

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:)
)
ELECTRONIC APPLICATION OF KENTUCKY)
UTILITIES COMPANY AND LOUISVILLE GAS) **Case No. 2025-00045**
AND ELECTRIC COMPANY FOR CERTIFICATES)
OF PUBLIC CONVENIENCE AND NECESSITY AND)
SITE COMPATIBILITY CERTIFICATES)

**TENDERED INITIAL REQUEST FOR INFORMATION OF SIERRA CLUB
TO LOUISVILLE GAS AND ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY**

Sierra Club hereby submits this Tendered Initial 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 “LGE/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” 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.
- 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: 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 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.

REQUESTS FOR INFORMATION

- 1-1. To the extent not already provided, please provide any redacted documents included in the Companies' initial filing in non-redacted, electronic versions.
- 1-2. To the extent not already provided, please provide all confidential workpapers, in electronic spreadsheet format with formulas intact, supporting the Companies' filing.
- 1-3. Please refer to the Direct Testimony of Witness Bellar at page 11.
 - a. Please provide a copy of the Unit Reservation Agreement with GE for Brown 12.
 - b. Please explain why the Companies have not entered into a reservation agreement for Mill Creek 6.
 - c. Please provide the documents that support the assertion that the 2031 projected online date for the Mill Creek 6 NGCC can be achieved if the Companies have not yet entered into a reservation agreement with GE.
 - d. Please explain if the lack of a signed reservation agreement for Mill Creek 6 means that the costs for Mill Creek 6 could be higher than what has been evaluated in this case.
- 1-4. Please refer to the Direct Testimony of Witness Tummonds at page 13 where it references the \$775 million cost to construct the Cane Run BESS. Please explain if that cost includes Investment Tax Credits.
- 1-5. Please refer to the Direct Testimony of Witness Jones at page 8, lines 5-10.
 - a. Please provide the supporting workpapers, with all formulas and links intact, used to develop the 2025 CPCN Load Forecast.
 - b. Please provide the supporting workpapers, with all formulas and links intact, for the translation of the 2025 CPCN Load Forecast into the hourly load modeled in PLEXOS.
 - c. Please provide the supporting workpapers, with all formulas and links intact, used to develop the 8,760 hourly shape assumed for the data center load and the BOSK Phase Two load in the 2025 CPCN Load Forecast.

- d. Please explain if any of the assumed 1,750 MW of data center load includes customers that have signed a contract for service with the Companies.
- 1-6. Please refer to the Direct Testimony of Witness Jones at page 14, lines 13 – 16. Please provide the assumed ramp rate for the 402 MW hyperscale data center that was included in the 2025 CPCN Forecast.
- 1-7. Please refer to the Direct Testimony of Witness Jones at page 20, lines 11 – 19. Please provide the assumed ramp rate for the 120 MW of Phase Two load for BOSK that was included in the 2025 CPCN Forecast.
- 1-8. Please refer to the Direct Testimony of Witness Jones at page 21, lines 1-8. Please provide the 8,760 hourly shape included in the 2025 CPCN Load Forecast for the 20 MW economic development prospect in the auto industry and the 19.4 MW from an existing customer’s expansion.
- 1-9. Please refer to the Direct Testimony of Witness Jones at page 29, lines 16 – 21, to page 30, lines 1-4.
- a. Please provide the supporting workbooks, with all formulas and links intact, used to develop the customer-initiated energy efficiency improvements, AMI-related conservation load reduction and e-Portal savings, distributed generation, and the energy efficiency effects of the Companies’ 2024-2030 DSM-EE Program plan that were included in the 2025 CPCN Load Forecast.
 - b. Please provide the supporting workbooks, with all formulas and links intact, that were used to reflect the savings in the load forecasts modeled in PLEXOS.
- 1-10. Please refer to the Direct Testimony of Witness Bevington at page 5, lines 15 – 18.
- a. Please explain in which stages of development each of the economic development load projects are in for the 8,000 MW of load potential.
 - b. Provide the number of new customers included in the 8,000 MW of load potential.
 - c. For each new customer included in the 8,000 MW of load potential, please provide the peak demand, ramp schedule, annual energy requirements, load factor, hourly shape, anticipated date the customer expects to receive service, the

commercial activity of the customer (i.e. data center, cryptocurrency, or EV manufacturing), and whether the customer has entered into any agreements or contracts with the Companies.

