

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2021 JOINT INTEGRATED)
RESOURCE PLAN OF LOUISVILLE GAS AND)
ELECTRIC COMPANY AND KENTUCKY) **CASE NO. 2021-00393**
UTILITIES COMPANY)

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY TO
SIERRA CLUB'S SUPPLEMENTAL REQUEST FOR INFORMATION
DATED MARCH 4, 2022

FILED: MARCH 25, 2022

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

**Response to Sierra Club’s Supplemental Request for Information
Dated March 4, 2022**

Case No. 2021-00393

Question No. 1

Responding Witness: Counsel / David S. Sinclair

- Q-1. Reference PPL’s 2021 Climate Assessment Report, including, inter alia, its statements “we are committed to delivering a net-zero carbon future,” “we highlight risks and opportunities associated with climate change,” “we continue to transition our Kentucky coal-fired generation ... and replace it with non-emitting generation,” “we believe the IPCC’s work is among the most respected and robust analyses,” and acknowledging that the IPCC’s Sixth Assessment Report observes that “[h]uman-induced climate change is already affecting many weather and climate extremes in every region across the globe,” and “[f]uture greenhouse gas emissions will cause future additional warming, with total warming dominated by CO2 emissions.”¹ Further reference the following excerpt reported in January 2022 by a Louisville local news outlet: “When WFPL News spoke to Sinclair, the vice president of energy supply and analysis at LG&E in November, he was reluctant to acknowledge utilities’ role in global warming. ‘Certainly the climate changes... there’s no doubt about that so I’m not sure what you are trying to drive at there,’ Sinclair said when asked if he believed in climate change.”²
- a. Please confirm whether LG&E and KU acknowledge that human activities are the main driver of current global climate change³; the scale of current climate change is unprecedented in hundreds, to hundreds of thousands, of years, at the least⁴; and a principal cause thereof is CO2 emissions from fossil-burning power plants such as those owned and operated by the Companies

¹ Energy Forward: PPL’s 2021 Climate Assessment Report, at 3, 17, available at https://www.pplweb.com/wpcontent/uploads/2022/01/PPL_Corp-2021-Climate-Assessment_2022-01-04.pdf.

²“Louisville activists call on utilities, regulators to act on climate change” (Jan. 25, 2022), Ryan Van veltzer, WFPL News, available at <https://wfpl.org/louisville-activists-call-on-utilities-regulators-to-act-on-climate-change/>.

³See, e.g., IPCC Sixth Assessment Report, at SPM-5–SPM-6, available at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf.

⁴ See, e.g., id. at SPM-9.

(among many others).⁵ If not, please explain specifically how/why not, and cite authorities supporting that view.

- b. Please confirm whether Mr. Sinclair acknowledges that human activities are the main driver of current global climate change; the scale of current climate change is unprecedented in hundreds, to hundreds of thousands, of years, at the least; and a principal cause thereof is GHG emissions from fossil-burning power plants such as those owned and operated by the Companies (among many others). If not, please explain specifically how/why not, and cite authorities supporting that view.

A-1. This request is objectionable in its entirety as argumentative in nature and irrelevant. The purpose of this proceeding is to review the Companies' IRP, which the Companies submitted pursuant to the requirements of the Commission's IRP regulation, 807 KAR 5:058. The IRP regulation states that it "prescribes rules for regular reporting and commission review of load forecasts and resource plans of the state's electric utilities to meet future demand with an adequate and reliable supply of electricity at the lowest possible cost for all customers within their service areas, and satisfy all related state and federal laws and regulations."⁶ Nowhere does the IRP regulation address, or require testimony upon, utilities' or utility officers' views on environmental phenomena per se or their causes.

In short, the purpose of this proceeding—as prescribed by the Commission's IRP regulation—is to discuss means by which the Companies might continue to provide safe and reliable service at the lowest reasonable cost. The Companies' and their individual officers' views on the causes of climate change or whether it is "unprecedented in hundreds, to hundreds of thousands, of years" are entirely irrelevant to that prescribed purpose.

