

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
LOUISVILLE/JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT'S
SUPPLEMENTAL REQUEST FOR INFORMATION
DATED JUNE 13, 2024

FILED: June 27, 2024

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Tom Rieth**, being duly sworn, deposes and says that he is Vice President – Gas Operations for Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, 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.

Tom Rieth

Tom Rieth

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of June _____ 2024.

Caroline J. Davison

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027



LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Louisville/Jefferson County Metropolitan Sewer District's
Supplemental Request for Information
Dated June 13, 2024**

Case No. 2024-00125

Question No. 2-1

Responding Witness: Tom C. Rieth

- Q-2-1. When LG&E states local customers would be required to purchase 7% more gas due to the lower heating value of RNG compared to fossil gas supplies (response to PSC Staff Q-1(b)), does this ignore effects of blending and diffusion within the local pipeline and assume customers connected near RNG producers would receive 100% RNG?
- A-2-1. The 7% increase assumes 100% RNG. The 100% RNG will decrease as it blends with other natural gas in LG&E's system and is consumed by downstream customers. Some customers will receive nearly 100% RNG and others will receive a blend of RNG and natural gas from the interstate pipelines until the RNG has been nearly consumed and the heat value impact will range from approximately 7% to no effect. Since customer load requirements and gas system operations vary, the number of customers and heat value impact will vary and will not be uniform.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 2-2

Responding Witness: Tom C. Rieth

- Q-2-2. Does LG&E have any empirical data or case studies which show RNG may significantly affect the quality of pipeline gas delivered to local customers?
- A-2-2. See the response to PSC 1-1b and MSD 1-3 for a description of the impacts of the quality of RNG on LG&E customers.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Louisville/Jefferson County Metropolitan Sewer District's
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Case No. 2024-00125

Question No. 2-3

Responding Witness: Tom C. Rieth

- Q-2-3. Has LG&E considered alternative solutions or special circumstances that would rectify concerns about adverse effects to local customers without increasing the heating value requirement to a level that is infeasible to meet by RNG, such as an RNG provider purchasing about the same amount of gas from the distribution system as they produce?
- A-2-3. See the response to MSD 1-1. Commercial solutions, such as blending propane, are available to achieve the proposed minimum heating value. Even if an RNG producer purchases fossil natural gas from LG&E in a volume equal to the volume of the RNG producer's injection on LG&E's gas system, other LG&E customers will receive the lower heating value RNG molecules due to system configuration and operation, which will result in the increased bill impact for those customers.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 2-4

Responding Witness: Tom C. Rieth

- Q-2-4. Would accepting RNG reduce the amount of fossil natural gas that LG&E purchases from interstate suppliers and transports through their gas grid?
- A-2-4. No. Rate LGDS requires that the RNG producer deliver the gas to a Rider PS-FT or Rider PS-TS-2 Pool Manager serving gas transportation service customers on LG&E's system. The Pool Manager receiving the RNG may purchase less fossil natural gas from its interstate pipeline supplier as a result of receiving RNG.

LOUISVILLE GAS AND ELECTRIC COMPANY

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Question No. 2-5

Responding Witness: Tom C. Rieth

- Q-2-5. In regard to the “RNG Quality Verification and Monitoring Program” (Attachment 2 to Response to PSC-1 Question No. 7(b)), have the proposed terms and conditions ever been accepted and utilized by an RNG producer in an actual application?
- A-2-5. At this time, no RNG producer has contracted for service under Rate LGDS. While LG&E has not conducted a review of the contract provisions accepted by individual RNG producers on other pipeline systems, the proposed terms and conditions of Rate LGDS were developed based on LG&E’s experience with its system and after engaging consultants and considering their recommendations.

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Question No. 2-6

Responding Witness: Tom C. Rieth

- Q-2-6. Did LG&E or its consultants develop any cost estimates or consider costs impacts to RNG providers for the blending systems proposed? Also, were operational, safety, regulatory or other impacts to the RNG provider for the recommended additional blending systems evaluated beyond the gas quality impacts to the natural gas utility?
- A-2-6. Please see response to MSD-1 Question No. 4.

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Question No. 2-7

Responding Witness: Tom C. Rieth

Q-2-7. The Entrust Solution report states: "No universal solution exists for how operators should handle the potential impacts of RNG injection on gas quality, heat content, and gas interchangeability. Every situation is unique – from regulatory compliance in the local jurisdiction to producer relationships and interconnect agreements, from the size and complexity of the gas distribution system to the quality of biomethane produced." Given this statement, does LG&E intend to develop terms and conditions for RNG connections to their distribution system(s) on a case-by-case basis, evaluating the impacts noted above for each application or do they intend to implore a "one size fits all" approach by requiring a blanket minimum RNG gas quality requirement for all RNG providers in all cases? For example, in many wastewater RNG applications where biosolids dryers are used, the dryer natural gas demand exceeds the plant's RNG production. Inasmuch the interconnect can be designed so that the majority of the RNG produced will not go beyond the interconnection site; thus, the impact from lower BTU RNG can be isolated and can be controlled.

A-2-7. See Attachment 1 to the response to PSC 1-7b. The Executive Summary on page 1 of REEthink's report says "RNG from all biogas waste streams should share common RNG Quality Specifications within one company, so that there is unity and consistency throughout. In this way, RNG producers considering projects within the LGE network and its affiliates can anticipate the RNG quality required, and can design their plants to accommodate the common Specifications. The gas quality Specifications are consistent throughout the company and are not particular to the injection point conditions or the specifics of a particular project. The Specifications are considered protective of all gas pipeline systems (high pressure/high volume, low pressure/low volume)."

As such, revisions to the LGDS tariff, including the gas quality specifications, were proposed by LG&E with consideration for the size, complexity, configuration, and operation of its gas system. Because this is a tariffed service, all RNG customers under Rate LGDS will be subject to the terms and conditions set forth in the tariff.

Also see the response to MSD 2-3.