names under which it conducts business; the present or last known address of the person; and, the present or last known telephone number of the person.

- k) “Identify” or “identifying” or “identification” when used in reference to a document means to provide with respect to each document requested to be identified by these discovery requests a description of the document that is sufficient for purposes of a request to produce or a subpoena duces tecum, including the following:
 - (a) the type of document (e.g., letter, memorandum, etc.);
 - (b) the date of the document;
 - (c) the title or label of the document;
 - (d) the Bates stamp number or other identifier used to number the document for use in litigation;
 - (e) the identity of the originator;
 - (f) the identity of each person to whom it was sent;
 - (g) the identity of each person to whom a copy or copies were sent;
 - (h) a summary of the contents of the document;
 - (i) the name and last known address of each person who presently has possession, custody or control of the document; and,
 - (j) if any such document was, but is no longer, in your possession, custody or control or is no longer in existence, state whether it: (1) is missing or lost; (2) has been destroyed; or (3) has been transferred voluntarily or involuntarily, and if so, state the circumstances surrounding the authorization for each such disposition and the date of such disposition.
- l) “Identify” or “identifying” or “identification” when used in reference to communications means to state the date of the communication, whether the communication was written or oral, the identity of all parties and witnesses to the communication, the substance of what was said and/or transpired and, if written, identify the document(s) containing or referring to the communication.
- m) “Current” when used in reference to time means in the present time of this data request.
- n) “Customer” means a person or company (residential, commercial, or industrial) who buys retail electricity on a regular and ongoing basis from Kentucky Power Company.
- o) “Workpapers” are defined as original, electronic, machine-readable, unlocked, Excel format (where possible) with formulas in-tact.

OTHER INSTRUCTIONS

- a) Responses are to be provided in electronic format (e.g., text documents should be in the original word processor file format or PDF, data files should be in Excel).
- b) If you contend that any response to any data request may be withheld under the attorney-client privilege, the attorney work product doctrine or any other privilege

4 or basis, please state the following with respect to each such response in order to explain the basis for the claim of privilege and to permit adjudication of the propriety of that claim: 1) The privilege asserted and its basis; 2) The nature of the information withheld; and, 3) The subject matter of the document, except to the extent that you claim it is privileged.

- c) For any document or set of documents Kentucky Power Company objects to providing to Sierra Club on the grounds it is burdensome or voluminous, please identify the specific document (see instruction (k) above).
- d) These data requests are to be answered with reference to all information in your possession, custody or control or reasonably available to you. These data requests are intended to include requests for information, which is physically within your possession, custody or control as well as in the possession, custody or control of your agents, attorneys, or other third parties from which such documents may be obtained.
- e) If any data request cannot be responded to or answered in full, answer to the extent possible and specify the reasons for your inability to answer fully.
- f) These data requests are continuing in nature and require supplemental responses should information unknown to you at the time you serve your responses to these data requests subsequently become known.
- g) For each response, identify all persons (see instruction (j)) that were involved in the preparation of the answers to the interrogatories below and/or are responsible for compiling and providing the information contained in each answer.
- h) Identify which witness(es) at the hearing is competent to adopt and/or discuss the response.
- i) Please produce the requested documents in electronic format to the following individuals:

Joe Childers, Joe@jchilderslaw.com
Nathaniel Shoaff, nathaniel.shoaff@sierraclub.org
Kristin Henry, kristin.henry@sierraclub.org
- j) Wherever the response to an interrogatory or request consists of a statement that the requested information is already available to the Sierra Club, 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).
- k) In the event that any document referred to in response to any request for information has been destroyed, specify the date and the manner of such destruction, the reason for such destruction, the person authorizing the destruction and the custodian of the document at the time of its destruction.

- l) Sierra Club reserves the right to serve supplemental, revised, or additional discovery requests as permitted in this proceeding.