Notwithstanding the objectionable argumentative nature and irrelevance of this entire request, the Companies provide the following responses:

- a. In addition to the request's quotations from PPL's 2021 Climate Assessment Report, the Companies' website publicly states:

Reducing CO₂ emissions

As part of our environmental efforts across our generation fleet and throughout our business, our parent company, PPL, has set a goal to achieve net-zero carbon emissions by 2050 and is

⁵ See, e.g., id. at 6-130, 6-145; see also, e.g., IPCC Fifth Assessment Report: Working Group I, Physical Science Basis, at 474, 486-87, 720, available at https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf.

⁶ 807 KAR 5:058, Necessity, Function, and Conformity section.

targeting a 70% reduction from 2010 levels by 2035 and an 80% reduction by 2040.

We've already helped the city of Louisville reduce its CO₂ emissions by 10% and are increasingly adding more solar to further expand our existing renewable generation, including our two, nearly 100-year-old hydro facilities. We continue exploring opportunities to add more cost-effective renewable energy sources for customers.

The U.S. Environmental Protection Agency sets health-based standards, which are reviewed every five years, under the Clean Air Act Rules that apply to all emission sources in communities across the country. These are sources we see in our communities every day, like vehicles, businesses and power plants.

At LG&E and KU, we are continually investing in our facilities to ensure our company complies with local, state and federal environmental regulations. This includes monitoring, measuring and reporting our facilities' performances to the appropriate regulatory agencies.⁷

The Companies are proud of their record of safe, reliable, and economical service. They have sought and continue to seek to meet their obligation to serve their customers under all weather conditions—from below 0 °F in the winter to over 100 °F in the summer—and at every moment of the year, day or night. The Companies have always sought to do so in compliance with all applicable law, including applicable environmental regulations. The Companies have incorporated this approach in their current IRP, which evaluates various generation technologies that can reliably and economically serve our customers' energy needs under a broad range of climatic conditions.

- b. Mr. Sinclair assumed managerial responsibility for the Companies' generation planning in 2007. Since then, he has overseen the analysis that supported decisions to:
- retire 1,200 MW of coal units (Tyrone 3, Green River 3 & 4, Cane Run 4-6, and Brown 1&2);
 - construct the state's first natural gas-fired combined cycle plant (Cane Run 7), which emits 60 percent less CO₂/MWh than a typical coal unit;
 - construct the state's first (and still largest) utility scale solar plant (Brown Solar); and

⁷ <https://lge-ku.com/environment/reducing-air-emissions>

- develop what become known as Green Tariff Option #3 to enable larger customers to use renewable energy to offset their system electricity usage.

Mr. Sinclair was also a key witness in each of the Commission proceedings related to the above activities, as well as the cancelled 700 MW Green River 5 natural gas-fired combined cycle plant, which would have further reduced CO₂ emissions from coal-fired generation. (This project was cancelled in 2014 due to the termination of wholesale power supply agreements by certain KU municipal customers, thus eliminating the need for new generation.)

In addition, Mr. Sinclair oversaw the development and negotiation of two of the largest solar purchase power agreements (“PPA”) in Kentucky (100 MW Rhudes Creek PPA and 125 MW Ragland PPA), as well as the renewable power agreement (“RPA”) for the Companies’ Green Tariff Option #3 customers. Mr. Sinclair also testified before this Commission to support the economics of 25% of the Rhudes Creek PPA for all LG&E and KU customers.

During Mr. Sinclair’s tenure overseeing the Companies’ generation planning activities, the Companies have reduced their annual CO₂ emissions by approximately 7 million tons annually (20 percent) with plans to reduce this further as demonstrated by the resource plans filed in this IRP.

Mr. Sinclair has also initiated and overseen various activities related to increasing the Companies’ understanding of the issues, challenges, and economics of reliably integrating more intermittent resources into the generation portfolio.