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PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION OF	)	
KENTUCKY UTILITIES COMPANY AND	)	
LOUISVILLE GAS AND ELECTRIC	)	CASE NO.
COMPANY FOR CERTIFICATES OF PUBLIC	)	2022-00402
CONVENIENCE AND NECESSITY AND SITE	)	
COMPATIBILITY CERTIFICATES AND	)	
APPROVAL OF DEMAND SIDE	)	
MANAGEMENT PLAN	)	

KENTUCKY SOLAR INDUSTRIES ASSOCIATION, INC.

WRITTEN PUBLIC COMMENTS

The Kentucky Solar Energy Industries Association ("KYSEIA") submits its Written Public Comments ("Comments") for the Kentucky Public Service Commission's ("PSC" or "Commission") investigation into Case No. 2022-00402, *Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan*. KYSEIA respectfully requests that the Commission, Joint Applicants, and parties consider these Comments during the presentation of issues and development of facts regarding the matters in this docket.

INTRODUCTION

KYSEIA is a Kentucky trade association of solar business supporters that unites businesses across the solar industry including the contractors responsible for building solar arrays, the developers creating new power plants, the solar manufacturers crafting innovative products, the many businesses that support the industry, and the customers that install solar systems. KYSEIA's members span the state with active or completed projects across the Commonwealth including within the certified territories of the Kentucky Utility Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively "Companies").

KYSEIA'S objective is to provide leadership and promote sound policy in Kentucky as the power sector enters the solar age and has been an active participant in Commission proceedings concerning net metering, qualifying facilities and interconnection.[1] KYSEIA has also been active in consumer advocacy matters including the net metering and qualifying facilities rates and service of KU and LG&E.[2]

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[1] Case No 2022-00190, *Electronic Investigation of the Fuel Adjustment Clause Regulation 807 KAR 5:056, Purchased Power Costs, and Related Cost Recovery Mechanism*; Case No. 2020-00302, *Electronic Investigation of Interconnection and Net Metering Guidelines*; and Case No. 2019-00256, *Electronic Consideration of the Implementation of the Net Metering Act*.

[2] Including but not limited to the following: Case No. 2020-00350, *Electronic Application of Louisville Gas and Electric Company for An Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advance Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatment, and Establishment of a One-Year Surcredit*; and Case No. 2020-00349, *Electronic Application of Kentucky Utilities Company for An Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*.

KU and LG&E seek approval of proposals for construction of two natural gas combined cycle combustion turbines ("NGCC"), a 120 MWac solar photovoltaic ("PV") electric generating facility, acquisition of a 120 MWac solar facility to be built by a third-party solar developer, a 125 MW, 4-hour (500 MWh) battery storage facility, their 2024-2030 Demand-Side Management and Energy Efficiency Program Plan ("DSM" and "EE"), and a declaratory order that their entry into non-firm energy-only power-purchase agreements ("PPAs") for the output of four solar PV facilities with a combined capacity of 637 MW does not require Commission Approval.[3]

The solar proposals described in the application have a combined capacity of 877 MW, an amount significantly in excess over the 146.53 AC MW nameplate of existing facilities and 225 AC MW of current planned units.[4] KYSEIA supports these solar projects. KYSEIA, likewise, supports the battery storage proposal. The Companies note that battery storage, among other things, is not being installed to simply backup solar generation.[5] The development of storage, at both the distributed generation level and the grid-scale level is essential in moving forward with renewable energy.

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[3] The proposals are described with detail in the Joint Application (tendered Dec. 15, 2022); therefore, these written comments summarize the proposals at pages 1 through 3 of the Joint Application.

[4] Lexington-Fayette Urban County Government's and Louisville/Jefferson County Metro Government's Initial Request for Information Response (Mar. 10, 2023), Item 31 ("LFUCG LJC 1-__").

[5] Kentucky Coal Association's First Request for Information Response (Mar. 10, 2023), Item 67 ("KCA Response 1-__").

KYSEIA encourages the robust deployment of additional DSM and EE by the Companies; however, these comments do not suggest that the Companies' DSM and EE proposals are sufficient. The Companies should prioritize increasing DSM and EE programs above those described in this Application and, specifically, encourage, support, and develop distributed solar and customer-sited storage as part of the DSM portfolio.[6] The Companies cannot be allowed to be indifferent, much less antagonistic, to the role of distributed generation and customer-sited storage. The DSM and EE proposals are properly described as barely minimal. They fall well short of the efforts necessary for meeting the objectives of PPL Corp's planning for a Net Zero Carbon Future. They also fail to account for generation, storage, efficiency, and other investments already being made by KU and LG&E ratepayers.

KYSEIA does not support the NGCC proposals. They represent implementation of a policy through which the Companies seek a near 1 for 1 substitution of one form of carbon generation for another.[7] Nothing in the Companies' recent Integrated Resource Plan indicated that they were planning on constructing NGCC units or issuing an RFP for such units, and they have not yet been demonstrated as necessary or appropriate for the transition to a clean energy future.

