From: PSC Public Comment
To:
Subject: RE: Rye Development 10/2023 Comments (Case No. 2022-00402)
Date: Wednesday, October 25, 2023 10:02:00 AM
Attachments: image001.png

Case No. 2022-00402

Thank you for your comments on the application of Kentucky Utilities Company and Louisville Gas and Electric Company. Your comments in the above-referenced matter have been received and will be placed into the case file for the Commission's consideration. Please cite the case number in this matter, 2022-00402, in any further correspondence. The documents in this case are available at View Case Filings for: 2022-00402 (ky.gov)

Thank you for your interest in this matter.

From: Sandy Slayton [redacted]
Sent: Monday, October 23, 2023 4:00 PM
To: PSC Public Comment <PSC.Comment@ky.gov>
Cc: Michael Rooney <Michael@ryedevelopment.com>
Subject: Rye Development 10/2023 Comments (Case No. 2022-00402)

[redacted]

[redacted]

Good afternoon,

Please find attached the public written comments of Rye Development for Case No. 2022-00402. Rye Development is not a party to the proceeding. Please file them into the public comments portion of the record for the docket.

If you have any questions or concerns, please contact me at your convenience.

Sincerely,

Sandy

Rye Development
Sandy Slayton

Vice President, Environmental
[redacted]
[redacted]
[redacted]

Rye Development

100 S. Olive Street, West Palm Beach, FL 33401

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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 DEMAND SIDE MANAGEMENT PLAN	)	CASE NO. 2022-00402

RYE DEVELOPMENT

WRITTEN COMMENTS

Rye Development, LLC ("Rye") previously entered comments into the record in this case on April 17, 2023. Rye is developing the Lewis Ridge pumped storage hydropower project, a proposed 287 MW 8-hour, closed-loop pumped storage facility within KU's service territory. Rye respectfully submits written comments upon the Post-Hearing Brief of Kentucky Utilities and Louisville Gas and Electric Company ("LGE/KU") filed on September 22, 2023.

In comparing their proposed Brown BESS with the Brown Solar Facility, LGE/KU's Post Hearing Brief, at (I)(B)(4), conveys:

> Most of these same potential benefits [of the Brown Solar Facility] and more apply to Brown BESS: (1) it will provide valuable experience at utility scale

> with a technology that will be vital to accommodating and optimizing increasing penetration of renewables in coming years to hedge fuel costs and potential CO2 compliance costs; (2) its cost will be significantly offset by tax credits; (3) its nearly instantaneous ramping capability might be particularly valuable if the Companies eventually join an RTO because RTOs are expressing a need for rapid-ramping resources; and (4) it could allow for the eventual retirement of an existing large-frame combustion turbine without thermal replacement (if such were permissible under Senate Bill 4 in the future).[1]

Rye submits that a comprehensive comparison of available options demonstrates that the lower risk, longer life storage technology option is pumped storage hydropower, and this option has not been adequately and fairly reviewed by the Companies.

1. As LGE/KU note: Battery technology at grid scale is still largely unproven on its own system whereas over 90% of operational grid scale storage is pumped storage hydropower.
2. The Lewis Ridge project is fully eligible to take advantage of federal tax credits, and Rye anticipates the project receiving maximum benefit given the projects locally and domestically sourced materials as well as its location within a former coal-impacted community.
3. As a replacement resource for existing larger-frame combustion, pumped storage is better suited given:

[1] https://psc.ky.gov/pscecf/2022-00402/kendrick.riggs%40skofirm.com/09222023031035/PUBLIC_-_REDACTED_VERSION_KU-LGE_Post-Hearing_Brief.pdf, page 29.

a. Its long asset life, 75-100 years, vs. lithium ion 12-15 years;

b. Operational flexibility including little-to-no degradation during charge/discharge cycles and providing critical ancillary services to the grid;

c. Long duration discharge times, that better mirror existing fossil-based generation characteristics (8-12 hour discharge cycle); and

d. Lowest environmental impact, of any existing storage technology available.[2]

Rye urges the Commission to further examine LGE/KU's assessment of available storage options when considering replacement capacity to ensure grid reliability and affordability for generations to come.

Respectfully submitted,

Sandra J Slayton

Sandy Slayton
On Behalf of Rye Development

[2] Environ. Sci. Technol. 2023, 57, 33, 12251–12258. Publication Date: August 11, https://doi.org/10.1021/acs.est.2c09189