

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

|   |          |                            |
|---|----------|----------------------------|
| <b>ELECTRONIC APPLICATION OF KENTUCKY</b>   | <b>)</b> |                            |
| <b>UTILITIES COMPANY AND LOUISVILLE GAS</b> | <b>)</b> |                            |
| <b>AND ELECTRIC COMPANY FOR</b>             | <b>)</b> | <b>CASE NO. 2025-00045</b> |
| <b>CERTIFICATES OF PUBLIC CONVENIENCE</b>   | <b>)</b> |                            |
| <b>AND NECESSITY AND SITE COMPATIBILITY</b> | <b>)</b> |                            |
| <b>CERTIFICATES</b>                         | <b>)</b> |                            |

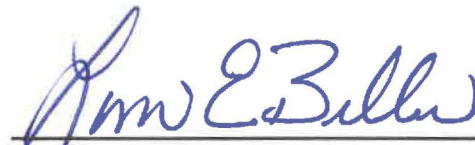
**RESPONSE OF**  
**KENTUCKY UTILITIES COMPANY**  
**AND**  
**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**TO**  
**THE ATTORNEY GENERAL AND KENTUCKY INDUSTRIAL UTILITY**  
**CUSTOMERS' THIRD SET OF DATA REQUESTS**  
**DATED MAY 27, 2025**

**FILED: June 6, 2025**

**VERIFICATION**

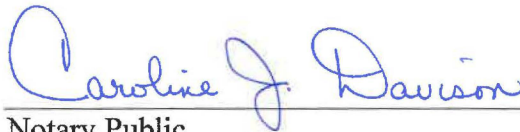
**COMMONWEALTH OF KENTUCKY    )**  
**)**  
**COUNTY OF JEFFERSON                                )**

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Executive Vice President of Engineering, Construction and Generation for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



**Lonnie E. Bellar**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 30<sup>th</sup> day of May 2025.



Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

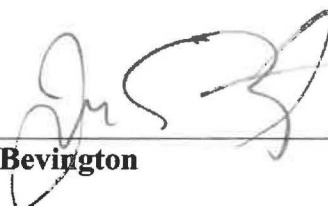
January 22, 2027



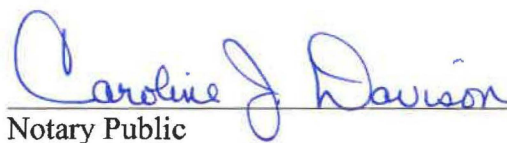
## VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 )  
COUNTY OF JEFFERSON )

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Senior Director – Business and Economic Development for PPL Services Corporation and he provides services to LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

  
\_\_\_\_\_  
**John Bevington**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 2nd day of June 2025.

  
\_\_\_\_\_  
Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



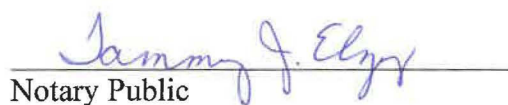
# VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 )  
COUNTY OF JEFFERSON )

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

  
Robert M. Conroy

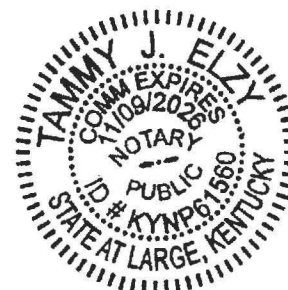
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4<sup>th</sup> day of June 2025.

  
Notary Public

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026

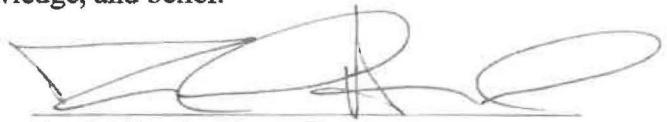


**VERIFICATION**

**COMMONWEALTH OF KENTUCKY    )**

**COUNTY OF JEFFERSON                    )**

The undersigned, **Daniel Hawk**, being duly sworn, deposes and says that he is Director – Transmission Strategy and Planning for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



**Daniel Hawk**

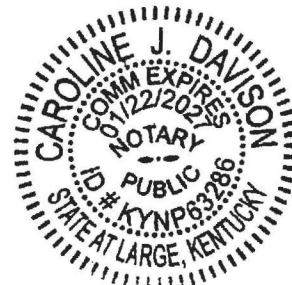
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4th day of June 2025.

