

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC JOINT APPLICATION OF)
KENTUCKY UTILITIES COMPANY AND)
LOUISVILLE GAS AND ELECTRIC)
COMPANY FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND NECESSITY)
AND APPROVAL OF A DEMAND SIDE)
MANAGEMENT PLAN)**

CASE NO. 2022-00402

**MAY 11, 2023 SUPPLEMENTAL RESPONSE OF
KENTUCKY UTILITIES COMPANY
AND
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE COMMISSION STAFF'S
SUPPLEMENTAL REQUEST FOR INFORMATION
DATED APRIL 14, 2023**

FILED: MAY 11, 2023

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

**May 11, 2023 Supplemental Response to Commission Staff's
Supplemental Request for Information
Dated April 14, 2023**

Case No. 2022-00402

Question No. 38

Responding Witness: Lana Isaacson

Q-38. Provide a cost-effectiveness analysis for each program identified in LG&E/KU's response to Staff's First Request, Item 21a–g.

A-38. **Original Response**

See attached for the cost-effectiveness analyses for the three programs the Companies previously stated they would perform in response to PSC 1-20(e)-(g). For the remaining four programs in PSC 1-20(a)-(d), the Companies have begun developing the program parameters and performing cost-effectiveness analyses. The Companies expect these analyses will be complete no later than May 22nd and will supplement this response with the analyses.

Please note that the cost-benefit analyses for the three programs noted use different avoided capacity costs than the avoided capacity cost reflected in the cost-benefit analyses the Companies filed in the December 2022 Application. The avoided capacity cost used in the cost-benefit analyses filed in December 2022 was the levelized cost of a simple cycle CT installed in 2028, which is an approach consistent with the Companies' past DSM-EE cost-effectiveness analyses. Subsequently, in discovery requests from Commission Staff and interveners, as well as in the informal conference held on April 17, 2023, the Companies received questions about which avoided capacity cost is used in DSM-EE cost-effectiveness calculations. The Companies therefore decided to refine their avoided capacity cost approach to evaluate the programs the Commission Staff has asked the Companies to assess; namely, the attached cost-benefit analysis of the three programs the Companies have been able to analyze to date uses avoided capacity costs for a simple cycle CT for dispatchable DSM, or demand response, programs, and it uses an NGCC unit's costs properly considered over time for energy efficiency programs.

For the sake of consistency, the Companies are also attaching new cost-effectiveness results for their proposed DSM-EE programs using the updated avoided capacity costs. The update does not materially impact the cost-effectiveness of the Companies' proposed programs; the portfolio TRC decreases from 1.54 to 1.50.

May 11, 2023 Supplemental Response

See attached for the cost-effectiveness analyses for all seven programs requested in PSC 1-20. The attachment includes the analyses of the three programs the Companies previously provided in their original response to PSC 2-38. The results shown in the attachment represent an initial, preliminary analysis of each requested program. If the Companies were preparing these analyses without the time constraint of discovery, the Companies would spend additional time to create, review, collaborate with DSM Advisory Stakeholders, validate, and further refine the program inputs and results.

The attachment is being
provided in a separate
file.