## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR A SITE COMPATIBILITY CERTIFICATE FOR THE CONSTRUCTION OF A BATTERY ENERGY STORAGE SYSTEM FACILITY AT E.W. BROWN GENERATING STATION IN MERCER COUNTY, KENTUCKY

CASE NO. 2024-00082

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## <u>COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION</u> <u>TO LOUISVILLE GAS AND ELECTRIC COMPANY</u>

Louisville Gas and Electric Company (LG&E), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on May 21, 2024. The Commission directs LG&E to the Commission's July 22, 2021 Order in Case No. 2020-00085<sup>1</sup> regarding filings with the Commission. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

Each response shall include the question to which the response is made and shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the

<sup>&</sup>lt;sup>1</sup> Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

LG&E shall make timely amendment to any prior response if LG&E obtains information that indicates the response was incorrect or incomplete when made or, though correct or complete when made, is now incorrect or incomplete in any material respect.

For any request to which LG&E fails or refuses to furnish all or part of the requested information, LG&E shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied and scanned material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, LG&E shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Provide a schedule for the project, starting from the Commission's approval to the completion of the project, including the length of each construction phase. Include in the response when LG&E believes peak construction will occur within the timeline.

-2-

2. Explain if an Engineering, Procurement, and Construction (EPC) firm has been selected for the project. Provide the request for proposal (RFP) for the EPC contractor.

3. Refer to the Application, Exhibit 1, Section 2.4, page 2-9.

Explain what additional measures will be taken to monitor and control
both construction personnel and access to the proposed Battery Energy Storage System
(BESS) facility during construction.

b. Once the BESS facility has been completed, explain whether there will be any modification to existing security protocols at the E. W. Brown Station (Brown Station).

4. Refer to the Application, Exhibit 1, Section 3.3, page 3-23. Since "it is assumed that the proposed BESS Facility is also conditionally compatible with the A-2 zoning code," explain whether the Mercer County Zoning Board has or will formally indicate that the BESS Facility is compatible with the A-2 zoning code. If so, provide any documentation demonstrating that this action must be taken. If not, explain why not.

5. Refer to the Application, Exhibit 1, Section 3.3, pages 3-25 and 3-26.

a. Provide the data supporting Figures 3-8 and 3-9.

b. If not provided in part a., for the last ten years, provide the assessed values of the properties including both agricultural and residential, when the assessed values changed (if at all), and if sold, the selling price and the selling price relative to the then existing assessed values.

-3-

c. Explain the rationale for the regression results indicating that property assessed values and sales values tend to decline as the distance from the Brown Station increases.

6. Refer to Application, Exhibit 1, SAR, 3.4.1, Roadway Capacity Analysis.

a. Provide weight limit ratings for each local roadway to be used by project construction traffic.

b. Provide the maximum expected load weights for each type of delivery truck.

c. Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries. If yes, provide the expected locations, frequency, and length of those stoppages.

d. Provide the weight and width restrictions of all bridges that exist along roadways proposed to be used during construction and operation of the project within Mercer County.

e. Provide a map showing anticipated directional delivery routes.

f. Provide any traffic management plans that have been created for project construction.

7. Refer to the Application, Exhibit 1, Section 3.4.2, page 3-30.

a. Explain whether there are any traffic mitigation protocols in place relative to minimizing existing worker and truck traffic into and exiting Brown Station during the hours between 6:30 a.m. to 4:30 p.m. Include in the response the number of existing daily Brown Station worker and coal truck traffic.

-4-

b. Explain if and how the anticipated construction worker and truck traffic will impact any school related traffic during the hours from 6:30 a.m. to 4:30 p.m.

8. Provide any communication with the Mercer County Road Department relating to traffic plans and mitigation measures. If no communication has been initiated, explain when that contact will occur.

9. Refer to the Application, Exhibit 1, Section 4.2, page 4.3. Explain the safety, containment and environmental mitigation measures that will be put in place in the event that there is an oil/chemical spill from the battery and transformer facilities.

10. Refer to the Application, Exhibit 1, Section 5.2, page 5-1. Provide a copy of LG&E's Spill Prevention Control, and Countermeasure plan.

11. Refer to Application, page 1-1.

a. Provide a description of what equipment will be installed in the new BESS substation.

b. Provide drawings or site plans for the installation of the new BESS substation including the interconnection with the existing transmission system at the Brown Station.

12. Provide the following information related to the BESS facility.

- a. Any safety data sheets;
- b. A statement of any environmental impacts of the facility;
- c. Any surveys related to environmental impacts;
- d. Expected life of the batteries; and

e. How the battery storage system installation will comply with National

Fire Protection Association Standard 855.

-5-

13. Refer to Application, Exhibit 1, SAR, 2.4, Proposed Access Control to the Site.

a. State whether the BESS facility will have its own separate security fencing or whether it will become connected with the fencing for existing facilities. If connected, provide the plan for expanding the current fencing.

b. Described the planned style of the security fence.

c. Explain whether the perimeter security will be installed according to National Electric Safety Code (NESC) standards. Include in the response whether the fencing will be installed before any electrical work begins.

d. Explain whether a separate fence will enclose the substation and related facilities.

e. Identify and describe any signage that will be utilized around the facility to warn trespassers of prohibited entry.

f. Identify who will control access to the site during construction and operations.

g. Describe the security software that will be used and who will have access to those systems.

