

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

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| ELECTRONIC 2024 JOINT INTEGRATED |) | |
| RESOURCE PLAN OF LOUISVILLE GAS AND |) | Case No. 2024-00326 |
| ELECTRIC COMPANY AND KENTUCKY |) | |
| UTILITIES COMPANY |) | |
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SIERRA CLUB’S MOTION TO INTERVENE

Pursuant to K.R.S. § 278.310 and 807 K.A.R. 5:001 Section 4(11), Sierra Club respectfully moves for full intervention in the above-captioned proceeding filed by Louisville Gas and Electric Company and Kentucky Utilities Company (collectively, “LG&E/KU” or “the Companies”). LG&E/KU has filed its 2024 Integrated Resource Plan (“IRP”), including its analysis of changes in load forecast, transmission, the regulatory climate, and joining PJM. In December 2022, LG&E/KU filed an application for Certificates of Public Convenience and Necessity (“CPCN”), which sought, among other things, to retire Ghent Unit 2 and Brown Unit 3 as these retirements were part of a least-cost plan.¹ Less than two years later, LG&E/KU have decided not to retire Ghent Unit 2 but rather to install selective catalytic reduction (“SCR”) technology on the unit and to not retire Brown Unit 3 until 2035.² LG&E/KU’s 2024 IRP Recommended Resource Plan also adds a significant amount of new generation beyond what

¹ Case No. 2022-00402, Joint Application of KU and LG&E for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan (Dec. 15, 2022) at 8, https://psc.ky.gov/pscecf/2022-00402/rick.lovekamp%40lge-ku.com/12152022012325/04-KU_LGE_Joint_Application_2022-00402.pdf.

² LG&E/KU 2024 IRP Executive Summary at 8, Table 3.

was approved in the CPCN case, Case No. 2022-00402—in 2023, a new 645 MW natural gas combined cycle (“NGCC”) unit to be in service by the end of 2027, a new 125 MW four-hour battery energy storage system (“BESS”), two 120 MW solar projects in Mercer and Marion Counties, and four solar power purchase agreements.³ LG&E/KU’s 2024 IRP Recommended Resource Plan adds another 400 MW of battery storage in 2028, a second 645 MW NGCC unit in 2031, and an additional 500 MW of solar in 2035.⁴ A number of key assumptions are driving this Recommended Resource Plan, including that the U.S. Environmental Protection Agency’s (“EPA’s”) Clean Air Act section 111(d) rules applicable to power plants will never become enforceable, that LG&E will experience mid- to high-load growth because of data centers that don’t currently exist, and increases in supply-side resource costs.⁵

Sierra Club has extensive experience evaluating the issues raised in the Companies’ IRP. Sierra Club has regularly intervened successfully in matters before the Kentucky Public Service Commission and in other jurisdictions nationwide, including numerous proceedings regarding IRPs. In fact, Sierra Club has previously intervened in proceedings by LG&E/KU in Kentucky, including Case No. 2022-00402 (Companies’ 2022 CPCN case), Case No. 2014-00002 (Companies’ CPCN case for a new NGCC plant at Green River Generating Station), Case No. 2014-00003 (Companies’ Application for approval of new Demand-Side Management Program), Case No. 2014-00131 (Companies’ 2014 Joint IRP), Case No. 2014-00372 (LG&E’s 2014 rate case), and Case No. 2021-00393 (Companies’ 2021 Joint IRP). As the Commission has previously recognized, it should grant Sierra Club’s motion to intervene because Sierra Club possesses “special knowledge and expertise in multiple areas” and is thus “likely to present

³ LG&E/KU 2024 IRP Executive Summary at 1-2, Volume I at 8-14.

⁴ LG&E/KU 2024 IRP Executive Summary at 8, Table 3.

⁵ *Id.* at 3-7.

issues and develop facts that will assist the Commission in considering this matter without unduly complicating or disrupting the proceedings.”⁶

I. MOVANT

Sierra Club moves to intervene in this proceeding on behalf of itself and its members who live and purchase utility services in Kentucky, many of whom are residential customers of LG&E/KU. Sierra Club is a national, non-profit environmental and conservation organization. Sierra Club has approximately 3.5 million members and supporters across its sixty-four chapters, covering all fifty states, the District of Columbia, and Puerto Rico. More than 4,900 Kentuckians belong to Sierra Club’s Kentucky Chapter.⁷ Sierra Club’s Kentucky address is: Sierra Club, Kentucky Chapter, P.O. Box 1368, Lexington, KY 40588.

