

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:

ELECTRONIC 2022 INTEGRATED RESOURCE)
PLANNING REPORT OF KENTUCKY POWER) CASE NO.
COMPANY) 2023-00092

LS POWER DEVELOPMENT, LLC'S WRITTEN COMMENTS

LS Power Development LLC ("LS Power" or "Company") files these comments in accordance with the Kentucky Public Service Commission's ("Commission") July 28, 2023 Order setting forth the amended procedural schedule, in the above-captioned proceeding regarding Kentucky Power Company's ("Kentucky Power") 2022 Integrated Resource Plan ("IRP").

INTRODUCTION

Founded in 1990, LS Power is a premier development, investment, and operating company focused on the North American power and energy infrastructure sector, with leading platforms across generation, transmission, and energy transition solutions.¹

¹ In addition to its current 19,000 MW of operating generation, LS Power's portfolio includes the following platforms: (i) **REV Renewables** – renewables and energy storage; (ii) **EVgo** – the nation's largest public fast-charging network for electric vehicles; (iii) **Endurant Energy** – distributed energy infrastructure solutions; (iv) **CPower Energy Management** – distributed energy resource management solutions; (v) **Primary Renewable Fuels, LLC** – landfill gas-to-renewable natural gas development and operating platform; and (vi) **LS Power Grid** – developer of high-voltage transmission lines that enhance grid reliability and efficiency and connect renewable generation to load centers.

Since inception, LS Power has developed or acquired over 47,000 megawatts ("MW") of power generation, including utility-scale solar, wind, hydro, battery energy storage, and natural gas-fired facilities. Through LS Power Grid, the Company has constructed and operates approximately 680 miles of high-voltage transmission and has another 200+ miles of transmission lines and multiple grid infrastructure projects currently under construction or development. LS Power actively invests in and scales businesses that are accelerating the energy transition, including renewable energy, energy storage, electric vehicle charging, demand response, microgrids, renewable fuels, and waste-to-energy platforms. The Company has raised \$53 billion in debt and equity capital to support North American infrastructure and currently operates 19,000 MW of power generation.

LS Power's Energy Operations in Kentucky

Through its affiliates, LS Power has a long-standing investment in the energy infrastructure of Kentucky, including 976 MW of efficient, flexible, gas-fueled generation located in Kentucky Power's territory that is owned and operated by affiliates of LS Power.

LS Power's Riverside energy facility in Lawrence County, Kentucky is a natural gas-fueled power generation facility of approximately 976 MW (summer rating). The capacity and electrical output from Riverside currently is sold into the PJM Interconnection, L.L.C. ("PJM") market. Riverside can provide electricity for more than 50,000 Kentucky households and consists of five peaking units that are activated during grid emergencies and when demand for electricity is high. These peaking units are critical to energy reliability today and will be even more critical in the future as more weather-dependent renewables such as wind and solar power the grid. As power from renewables fluctuates or is unavailable during certain hours, the grid will need flexible, quick-responding resources like those at Riverside to balance and backstop intermittent output

from renewable resources and maintain reliability. Additionally, Riverside is also a major electric customer of Kentucky Power and is impacted by the cost of any supply decisions made by the utility.

COMMENTS

Consumers and Kentucky Benefit from Robust Energy Competition

LS Power believes competition is the best means of providing innovative and cost-effective products and services across the energy landscape in Kentucky. The promotion of robust competition throughout Kentucky's energy industry should be a foundational tenet of all energy policy in the state and LS Power is pleased to see Kentucky Power's recently announced request for proposal (RFP) for approximately 875 MW of PJM-accredited summer capacity and approximately 1,300 MW of PJM-accredited winter capacity.

Competitive procurement of resources ensures that Kentucky Power's customers are benefitting from low cost, low risk and innovative energy resources to meet Kentucky Power's load obligations identified in the IRP. A competitive procurement process enables the largest number of available existing and new resources within Kentucky Power's territory or deliverable into it to compete in the process, driving down the ultimate cost to ratepayers. Additionally, an open and competitive process with proposals from multiple resources and parties enables an independent third-party such as the Commission to adequately evaluate the risks associated with each resource. Examples of such risks that should be evaluated include development and permitting risks, the potential for increased costs or cost overruns and who bears those costs, and the risk and cost of obtaining access to both fuel supply and electrical interconnection. Finally, competition will enable Kentucky Power to match its identified resource need with the resources best suited to meet the utility's requirements. A specific number of MW of firm resources needed

to balance and backstop renewables can be met by multiple resource types such as baseload gas, peaking facilities, energy storage, and demand response. Competitive procurement processes, particularly those designated as all-source solicitations, enable each of those resource types to supply customers' needs on a competitive basis, rather than a utility selecting the type of resource it wants to build.

However, true competition in a regulated construct requires competitive requests for proposals ("RFPs") to be offered for all resource procurements and requires those RFPs to be managed by an independent third party that provides an open and transparent analysis such as the Commission. Without such a transparent process, asset owners, developers and ratepayers cannot have full confidence that the resources selected are in fact the best and most cost competitive, including fuel and electrical interconnection costs, considering risk, reliability, and all other considerations to fill the supply requirement.

