

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC APPLICATION OF KENTUCKY
UTILITIES COMPANY AND LOUISVILLE GAS
AND ELECTRIC COMPANY FOR
CERTIFICATES OF PUBLIC CONVENIENCE
AND NECESSITY AND SITE COMPATIBILITY
CERTIFICATES**

Case No. 2025-00045

**SIERRA CLUB’S SUPPLEMENTAL REQUEST FOR INFORMATION
TO LOUISVILLE GAS AND ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY**

Sierra Club hereby submits this Supplemental Request for Information to Louisville Gas and Electric Company and Kentucky Utilities Company (collectively referred to as “LG&E/KU” or the “Companies”). 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 term “LG&E/KU” means and includes Louisville Gas and Electric Company and Kentucky Utilities 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.
- b) The term “Companies” and “Company” means and includes Louisville Gas and Electric Company and Kentucky Utilities 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 “LG&E/KU.”
- 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.
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- 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 LG&E/KU.
 - 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:
 - (a) the privilege asserted and its basis;
 - (b) the nature of the information withheld; and,
 - (c) the subject matter of the document, except to the extent that you claim it is privileged.
- c) For any document or set of documents LG&E/KU 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:
Kristin Henry, kristin.henry@sierraclub.org
Nathaniel Shoaff, nathaniel.shoaff@sierraclub.org

Josh Smith, josh.smith@sierraclub.org
Tony Mendoza, tony.mendoza@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.

SUPPLEMENTAL REQUESTS FOR INFORMATION

- 3-1. Please refer to the Company's response to PSC 28(b) and (c). With respect to potential "new tariff provisions for large, high load factor customers."
 - a. Please confirm whether the Companies have shared these proposed new tariff provisions with potential impacted customers.
 - b. Please identify any potential customers with which these proposed new tariff provisions were shared, or collaborated in the creation of these tariffs.
- 3-2. Please refer to SC DR1 LGE KU Attach to Q41(b) - CONFIDENTIAL Data Center Internal Reports. With respect to this document please answer the following:
 - a. What analysis serves as the basis for the interconnection costs given in this document?
 - b. What terms, if any, do prospective customers need to meet before the Companies will go to the work of providing the interconnection cost estimates given in this document?
- 3-3. Please refer to the response to Staff 2-14(b) which states in part, "But it is also important to bear in mind that receiving a CPCN for a particular resource does not mean the Companies will proceed with it irrespective of changed circumstances. [...]"

Thus, the Companies will act on any CPCN authority granted in this proceeding only insofar as it is reasonable and prudent to do so.”

- a. What changed circumstances would the Companies be on the lookout for as they consider whether to move forward with a particular resource assuming the CPCN is granted?
 - b. What notice, if any, do the Companies feel obliged to give to the Commission should circumstances change?
- 3-4. For any new customer that has shared with the Companies a projection of jobs created, what is the Companies’ understanding of how many of those jobs will be located in state? Provide any documentation that supports the Companies’ response.
- 3-5. Please refer to the Companies’ May 2025 investor meetings presentation.
- a. Provide the information that serves as the basis for the job impacts given at slide 19.
 - b. How many of these jobs are permanent?
 - c. How many of these jobs are located within Kentucky?
 - d. What are the job titles or job categories (construction, maintenance, engineering, etc.) and what is the average salary for the job title or job category?
 - e. At slide 21, there is a reference to a projection of \$475 million in electric transmission investment in each of 2026 – 2028. Provide the detailed information that supports this projection.
- 3-6. Please provide any projections in the Companies’ possession with all supporting detail and formulas intact of its future rate base for as long a period as such projections are made.
- 3-7. Please provide any projections in the Companies’ possession with all supporting detail and formulas intact of projected rate increases for each customer class as a result of this CPCN and/or other expected capital projects for as long a period as such projections are made.