- d. For each new customer that has executed an agreement indicating an intention to obtain service from the Companies, please provide the date of the agreement.
 - i. If agreements have not been executed, please explain if any of the new customers are considering locating their facility outside of the Companies' service territory or in another state.
 - ii. Please provide a copy of said agreement.
 - e. Please provide any communications that the Companies have provided to data center customers indicating what rate they should expect to pay.
 - f. Please explain if any of the new customers have commenced site construction activities.
 - g. For the potential new customers that the Companies have engaged in conversations with, please confirm if any of those customers have made modifications to the announced load or ramp schedule. If yes, please provide the initial numbers provided to the Companies and modifications made by the customer.
- 1-11. Please refer to the Direct Testimony of Witness Wilson at pages 13 and 14.
- a. Please provide the supporting workbooks, with all formulas and links intact, used to develop the cost and performance estimates modeled in the 2025 CPCN Resource Assessment for renewable resources, Brown 12, Mill Creek 6, an NGCC at Green River Generating Station, Cane Run BESS, a BESS at Ghent, and the generic resources.
 - b. Please provide the bid responses the Companies received in response to the May 2024 RFP.
 - c. Please provide any studies that were prepared to support the costs of the NGCCs at Brown 12, Mill Creek 6, and the Green River Generating Station.

- d. Please provide any studies that were prepared to support the costs of the BESS at Cane Run and Ghent.
 - e. Please confirm if the new dispatchable DSM program measures and the expansion of the Companies' CSR program are the same as what was modeled in the 2024 IRP.
 - i. If not confirmed, please explain any differences in assumptions between the 2024 IRP and the 2025 CPCN Resource Assessment.
 - f. Please explain if the renewable projects from the RFP were modeled in PLEXOS with site-specific capacity factors. If not, please explain what capacity factor was modeled in PLEXOS.
- 1-12. Please refer to the Direct Testimony of Witness Wilson at page 15, lines 13 – 16. Please explain what additional site work would be needed at Ghent to accommodate battery storage.
- 1-13. Please refer to the Direct Testimony of Witness Wilson at page 21 – 22.
- a. For all PLEXOS modeling runs performed for the CPCN filing, please provide the following:
 - i. The PLEXOS database (.xml).
 - ii. The zipped output solution files for each run and associated portfolio containing the log files and other relevant output.
 - iii. The capacity expansion planning period.
 - b. Please provide all SERVVM files necessary to execute studies from the 2025 CPCN Resource Assessment within the SERVVM software, including the SERVVM .bak file, the SERVVM release, and the executable file.
 - c. Please provide the SERVVM output files for each of the studies conducted as part of the 2025 CPCN Resource Assessment.
 - d. Please provide the PROSYM input and output modeling files for each resource portfolio modeled.
 - e. Please provide the period over which the production cost modeling was performed in PROSYM.

- f. Please provide the Financial Model supporting workbooks, with all formulas and links intact, used to develop the costs for each of the resource portfolios modeled.
 - g. Please provide the present value of revenue requirements (“PVRR”) results for each of the modeling runs performed for this IRP.
- 1-14. Please refer to the Direct Testimony of Witness Wilson at page 22. Please provide the supporting workbooks, with all formulas and links intact, used to develop each of the load scenarios modeled in PLEXOS.
- 1-15. Please refer to Exhibit SAW-1 at page 6. Please provide the supporting workbook, with all formulas and links intact, used to develop the Brown 3 life extension costs.
- 1-16. Please refer to Exhibit SAW-1, Table 1 at page 5.
- a. Please explain if the option for Ghent 2 to convert to gas was modeled in PLEXOS.
 - i. If this option was not modeled, please explain why not.
 - b. Please provide the supporting workbooks, with all formulas and links intact, used to develop the capital, fixed operations and maintenance, and stay-open costs if Ghent 2 converts to gas.
- 1-17. Please refer to Exhibit SAW-1, Table 4 at page 19. Please explain the difference in the firm gas cost between the Brown 12 NGCC and the Mill Creek 6 NGCC.
- 1-18. Please refer to Exhibit SAW-1 at pages 34 – 35.
- a. Please explain how the economic development load was modeled in SERVVM.
 - b. Please provide the supporting workbooks used to develop the 8,760 hourly shape for the economic development load for all weather years modeled in SERVVM.
- 1-19. Please refer to Exhibit SAW-1 at page 45. Please provide the amount of transmission system upgrade costs that were included for the NGCC at Brown, Mill Creek, and the Green River Generating Station.
- 1-20. Produce all bilateral capacity contracts entered into by or for the Company in the past five years.