Reliable, Dispatchable Resources are Critical to Supporting the Objectives of Kentucky Power's IRP

LS Power agrees with Kentucky Power's four objectives for the 2022 IRP that align to customer and corporate priorities: reliable and affordable power, rate stability, maintaining reliability, and sustainability. Similarly, LS Power agrees with Kentucky Power's assessment that "More recently, greater amounts of intermittent renewable generation in the market combined with more extreme weather patterns have necessitated more flexible resources."²

The addition of significant solar and wind resources creates new challenges for the grid that gas-fired resources are particularly well-suited to address due to their ability to turn on and off and ramp up and down quickly as needed by the grid. These challenges include balancing short-

² 2022 IRP, p. 88

term supply/demand imbalances, managing new summer and winter demand peaks created by increasing instances of severe weather events and growth in load from data centers and electrification, and filling in the supply gaps created when solar and wind generation are not available, in particular, during the early morning and early evening hours. With hydrogen and carbon capture technologies in the early stages of commercialization and infrastructure build out, and the limited ability of four- to eight-hour battery energy storage systems to manage extended duration emergency events such as Winter Storm Elliott in December 2022, gas-fired units continue to provide critical reliability service to the grid and are important in supporting Kentucky's energy transition going forward. Gas-fired units are also able to provide ancillary services to the grid that are not replicable by solar and on- and off-shore wind, such as reserves, regulation and reactive power services and may have benefits to the transmission system by being located near load centers.

Demand response (“DR”) resources also play a vital role supporting the electric grid as it transitions to accommodate more renewable resources. DR is an existing and proven flexible resource that provided over 5%³ of PJM’s cleared capacity in the Base Residual Auction (“BRA”) for Delivery Year 2024/2025 with dispatchable and low or negative emissions generation. DR resources also benefit local businesses by enabling energy users to create savings and better manage their electric bills. While LS Power supports the continued study of DR and demand-side management (“DSM”) resources, we also recommend that Kentucky Power pursue competitive, market-based approaches to procure additional DR resources for its load requirements. While Kentucky Power reports an existing 6.0 MW of interruptible load within its territory, the

³ Based on 7,992.7 MW of cleared Demand Response and 147,478.9 MW of total cleared MW in the BRA for DY 2024/2025 per PJM. <https://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-base-residual-auction-report.ashx>

percentage of capacity supplied by DR in the most recent PJM capacity auction suggests significantly more DR MW may be available to Kentucky Power through competitive procurement. The best way to fully access this DR resource is to procure DR from the multiple providers who are active within PJM and already have relationships with national and regional businesses that are located in Kentucky Power's territory.

Existing Resources Are Available in Kentucky Power's Service Territory and Will Be Critical to Kentucky Power Achieving its IRP Objectives at an Affordable Cost

As Kentucky Power and the Commission assess how to reliably supply affordable resources to satisfy the need and objectives identified in the Kentucky Power IRP, existing resources, especially those located in the state and Kentucky Power's territory, must be considered as part of the plan for the reasons set forth herein.

Kentucky Power's utilization of such existing resources would provide a number of benefits as they reduce the cost, risk, and lead times associated with new resource procurement as well as support local investment:

- (a) *Cost Competitive:* In light of current inflationary pressures in the electric industry and the economy overall, existing, already-constructed resources offer a cost competitive alternative to new builds. Additionally, the cost of new electric interconnections in PJM and securing new firm gas transportation can be high and availability is often challenging, which makes resources that already have those rights particularly well-positioned in comparison to new builds.
- (b) *Risk Reducing:* Operating assets benefit ratepayers by avoiding certain risks inherent in any new build development and construction project. Examples of risks associated

with new builds include difficulties permitting, construction delays, cost overruns and utilizing newer technologies with less operating history, all of which can ultimately lead to unexpected cost increases for ratepayers.

(c) *Greater Flexibility*: Existing resources offer greater flexibility in procurement timing, quantity and duration to allow Kentucky Power to select the optimal resource to meet a particular need. While new resources have substantial lead times and are often added in lumpy quantities, operating assets can be available more quickly and in smaller increments, avoiding the cost of short-term market purchases that fill resource gaps while a new facility is being constructed. Additionally, existing resources can be made available in shorter durations (such as 10- 15- or 20-year terms) than new resources, which provides the utility with greater flexibility to reevaluate resource needs and the available commercial technologies to meet those needs in the future.

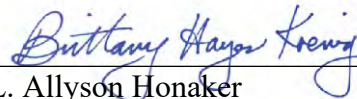
(d) *Support Local Investment*: Existing facilities located in Kentucky Power's territory provide numerous economic benefits to local communities. These include direct benefits such as local employment, property taxes and community donations and volunteerism as well as indirect benefits through the plants' spending on equipment, repairs and other services from businesses within the community.

For these reasons, LS Power believes that existing facilities within the state, and Kentucky Power's territory in particular, must not only be considered and evaluated as part of Kentucky Power's resource planning process but provided equal opportunity to compete to supply its resource needs through an open, transparent, and independently run competitive procurement process.

CONCLUSION

LS Power appreciates the opportunity to provide these comments on Kentucky Power's 2022 IRP. LS Power remains ready to compete to bring innovative, low-cost, reliable solutions to meet growing demand for electricity in Kentucky's energy economy.

Respectfully Submitted,

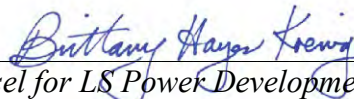


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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of LS Power Development, LLC's Comments on Kentucky Power's IRP is being electronically transmitted to the Commission on October 6, 2023; and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding. Pursuant to the Commission's July 22, 2021 Order in Case No. 2020- 00085, no hard copies of this filing will be made.



Counsel for LS Power Development, LLC