  
Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



**COMMONWEALTH OF KENTUCKY )**  
**)**  
**COUNTY OF JEFFERSON )**

  
Tim A. Jones

Caroline J. Davison  
Notary Public

January 22, 2027



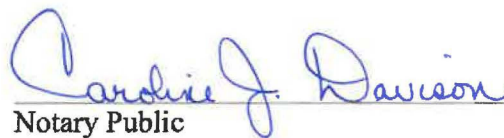
**VERIFICATION**

**COMMONWEALTH OF KENTUCKY    )**  
**)**  
**COUNTY OF JEFFERSON            )**

The undersigned, **Elizabeth J. McFarland**, being duly sworn, deposes and says that she is Vice President, Transmission for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

  
Elizabeth J. McFarland

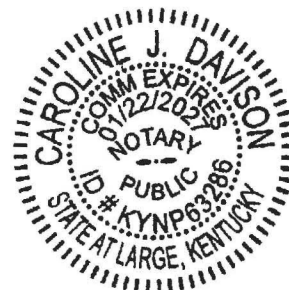
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 3rd day of June 2025.

  
Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



COMMONWEALTH OF KENTUCKY )  
 )  
COUNTY OF JEFFERSON )

  
Charles R. Schram

Caroline J. Davison  
Notary Public

January 22, 2027

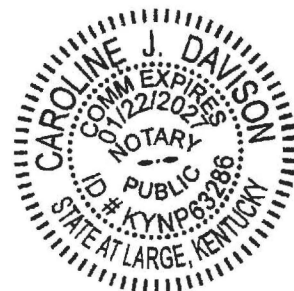


COMMONWEALTH OF KENTUCKY )  
 )  
COUNTY OF JEFFERSON )

  
Stuart A. Wilson

Caroline J. Davison  
Notary Public

January 22, 2027



**KENTUCKY UTILITIES COMPANY  
AND  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
Set of Data Request  
Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 1**

**Responding Witness: Tim A. Jones**

Q-1. Refer to Confidential Filing Workpaper file "Exhibit TAJ-2 - CONFIDENTIAL\Load\_Forecasting\CPCN\Work\AWJ\_JDL\_Charts.xlsx" tab: "Peak\_Chart\_2"

- a. Please confirm that the "without Economic Development" CPCN forecasts (columns C and H) exclude all economic development, including the projects identified in the Companies' application (Data Centers, BOSK, Auto, etc.)
- b. Please provide an hourly breakdown of the economic development load component forecast by economic development category (DC, BOSK, Auto, etc.) for each of the 5 CPCN forecasts for each year of the forecast. Please present each category similar to the breakdown provided for the 2024 IRP in "Exhibit TAJ-2 -CONFIDENTIAL\ Load\_Forecasting\ CPCN\ Work\ 2024IRP\_Mid\_Econ\_Dev\_Requirements.xlsx"

A-1.

- a. Confirmed with the clarification that the "without Economic Development" lines exclude economic development and major account expansions for which the Companies assigned distinct load shapes.
- b. Data center load was the only load assumed to vary across the five CPCN forecasts referenced. For an hourly breakdown of the data center load, see the attachment being provided in a separate file. See also the Companies' response to SC 2-5.

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**Case No. 2025-00045**

**Question No. 2**

**Responding Witness: Stuart A. Wilson**

- Q-2. See Company's response to AG/KIUC 1-39 regarding Cane Run dispatch.
- a. Please explain how the Companies interpret and use the Station Revenue Report provided in PROSYM.
  - b. Please provide the hourly charge and discharge energy profiles and dollar margin calculations for each Cane Run BESS resource modeled in the L1750\_E02\_MGMR run.
  - c. Please provide the Cane Run BESS average charge cost, charge GWh, discharge cost, discharge GWh, assumed efficiency (losses), and assumed resource value (margin) consistent with the Companies PROSYM Station Revenue Report under a MGMR fuel scenario 1750 MW load for each month of the study horizon.
  - d. Please confirm that the Companies PROSYM modeling for 1750 MW case provided in file, "Case No. 2025-00045 - Exhibit SAW-2 - CONFIDENTIAL\PROSYM\01\_Stage1\_Step2\CaseFolders\L1750E02\MGMR\C000\CONFIDENTIAL\_2025CPCNL1750E02MGMRC000.yr" shows the 2031 Cane Run BESS station revenue report margin is only \$55,000 and negative for years 2036-2040. If not, confirmed, please provide the estimated "value" of the Cane Run BESS energy dispatch compared to the system lambda and/or market price modeled in PROSYM.
- A-2.
- a. The Station Revenue Report is part of a broader set of model results in annual and monthly PROSYM output files. The Companies have not interpreted or used this report. The costs in this report appear to reflect some items that are considered in unit dispatch but are not included in production costs (such as emission allowances), and the revenues appear to be assigning an hourly market clearing value to each MW of generation. This information may be of

value to an RTO member, but the Companies do not use it in their resource planning decision making process.