THE ELECTRIC INDUSTRY IN THE UNITED STATES IS DECARBONIZING, A FACT ACKNOWLEDGED BY PPL CORP, KU'S AND LG&E'S PARENT CORPORATION.

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[6] *See, for background,* Response to Commission Staff's First Request for Information (filed Mar. 10, 2023), Item 23. ("Staff Response 1-__") ("Going forward, the Companies are proposing to increase funding in the Market Research budget to perform research of possible DSM offerings in this area.")

[7] Staff Response 1-25(a).

The electric industry in the United States is moving away from carbon-based generation toward renewable energy power. This transition is well-documented by numerous sources, and the necessity for this transition is aptly described by the following statement.

> Global carbon emissions must be halved by 2030 to limit warming to 1.5º C and avoid catastrophic climate impacts. As the nation coalesces around 2035 as the target year for power sector decarbonization, rapid progress must be made in the next decade in order for this target to remain in reach. The United States has already committed to reducing its economy-wide greenhouse gas emissions in 2030 by 50-52 percent below 2005 levels. Ambitious power sector decarbonization enables economy-wide decarbonization of the building, industrial, and transportation sectors, setting the U.S. on a 1.5º C pathway commensurate with international climate goals.[8]

PPL Corp, through public statements made to the investment community, recognizes this "transition to a clean energy future" and has adopted an "ambitious goal to achieve net-zero carbon emissions by 2050."[9] In the near term, through 2026, PPL Corp seeks to increase sustainable infrastructure and decrease coal-fired generation.[10]

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[8] *Power America's Clean Economy, A Supplemental Analysis to the 2035 Report*, Goldman School of Public Policy, University of California Berkeley, page 11 (April 2021). https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/2030-report-powering-americas-clean-economy; see also *Plummeting Solar, Wind, and Battery Costs Can Accelerate Our Clean Electricity Future*, Goldman School of Public Policy, University of California Berkeley (June 2020). https://www.2035report.com/electricity/downloads/

[9] PPL Climate Policy Principles. https://pplweb.wpenginepowered.com/wp-content/uploads/2022/08/PPL_Climate-Policy-Principles.pdf

[10] *Delivering Leading Financial Performance Through an Affordable Clean Energy Future*, PPL Corporation 2022 Investor Day Presentation, slides 11 and 44. (June 9, 2022) ("2022 Investor Day Presentation"). https://investors.pplweb.com/PPL-Corporation-2022-Investor-Day

PPL Corp seeks to transition 4,700 MW of coal capacity in Kentucky.[11] Renewable energy is the pathway to the Companies' "primary focus on eliminating gross emissions."[12]

As PPL Corp acknowledges:

> The electric and natural gas sectors alone cannot deliver a net-zero carbon future,[13] and policies that leverage our industry's unique ability to facilitate decarbonization reliably and affordably are key to achieving deep, economy-wide impacts.[14]

Utility-scale solar, distributed generation, and battery storage are among the suite of many renewable options and programs that are indispensable to KU's and LG&E's decarbonization; further, KU and LG&E need to offer much more than what is offered through the current docket if they are to meaningfully advance towards the goals set by PPL Corp.[15] Regrettably, the Companies do not include the PPL Corp's corporate goal

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[11] 2022 Investor Day Presentation, slides 27 through 29, and 32.

[12] Kentucky Coal Association's First Request for Information Response (Mar. 10, 2023), Item 54 ("KCA Response 1-__"). The primary focus is eliminating gross emissions. Technology to remove emissions is identified as a strategy only after gross emissions cannot be eliminated due to costs or reliability constraints. *Id.*

[13] The Companies tend to quibble a bit over the nuances of net zero emissions versus gross emissions, and the quibbling serves as an unnecessary distraction from the main concern at issue, prudent decarbonization of the Companies' generation.

[14] PPL Climate Policy Principles.

[15] In passing, the Companies should also be engaged in aggressive research and development regarding *renewables and battery storage*. While the Companies' parent discusses research and development investment as part of its clean energy strategy (2022 Investor Day Presentation, slide 32), if the priority for research and development is for technology to facilitate the continued burning of coal or the deployment of natural gas generators, that prioritization represents a commitment to preserving the status quo rather than to a transition. That strategy will cause the Companies to fall further behind and result in the Companies reacting to regulations rather than preparing for them.

concerning net zero carbon emission by 2050 as "an evaluation factor in the development of the current resource portfolio assessment."[16]

Moreover, KYSEIA points out that focusing on the electric and gas sectors is critical to transition away from carbon. The status quo concerning carbon generation is not sustainable. As a matter of necessity, including the economic realities attendant to continued reliance upon carbon generation, increasing renewable energy and increasing battery storage are two of the primary pathways to decarbonization.[17] The solar generation and battery storage proposed in the instant application responsibly move the Companies forward on that path.

The Companies Recognize and Acknowledge the Sector's Current Challenges with Coal and Natural Gas.