Sierra Club seeks to participate in this proceeding in order to protect (1) its organizational interests and (2) the interests of Sierra Club members who (a) are customers of the Companies and/or (b) live, work, and recreate in and around the Companies’ power units, and who will be directly affected by any Commission order regarding the proposed IRP.

Sierra Club and its members who are LG&E/KU customers or otherwise directly impacted by the Companies’ facilities have economic and environmental interests in ensuring that LG&E/KU’s plans provide for the least-cost means of meeting customer energy and

⁶ See, e.g., *In re: Elec. Application of Louisville Gas and Electric Co. for an Adjustment of Its Electric Rates and for CPCNs*, Case No. 2016-00371, Order (Jan. 11, 2017) at 3, https://psc.ky.gov/pscscf/2016%20Cases/2016-00371//20170111_PSC_ORDER.pdf; *In re: Elec. Application of Ky. Utils. Co. for an Adjustment of Its Electric Rates and for CPCNs*, Case No. 2016-00370, Order (Jan. 11, 2017) at 3, https://psc.ky.gov/pscscf/2016%20Cases/2016-00370//20170111_PSC_ORDER01.pdf; *In re: Application of Ky. Utils. Co. for an Adjustment of Its Electric Rates*, Case No. 2014-00371, Order (Jan. 13, 2015) at 4-5, https://psc.ky.gov/pscscf/2014%20Cases/2014-00371//20150113_PSC_ORDER.pdf; *In re: Application of Louisville Gas and Electric Co. for an Adjustment of Its Electric Rates*, Case No. 2014-00372, Order (Jan. 12, 2015) at 4, https://psc.ky.gov/pscscf/2014%20Cases/2014-00372//20150112_PSC_ORDER01.pdf.

⁷ Requiring member names infringes on Sierra Club members’ rights of free association. However, if required by Commission order, Sierra Club will provide the names of one or more specific members.

reliability needs while also avoiding unnecessary pollution. Sierra Club and its members have economic and environmental interests in whether further clean energy alternatives would be more affordable or lower risk, while maintaining reliability. Sierra Club members who are LG&E/KU customers have an economic interest in ensuring that future electricity rates truly represent the least-cost option, and an interest in the safety and reliability of the electric grid.

Sierra Club and its members also have environmental and health interests in transitioning away from polluting fossil fuel generation resources as soon as possible. Continued burning of fossil fuels contributes to polluting the surrounding communities and to climate change. These outcomes adversely impact the environment and public health, contrary to the interests of Sierra Club and its members.

Finally, Sierra Club and its members have procedural and organizational interests in exercising their rights to participate in this proceeding to advocate for accelerating the electric sector's transition from high-cost, harmful fossil fuel-based generation to cleaner, more affordable energy sources that save customers money, preserve reliability, and assist impacted communities and workers. Sierra Club seeks full intervention to ensure that its and its members' interests are fully represented in ensuring that LG&E/KU's investment, operational, and resource decisions are reasonable. Specifically, Sierra Club will investigate, among other issues, whether the Companies' proposed portfolio is the least-cost option for customers, if the assumptions used in the IRP are reasonable, and if the Companies have fully evaluated the costs to comply with the suite of new environmental regulations promulgated by the U.S. EPA and taken full advantage of the Inflation Reduction Act; and if the Companies could avoid costs by fully converting or retiring existing units and investing more in renewable energy, storage, or efficiency measures

and planning. Sierra Club may advance other positions as it conducts discovery in this proceeding.

II. THE COMMISSION SHOULD GRANT SIERRA CLUB’S MOTION.

Although only necessary to satisfy one, Sierra Club satisfies both of the two independently sufficient bases for timely intervention. First, Sierra Club will aid the Commission’s full consideration of the matters at hand—as it has done uniformly in the past. Second, Sierra Club has a special interest not otherwise adequately represented in this case. The Commission may grant intervention on either basis without opining on the other, and has done so on the former ground without reaching the latter.

