COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| ELECTRONIC TARIFF FILINGS OF LOUISVILLE |) | CASE NO. 2023-00404 |
|---|---|---------------------|
| GAS AND ELECTRIC COMPANY AND |) | |
| KENTUCKY UTILITIES COMPANY TO REVISE |) | |
| PURCHASE RATES FOR SMALL CAPACITY |) | |
| AND LARGE CAPACITY COGENERATION AND |) | |
| POWER PRODUCTION QUALIFYING |) | |
| FACILITIES AND NET METERING SERVICE-2 |) | |
| CREDIT RATES |) | |

FIRST SET OF REQUESTS TO LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES FOR INFORMATION FROM INTERVENORS KENTUCKY SOLAR ENERGY SOCIETY AND MOUNTAIN ASSOCIATION

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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. "Company", "Companies", "LG&E", "LGE", or "KU" means Louisville Gas and Electric Company and Kentucky Utilities, jointly and/or separately, and/or any of their officers, directors, employees or agents who may have knowledge of the particular matter addressed, and affiliated companies including Pennsylvania Power and Light.
- 12. "Joint Intervenors" or "Joint Movants" means the Kentucky Solar Energy Society and Mountain Association, who have moved for the status of full intervention as joint intervenors in this matter.
- 13. Unless otherwise specified in each individual request the term "tariff" means the tariff as filed in this matter by Companies.

a.

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.
- 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.

TENDERED INITIAL REQUESTS FOR INFORMATION PROPOUNDED TO LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY BY MOVANTS FOR JOINT INTERVENTION

Joint Intervenors hereby submit the following initial requests for information to Companies:

- 1.1. Please provide the following information regarding the Company's NMS-1 & NMS-2 customer-generators, for each year from 2018 through 2023. For all requests below that result in a data response, please provide the data in Excel spreadsheet format with formulas intact and cells unlocked.
 - a. For each month and year, how many kWh of excess generation ("Received" or "Rcvd" kWh) were supplied back to the Companies from all Net Metering Service ("NMS") customers? Provide the aggregate amount for each month and year of total received "Rcvd" kWh by rate class.
 - b. For each month and year, how many kWh of energy produced by the Companies ("Delivered" or Dlvd") were used by all NMS customers? Provide the aggregate amount for each month and year of total delivered "Dlvd" kWh by rate class.
 - c. For purposes of this question and the proposed tariff, please explain whether the Companies define "excess generation" on an hourly, daily, or billing period basis, or if none of these, explain how the companies define and measure "excess generation?"
 - d. List the number of residential and commercial customers taking NMS service. List the number by each tariff.

- e. List the total installed generation capacity (AC and DC) for customers receiving NMS by each specific tariff.
- f. For each NMS customer, without divulging customer identity of geographic location, please list the capacity (system size in KW) of their Distributed Generation System, the technology type of that system (e.g., PV, wind, hydro, biomass), the date of interconnected operation, and the rate class. List the total amount of kWh delivered to the grid from each NMS customer in each month.
- g. What was the total combined capacity by rate class of all NMS customers, all residential NMS customers, and all commercial NMS customers for each year?
- h. What percentage of the Company's single hour peak load for the previous year did the aggregate NMS customer generation represent for each year?
- i. Please provide any additional data concerning net metering or generation from NMS customers for the years 2018 through 2023 which the Company has reported to the US Energy Information Administration, FERC, the Kentucky Energy and Environment Cabinet, or any other regulatory agency. This includes but is not limited to data filed on Form EIA-861 for each of those years.
- j. For each NMS customer, please provide the monthly and annual energy consumption data for the year prior to the interconnected operation of the customer generation system. If this data is not available, please explain why not.
- k. For each new NMS account in the years 2021, 2022, and 2023, provide the name of the installation contractor(s) identified on the customer's net metering application.
- 1.2. Please provide the following information regarding the Company's SQF and LQF facilities, for each year from 2018 through 2023. For all requests below that result in a data response, please provide the data in Excel spreadsheet format with formulas intact and cells unlocked.
 - a. For each month and year, how many kWh of excess generation ("Received" or "Rcvd" kWh) were supplied back to the Companies from all facilities? Provide the aggregate amount for each month and year of total received "Rcvd" kWh by rate class.
 - b. For each month and year, how many kWh of energy produced by the Companies ("Delivered" or Dlvd") were used by all facilities? Provide the