REQUESTS FOR INFORMATION

- 1.1 With reference to Coon Exhibit NMC-1:
 - a) Provide a copy of this exhibit in native file format with formulas intact.
 - b) Provide all workpapers that Witness Coon used to develop the revenue requirement calculations in this exhibit in native file format with formulas intact.
 - c) What is the dollar year of the revenue requirement results presented in this exhibit?
 - d) Why does option 1 not include any costs until 2029? Please explain.
- 1.2 With reference to Coon Exhibit NMC-2: Provide the underlying workpapers used to develop the results in this exhibit in native file format with formulas intact.
- 1.3 With reference to the direct testimony of Coon at 5, which discusses a cost-of-service model that Witness Coon used to prepare the economic analysis: please provide the cost-of-service model for each of the four options analyzed, in native file format with formulas intact and sources clearly identified.
- 1.4 With reference to the direct testimony of Coon at 5–6, which discusses the capital structure utilized in the economic analysis, please provide:
 - a) The capital structure of Kentucky Power
 - b) The capital structure of Wheeling Power
 - c) The combined capital structure of Kentucky and Wheeling Power used in the economic analysis
 - d) The tax rate assumed in the economic analysis
- 1.5 With reference to the direct testimony of Coon at 6, which discusses option 2 (retire and replace Mitchell 2), please answer the following questions regarding replacement capacity and energy costs:
 - a) Provide the Company's forecasts for replacement capacity and energy costs in each year.
 - b) Explain how the Company developed the estimates in part (a). Provide any supporting workpapers, analysis, or studies in native file format with formulas intact.
 - c) What quantity of replacement capacity and energy does the Company anticipate it would need to purchase in each year if it pursued this option?
 - d) Did Kentucky Power analyze an option to purchase capacity from Mitchell through a power purchase agreement with Wheeling Power through May 2031 (when the combined-cycle plant comes online)? If yes, provide the Company's cost assumption for this option. If not, explain why not.

- e) Did Kentucky Power analyze an option to purchase capacity from any of AEP's other subsidiaries in PJM, given the excess capacity identified in FERC docket ER26-444? If yes, provide the Company's cost assumption for this option, and the time period that the capacity would be available. If not, explain why not.
- 1.6 With reference to the direct testimony of Coon at 7, which discusses option 3 (construct a new mechanical draft cooling tower):
- a) Please explain why this option results in a capacity derate at Mitchell Unit 2.
 - b) Please provide the magnitude of the capacity derate (in MW) and the timeframe for the derate.
 - c) Would the Company need to purchase additional capacity to make up for the derate at Mitchell Unit 2? Explain why or why not.
 - d) If the answer to part (c) is yes, provide the price that the Company assumed for this replacement capacity.
 - e) Please provide the quantity in MWh and the price of the lost energy margin included in Witness Coon's analysis.
- 1.7 With reference to the direct testimony of Coon at 7–8, which discusses option 4 (continue the exterior reinforcements after reducing the tower's height):
- a) Please explain why this option results in a capacity derate at Mitchell Unit 2.
 - b) Please provide the magnitude of the capacity derate (in MW) and the timeframe for the derate.
 - c) What is the timespan for the outage required for construction and the loss of energy margins in this option?
 - d) Provide the Company's forecasts for replacement capacity and energy prices in each year (or for the period when replacement resources are needed, if less than a year).
 - e) What quantity of replacement capacity and energy does the Company anticipate it would need to purchase in each year or month if it pursued this option?
 - f) Did Kentucky Power analyze an option to purchase capacity from any of AEP's other subsidiaries in PJM, given the excess in capacity as identified in FERC docket ER26-444? If yes, provide the Company's cost assumptions. If not, explain why not.
- 1.8 Please explain what the Company means by "energy margin" as referenced in the direct testimony of Coon.
- 1.9 Refer to the direct testimony of Coon at 12, which states that, "in terms of an economic decision, the Company chose to use a 25-year [depreciable] life as that aligns with the cooling tower's useful life." Also refer to the direct testimony of Wolfram at 16, which states that "a basic 8.33% depreciation rate (or 1/12 years) is reflected in Exhibit NMC-1."
- a) Please reconcile these two statements.
 - b) Please confirm what depreciable life Kentucky Power assumed for the mechanical draft cooling tower in Witness Coon's economic analysis (Exhibit NMC-1).

- c) Please confirm what depreciable life Kentucky Power assumed for the mechanical draft cooling tower in Witness Coon's rate impact analysis (Exhibit NMC-2).
 - d) If the responses to parts (b) and (c) are different, please explain why.
- 1.10 Provide the following data for Mitchell Unit 2 for each year 2027–2040 for each of the four options in Coon Exhibit NMC-1:
- a) Nameplate capacity (MW)
 - b) Accredited capacity (MW)
 - c) Annual generation (MWh)
 - d) Sustaining capital expenditures (\$/year)
 - e) Fixed operations and maintenance (\$/year)
 - f) Non-fuel variable operations and maintenance (\$/MWh)
 - g) Heat rate (MMBtu/MWh)
 - h) Fuel cost (\$/MMBtu)
 - i) Forced or random outage rate
- 1.11 Provide the following historical data for Mitchell Unit 2 for each year 2020–2025:
- a) Nameplate capacity (MW)
 - b) Accredited capacity (MW)
 - c) Annual generation (MWh)
 - d) Sustaining capital expenditures (\$/year)
 - e) Fixed operations and maintenance (\$/year)
 - f) Non-fuel variable operations and maintenance (\$/MWh)
 - g) Heat rate (MMBtu/MWh)
 - h) Fuel cost (\$/MMBtu)
 - i) Forced or random outage rate
- 1.12 How did Kentucky Power account for the increasing age of Mitchell Unit 2 in its projections of sustaining capital expenditures and unit availability assumed in Coon Exhibit NMC-1?
- 1.13 Regarding environmental compliance costs at Mitchell Unit 2:
- a) What environmental compliance costs does Kentucky Power anticipate at Mitchell Unit 2 under each of the four options the Company analyzed?
 - b) Please explain how Witness Coon's economic analysis accounts for upcoming environmental compliance costs in each of the four options.
- 1.14 With reference to the direct testimony of Coon at 6, which discusses option 2 (retire and replace Mitchell 2), please answer the following questions about the new combined-cycle gas plant:
- a) What capital cost did the Company assume for the new gas combined-cycle plant? Provide the source of this estimate, including any supporting workpapers or analyses in their native file format with formulas intact.
 - b) Does the Company plan to obtain firm gas transportation for the combined-cycle plant? If so, what costs did the Company assume for gas transportation?