14. Refer to Application, Visual Impact Assessment. Explain whether vegetative clearing will be conducted for the construction or operation of the proposed facility. Provide in the response the number of acres that will be cleared and any permits that will be required.

-6-

15. Refer to Application, Section 3.2.3.2. State whether any vegetative buffers be required to ensure appropriate compatibility with scenic surroundings. If yes, provide what species of vegetative buffer will be used.

16. Describe any steps LG&E has taken or intends to take to ensure that its construction of the proposed facilities will comply with the National Environmental Policy Act (NEPA).

17. Explain and detail whether any existing structures on the BESS project site will be demolished prior to or during construction.

18. Provide a list of permits that will be required from any other local, state, or federal agencies for the BESS project. Include in the response the status of those permits.

19. Provide copies of any documents submitted to other federal or state agencies related to the BESS facility, other than those in the application.

20. Refer to Application, 3.2.2. Of the approximately 7.5-acre undeveloped plot of land, state what approximate acreage will facility components comprise.

21. Describe the hazard detection systems, such as smoke and heat detectors, as well as gas meters, that will be used within the facility.

22. Describe alert systems that will be in place and who will monitor and maintain those systems. State whether those systems provide remote alert and annunciation to offsite personnel and a fire department.

23. Describe how the facility will be designed to prevent thermal runaway. Include heating, ventilation and air conditioning (HVAC) systems that will be used.

-7-

24. Explain how extreme external temperatures, such as in the summer, will be addressed when considering protection from thermal runaway.

25. State whether the facility include a failsafe protection system, such as a forced shutdown, should all other countermeasures fail to prevent a thermal runaway.

26. Describe the fire suppression systems that will be installed. Provide in the response which standards those systems will have to meet and who will monitor and maintain those systems. Explain considerations and mitigation plans for liquid run-off that may contain toxic chemicals.

27. Explain how any overvoltage due to ground faults will be controlled.

28. Explain how the facility will comply with IEEE 1578 standards in relation to electrolyte spills.

29. Considering the gas producing nature of batteries, state what ventilation systems will be in place to prevent the leaking of hazardous gases.

30. Explain how the battery area will be adequately ventilated to remove potentially explosive gases that are generated from charging cycles.

31. Provide any communication with local emergency services on security and emergency protocols during construction and operation. If contact has not been made, explain when that contact will occur.

32. Describe any first responder training that will occur and when it will occur in relation to the project. Relating to battery storage facilities, provide who will provide training to the responding fire departments and any past or future trainings they will have received prior to the operation of the facility.

-8-

33. Explain how the BESS facility will be secured and what plans will be in place to prevent or mitigate dangerous situations that could occur from extreme weather events, natural disasters, and environmental hazards.

34. Explain how the BESS facility will monitor extreme weather and natural disasters and what protocols will apply.

35. Explain what steps LG&E will take in designing the BESS facility to withstand environmental hazards that may arise within the area.

36. Given the proximity to the Dix Dam, state what mitigation measures will exist in the event of flooding and the danger of excessive water within an electric generating facility.

37. Given that the batteries contain hazardous materials, explain how they will be disposed of during decommissioning and how the project follow U.S. Environmental Protection Agency (EPA) rules.

38. Given the proximity to the existing components of E.W. Brown Station, in the event of an explosion at the BESS facility, state what other electric generating facilities could be affected. Include possible impacts to structures and transmission production. State what plans LG&E will have in place in case of such an emergency.

39. In the event of an explosion at the BESS facility, explain what the most extreme impacts on the transmission line and the electric grid that are likely to occur.

40. Explain who will ensure all facility components and protection systems are adequate and effective before the start of operations.

41. Provide any plans to coordinate with local landowners in case of complaints or other issues that might arise during construction or operation of the project.

-9-

42. Explain any specific restrictions that are proposed to be placed on the time of day or days of the week during which pile driving or other loud construction activities may take place. Include in the response the estimated length of time pile driving will occur during construction.

43. Describe any communication with landowners within 1,500 feet of the construction site boundaries.

44. State whether any additional easements will be needed for construction or operation of the BESS facility.

45. Provide a one-page map showing the project and a 2-mile radius around the project. Identify and include on the map any residential and nonresidential structures.

46. Provide a table of noise receptors within 1,500 feet of the construction site boundaries with expected noise levels during construction and operation.

47. Provide any geotechnical surveys done on the project area. If no geotechnical survey has been done, explain why not.

48. Refer to Application, Section 2.2. Explain what the onsite residential property is and what will happen to it during the construction of the BESS facility.

49. Provide a map presenting all karst features within the project boundary.

50. Provide the results of any field study that has been conducted to locate any historic or cultural resources were found on the project site. If the field study has not been completed, provide when it will be completed.

51. State the expected operational life of the project.

-10-

6. Bridell

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DATED MAY 02 2024

cc: Parties of Record

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