A. Movants Will Assist the Commission’s Consideration Without Complication.

The Commission should grant Sierra Club intervention because it is “likely to present issues or to develop facts that assist the commission in fully considering the matter without unduly complicating or disrupting the proceedings.”⁸

In order to ensure that utilities “furnish adequate, efficient and reasonable service” and charge “fair, just and reasonable rates,”⁹ Kentucky regulation requires “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.”¹⁰ For that purpose, regulations require that electric utilities file an IRP every three years.

⁸ 807 K.A.R. 5:001, Section 4(11)(b).

⁹ K.R.S. § 278.030(1)-(2).

¹⁰ 807 K.A.R. 5:058 (necessity, function, and conformity).

Regulations explicitly articulate the information that utilities must include in an IRP: historical and projected demand, resource information, financial data, and other operating performance and system information.¹¹ And regulations also specify how the IRP should utilize and analyze that information: it should “discuss the facts, assumptions, and conclusions, upon which the plan is based and the actions it proposes.”¹² In selecting a resource mix, the utility must not only demonstrate how that resource mix satisfies reliable and adequate supply at lowest possible cost, but also test key uncertainties, including alternative resource options that may be cost-effective.¹³ The IRP should not merely lock in an assumption, but instead toggle between them, showing “how uncertainties in those assumptions and judgments were incorporated into analyses.”¹⁴ The IRP is intentionally and obviously designed to ensure that Kentuckians have access to affordable and reliable electricity by proactively planning for the future and testing assumptions. Utilities must analyze *at a granular level* the economics, reliability, and environmental risk of existing generation and contrast it with other options, including replacement generation.

This proceeding comes at a critical juncture for LG&E/KU. Existing federal Clean Air Act and Clean Water Act regulations will require LG&E/KU to modify its use of coal as a fuel source at the Ghent, Brown, Mill Creek and Trimble power plants, install pollution controls on coal-fired units, and/or to retire such units. Most notable is the U.S. EPA’s regulation of greenhouse gas emissions under Section 111(d) of the Clean Air Act.¹⁵ While LG&E/KU’s 2024

¹¹ 807 K.A.R. 5:058, Section 1(2).

¹² *Id.*

¹³ *Id.* Section 8(1).

¹⁴ *Id.* Section 8(5)(b).

¹⁵ *See* New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units, 89 Fed. Reg. 39,798 (May 9, 2024).

IRP generally discusses Section 111(d) of the Clean Air Act, the Good Neighbor Plan, the Mercury and Air Toxics Standard, National Ambient Air Quality Standards for Ozone, particulate matter, and sulfur dioxide and other newly promulgated rules, the Companies do not discuss their preferred compliance option or the cost of these compliance options. Instead the Companies note that they will continue to follow these rules and assess their impacts on operating facilities in the future.¹⁶ But LG&E/KU's 2024 IRP Recommended Resource Plan includes capital investments that will be completed by 2028 for only a small subset of these existing regulations.¹⁷

Sierra Club is seeking to present testimony regarding whether such a piecemeal approach to complying with environmental regulations is reasonable. Specifically, Sierra Club will provide information on and input to the Commission addressing whether the additional generation resources proposed, in conjunction with the resources approved last year, without the offset of the retirement of any other generation assets, some of which were proposed for retirement just two years ago, might not be the least-cost plan in light of reasonable demand growth and the full range of regulatory, capital, operating, and fuel costs that Ghent, Brown, Mill Creek and Trimble face. The Commission cannot reach a logical determination on the adequacy of the IRP without evaluating each of those issues.

Sierra Club routinely intervenes in public utility commission proceedings nationwide and in Kentucky, as discussed above. In these interventions, Sierra Club advocates for utility

¹⁶ See, e.g., LG&E/KU 2024 IRP Volume I at 8-43 (“The Companies will continue to follow these ozone NAAQS issues and assess their impacts on operating facilities.”), 8-44 (The Companies will continue to follow these issues and implement any needed changes to ensure compliance.”), 8-47 (“The Companies will continue to follow all these GHG issues and assess their impacts on operating facilities.”), and 8-49 (“The Companies will continue to assess its compliance strategies so that impacts to units where closure is considered complete will be minimized.”).

¹⁷ LG&E/KU 2024 IRP Executive Summary at 6-7.

practices, investments, and policies that promote the development of cost-effective energy efficiency and clean, renewable energy, which can reduce overall system costs, electricity rates, and pollution while also maintaining reliability.