- b. Hourly data to support charge and discharge profiles is not available from the Companies' PROSYM results, because the results for this analysis are summarized on an annual basis. The Companies did not calculate dollar margins associated with Cane Run BESS. Again, the Companies' objective is to minimize cost, not to calculate projected RTO-like revenue, which has no bearing on the Companies.
- c. The modeling assumed efficiencies of 93.27% for both charging and discharging for Cane Run BESS, yielding a round-trip efficiency of 87%. The discharge GWh is available in column D of "CONFIDENTIAL\_out\_unitmn.csv" provided in response to JI 1-22, filtering for units "CR BESS 01" through "CR BESS 04" (the Companies modeled CR BESS in 100 MW increments in PROSYM consistent with the increments selectable by PLEXOS). The charge GWh is equal to the discharge GWh divided by the round-trip efficiency of 87%. The Companies did not calculate average charge cost, discharge cost, and assumed resource value (margin) for Cane Run BESS, but the PROSYM output file associated with this run is available at "CaseFolders\RefCase\MGMR\C000\CONFIDENTIAL\_2025RefCaseMG MRC000.mn" provided in response to JI 1-22.
- d. See the response to part (a). The Companies do not use data in this section of the PROSYM outputs because it is irrelevant to the Companies' analysis, which focuses on minimizing cost, not optimizing RTO-like margins. The Companies observe that many units have negative values throughout the analysis period, including the Companies' combustion turbines, which perform a peaking function similar to what Cane Run BESS is expected to perform. Again, the Companies' modeling approach is entirely appropriate when the objective function is to provide safe and reliable service at the lowest reasonable cost, not to maximize margins in an RTO.

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**Case No. 2025-00045**

**Question No. 3**

**Responding Witness: John Bevington / Tim A. Jones**

- Q-3. See p. 14 lines 8-10 of the Direct Testimony of John Bevington and the Companies response to AG-KIUC 2-21.
- a. Please provide a list of the data centers or other new large load included in the Companies' load forecast that have signed an engineering, procurement, and construction ("EPC") contract.
  - b. Provide a copy of any EPC or other contracts the Companies have signed or are negotiating for transmission work that will need to be completed prior to the customer beginning to take service. Provide the total cost of each transmission project identified by new customer load as well as the estimated time to complete and expected date of completion for each transmission project identified by new customer load.
- A-3.
- a. See the response to JI 1-5(b). Note that, as the Companies stated in response to PSC 1-17(a), "The 1,750 MW of data center load included in the 2025 CPCN Load Forecast does not consist of specific data center projects; rather, it is a reasonable estimate of how much of the more than 6,000 MW of potential data center load in the Companies' current queue will come to fruition in the near term."
  - b. See attachment being provided in a separate file. The information requested is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

**KENTUCKY UTILITIES COMPANY  
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**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
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Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 4**

**Responding Witness: Daniel Hawk / Elizabeth J. McFarland**

Q-4. See the Companies response to AG-KIUC 2-40.

- a. Provide the initial estimated costs and timeline for the study identified project transmission system related upgrades identified in the 5 TSRs that total 1,252 MW. Please include both the interconnection and system upgrade projects separately.
- b. Please explain how the Companies will monitor and track new transmission projects attributed to data center customers.

A-4.

- a. See the table below.

| TSR Study    | MW Amount | Interconnection Facilities Cost | Interconnection Facilities Timeline | Network Upgrades Cost | Network Upgrades Timeline |
|--------------|-----------|---------------------------------|-------------------------------------|-----------------------|---------------------------|
| TSR-2024-001 | 335 MW    | \$29,113,536                    | 36 months                           | \$1,151,329           | 30 months                 |
| TSR-2024-011 | 67 MW     | \$0                             | NA                                  | \$330,765             | 37 months                 |
| TSR-2024-012 | 100 MW    | \$21,923,756                    | 30 months                           | \$790,800             | 36 months                 |
| TSR-2024-013 | 650 MW    | \$47,801,757                    | 70 months                           | \$399,239             | 24 months                 |

|                      |        |               |           |     |    |
|----------------------|--------|---------------|-----------|-----|----|
| TSR-<br>2024-<br>014 | 100 MW | \$118,767,906 | 64 months | \$0 | NA |
|----------------------|--------|---------------|-----------|-----|----|

- b. The Companies will continue to determine what transmission projects are required to serve data center customers through the TSR and annual Transmission Expansion Planning processes.

