

**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)	CASE NO. 2025-00045
OF PUBLIC CONVENIENCE AND NECESSITY)	
AND SITE COMPATIBILITY CERTIFICATES)	

**THIRD REQUESTS FOR INFORMATION OF KENTUCKIANS FOR THE
COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY,
METROPOLITAN HOUSING COALITION, AND MOUNTAIN
ASSOCIATION TO LOUISVILLE GAS & ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY**

CONFIDENTIAL

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Metropolitan Housing Coalition, and
Mountain Association*

Dated: May 27, 2025

DEFINITIONS

1. "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. “Companies”, “Louisville Gas & Electric Company and Kentucky Utilities Company”, or “LG&E-KU ”, means Louisville Gas & Electric Company and Kentucky Utilities Company, their parents or subsidiaries, and/or any of its officers, directors, employees or agents who may have knowledge of the particular matter addressed, and affiliated companies including member cooperatives.
12. “Joint Intervenors” means Kentuckians for the Commonwealth, Kentucky Solar Energy Society, Metropolitan Housing Coalition, and Mountain Association who have been granted 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 LG&E-KU .
14. “Commission” or “PSC” means the Kentucky Public Service Commission, including its Commissioners, personnel, and offices.
15. “BESS” means Battery Energy Storage System.
16. “EPC” means Engineering, Procurement, and Construction.
17. “NGCC” means Natural Gas Combined Cycle.
18. “OEM” means Original Equipment Manufacturer.
19. “URA” means Unit Reservation Agreement.

INSTRUCTIONS

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

8. If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any discovery request, please describe the basis for your claim of privilege in sufficient detail so as to permit Joint Intervenors or the Commission to evaluate the validity of the claim. With respect to documents for which a privilege is claimed, please produce a “privilege log” that identifies the author, recipient, date, and subject matter of the documents or interrogatory answers for which you are asserting a claim of privilege and any other information pertinent to the claim that would enable Joint Intervenors or the Commission to evaluate the validity of such claims.
9. Whenever the documents responsive to a discovery request consist of modeling files (including inputs or output) and/or workpapers, the files and workpapers should be provided in machine-readable electronic format (e.g., Microsoft Excel), with all formulas and cell references intact.
10. The interrogatories are to be answered under oath by the witness(es) responsible for the answer.

SUPPLEMENTAL DATA REQUESTS PROPOUNDED TO
LOUISVILLE GAS & ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY BY JOINT
INTERVENORS

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

- 3.1. Please refer to the Companies' response to Staff 1-34 and 1-35.
 - a. State whether LG&E-KU have concluded that a URA for Mill Creek 6 is necessary.
 - b. Provide an updated explanation of the current status of any negotiation for a URA for Mill Creek 6, including an anticipated execution date and cost.
- 3.2. Please refer to the Companies' response to Staff 2-57. Please provide an explanation of all "market changes" adjustments made to the EPC bids received in Case No. 2022-00402 in developing estimated EPC costs for the NGCC and BESS proposed in this proceeding.
- 3.3. Please refer to Exhibit SAW-2 at "Screening\Support\ CONFIDENTIAL_NGCC BR12 - DRAFT 2025 BP Cost Estimate (Base Case Update).xlsx" and "Screening\Support\CONFIDENTIAL_2031 NGCC MC6 - DRAFT 2025 BP Cost Estimate.xlsx." [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]
- 3.4. Please reconcile the [REDACTED]
[REDACTED]
[REDACTED] with the escalation rates listed in the input tab of LG&E-KU's response to Staff 1-32, [REDACTED]
[REDACTED] For each escalation rate in LG&E-KU's Response to Staff 1-32 [REDACTED]
[REDACTED], please explain why the Company chose that escalation rate and produce any analysis related to that escalation rate.
- 3.5. Please refer to LG&E-KU's Response to AG 1.41b, which EKPC states:
"Regarding cost contingency, the current estimates include a 10% contingency to address final pricing risk due to escalation, as well as the risks noted in the question. Input from our Owner's Engineer and discussion with other power providers indicate this is a prudent contingency at this stage of project development assuming minimal delay to contract execution." Produce all documentation of input from LG&E-KU's Owner's Engineer and discussion with other power providers regarding appropriate cost contingency.
- 3.6. Please refer to LG&E-KU's Response to JI 1.16a, which states in regards to Mercer County Solar: "The Companies expect to execute an EPC contract later in the second quarter of 2025, at which point the Companies will be in an informed position to provide updated cost expectation." Provide an update on the status of the EPC contract and cost expectation for Mercer County Solar.
- 3.7. Please refer to the Direct Testimony of Companies' Witness David L. Tummonds, p.11, lines 10-11. Please provide the basis for the Companies' estimation that transmission costs will be approximately 2% of the total cost of the NGCCs.
- 3.8. Please refer to the Direct Testimony of Companies' Witness Lonnie E. Bellar at p. 2, lines 22-23, stating that "[s]uch large and rapid load growth is truly unprecedented for the Companies," and produce, in machine-readable format, to the extent available, any previous load forecasts from the Companies for the past twenty-five years, broken down by customer class and with municipal customers and reserve margins listed separately.
- 3.9. Please refer to the Direct Testimony of Companies' Witness Stuart A. Wilson at Ex. SAW-1 p. 15-16, which states that the Companies' combined system peak in 2032 is 8,034 MW, and minimum demand is 4,093 MW. Please also refer to the 2024 IRP Resource Planning public workpapers, "2025PlanInputs→Load→20240913_LoadforPROSYM_2025BP_High.xlsx"