- c) How did the Company decide on a commercial operation date of May 2031 for the combined-cycle plant? Please explain.
 - d) What depreciation life and useful life does the Company assume for the combined-cycle plant?
 - e) What portion of the \$1,044 million capital cost cited by Witness Coon is for the combined-cycle plant and what portion is for demolition?
- 1.15 With reference to Coon Exhibit NMC-1, provide the following data for the new gas combined-cycle plant in option 2 for each year 2031–2040:
- a) Nameplate capacity (MW)
 - b) Accredited capacity (MW)
 - c) Annual generation (MWh)
 - d) Sustaining capital expenditures (\$/year)
 - e) Fixed operations and maintenance (\$/year)
 - f) Non-fuel variable operations and maintenance (\$/MWh)
 - g) Heat rate (MMBtu/MWh)
 - h) Fuel cost (\$/MMBtu)
 - i) Forced or random outage rate
- 1.16 Refer to the direct testimony of Coon at 11, which states that, "there are several differences between the inputs for the economic analysis revenue requirement calculated in October 2025 to provide relative costs for decision making purposes and the rate impact revenue requirement calculated for this Application using updated information."
- a) Do the results presented in Exhibit NMC-1 reflect the October 2025 revenue requirement results or the updated revenue requirement results used in the rate impact analysis for this docket? Please explain.
 - b) Provide both the October 2025 revenue requirement results and the updated "rate impact revenue requirement" for all four options at Mitchell Unit 2, including all supporting workpapers with formulas intact.
 - c) Summarize how the changes since October 2025 affect the revenue requirement results for the four options at Mitchell Unit 2.
- 1.17 With reference to the direct testimony of Coon at 11, which discusses the estimated rate impact of the Mitchell Cooling Tower Project. Has Kentucky Power analyzed the rate impact of the other options considered in Coon Exhibit NMC-1? If so, please provide these analyses and all supporting workpapers in their native file format with formulas intact. If not, please explain why not.
- 1.18 With reference to the direct testimony of Wolfram at 7–8:
- a) Provide the load and resources data shown in figures TSW-1 and TSW-2 in excel, with formulas intact.
 - b) Please explain why the Company expects its load obligation to increase starting in the winter of 2031/2032.
 - c) How does the Company intend to fill the capacity shortfall shown in figure TSW-1 starting in the winter of 2031/2032?

- 1.19 Regarding Kentucky Power's load and resources position:
- a) For each year 2026–2040, provide data on Kentucky Power's load and resources position, including:
 - i. Peak load
 - ii. Reserve margin
 - iii. Nameplate capacity of each resource in Kentucky Power's portfolio
 - iv. Accredited capacity of each resource in Kentucky Power's portfolio
 - b) Explain how the data in part (a) would differ under the four options Kentucky Power considered for Mitchell Unit 2, including the effects of any unit derates, retirements, and new resource builds.
- 1.20 With reference to the direct testimony of Wolfram at 7, which discusses PJM's proposed revisions to how winter capacity is accounted for in its accreditation methodology starting in year 2029/2030:
- a) Please explain Kentucky Power's understanding of how the proposed revision will affect its capacity position in more detail.
 - b) Has this change been approved by FERC? If so, please provide the docket number.
 - c) Please identify the stakeholder committee/forum and date when PJM presented this proposal to stakeholders, as well as any additional follow-up presentations or materials from PJM on this topic.
- 1.21 Regarding the capacity position of other AEP utilities in PJM:
- a) Please provide load and resources data for the other AEP subsidiaries in PJM (Appalachian Power, Indiana Michigan Power, and Wheeling Power) for each year 2026–2040.
 - b) Given AEP's current excess capacity, as identified in FERC docket ER26-444, has Kentucky Power considered purchasing capacity from other AEP affiliates? Explain why or why not.
- 1.22 With reference to the direct testimony of Wolfram at 9: Please provide copies of all communications provided to Kentucky Power President Wiseman and Appalachian Power Company President Walker about "possible paths forward" at Mitchell Unit 2.
- 1.23 With reference to the direct testimony of Wolfram at 13, which gives an estimate of \$191 million for the capital cost of the Mitchell Cooling Tower Project:
- a) What is the dollar year of this estimate?
 - b) Please provide a budget table that breaks down this total amount by category.
 - c) What is Kentucky Power's estimate of construction financing costs for the Mitchell Cooling Tower Project, and are these costs included in the \$191 million total?
 - d) What is the AACE class level of this cost estimate?
- 1.24 With reference to Malone Exhibit SPM-2:
- a) Please provide this exhibit and all supporting workpapers in native file format with formulas intact.