1-21. Provide all bilateral capacity solicitations issued by or for the Company in the past five years, all responses, all evaluations of responses, and documentation of ultimate selections.

1-22. Has the Company evaluated whether any of its coal-fired electric generating units will require additional investments to comply with final, proposed, or possible future environmental regulations including, but not limited to: existing consent decrees, new source review provisions, coal combustion residuals, effluent limitation guidelines, national ambient air quality standards, cooling water intake standards, the cross-state air pollution rule, the mercury and air toxics standards, regional haze, and carbon dioxide emission limits?

- a. If not, please explain why not.
- b. If so, please provide a summary, organized by electric generating unit, briefly describing the additional investments, including the purpose, and capital and annual O&M costs of such investments.
- c. Please also include all supporting analyses, calculations, data, documents, modeling input and output files, and workpapers associated with each investment.
- d. If so, please specify those costs that would be incurred even if the unit were to retire before its planned date, i.e. unavoidable costs.
- e. If so, please specify those costs that could be avoided if the unit were to retire prior to their currently planned date, including the latest year in which each cost could be avoided.

1-23. For each of the Company's coal-fired units, please provide the following historical annual data since 2020 through 2025 (year-to-date):

- i. Installed Capacity
- ii. Unforced Capacity
- iii. Generation
- iv. Equivalent Availability Factor (EAF)
- v. Heat Rate
- vi. Forced outage rate
- vii. Cold start-up costs
- viii. Warm start-up costs
- ix. Time for startup
- x. Number of starts

- xi. Economic minimum operating level
- xii. Planned outage rate
- xiii. Effective forced outage rate (EFORd)
- xiv. Fixed O&M costs
- xv. Non-Fuel Variable O&M costs
- xvi. Fuel Costs (by fuel type)
- xvii. Capital costs
- xviii. Energy revenues (if any)
- xix. Capacity revenues (if any)
- xx. Ancillary services revenues (if any)
- xxi. Depreciation
- xxii. Undepreciated net book value

1-24. For each of the Company's coal-fired units, and for each of the years 2025 through 2044 (or latest projection year), please provide the Company's most recent projection of:

- i. Installed Capacity
- ii. Unforced Capacity
- iii. Generation
- iv. Equivalent Availability Factor (EAF)
- v. Heat Rate
- vi. Forced outage rate
- vii. Cold start-up costs
- viii. Warm start-up costs
- ix. Time for startup
- x. Number of starts
- xi. Economic minimum operating level
- xii. Planned outage rate
- xiii. Effective forced outage rate (EFORd)
- xiv. Fixed O&M costs
- xv. Non-Fuel Variable O&M costs
- xvi. Fuel Costs (by fuel type)
- xvii. Capital costs
- xviii. Energy revenues (if any)
- xix. Capacity revenues (if any)
- xx. Ancillary services revenues (if any)
- xxi. Depreciation
- xxii. Undepreciated net book value

1-25. Regarding the Company's unit commitment and dispatch decision process for its coal- and gas-fired generating units:

- a. Describe the Company's process for determining whether to self-commit its thermal units and operate them up to at least their minimum operation levels on the next day.
- b. Describe the Company's process for determining whether to self-schedule its generating units at generating levels above their minimum operation levels.
- c. Does the Company perform economic analyses to inform its unit commitment and dispatch decisions for its coal and gas units (i.e., decisions regarding whether to designate these units as must run or take them offline for economic reasons)?
 - i. If not, explain why not.
 - ii. If so, provide all such analyses conducted since January 1, 2024 in native, machine readable format.
 - iii. If so, identify each category of cost and revenue accounted for in such analyses.
 - iv. If so, identify whether such analyses are conducted differently for periods immediately preceding or following unit outages, and explain any differences.

1-26. Please refer to the Testimony of Lonnie Bellar at page 5, lines 5 – 9, which states, "Although all the Companies' units performed well within expectations during the January 22 peak demand, as Mr. Schram notes, losing even one large unit to a forced outage would have caused the Companies to be at risk of being unable to meet their contingency reserve obligation under their reserve sharing agreement with the Tennessee Valley Authority." With respect to this statement please answer the following:

- a. Please provide a copy of the reserve sharing agreement with the Tennessee Valley Authority.
- b. What specific provision of that agreement would the Companies have been in violation had they lost one large unit?
- c. Is the obligation to provide this contingency reserve represented in the Companies' SERVVM model? If so, how? Please be specific about how/where in your answer.

