

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF)
LOUISVILLE GAS AND ELECTRIC) CASE NO. 2018-00295
COMPANY FOR AN ADJUSTMENT OF ITS)
ELECTRIC AND GAS RATES)

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
SUPPLEMENTAL SET OF DATA REQUESTS OF METROPOLITAN HOUSING
COALITION
DATED DECEMBER 12, 2018

FILED: JANUARY 2, 2019

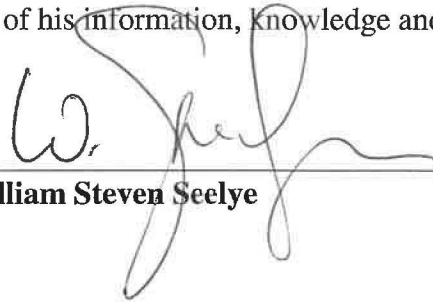
VERIFICATION

STATE OF NORTH CAROLINA

COUNTY OF BUNCOMBE

)
)

The undersigned, **William Steven Seelye**, being duly sworn, deposes and states that he is a Principal of The Prime Group, LLC, 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.



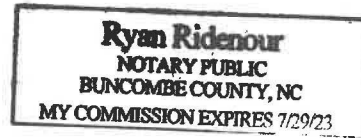
William Steven Seelye

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 21 day of December 2018.

 (SEAL)
Notary Public

My Commission Expires:

7-29-23



LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Supplemental Set of Data Requests of Metropolitan Housing Coalition
Dated December 12, 2018**

Case No. 2018-00295

Question No. 1

Responding Witness: William Steven Seelye

Q-1. In response to MHC's First Set of Data Requests, Question 1-e, William Seelye is the authority cited on splitting the electric charge into several components. The reasoning, as cited in the Response by LG&E in A-1 e, is that ... "it is his opinion and belief that more information available to customers will lead to a greater understanding on the part of the customers."

Mr. Seelye listed his credentials in page 9 Of 439.

- a. In addition to those credentials, does Mr. Seelye have a degree in education, communications, cognitive science, psychology or marketing?
 - b. What studies did Mr. Seelye use to arrive at his opinion and belief that consumers would have a better understanding if the charges were split into several components? If he relied on no studies, what empirical basis exists that he relied on in forming his opinion?
 - c. Was the goal of having a better understanding a level of control over usage and/or the ability to lower usage?
 - d. What, if any, focus groups did Mr. Seelye conduct to arrive at his opinion and belief?
 - e. Why did Mr. Seelye not use the experience of having the gas charge in several components to see if LG&E customers understood their gas bill better?
- A-1. Note that the Companies, not Mr. Seelye, made the decision to split the energy rate into two components. Mr. Seelye responded to the cited request because it cited his testimony.
- a. Mr. Seelye's educational background is in mathematics, physics, and engineering. However, he has worked in the utility industry for approximately 40 years. For several years, Mr. Seelye headed up the market management area for LG&E. See Exhibit WSS-1. Mr. Seelye's opinion and belief that providing more information will lead to a greater understanding on the part of

customers was formed by his 40 years of work experience in utility marketing and rates and not specifically from his academic coursework in the areas of mathematics, physics and engineering.

- b. Mr. Seelye's opinion and belief that providing more information will lead to a greater understanding on the part of customers was based on his personal experience working in utility marketing and rates, particularly his experience with separating LG&E's volumetric charge for gas service in a Distribution Charge (fixed cost component) and a Gas Supply Cost Component (variable cost component). See the response to sub-part (e). Mr. Seelye also notes that it is common for electric utilities to unbundle electric energy charges into production and delivery cost components. It has been Mr. Seelye's experience that unbundled energy charges have led to greater understanding on the part of customers, employees and others regarding the cost components that make up the energy charge in the Company's electric rates.
- c. No. The goal was to provide more information to customers, employees, regulators and others regarding the cost components that make up the energy charge in the Company's electric rates.
- d. Although Mr. Seelye has had extensive interaction with utility customers during his career, he did not conduct focus groups to form his opinion. See the responses to sub-parts (a) and (b).
- e. Mr. Seelye did use his experience of the natural gas volumetric charges being separated into a Distribution Charge (fixed cost component) and a Gas Supply Cost Component (variable cost component) in LG&E's gas tariff to form his opinion that breaking out the energy charge into the constituent cost components will lead to greater understanding on the part of customers. Based on Mr. Seelye's experience, separating the gas volumetric charge into a Distribution Charge and a Gas Supply Charge has certainly led to a better understanding on the part of customers, employees, regulators and others of the cost components that make up the volumetric charge for natural gas service.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Supplemental Set of Data Requests of Metropolitan Housing Coalition
Dated December 12, 2018**