The Joint Application and the evidence filed thus far in support of the proposals thoroughly demonstrate (as discussed above) that the Companies cannot reasonably continue with coal generation and must move away from it. The foundation of PPL Corp's commitment to net zero emissions is both economic and regulatory reality. The risks and costs of carbon generation are unavoidable and will only increase. KYSEIA submits that discussion of 2050 has its place; however, discussion of 2023 and current conditions is just as relevant and presents compelling support for transforming the Companies' diversity of supply options.

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[16] Joint Intervenors' Initial Requests for Information Responses (filed Mar. 10, 2023), Item 1-149 ("JI Responses 1-__").

[17] There are other pathways to decarbonization including wind and hydro facilities. The Companies need to be responsibly moving forward on all renewable options.

The Companies acknowledge the value of solar proposals to "help hedge future natural gas price volatility and reduce exposure to possible CO_2 emission regulations."[18] The future (in actuality) is now regarding natural gas price volatility.[19] Natural gas is already observed as experiencing "record volatility."[20] There is clearly a present necessity for these solar projects.

Further; coal is properly characterized as experiencing record high prices and increasingly difficult supply conditions. In fact, from the Companies' recent FAC dockets:

> Maintaining supplier diversity has become increasing more difficult as the number of coal suppliers continues to decline because of falling coal demand and industry consolidation.[21]
>
> …
>
> During the past year, the coal market has experienced and continues to experience significant changes that have resulted in tight supply and record high prices.[22]

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[18] Staff Response 1-25(a) (footnote omitted); *see also* LFUCG LJC Response 1-23 (solar projects a hedge against future fuel prices and CO_2 regulations).

[19] United States Energy Information Administration, Today In Energy (August 24, 2022) (discussing natural gas price volatility in the first quarter of 2022). https://www.eia.gov/todayinenergy/detail.php?id=53579 retrieved Nov. 30, 2022.

[20] *Id.*

[21] Case No. 2022-00265, *An Electronic Examination of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company from November 1, 2021 to April 30, 2022*, and Case No. 2022-00266, *An Electronic Examination of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 2021 to April 30, 2022*, KU and LG&E Joint Direct Testimonies (filed Sept. 30, 2022) (Billiter Testimony at 4 [PDF 5 of 24]).

[22] *Id.*

Further, during the recent December Winter Weather Event, there were LG&E and KU coal units that were not reliably producing power during the 48 to 72 hours when needed. They were operating in less than firm fashion. Similarly, LG&E and KU gas units were not operating at full output during this same period, and the Companies have acknowledged a major problem with natural gas supply during this Weather Event. In sum, the rolling blackouts in the LG&E's and KU's certified territories were consequent to problems with carbon units and fuel. There needs to be a serious reconsideration of the Companies' representations concerning reliability in its planning. To make up for the lack of generation during the Winter Weather Event, the Companies relied heavily upon the neighboring PJM and MISO regions (and TVA) to import power. There, likewise, needs to be serious reconsideration of the Companies' representations concerning RTOs.

There is a present necessity and justification for these solar projects because carbon fuel problems and emissions regulations have already arrived. It is no longer simply a matter of the Companies positioning themselves for the future. At issue is the need for the Companies to act now. The Inflation Reduction Act, as noted through evidence in this docket and the Companies' recent IRP, provides additional incentives for renewables beyond the incentives currently available.

SUMMARY

KYSEIA supports the Companies' decision to pursue additional utility-scale solar projects and battery storage proposed through this Application. The expansion of renewable energy and battery storage will, among other things, reduce energy costs in an environmentally responsible way. KYSEIA further urges all stakeholders to also pursue policies for the expansion of distributed generation, energy efficiency, and demand-side management programs.

The Companies' efforts demonstrate some movement forward. These comments, however, should not be construed as characterization or assessment of the Companies' efforts through this proposal or its overall strategy regarding renewables as sufficient. The Companies state that they can address all the energy needs of their customers through renewable generation.[23] Costs are obviously a factor.[24] Nonetheless, renewable energy offers far more benefits than those identified by the Companies, and they are encouraged to quicken their pace in their movement forward. Moreover, the Companies should expand their solar programs and services to allow ratepayers to more easily make direct investments in solar.

These written comments also should not be construed as characterization or assessment of PPL Corp's strategy as appropriate. PPL Corp's goal, through its own words, is not necessarily moving away from coal; rather, PPL Corp is moving away from "unabated" coal. There is a very big difference in these two approaches. Further, PPL Corp is embracing another carbon fuel, natural gas, as the means through which it plans to balance its "unabated" coal risk commitments. PPL Corp's efforts contain some movement forward; however, there are several aspects of PPL Corp's renewable energy strategy warranting improvement.

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[23] Kentucky Attorney General's Initial Request for Information Response (Mar. 10, 2023), Item 53 ("OAG Response 1-53").

[24] *Id.*

WHEREFORE, KYSEIA tenders these written comments and respectfully requests that the Commission consider them as it investigates and deliberates upon the proposals contained in the instant application.

Respectfully submitted,

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