which shows a combined peak of 8,217.654 MW in 2034, and a minimum of 4,147.458 MW.

- a. Please explain the difference between these two forecasts.
 - b. If the forecasts are different, please provide the updated supporting workpapers as in the 2024 IRP case, where different.
- 3.10. Please provide a spreadsheet with the total MW and MWh purchases/sales and associated costs/revenues by month, day, and hour for the last 2 years. If total cost data is not available for each hour, please provide separately the hourly MWh and the total cost at whatever interval is available (e.g., daily).
- 3.11. Please refer to 2024 IRP Resource Planning public workpapers, “2025PlanInputs-->Solar-->20240711_JRW_SolarPROSYMTemplate_Marion_2025-2050.xlsx”.
- a. Please explain the meaning of the “period” column (column B) that oscillates between 0 and 12.
 - b. Please describe the interpretation of the values in the table of values in PROSYM tab columns J:U.
 - c. Please describe how the inputs in this workbook are utilized in the Companies’ PROSYM modeling.
 - d. Please clarify the nameplate MW of the solar resource reflected in this workbook.
 - e. Please describe how PROSYM results are fed into other modeling workflows to determine ultimate resource need.
 - f. Please confirm that the cell values in the PROSYM tab for August 12, 2032 are 63.77 for period = 0 (row 7877) and 0.59 for period = 12 (row 7878) and provide an explanation for why the formula in the referenced PROSYM cells is calling values corresponding to 7 a.m. (Hour 7) and 7 p.m. (Hour 19), respectively.
- 3.12. Please refer to Direct Testimony of Companies’ Witness Tim A. Jones at p. 45, lines 4-11, referring to incorporation of distributed solar and electric vehicle forecasts into their load forecast.
- a. Please provide the normalized hourly 8760 generation profiles used for rooftop solar in the 2025 CPCN load forecast, represented as a % of nameplate capacity in each hour.

- b. Please provide the hourly 8760 generation profiles used for rooftop solar in the 2025 CPCN load forecast, represented by total MW-ac generated in each hour.
 - c. Please provide the normalized hourly 8760 load profiles used for EV charging in the 2025 CPCN load forecast, represented as a % of total annual load in each hour. Please segment by use case to include residential, commercial/workplace, fleet, and public charging segments, or other similar categories used by the Companies for analysis.
 - d. Please provide the hourly 8760 load profiles (MW) used for EV charging in the 2025 CPCN load forecast, represented by total MW load in each hour. Please segment by use case to include residential, commercial/workplace, fleet, and public charging segments, or other similar categories used by the Companies for analysis.
- 3.13. Please refer to Direct Testimony of Companies' Witness Tim A. Jones at p. 39-40, regarding customer motivations to adopt solar.
- a. Has the Company conducted any third-party evaluations about customer motivations in adopting rooftop solar? Please provide any and all evaluations, reports, memos, or workpapers detailing the customer motivations to adopt solar.
- 3.14. Please refer to 2024 IRP, Vol. I, at p. 7-21 (pdf p. 68/135), relating to the method for applying the avoided cost-LCOE ratio to determine future net metered customers. Please also refer to the Companies' response to JI 1-123, regarding the solar capacity forecast workpaper at Ex. TAJ-2, Confidential "Load_Forecasting\Electric_Load_Forecast\Electric\Forecasts\PV\Input_Data\Price Needed for Energy Exported to Grid to Meet Total Project Costs_SAW_25BP_GP_IRP.xlsx."
- a. Please confirm whether this workbook is the source of the derivation of the final avoided cost-LCOE model referenced above.
 - i. If confirmed, please indicate which worksheet and cell ranges contain the final calculations used in the development of the Base Case forecast for distributed solar used in this CPCN.
 - ii. If denied, please provide the file with the final specification of the model, with all cell formulae intact and input sources defined and referenced, and indicate which worksheet and cell ranges contain the final calculations used in the development of the Base Case forecast for distributed solar used in this CPCN.

