

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

**In the Matter of:**

<b>ELECTRONIC JOINT APPLICATION OF</b>	)	
<b>KENTUCKY UTILITIES COMPANY AND</b>	)	
<b>LOUISVILLE GAS AND ELECTRIC</b>	)	
<b>COMPANY FOR CERTIFICATES OF</b>	)	<b>CASE NO. 2022-00402</b>
<b>PUBLIC CONVENIENCE AND NECESSITY</b>	)	
<b>AND APPROVAL OF A DEMAND SIDE</b>	)	
<b>MANAGEMENT PLAN</b>	)	

**RESPONSE OF**  
**KENTUCKY UTILITIES COMPANY**  
**AND**  
**LOUISVILLE GAS AND ELECTRIC COMPANY**  
**TO**  
**WALMART INC.'S**  
**SUPPLEMENTAL REQUEST FOR INFORMATION**  
**DATED APRIL 14, 2023**

**FILED: MAY 4, 2023**

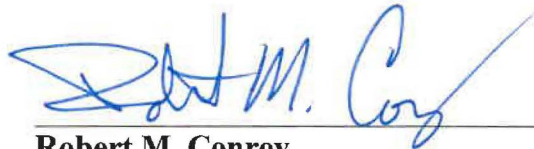





VERIFICATION

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, 220 West Main Street, Louisville, KY 40202, and 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 1<sup>st</sup> day of May \_\_\_\_\_ 2023.

  
\_\_\_\_\_  
Notary Public  
Notary Public ID No. KYNP61560



My Commission Expires:

November 9, 2026

VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 )  
COUNTY OF JEFFERSON )

The undersigned, **David S. Sinclair**, being duly sworn, deposes and says that he is Vice President, Energy Supply and Analysis for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 220 West Main Street, Louisville, KY 40202, and 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.

David S. Sinclair

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 1st day of May 2023.

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027





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

**Response to Walmart Inc.'s Supplemental Request for Information  
Dated April 14, 2023**

**Case No. 2022-00402**

**Question No. 1**

**Responding Witness: Lonnie E. Bellar**

Q-1. As it relates to the natural gas combined cycle (“NGCC”) units proposed for approval in this proceeding, please answer the following questions:

- a. According to the Direct Testimony of Lonnie E. Bellar, p. 11, lines 19-23, “[a]ll OEMs that provide NGCC technology are designing their gas turbines to combust hydrogen in the future should it become economically viable or mandated.” Will the NGCC units proposed for approval in this proceeding be capable of co-firing with hydrogen?
- b. If the answer to 1(a) is no, please explain why not, and identify all costs, whether estimated or actual, associated with retrofitting these units in the future to co-fire with hydrogen.

A-1.

- a. Yes. The capabilities of the gas turbine OEM’s vary widely, but all outpace the current, or reasonably envisioned, supply of commercially available quantities to sustain operation at even a 5% hydrogen blend. Any selected OEM will be capable of blending at least that at time of installation. As suitable sources of commercially available hydrogen evolve, the Companies will assess potential upgrades necessary and execute beneficial upgrades in conjunction with other necessary maintenance. See also response to KCA 2-51(b).
- b. Not applicable.

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**Question No. 2**

**Responding Witness: John Bevington / Robert M. Conroy / David S. Sinclair**

- Q-2. Have the Companies quantified potential benefits to ratepayers associated with the Inflation Reduction Act (“IRA”) as it relates to the projects proposed in the Companies’ Application?
- A-2. No. The details around the funding channel (i.e., Kentucky State Energy Office) and the timing are not yet published. See the following:
- Exhibit JB-1, Section 1.2.1, page 7 (filed December 15, 2022)
  - Charles R. Schram Direct Testimony, page 5 (filed December 15, 2022)
  - PSC 1-19(b), 1-24, 1-47(a), 1-69, 1-94(c)
  - JI 1-73
  - KCA 1-68
  - LFUCG/METRO 1-44



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**Question No. 3**

**Responding Witness: Stuart A. Wilson**

- Q-3. Please reference the Direct Testimony of Stuart A. Wilson, p. 14, lines 1-8 concerning the use of the PLEXOS model to develop the least-cost resource portfolios.
- a. Did the Companies perform any out-of-model steps and/or impose out-of-model constraints on PLEXOS?
  - b. If so, please describe all such forced inputs, limitations, or out-of-model constraints and the reason(s) for each such input or limitation.
- A-3.
- a. No. For an explanation of the in-model PLEXOS constraints, see the response to PSC 2-10(e).
  - b. Not applicable.

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**Question No. 4**

**Responding Witness: Stuart A. Wilson**

Q-4. Please reference the Direct Testimony of Stuart A. Wilson, p. 14, lines 19-20 concerning the use of SERVM to test the portfolios' reliability.

- a. Did the Companies perform any out-of-model steps and/or impose out-of-model constraints on SERVM?
- b. If so, please describe all such forced inputs, limitations, or out-of-model constraints and the reason(s) for each such input or limitation.

A-4.

- a. No.
- b. Not applicable.

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**Question No. 5**

**Responding Witness: David S. Sinclair**

- Q-5. Please reference the Direct Testimony of David S. Sinclair, p. 19, line 15 to p. 20, line 15 concerning the risks regarding the power purchase agreements (“PPAs”) proposed for approval in this proceeding and answer the following:
- a. Are any costs of these PPAs being recovered by customers prior to these projects coming online?
  - b. If so, please explain all such costs.
  - c. In the event a PPA is terminated and costs are recovered from customers prior to the project coming online, how will such costs be refunded to customers?
- A-5.
- a. No. The Companies will only pay for energy delivered at the agreed upon PPA price.
  - b. See the response to part (a).
  - c. Not applicable, see the response to part (a).