- b) What is the dollar year of the results presented in this exhibit?
- 1.25 With reference to the direct testimony of Malone at 5, Table SPM-1:
- a) What is the dollar year of the values in Table SPM-1?
 - b) Explain the difference between the "full demo" in option 1 and the "partial demo" in the other options.
 - c) Explain why "full demo" costs only \$3M while "partial demo" costs \$29M.
 - d) In option 3, how long does Kentucky Power expect that Mitchell Unit 2 would be offline for the tie in outage?
- 1.26 With reference to the direct testimony of Malone at 5, Table SPM-1, discussion of option 1 (exterior shell remediation):
- a) Please explain why option 1 entails a "High Risk of Cost and schedule overruns" compared to the other options.
 - b) Please explain why option 1 entails "worst condition of tower still to come" compared to the other options.
 - c) Does the "\$136M remaining" in incremental capital costs include any additional capital costs beyond what the Company budgeted for the Initial Repair Project? Please explain.
 - d) Given the issues the Company encountered with the Initial Repair Project, does the Company anticipate that expenditures above the "\$136M remaining" would be necessary to pursue Option 1 and operate the existing cooling tower for an additional ten years? Please explain.
- 1.27 With reference to the direct testimony of Pizzino at 11, which discusses auxiliary power use of the fans in the draft cooling tower: What is the magnitude of this auxiliary power use?
- 1.28 Please identify and produce the most recent depreciation study for the Mitchell plant.
- 1.29 Please provide the date of the most recent RFP or bid that Kentucky Power issued for new generating resources and summarize the results of the RFP.
- 1.30 Regarding a possible coal-to-gas conversion at Mitchell Unit 2:
- a) Did the Company consider gas conversion as an option in its economic analysis for this docket? Explain why or why not.
 - b) What type of cooling tower would Mitchell Unit 2 require after conversion to gas?
 - c) Could Kentucky Power avoid any costs associated with the Mitchell Cooling Tower Project by converting the unit to gas? Please explain.
 - d) Provide all analysis or studies in Kentucky Power's possession about the cost to convert Mitchell Unit 2 to gas, the cost and feasibility of obtaining firm gas service at the Mitchell site, and the projected capacity factor of the unit after conversion.

- 1.31 Regarding the Mitchell power plant’s compliance with the 2020 and 2024 Effluent Limitation Guidelines (ELG) Rules:
- a) What are the total expected capital costs associated with ELG compliance at Mitchell (including all prior, current, and future ELG capital costs)? Please provide documentation showing an itemized breakdown of the ELG-related capital costs at Mitchell, and Kentucky Power’s timeline for incurring its share of those costs.
 - b) What are the total expected operations & maintenance (“O&M”) costs associated with ELG compliance at Mitchell (including all prior, current, and future ELG O&M costs)? Please provide all documentation showing an itemized breakdown of the ELG-related O&M costs at Mitchell, and Kentucky Power’s timeline for incurring its share of those costs.
 - c) Under option 2 (retire and replace Mitchell Unit 2), could any of the costs in part (a) and (b) be avoided? If yes, please specify which of the costs could be avoided. If not, please explain why not.
 - d) If the Mitchell power plant is converted by 2034 to burn only gas, could any of the costs in part (a) and (b) be avoided? If yes, please specify which of the costs could be avoided. If not, please explain why not.

Dated: March 20, 2026

Respectfully submitted,

/s/ Joe F. Childers
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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Tendered Initial Requests for Information to Kentucky Power Company in this action is being electronically transmitted to the Commission on March 20, 2026, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

/s/ Joe F. Childers
JOE F. CHILDERS