- 3-8. Please explain why the Companies have not submitted an interconnection request for Mill Creek 6.
- 3-9. Please provide an updated list of projects for which a TSR has been submitted.
- 3-10. Please provide any completed TSR studies beyond those given in response to SC DR 1-41 and SC DR 2-18.
- 3-11. Provide a list of all projects, their size, and name that have dropped out of the Companies' load interconnection queue since the filing of the IRP. Please provide the reason that each project has dropped out.
- 3-12. Please refer to the Companies response to Staff 2-47. Please provide the supporting analyses used to develop the Mill Creek 2 study referenced in the Companies response to Staff 2-47.
- 3-13. Please refer to the Companies response to Staff 2-14(b) where the Companies said: "But it is also important to bear in mind that receiving a CPCN for a particular resource does not mean the Companies will proceed with it irrespective of changed circumstances. For example, the Companies did not construct the Ghent 2 SCR for which they received a CPCN in Case No. 2006-00206 after they determined they could comply with the relevant regulations by over-controlling for NOx at other units. Similarly, the Companies amended their application in Case No. 2014-00002 to remove their CPCN request for the Green River 5 NGCC unit after the departure of certain municipal customers. Thus, the Companies will act on any CPCN authority granted in this proceeding only insofar as it is reasonable and prudent to do so."
- a. At what point in Case No. 2006-00206 did the Companies determine not to move forward with the Ghent 2 SCR?
- b. At the time that the Companies decided not to move forward with the Ghent 2 SCR, had the Companies incurred expenses related to the SCR?
- c. At what point in Case No. 2014-00002 did the Companies determine not to move forward with the CPCN request for the Green River 5 NGCC?
- d. At the time that the Companies decided not to move forward with the Green River 5 NGCC, had the Companies incurred expenses related to the NGCC?

- e. The Companies provided project milestone information for Brown 12 and the Cane Run battery storage project in response to AG-KIUC 1-28 and 1-29. At what point in the project timeline would it be too late for the Companies to make a decision to not move forward with constructing Brown 12, Mill Creek 6, and the Cane Run battery storage project?
 - f. Please explain how the costs for project development and/or construction would be assigned to customers if the Companies decide not to pursue the resources requested in this CPCN and costs have been incurred for the development of the requested projects.
- 3-14. Please refer to the Direct Testimony of Witness Bellar at page 11, lines 13-14.
- a. Please provide an update on whether the Companies have entered into a Unit Reservation Agreement for Mill Creek 6.
 - b. If the Companies have entered into a Unit Reservation Agreement, please provide the agreement.
- 3-15. Please refer to the Companies response to Sierra Club 1-41(a) Attachment 1.
- a. Attachment 1 provides the Facilities Study results for a customer interconnection request. The study identifies costs for network upgrades and network interconnection facilities. Please explain if the customer requesting interconnection is responsible for paying the costs of the network upgrades and network interconnection facilities reported in this study.
 - b. If the customer requesting interconnection is not responsible for all the costs, please explain which portion of the costs the customer requesting interconnection is responsible for.
- 3-16. Please refer to the Companies response to Sierra Club 1-41(b) and the Confidential attachment provided with this response.
- a. Please explain if the costs provided in this attachment for the prospective customers are expected to be incurred by the customers requesting service.
 - b. If not, please explain how the costs will be allocated to the customer requesting service.

- 3-17. Please refer to the Companies response to Sierra Club 2-9. Please explain how the Companies determined the “Mid” probabilities assigned to each project phase.
- 3-18. Please refer to the Companies response to SREA 2-3(c), which said, “While no money is collected, the agreement requires the developer to provide security, in a form acceptable to the Company, that will protect the Company in the event the load does not come to fruition.”
- a. Please explain what types of security are acceptable to the Company.
 - b. The Companies provided a signed EPC agreement in response to Sierra Club 1-12(c)(i) in Docket No. 2024-00326. Please explain what type of security was provided by the party that signed this EPC agreement.
- 3-19. Please refer to the Companies response to AG-KIUC 2-22(a) and the additional 123 MW TSR for Camp Ground and the Companies response to Sierra Club 1-12(c)(i) in Docket No. 2024-00326. Please explain if the Companies have entered into any amendments to the EPC agreement.
- 3-20. Please refer to the Direct Testimony of Witness Conroy at page 5, lines 1-8, where there is a reference to the Companies constructing transmission facilities for the Ford BOSK Battery Park and pages 9-10 of the Order in Case No. 2022-00066 for the construction of those transmission facilities. The Order indicates the total project cost was estimated to be \$121 million and the expenses attributed to Ford were approximately \$39 million. Please explain how the Companies determined the expenses attributed to Ford.
- 3-21. Please refer to LGE-KU response to Commission Staff 1-100(d):
- a. Confirm that Ghent 2 is not located in an area that is designated as being in nonattainment under the 2015 ozone NAAQS.
 - b. If the 2024 Good Neighbor Plan is withdrawn, vacated, or found not to apply to Kentucky, please confirm that Ghent 2 would not be required to meet a NO_x emission rate commensurate with SCR in the ozone season. If not confirmed, explain why.
 - c. Confirm that, under the Good Neighbor Plan, Ghent 2 would not be required to meet an emission limit commensurate with SCR in the non-ozone season

(typically, September through May). If not confirmed, explain why.