Case No. 2018-00295

Question No. 2

Responding Witness: Robert M. Conroy

- Q-2. The answer provided to Q-8 of MHC's First Set of Data Requests on how rates would affect the behavior of investing in solar energy is that "...the clear impact will be to maintain or increase the current incentive..." In the answer to Question Q-7 of MHC's First Set of Data Requests on what the rate would be if more of the increase was in the kWh instead of the meter charge, the answer was that the Kwh charge would be \$0.9851 in order to collect the same revenue. The proposed rate, as stated in the answer to Q-8 is \$0.9420.
- a. Is it not true that the difference in kWh would enable the investment in solar energy to be recovered sooner?
 - b. Is it not true that more people would consider solar investment if more of the increase were in the kWh charge?
 - c. Is it not true that residential customers would have a greater incentive to lower their usage if more of the increase were in the kWh charge?
 - d. Is it not true that changes in the kWh charge gives people more opportunity and incentive over their bill than raising the meter charge?
- A-2. Note that the hypothetical Rate RS energy rate given in LG&E's response to MHC 1-7 was \$0.09851 per kWh, not \$0.9851. Similarly, the proposed Rate RS energy rate is \$0.09420 per kWh, not \$0.9420.
- a. Yes, but only marginally at best: An LG&E customer with average usage (917 kWh/month) who invested in a solar facility sufficient to eliminate *all* energy charges would see increased savings of less than \$4.00 per month under MHC's proposal compared to LG&E's proposed energy rates.¹ It seems unlikely that a monthly savings difference of less than \$4.00 would alter an investment decision with an upfront cost in the tens of thousands of dollars.²

¹ 917 kWh x \$0.09851/kWh = \$90.33; 917 kWh x \$0.09420/kWh = \$86.38; \$90.33 - \$86.38 = \$3.95.

² According to NREL's PVWatts Calculator, an 8 kW solar facility should produce roughly enough energy in Louisville to offset average usage of 917 kWh per month. (Calculated using PV Watts on Dec. 13, 2018;

More importantly, MHC's proposal would harm customers most in need of help. As LG&E stated in its response to MHC 1-20, the average WeCare recipient during 2018 had average usage of 1,083 kWh per month. At that level of average usage, the average WeCare recipient would pay an additional \$8.56 per year to subsidize solar panel investments for customers who—if they have the means to invest in solar panels—do not need subsidies from low- or fixed-income customers.³ It would therefore be harmful, not helpful, to the residential customers most in need of assistance to arbitrarily shift fixed-cost recovery from the Basic Service Charge to the per-kWh energy charge.

It is important to note that when cost of service ceases to be the primary guiding principle in ratemaking, there is no obvious replacement for it. For example, consider eliminating the Rate RS Basic Service Charge entirely and increasing the energy charge accordingly to \$0.11179. To do so would certainly increase the incentive to invest in solar panels, but it would also require the average WeCare recipient to pay \$35 more per year than they would under LG&E's proposed rates.⁴ It is not clear whether MHC believes that is a desirable outcome, but it would certainly violate ratemaking based on cost of service.

Finally, LG&E would also note that artificially increasing the per-kWh charge has the effect of artificially increasing the cost of driving an electric vehicle for residential customers who charge their vehicles at home. If MHC is concerned about urban air quality, it might consider whether discouraging the purchase and use of electric vehicles is in the interest of its constituents.