b. [REDACTED]

[REDACTED]

[REDACTED]

- c. Have the Companies applied this avoided cost-LCOE model to past adoption trends to determine goodness of fit? Please provide any and all workpapers.
 - d. Have the Companies explored or evaluated any other models to predict distributed solar adoption? If yes, please describe what was done and provide any supporting workpapers, reports, internal memoranda, or other materials indicating the reason for not adopting.
- 3.15. Please refer to the Companies' responses to JI 1.92 and 2.13, and explain whether the Companies the increased load forecast in this proceeding and the 2024 IRP as compared to the 2022 CPCN was taken into account in deciding the need to evaluate the potential for managed DERs, or VPP potential to supply a portion of the Companies' forecasted new resource requirements.
- a. If yes, explain how.
 - b. If no, why not?
- 3.16. Please refer to the Companies' responses to JI 2.41 e and f., and explain why the Companies do not attribute any transmission or distribution capacity deferral credit to DR and EE programs in calculating program cost effectiveness.
- 3.17. Please refer to the Companies' response to JI 2.49 c. and explain which of the items from Table 2 and Table 3 of the cited NREL report regarding policies and associated utility actions that can advance distributed storage adoption the Companies met through their current planning and proposed program offerings.
- 3.18. Please refer to the Companies responses to PSC 2.7 and AG-KIUC 2.29.
- a. Identify the control status (option, letter of intent, ownership, etc.) for each of the data center projects in the "prospect" or "imminent" stage of the economic development pipeline.
 - b. State whether any of the data center projects in the "inquiry" or "suspect" stages of the economic development pipeline has ownership or an option to

purchase the proposed site for the project. If so, identify the total MW of such projects that have site ownership or an option to purchase.

- 3.19. Please refer to the Companies' response to PSC 2.14(b), and produce any written documentation of the Camp Ground Road data center developer's request to submit a TSR for an additional 123 MW of load.
- 3.20. Please refer to the Companies' response to PSC 2.21. With regards to the Companies' economic development queue:
 - a. Identify the amount of potential load in the Companies' economic development queue at the beginning of each of the years 2010-2024.
 - b. Identify the amount of potential load that was in the Companies' economic development queue at the beginning of each of the years 2010-2024 that has come online as a customer of LG&E or KU to date.
 - c. Explain in detail how the Companies decide whether and/or when a project in the economic development queue that has not come online should be removed from the queue.
 - d. Identify for each of the years 2010-2025 the amount of potential load that was removed from the economic development queue, and the reason(s) for such removal.
- 3.21. Refer to the Companies' response to PSC 2.33. Confirm that the Companies have not taken any affirmative steps to recommend to potential data center customers curtailable or interruptible service, standby on-site generation, behind the meter generation, participation in energy efficiency programs, or any other approaches to offset needed capacity in the absence of such customers asking about or expressing interest in such items.
 - a. If confirmed, explain why the Companies have not taken any such affirmative steps.
 - b. If not confirmed, explain what affirmative steps the Companies have taken, and provide any documentation of the same.
- 3.22. Refer to the Companies' response to LMG-LFUGC 2-4. State whether the Companies anticipate that the gas plant projects proposed in this proceeding would lead to excess generation capacity that would make the EDR available to potential data center customers. If not, explain why not.
- 3.23. Refer to the Companies' response to PSC 2-47. With regards to the "broader analysis" referenced therein:
 - a. Produce any report or other documentation of the results of such broader analysis.

- b. Produce any modeling input and output files, workpapers, workbooks, or other documents used in carrying out, or supporting the results of, such “broader analysis.”
- c. Identify each major assumption or input to the “broader analysis” that differs from the assumption or input used in the modeling supporting this CPCN application. For each such assumption or input, explain the basis for the difference.

[Signature on next page]

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 May 27, 2025; that the documents in this electronic filing are a true representation of the materials prepared for the filing; and that the Commission has not excused any party from electronic filing procedures for this case at this time.



Byron L. Gary