- d. If LGE-KU installs SCR at Ghent 2, would the Companies operate the SCR in the non-ozone season? If so, explain why.
 - e. Did LGE-KU evaluate the additional operations and maintenance cost associated with running SCR year round? If so, please provide. If not, why.
 - f. If the Good Neighbor Plan is withdrawn, vacated, or amended so that Ghent 2 is not required to meet an emission limit commensurate with SCR operation, does LGE-KU intend to operate the proposed SCR regardless? Please explain.
 - g. Have the Companies conducted any analyses of Ghent 2's estimated emissions under the various compliance alternatives considered? If so, please provide all such analyses. If not, why?
- 3-22. Please refer to LGE-KU response to Joint Intervenor 2-22(b). Please confirm that there is no current "Reasonably Available Control Technology" requirement for Ghent 2.
- 3-23. Refer to LGE-KU response to Commission Staff 2-43.
- a. Provide the Companies' estimated useful life and all supporting documentation for SCR at Ghent 2.
 - b. Provide the depreciation schedule for SCR at Ghent 2.
 - c. Provide the Companies' expected retirement date for Ghent 2 with and without SCR.
 - d. Provide the Companies estimated plant balance for Ghent 2 with and without SCR for 2025-2040.
- 3-24. The Companies believe that if Ghent 2 were converted to a gas plant that it could not achieve an emission rate of 0.04 lb/MMBtu based on an analysis/study that was completed. Please produce that analysis/study.
- 3-25. What measures are being taken to ensure that costs and risks associated with potential large new loads are not being passed onto existing customers?

- 3-26. What financial safeguards are in place to ensure that debts or financial obligations do not adversely impact existing ratepayers?
- 3-27. Will existing customers be subsidizing infrastructure investments or operational costs in any way? Why or why not? How is this guaranteed?
- 3-28. What is the plan for dealing with stranded assets if large load customers do not materialize or leave the queue or contract for less service than projected?
- 3-29. What contingency plans are in place to ensure that demand from large load customers that does not materialize does not adversely affect existing customers?
- 3-30. How is the utility assuring that large load customers will remain in the region long term? Will the utility require new large load customers pay exit fees to ensure that assets built to serve them do not become stranded costs passed to other ratepayers?
- 3-31. Are existing customers adequately represented and educated on the benefits and risks presented by new large load customers?
- 3-32. How are existing customers and ratepayers being protected from higher energy costs, given the large increase in demand?
- 3-33. What are the projected possible economic benefits (e.g., job creation, tax revenue) of approving this request? Are they focused in specific counties, or are they spread evenly across areas served by the utility?
- 3-34. Have the Companies evaluated possible negative economic impacts to existing customers if the CPCN request is approved?
- 3-35. How is the utility coordinating with stakeholders to address transmission network performance deficiencies and assess potential network upgrades required for new large load interconnections?
- 3-36. What alternative solutions are considered as part of network upgrades beyond transmission infrastructure investments?
 - a. What advanced technologies (i.e., grid forming (“GFM”) inverter technology, FACTS devices, high voltage DC (“HVDC”) technologies, powerflow control, etc.) are included in these assessments?

- 3-37. Please provide any national forecasts of data center growth that the Companies used or relied on in evaluating the likelihood of data center load growth in their service territory.
- a. If any of those forecasts include specific projections of data center load growth in Kentucky, please identify that by report and page number.
 - b. If the Companies are aware of national forecasts for data center growth, but did not rely on those forecasts, please explain why.
- 3-38. Please explain whether the potential data centers' electricity load will fluctuate, and to what extent. Please specify both in terms of speed of fluctuations and the amount of electricity used. If the answer depends on the type of business the data center serves (e.g., artificial intelligence, crypto currency, other, etc.) please provide the answer for each type of data center that the Companies expect may locate in its service territory during the IRP time period.
- 3-39. Do the fluctuations identified in response to Question 3-38 above, pose a risk to the grid? If so, please explain the nature of the risk and the Companies' assessment of the likelihood of such a risk occurring.
- 3-40. How do the ramp rates for data centers compare to the ramp rates for the Companies' existing customers?
- 3-41. Are the Companies aware of whether any fossil fueled resource can match anticipated ramp rates for data centers?
- 3-42. Will the Companies impose any limit on the ramp rate for data centers that operate in its Kentucky service territories?

Dated: May 27, 2025

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 Supplemental Request for Information to Louisville Gas and Electric Company and Kentucky Utilities Company in this action is being electronically transmitted to the Commission on May 27, 2025, 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