- b. See the response to part a.
- c. See the response to part a. Assuming an average customer could find a way to decrease energy usage 20%, the difference in savings in energy charges between MHC's proposal and LG&E's proposed Rate RS energy rate would be

available at <https://pvwatts.nrel.gov/pvwatts.php>.) According to SolarReviews.com, an 8 kW residential solar array costs approximately \$20,850 after tax incentives. (<https://www.solarreviews.com/solar-panels/solar-panel-cost/cost-of-solar-panels-in-kentucky/solar-panels-cost-in-jefferson-county/louisville/>, accessed Dec. 13, 2018.)

³ Under proposed rates, the Rate RS Basic Service Charge for 365 days would be \$193.45 and 12 months of average usage for an average WeCare recipient (1,083 kWh x \$0.09420 per kWh x 12 months = \$1,224.22) would total \$1,417.67. Under MHC's apparent proposal, the Rate RS Basic Service Charge for 365 days would be \$146 and 12 months of average usage for an average WeCare recipient (1,083 kWh x \$0.09851 per kWh x 12 months = \$1,280.24) would total \$1,426.24.

⁴ Under proposed rates, the Rate RS Basic Service Charge for 365 days would be \$193.45 and 12 months of average usage for an average WeCare recipient (1,083 kWh x \$0.09420 per kWh x 12 months = \$1,224.22) would total \$1,417.67. Zeroing out the Rate RS Basic Service Charge and using 12 months of average usage for an average WeCare recipient at the \$0.11179/kWh rate that would result from eliminating the Basic Service Charge would total \$1,452.80. The difference is \$35.13.

less than \$0.80 per month and less than \$10.00 per year.⁵ It seems unlikely that such a small difference in savings would appreciably alter a customer's energy efficiency or usage decisions.

- d. See the responses to parts a. and c.

⁵ A 20% energy reduction would be an extraordinary reduction for most customers and would likely require significant investments to achieve.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Supplemental Set of Data Requests of Metropolitan Housing Coalition
Dated December 12, 2018**

Case No. 2018-00295

Question No. 3

Responding Witness: Robert M. Conroy

- Q-3. MHC requested information on the percentage of increase and dollar increase in cost for a homebound person who has one 5,000 BTU window air conditioner that is five years old, running continuously to cool 200 square feet in August with the temperature of the day ranging from 75 degrees as a low to 97 degrees as a high for a thirty-one day period. LG&E declined to answer, asserting that it lacked such an analysis.
- a. MHC requests disclosure of any studies that has LG&E commissioned or used to determine if the proposed rates and rate structure will have a deleterious effect on those who are disabled and/or homebound?
 - b. What steps does LG&E propose to ameliorate those deleterious effects?
- A-3. LG&E disagrees with the assertion that “LG&E declined to answer” the previous question. The hypothetical scenario has many variables associated with the level of energy consumption that would have to be specified and bounded to perform any analysis, which would still result in a wide range of outcomes. To name just a few unspecified variables: ceiling height, insulation quality and quantity, airtightness of the space, desired interior temperature to be maintained, housing type (freestanding home, single-floor multi-unit, multi-floor multi-unit; if multi-floor, which floor), number of windows and relevant specifications, number of interior and exterior walls, exterior temperature curves for each day, sun exposure, and interior and exterior humidity levels. There are numerous others, including lighting and other energy-consuming devices in use in the space, as well as energy-efficiency and weatherization measures in place.

Thus, rather than attempt to provide a response to an incomplete hypothetical, the Company provided information for the monthly bill impact on a residential customer for energy consumption ranging from 500 kWh per month (6.6% increase to the bill) to 3,000 kWh per month (1.6% increase to the bill).

- a. LG&E has not conducted any such studies.
- b. LG&E provides significant support to low-income customers in a variety of ways. See the Direct Testimony of Robert M. Conroy at pages 45-50.