**KENTUCKY UTILITIES COMPANY  
AND  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
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Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 5**

**Responding Witness: Lonnie E. Bellar / John Bevington / Robert M. Conroy**

- Q-5. Refer to the Companies' response to AG/KIUC 2-24
- a. Does the Company have an internal policy for contracting with new customers? What requirements must be met in order to offer a contract (available capacity, appropriate contract terms, etc.)?
  - b. What internal teams approve new contracts? Who ultimately signs electric service agreements on behalf of the Companies?
  - c. Have the Companies considered a temporary pause on new data center contracts until a new large load/high load factor tariff is approved? If not, why not?
- A-5. The Companies assume the references to contracts and contracting in this request refer to special contracts, not contracts for service under standard tariff rates, terms, and conditions.
- a. See the response to SC 2-25 in Case No. 2024-00326.
  - b. The Companies' major accounts, customer service, regulatory, and legal teams typically review and participate in formulating special contracts, though others may also have input. After those teams have completed their work, the account representative working with the prospective customer would usually execute the special contract, although another responsible person might do so.<sup>1</sup>
  - c. No. Any such pause would be unnecessary and inconsistent with the Companies' obligation to serve. If a prospective large, high-load factor customer desires to take service prior to the Commission's approval of the Companies' proposed Extremely High Load Factor standard rate (Rate

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<sup>1</sup> For example, KU's Chief Operating Officer executed the special contract with BlueOval SK, LLC.

EHLF), the Companies would seek Commission approval of a special contract.

**KENTUCKY UTILITIES COMPANY  
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**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
Set of Data Request  
Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 6**

**Responding Witness: Lonnie E. Bellar / Stuart A. Wilson**

- Q-6. Please provide a copy of the study referenced in response to PSC 2-47 once completed on May 30, 2025.
- A-6. See the supplemental response to KCA 1-4.

**KENTUCKY UTILITIES COMPANY  
AND  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
Set of Data Request  
Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 7**

**Responding Witness: Lonnie E. Bellar / Stuart A. Wilson**

Q-7. If new federal legislation were passed modifying the availability of ITC or PTCs for BESS and/or solar, would the Companies' action plan and preferred resource plan be reevaluated?<sup>2</sup> If so, please explain how. If not, explain why not.

A-7. See the responses to KCA 1-4 and PSC 3-8.

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<sup>2</sup> <https://www.congress.gov/bill/119th-congress/house-bill/1/text>

**KENTUCKY UTILITIES COMPANY  
AND  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Response to Attorney General and Kentucky Industrial Utility Customers' Third  
Set of Data Request  
Dated May 27, 2025**

**Case No. 2025-00045**

**Question No. 8**

**Responding Witness: Charles R. Schram / Stuart A. Wilson**

- Q-8. Please describe in detail the Companies' methodology and process for evaluating the need for entering into new or renegotiated coal supply contracts.
- a. Please provide a copy of all coal procurement guidelines including details around contract targets by year, transportation, hedging, stockpile management, etc.
  - b. Please provide complete copies of all coal supply and transportation contracts in effect over the last three years and into future years. For each contract, identify the generating units it supplies.
  - c. For each coal supply contract supplied in 3-8(a) provide a monthly comparison of the projected volume of coal and the actual volume of coal taken at each generation station in calendar year 2024. Please include the total cost of all pricing components.
  - d. Describe in detail how the Companies incorporate the coal transportation and supply prices from the coal contracts into its Plexos expansion plan and PROSYM production cost modeling. Specifically, please describe how the commodity and transportation costs are included as fixed or variable in the models and whether marginal or average pricing is used.
- A-8. The Companies' coal procurement strategy and procedures are outlined in two documents: the LG&E and KU Fuel Procurement Strategy and the Coal Supply and By-Products Marketing Procurement Procedures. The LG&E and KU Fuel Procurement strategy was provided in response to JI 1.61. The current version of the Coal Supply and By-Products Marketing Procurement Procedures is attached in a separate file.
- a. See response above.

- b. All LG&E and KU coal and transportation contracts are filed with the Kentucky Public Service Commission and are available at <https://psc.ky.gov/WebNet/FuelContracts>.
- c. The attached file includes the 2024 monthly coal delivery plan developed during the Companies' business planning process and the actual monthly coal deliveries for each coal contract by plant. Also included is the total delivered cost for the actual coal delivered. Coal and transportation contracts are joint contracts, providing the Companies flexibility to shift deliveries between generating stations. The Companies use this flexibility to adjust to the coal delivery schedule throughout the year to address changes in coal burn, logistical conditions, unloader availability, coal production shortfalls, etc. The Companies also develop and adjust schedules to balance prices, coal quality, coal inventory, and other factors for each station.
- d. Coal prices used in the Companies' PLEXOS and PROSYM analyses consist of the Companies' mine-mouth ILB and PRB coal price forecasts plus forecasted delivery bases that are based on existing contracts. The delivery bases consist of all variable costs associated with the delivery of coal to each plant, while fixed fuel transportation costs are included in each unit's fixed O&M costs.