- aggregate amount for each month and year of total delivered "Dlvd" kWh by rate class.
- c. List the number of facilities taking SQF and LQF service. List the number by each tariff.
- d. List the total installed generation capacity (AC and DC) for facilities by each specific tariff.
- e. For each SQF and LQF customer, without divulging customer identity of geographic location, please list the capacity (system size in KW) of their Distributed Generation System, the technology type of that system (e.g., PV, wind, hydro, biomass), the date of interconnected operation, and the rate class. List the total amount of kWh delivered to the grid from each NMS customer in each month.
- f. What was the total combined capacity by rate class of all SQF and LQF for each year?
- g. Please provide any additional data concerning qualified facilities for the years 2018 through 2023 which the Company has reported to the US Energy Information Administration, FERC, the Kentucky Energy and Environment Cabinet, or any other regulatory agency. This includes but is not limited to data filed on Form EIA-861 for each of those years.
- h. For each new SQF and LQF account in the years 2021, 2022, and 2023, provide the name of the installation contractor(s) identified on the customer's net metering application.
- 1.3. Please refer to the 2024-2025 Qualifying Facilities Rates & Net Metering Service-2 Bill Credit, Generation Planning & Analysis, October 2023 (beginning at pdf 16 of both the LG&E and KU December 4, 2023, filings, hereinafter "Planning Study"). Please provide all supporting workpapers in native format with formulas intact and cells unlocked.
- 1.4. Refer to Section 2 at p.3 (pdf 18) of the Planning Study. Have the Companies conducted any additional analysis that takes into account the certificates of public convenience and need (CPCNs), closures, power purchase agreements (PPAs) and demand side management (DSM) plan approved in the final order of the Commission in Case No. 2022-00402 dated November 06, 2023? If so, please provide any such analysis. If not, why not? *See* Order, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan

and Approval of Fossil Fuel-Fired Generating Unit Retirements, Case No. 2022-00402, Nov. 6, 2023.

- 1.5. Please refer to Section 3.1 of the Planning Study beginning at p. 6 (pdf 21).
 - a. What is the Company's projection for how NMS customer cumulative capacity would expand through 2028?
 - i. Please represent this in terms of cumulative capacity (KW) and percent of the Company's single hour peak load for the previous year both for cumulative NMS customer-generator capacity, as well as for NMS-1 and NMS-2 customer-generators summed separately. Please provide a detailed explanation and copies of all analysis or studies supporting the Company's projections.
 - ii. Under each scenario, when does the company project the aggregate capacity of NMS customers would reach 1% of the Company's single hour peak load for the previous year? Please provide a detailed explanation and copies of all analysis or studies supporting the Company's projection.
 - b. Please refer to Tables 22 and 23 in Appendix A to the Planning Study, and provide the unit-specific capacity additions, and retirements assumed under each of the scenarios, for each year.
 - c. Have any updates to the assumptions in Tables 22 and 23 in Appendix A to the Planning Study been made since the Planning Study? If so, please provide updated versions of the Tables, along with the unit-specific assumptions.
 - d. Were different possible scenarios for compliance with any environmental regulatory schemes aside from EPA's proposed Section 111(d) rule evaluated? If so, please provide inputs and outputs/results of any such analysis. If not, why not?
 - e. Did Companies analyze reductions in capacity factors at either gas or coal plants, other than retirement, whether to comply with federal environmental rules or otherwise, as part of its forecasting of future capacity need? If so, please provide inputs and outputs/results of any such analysis. If not, why not?
- 1.6. Please refer to the *Generation Forecast Process, Generation Planning & Analysis*, 2023 (beginning at pdf 35 of both the LG&E and KU December 4, 2023, filings, *hereinafter* "Forecast Process"). Please provide all supporting workpapers in native format with formulas intact and cells unlocked.

