

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC TARIFF FILING OF)
LOUISVILLE GAS AND ELECTRIC COMPANY)
TO REVISE ITS LOCAL GAS DELIVERY) **CASE NO. 2024-00125**
SERVICE TARIFF)

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
DATED JUNE 13, 2024

FILED: June 27, 2024

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's Second Request for Information
Dated June 13, 2024**

Case No. 2024-00125

Question No. 1

Responding Witness: Tom C. Rieth

- Q-1. Refer to LG&E's response to Commission Staff's First Request for Information (Staff's First Request), Item 5a. Explain whether the verification tests to ensure natural or manufactured gas (gas) quality specifications for LG&E are the same tests and specifications required for authorization to inject gas into interstate pipelines. If not, explain the similarities and differences of the tests.
- A-1. Verification tests to ensure gas quality from potential RNG producers would share some similarities with verification tests for interstate pipeline connections, but there would also be some differences due to the process to manufacture RNG and various potential feedstocks.

For interstate pipeline connections, gas chromatographs are used to monitor and collect real-time data including BTU, specific gravity, nitrogen, carbon dioxide, butane, ethane, methane, pentane, propane, and C6+ (heavier hydrocarbons). In the case of local gas, for example RNG connections, a gas chromatograph would be used to monitor and collect real-time data including BTU, specific gravity, nitrogen, carbon dioxide, methane, and any other non-methane hydrocarbon gas that might be used by the RNG producer to increase heat value. It would not be necessary to test for all non-methane hydrocarbons that are a component of natural gas as they are not present in RNG. In addition, due to the process to manufacture RNG and various potential feedstocks, real time testing of oxygen, sulfur and water vapor would also be required.

There are additional RNG gas quality constituents that would be assessed and verified through a sampling process, including ammonia, siloxanes, chlorine, fluorine, mercury, arsenic, and copper. Some of these constituents may not require sampling if they are not expected to be present in the RNG based upon the RNG producer's feedstock.

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Question No. 2

Responding Witness: Tom C. Rieth

- Q-2. Refer to LG&E's response to Staff's First Request, Item 7b, REEthink report, Section 4, pages 8-9. Explain whether LG&E will conduct or currently conducts its own testing and monitoring of gases taken from interstate pipelines prior to entering its pipeline system.
- a. If so, explain its testing protocols and procedures.
 - b. If not, explain how LG&E will verify the veracity of third-party test verification results from renewable natural gas (RNG) producers. Include in the response whether there are industry gas testing vendors that are commonly considered reliable in the gas utility industry.
 - c. Explain the approximate volume of RNG necessary to make the business case for LG&E to invest in the facilities necessary to take local RNG gas.
- A-2.
- a. The Company conducts real-time gas analysis of receipts from each of its interstate gas supply sources, Texas Gas Transmission, LLC and Tennessee Gas Pipeline Company, LLC. Using gas chromatographs installed at City Gate Station custody transfer sites, real-time data is monitored and collected including BTU, specific gravity, nitrogen, carbon dioxide, butane, ethane, methane, pentane, propane, and C6+ (heavier hydrocarbons). The gas chromatograph data is transmitted to the Company's Gas SCADA (Supervisory Control and Data Acquisition) system, where alarm parameters are set to alert Gas Control personnel of any abnormal conditions. If abnormal conditions are detected, Company personnel will contact the interstate gas supplier to rectify.
 - b. Similar to having a gas chromatograph test gas received from interstate pipeline suppliers, each RNG interconnect facility will include a gas chromatograph to conduct real-time gas analysis similar to the process described above. Any third party testing deemed necessary will be completed in accordance with the verification and monitoring protocol recommendations listed in the RNG Quality Verification and Monitoring Program: Task 2 document provided by REEthink, Inc. Attachment 2 to that document lists a

recommended analytical method for testing each component of LG&E's gas quality specification that cannot be monitored in real time. An independent third party will certify the composition based on analysis using industry standard test methods.

- c. The RNG producer will pay the costs to construct, operate, and maintain the interconnect facility, as well as costs to construct any necessary infrastructure downstream of the interconnect facility, so LG&E will not invest in facilities to transport RNG pursuant to Rate LGDS.

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Question No. 3

Responding Witness: Tom C. Rieth

Q-3. Refer to LG&E's response to Louisville/Jefferson County Metropolitan Sewer District First Information Request, Item 11.

- a. Explain whether LG&E, the local distribution company (LDC), would purchase RNG for retail customer heating, cooking, or other commercial purposes.
- b. Explain which customers/customer classes, if any, are eligible to purchase local RNG from LG&E or from the local RNG supplier where LG&E is the RNG transporter. If there are any customers/customer classes able to purchase local RNG, provide a reference to the tariff(s) under which such the sales occur.

A-3.

- a. LG&E, the LDC, is not purchasing RNG as part of the LGDS tariff, which is a transportation-only service. LG&E is not purchasing RNG for its retail customers as it is not the least cost option.

While LG&E is not purchasing RNG, the physical molecules of RNG and other local gas transported on LG&E's system pursuant to Rate LGDS, will be consumed by LG&E customers in the vicinity of the RNG injection site. Please also see the response to MSD 2-1.

- b. No customer class is eligible to purchase RNG from LG&E. Rate FT and Rider TS-2 customers may purchase RNG from their third party natural gas suppliers (Pool Managers). The RNG purchased by these customers may be purchased by the Pool Manager from a RNG producer that is not connected to LG&E's system or in the future from a RNG producer that connects to LG&E's system taking service pursuant to Rate LGDS.