- d. Does the addition of the load contained in the Companies' load forecast in this docket change the Companies' obligations under the reserve-sharing agreement with TVA? If so, how?
 - e. At page 2 of his testimony, Mr. Bellar states that winter peak needs will increase by 1,800 MW by 2032. Even with the addition of two CCGTs and 400 MW of battery storage, please explain why the Companies would not remain, during a peak event, in the same position of a large unit outage resulting in the Companies being unable to meet their contingency reserve obligation.
- 1-27. Please refer to the Testimony of Lonnie Bellar at page 3, lines 4 – 7, which states, “The General Assembly, in enacting legislation to encourage data center development, stated that ‘the inducement of the location of data center projects within the Commonwealth is of paramount importance to the economic well-being of the Commonwealth.’” With respect to this statement please answer the following:
- a. In the Companies' judgement, what specific economic development benefits of data centers did the General Assembly intend to bring to Kentucky?
 - b. How, if at all, do the Companies intend to use the interconnection process to prioritize customers that provide more of any of these benefits over others?
- 1-28. Please refer to the Testimony of Robert Conroy at page 3, lines 9 – 11, which states, “The statutes creating and governing certified service territories for retail electric suppliers, which support the vertical integration of power supply that has long served Kentucky well, require those suppliers to provide ‘adequate service’; KRS 278.030(2) states unequivocally, “Every utility shall furnish adequate, efficient and reasonable service” With respect to this statement, and in the Companies' judgement, could any of the following impact the Companies' ability to provide adequate service to existing customers? What additional steps, if any, do the Companies need to take to ensure that the following factors do not influence the provision of adequate service to *existing* customers even as new, large loads are added:
- a. Stranded asset costs should data centers come to the Companies' system at a lower level than projected;
 - b. Cross subsidization risk in the event that data centers meet load projections but do not pay all of the generator capital costs contemplated in this filing;

- c. Inability to maintain operational security of the bulk electric power system due to the dynamic nature of large loads; and
 - d. Increased fuel and ancillary services costs caused by data centers;
 - e. If the Companies believe that none of the foregoing factors impact the provision of adequate service to *existing* customers, please explain why.
 - f. If the Companies believe that any of the foregoing factors impact the provision of adequate service to *existing* customers, please explain what steps the Companies will take to mitigate these risks.
- 1-29. Please refer to the Testimony of Robert Conroy at page 15, lines 16 – 20, which states, “This regulatory asset treatment of post-in-service costs would improve administrative efficiency for the Commission and reduce rate case costs for customers. Due to the magnitude of these investments, having either timely cost recovery or the proposed post-in-service regulatory accounting treatment would be necessary to avoid significant adverse impacts to the Companies’ financial health.” With respect to this statement please answer the following:
- a. Provide any presentations, memos, emails, or other Company documents that describe the “significant adverse impacts to the Companies’ financial health” absent this regulatory treatment.
 - b. Provide any calculations with all formulas and links intact of the potential impact on ratepayers of any or all rate classes under the Companies’ proposal in this docket.
 - c. If the Companies have not conducted a rate impact analysis of its proposal in this docket, explain why not.
 - d. Provide any calculations with all formulas and links intact, showing the rate(s) that would be paid by data center loads taking service with the Companies.
- 1-30. Please refer to the Testimony of Lonnie Bellar at page 2, lines 17 – 20, which states, “As Mr. Jones notes, even accounting for significant amounts of energy efficiency and other energy needs reducing measures, annual energy requirements will climb sharply from 32,808 GWh in 2025 to 48,129 GWh in 2032—an increase of almost 47%.” With respect to this statement please answer the following:

- a. What increase in rate base for each Company is anticipated as a result of the Companies' proposal in this docket?
 - b. What is the total amount in each of the Companies' current rate base?
- 1-31. Please refer to the Testimony of Witness Bevington at page 5, lines 13-18. For that current list of prospective customers, please provide the status on each of the projects, in terms of how far along they are in discussions and/or interconnection process. Additionally, indicate if any commitments have been signed.
- 1-32. For any economic development projects that receive an economic development rate or special contract, does the Company require any commitments in terms of minimum investment and/or job creation? If not, please provide the reasoning.
- 1-33. Please refer to the Testimony of Witness Bevington at page 10, line 19, to page 11, line 2. Please define "high-paying jobs."
- 1-34. Please refer to the Testimony of Witness Bevington at page 12, line 8, to page 13, line 10.
- a. Does the Company have any minimum efficiency requirements, certifications, or designations for data load centers built in its service territory? If so, what are the requirements.
 - b. Does the Company work with data centers to evaluate the potential to encourage the installation of the most efficient equipment? If so, what is that process?
- 1-35. Please refer to the Companies' response to PSC-1-21 in Case No. 2024-00326. Please define what the Company means by "higher-probability prospective data-center customers" and how that is determined. Please detail the levels of probability and the characteristics for each level of probability.
- 1-36. Given the level of interest from large load entities, has the Company considered developing a large load tariff? If so, what would the proposed level of minimum load be for such a tariff?
- 1-37. If a new customer's load requires system upgrades, please detail how those costs are allocated between the new customer and the existing ratepayers. Please provide the citation, if available.

1-38. Please refer to the Testimony of David Schram at page 22, lines 12 – 18, which states, “The Companies do not procure transportation services until receiving regulatory approvals to construct new units. Nonetheless, upon approval of the proposed NGCC units in this proceeding, the Companies anticipate sufficient transportation services will be available based on their recent communications with Texas Gas and Tennessee Gas.” With respect to this statement, please answer the following:

- a. Please provide any communications that the Companies have had with Texas Gas Transmission, Texas Eastern, and/or Tennessee Gas regarding firm transportation service for Brown 12 and Mill Creek 6.
- b. Please provide any draft firm gas transportation service contracts provided to the Companies by Texas Gas, Texas Eastern, and/or Tennessee Gas.

1-39. Please answer the following with respect to data center loads that will take service from the Companies:

- a. Will the Companies require customers to install any of the following: SCADA telemetry, sequence of events recording, digital fault recording, dynamic disturbance recording, and/or power quality recording?
- b. If the answer to subpart “a.” is “yes,” for what purpose will the Companies require these technologies? If the answer is “no,” why won’t the Companies require these?
- c. Will the Companies implement processes to analyze and archive significant events and information?

1-40. Please refer to the response to Sierra Club 2-23(a) in Case No. 2024-00326, which states, “According to LG&E/KU’s Transmission Service Request Study Criteria, EMT or transient stability studies are performed as part of a Facilities Study within the Transmission Service Request (“TSR”) process. LG&E/KU may also perform such studies outside the TSR process. According to LG&E/KU’s OATT, LG&E/KU is responsible for completing Facilities Studies and any studies outside the TSR process.” With respect to this statement, please answer the following:

- a. Do the Companies intend to conduct any EMT studies as part of the interconnection process for any new data center customers?
- b. If the answer to subpart “a.” is “yes,” what data will the Companies require from potential customers for these studies? If the answer is “no,” why won’t the Companies require that these studies be conducted?

c. Do the Companies intend to conduct any transient stability studies as part of the interconnection process for any new data center customers?

d. If the answer to subpart “c.” is “yes,” what data will the Companies require from potential customers for these studies? If the answer is “no,” why won’t the Companies require that these studies be conducted?

1-41. If the Companies have performed any facilities studies of data center customers please provide:

a. All workpapers created either to support inputs to these studies and/or to produce work products resulting from these studies, changing nothing.

b. Any internal presentations or reports related to these analyses including but not limited to documentation on specific results that support conclusions on what transmission and generation upgrades were necessary as well as what and why alternatives were found to be inadequate.

c. Any reports and/or summary tables (showing all contingencies, monitored elements, and violation levels reported) in an open format (.csv, .xlsx, etc.) capturing any thermal and voltage violations resulting from such studies

d. Do customers provide any dynamic load data in support of these studies? This includes but is not limited to cycling and fluctuation frequency, amplitude and character, as well as fault ride-thru behavior including tolerance for voltage and frequency disturbances.

e. Any subsystem, contingency, and monitor (.sub, .con, .mon) files used as inputs for these studies.

f. Any analysis performed to evaluate the risk of fluctuating active power or reactive power demand from data center customers. Please explain how such risks are planned to be controlled or mitigated. If this analysis has not been performed, please explain when it is planned, how it will be performed, or why is it deemed unnecessary.

Dated: March 28, 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 Tendered Initial Request for Information to Louisville Gas and Electric Company and Kentucky Utilities Company in this action is being electronically transmitted to the Commission on March 28, 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