Particularly in light of that experience, Sierra Club respectfully submits that its participation will help develop a thorough record, stimulate a robust evaluation of the issues, and inform the Commission’s ultimate decision about the reasonableness, adequacy, and prudence of LG&E/KU’s 2024 IRP Recommended Resource Plan. Through discovery, the filing of expert testimony, examination of witnesses, and legal briefing, Sierra Club will help to illuminate the economic and environmental risks associated with continued reliance on fossil fuel-fired generation, as well as the potential benefits of meeting energy and capacity needs with additional affordable, renewable energy generation or storage capacity. Sierra Club has knowledge of and experience with these kinds of questions, having previously studied, argued, and helped resolve them before the Commissions in Kentucky and other states. Sierra Club has particular expertise with analysis of how utilities should evaluate compliance costs and compliance options associated with the suite of new environmental regulations, including the U.S. EPA’s greenhouse gas rule under Clean Air Act Section 111(d), the revised Effluent Limitation Guidelines Rule (“ELG”), the revised Mercury and Air Toxics Standards Rule (“MATS”), the Good Neighbor Plan, and other federal rules. In addition, Sierra Club has experience with how utilities can avail themselves and their customers of the full benefits of the Inflation Reduction Act. Sierra Club will aid the Commission by helping to identify, clarify, and apply key principles that bear on whether LG&E/KU’s proposals “furnish adequate, efficient and reasonable service” and otherwise comport with all applicable laws and regulations.¹⁸

¹⁸ K.R.S. § 278.030(2).

Moreover, Sierra Club’s participation will not unduly complicate or disrupt the proceeding, and will not be unduly duplicative of that of any other party to this case. Sierra Club will comply with all Commission rules and deadlines, as it has in the past. The Commission has not yet set a case schedule for this proceeding, so this motion for intervention predates the established intervention deadline. Except for LG&E/KU’s filing of the IRP, no other substantive pleadings or testimony have been filed. In sum, Sierra Club’s participation here will “assist the commission in fully considering” these important issues without any “undu[e] complicati[on].”¹⁹

B. Movants Have Special Interests Not Otherwise Adequately Represented.

The Commission should also grant Sierra Club intervention for the independently sufficient reason that it “has a special interest in the case that is not otherwise adequately represented.”²⁰ No other party to this docket adequately represents the institutional and policy interests of Sierra Club and its members, including as it pertains to the environment and public health. Sierra Club’s members have a unique interest in avoiding continued investment in expensive fossil fuel energy resources and infrastructure, especially in light of current and impending environmental regulations and the rapid development of renewable energy and storage technology. Sierra Club and its members possess the economic, environmental, and public health interests described above.

Sierra Club is uniquely situated to represent its interests and the interests of its members in this proceeding as a result of its expertise and experience in energy policy and law, renewable energy generation, energy efficiency, and environmental regulations. Sierra Club’s interests are “special,”²¹ because they are quantitatively unique—Sierra Club and its members value their

¹⁹ 807 K.A.R. 5:001, Section 4(11)(b).

²⁰ *Id.*

²¹ *Id.*

interests more deeply on average than the community at large—and qualitatively unique—Sierra Club publicly advocates for, invests in, and otherwise champions these interests in exceptional ways. These interests are implicated “in the case,”²² due to the proposed supply-side and demand-side management plans.

Finally, Sierra Club’s special interests in the case are “not otherwise adequately represented,”²³ because no other party has either the same expertise or the inclination to advocate in the same ways that Sierra Club will. The Attorney General, for instance, has neither the capacity nor the inclination (as his office has stated on the record in the past) to fully represent Sierra Club’s more focused interests in conservation and the like, because he must represent the values and prerogatives of ratepayers generally—a broad, mixed obligation that has at times caused his office to take positions at odds with Sierra Club. Sierra Club’s intervention is necessary to adequately represent its unique interests in this proceeding.

III. CONCLUSION

Sierra Club respectfully requests that the Commission permit Sierra Club to fully intervene in this proceeding, as it has in other recent proceedings.

Dated: October 29, 2024

Respectfully submitted,

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²² *Id.*

²³ *Id.*

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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Motion to Intervene in this action is being electronically transmitted to the Commission on October 30, 2024, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

/s/ Joe F. Childers
JOE F. CHILDERS