- 1.7. Provide a breakdown by category of each component of costs included in the Company's avoided cost calculations, and the methodology and data on which the cost was calculated and assigned. Please provide a comparison of the current costs for each category with the assumed avoided costs in 2020-00349 and 00350 and explain the basis or bases for the increase or decrease in costs.
- 1.8. Please refer to Order, In the Matter of: Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00349; and Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit, Case No. 2020-00350, Sept. 24, 2021.
 - a. In the present application, please explain how each of the guiding principles developed by the Commission in Kentucky Power Company Case No. 2020-00174 and reiterated in the Commission's Order in Case Nos. 2020-00249 and 2020-00350 were addressed and incorporated into the formulation of each the proposed tariffs. *See* Order at 41-42.
 - b. Please explain which of the components of the Commission's Avoided Cost Rate Calculation were updated in this filing, and the basis and formulae for how each was calculated. Provide all supporting workpapers in native format with formulas intact and cells unlocked for the calculation and formulation of:
 - i. avoided energy cost
 - ii. avoided generation capacity cost
 - iii. avoided transmission capacity cost
 - iv. avoided distribution capacity cost
 - v. avoided ancillary services cost
 - vi. avoided carbon cost
 - vii. avoided environmental compliance cost, and
 - viii. jobs benefits
- 1.9. What was the Company's load profile for each of the last two years, expressed in 15-minute intervals?
 - a. Provide a breakdown of how the Company's cost of power changes over the course of each day for each month of the year.

- b. What is the Company's cost of power during peak demand times for each month (including all energy, demand, and transmission charges)?
- c. Identify what resources the Company uses to meet demand during times of peak demand.
- d. Identify the Company's costs for power and energy during on peak and off-peak times each month.
- 1.10. Please refer to Companies' Tariff Terms and Conditions Net Metering Service Interconnection Guidelines (Sheet 108.4) provision (9), and Companies' Responses to Kentucky Solar Industries Associations Inc.'s Initial Requests for Information dated January 22, 2021, in Case Nos. 2020-00349 & 2020-00350, Response to Question 5.
 - a. Please provide the number of customer-generators previously grandfathered into NMS-1 that have been removed from NMS-1 due to expansion, or other alteration of the facility.
 - b. Please provide the total hourly energy produced by customer-generators previously grandfathered into NMS-1 that have been removed from NMS-1 due to expansion, replacement, or other alteration of the facility since removal from NMS-1.
 - c. Please provide the total generation capacity of customer-generators previously grandfathered into NMS-1 that have been removed from NMS-1 due to expansion, or other alteration of the facility since removal from NMS-1, both by original and expanded capacity.
- 1.11. Please provide a comprehensive tabulation of all costs and allocation of costs associated with the following activities, for each of the years 2021-2023:
 - a. Trade association dues to and staff time spent on activities conducted by any organization developing or taking any position on net metering rate design, rate design in general, or conducting studies or issuing reports on net metering rate design and rate design in general.
 - b. Lobbying and regulatory affairs advocacy and communications relating to net metering rate design, non-utility generation, and related topics; and other utility-related topics.
 - c. Economic development rates and incentives.
 - d. Storm and extreme-weather damage prevention and response.
- 1.12. The National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources ("NSPM-DER," available at https://www.nationalenergyscreeningproject.org/national-standard-practice-

manual/) provides a comprehensive framework for cost-effectiveness assessment of distributed energy resources including distributed generation, distributed storage, demand response, and energy efficiency. The NSPM-DER also provides guidance on addressing multiple DERs and rate impacts and cost shifts.

- a. Is the Company aware of and familiar with the NSPM-DER?
- b. Did the Company rely upon the NSPM-DER in developing its proposal for a new net metering tariff? Please explain why or why not.
- 1.13. Has the Company performed cost of service analysis on net metering customers? Please explain whether and how net metering customers cost more or less to serve than non-net metering customers. If the Company has not performed cost of service analysis on net metering customers, how has the Company determined that its proposed net metering tariff changes adhere to the principle of cost causation, i.e. that customers are fairly allocated the costs to serve them. Please provide copies of any and all such studies.
- 1.14. Has the Company performed any studies or analysis of the impact distributed energy resources could have or has had on their distribution grid, to reduce or defer infrastructure investments, or to improve system reliability or resilience for customers? Is the Company aware of any such studies performed by other parties in other regions or utility territories? Please provide copies of any such studies or analysis.

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 January 11, 2024; that the documents in this electronic filing are a true representation of the materials prepared for the filing; and that the Commission has not excused any party from electronic filing procedures for this case at this time.

Byron L. Gary