

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)	CASE NO. 2024-00082
ENERGY STORAGE SYSTEM FACILITY AT)	
E.W. BROWN GENERATING STATION IN)	
MERCER COUNTY, KENTUCKY)	

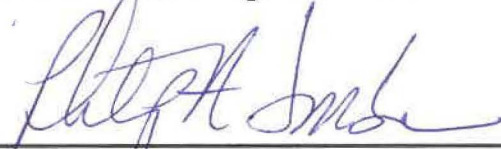
RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
THE COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
DATED MAY 2, 2024

FILED: May 21, 2024

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Philip A. Imber**, being duly sworn, deposes and says that he is Director – Environmental Compliance for LG&E and KU Services Company, 220 West Main Street, Louisville, KY 40202, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Philip A. Imber

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 16th day of May 2024.


Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

January 22, 2027



LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 1

Responding Witness: David L. Tummonds

- Q-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.
- A-1. See attachment being provided as a separate file. The Company anticipates that peak construction will occur during the spring and summer of 2025.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 2

Responding Witness: David L. Tummonds

- Q-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.
- A-2. The Companies have not yet selected the EPC contractor or the method of EPC contracting. Bid documents for the batteries are in progress with the expectation of distribution in the second or third quarter. The Company anticipates awarding both the EPC and battery contracts in the third or fourth quarter of 2024. To minimize impacts associated with long lead equipment, the Company is working with an Owners Engineer to procure high voltage breakers, main power transformer, and potentially the battery modules ahead of awarding the EPC contract.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 3

Responding Witness: David L. Tummonds

- Q-3. Refer to the Application, Exhibit 1, Section 2.4, page 2-9.
- a. 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).
- A-3.
- a. The BESS facility is located within the existing perimeter fence at the Brown Station. Access to the generating site will be monitored and controlled by the Brown Station's existing site security. The Company will work with the EPC contractor to monitor and control access to the physical project site during construction.
 - b. Other than the addition of appropriate security cameras, the Company does not anticipate any modifications to existing security protocols at the Brown Station once the BESS facility is in operation.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 4

Responding Witness: Philip A. Imber / David L. Tummonds

- Q-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.
- A-4. Pursuant to KRS 100.324(1) and because the Company is a public utility operating under the jurisdiction of the Kentucky Public Service Commission, the proposed BESS facility is exempt from local planning and zoning. As a result the Mercer County Zoning Board will not formally indicate that the BESS Facility is compatible with the A-2 zoning.

Additionally, please note that the BESS Facility is exempt from the setback requirements contained in KRS 278.704(3) because it will be constructed on a site that already contains facilities capable of generating ten megawatts or more of electricity. See KRS 278.216 (2). Trinity has provided an update to its SAR-CEA on this point, which is memorialized in the attached letter dated May 20, 2024 being provided as a separate file.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 5

Responding Witness: David L. Tummonds

- Q-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.
 - 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.
- A-5.
- a. The supporting data for Figures 3-8 and 3-9 is included in Appendix D of Application Exhibit 1.
 - b. Taxed assessed values from the Mercer County PVA website are only available for the past five (5) years. Taxed assessed values from the Garrard County PVA website are only available for the past three (3) years. The attached table being provided as a separate file has the most recent available assessed tax and sales values. Some values may differ from the information in Appendix D due to timing. The cells highlighted in light blue indicate the last year of when the taxable assessed values changed.
 - c. The correlation between the declining assessed and sales values and increased distance from the Brown Station indicate no notable relationship between the two variables. It is suspected that any decrease in property value occurs due to the relationship of the distance from Lake Herrington and Peninsula Golf Resort versus the proximity to the Brown Station.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to Commission Staff's First Request for Information

Dated May 2, 2024

Case No. 2024-00082

Question No. 6

Responding Witness: David L. Tummonds

- Q-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.
- A-6.
- a. U.S. Route 127 (US 127), US 68, KY-33, and State Hwy 342 will be the main roadways utilized to access the project site. All have a gross weight capacity of 80,000 lbs.
 - b. The expected weights for the listed vehicles and equipment are unknown at this time but may require approval from the Kentucky Transportation Cabinet due to shipment weight. However, the Companies will require the EPC contractor to comply with Kentucky Transportation Cabinet requirements as well as posted weight limits for roads, bridges, culverts, etc.
 - c. The Company will work with the EPC contractor to establish transportation logistics, up to and including traffic stoppages, based on equipment

shipping arrangements. However, the Company does not anticipate the need for traffic stoppage based on the proposed equipment.

- d. As indicated in response to part (a), the listed roads will be utilized to access the project site and the Companies will work with the EPC contractor to comply with posted weight and width restrictions on all roadways used during construction.
- e. See attachment being provided as a separate file.
- f. No traffic management plans have been created by the Company. As indicated in response to part (c), the Company will work with the EPC contractor to establish transportation logistics during execution of the project.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 7

Responding Witness: David L. Tummonds

- Q-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.
 - 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.
- A-7.
- a. The Company has no traffic mitigation protocols in place to minimize existing worker and truck traffic into the Brown Station during the referenced hours. Daily traffic at Brown Station includes 115 employees/contractors and infrequent coal truck traffic which rounds to zero daily. While a project specific traffic mitigation plan has not been developed, the Company has a practice of working with the city of Burgin, Kentucky to restrict non-personnel vehicles from traveling through Burgin. The Company will work with the EPC contractor to continue this practice.
 - b. The Company anticipates minimal to no impact to school related traffic during the referenced hours. Over the past 20 years, the Company has conducted notably higher impact construction at the Brown Station during which the associated workforce frequently exceeded 400 persons travelling to and from the site daily without impact to school related traffic.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 8

Responding Witness: David L. Tummonds

- Q-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.
- A-8. The Company has not communicated with the Mercer County Road Department. If necessary, the Company will work with the EPC contractor to engage the Mercer County Road Department to present their construction plan and potential mitigation measures.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 9

Responding Witness: David L. Tummonds

- Q-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.
- A-9. Regarding environmental mitigation measures, secondary containment will be designed and installed. Any spills would be reported to appropriate regulatory agencies and would be promptly cleaned up and disposed.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 10

Responding Witness: Philip A. Imber / David L. Tummonds

- Q-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.
- A-10. At this time the exact locations and quantities of oil-containing equipment have not been determined. The Brown Plant existing SPCC plan will be updated following installation of the BESS facility to include oil-containing equipment.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 11

Responding Witness: David L. Tummonds

Q-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.

A-11.

- a. The main components of the BESS substation will likely include the following pending final design.
 - 345kV Deadend and Bus Support (Frame)
 - 345/34.5kV Transformer
 - 34.5kV Disconnect Switch(s)
 - 34.5kV Bus Voltage Transformer
 - Steel for busses
 - Capacitor Bank
 - Service Station Voltage Transformer (SSVT)
 - Lightning Mast
 - Breaker(s)
 - Control Enclosure and associated equipment (e.g. backup, communication equipment, RTU, DFR, AC Panelboards, DC Panelboards, etc.)
 - Surge Arrestors
 - Insulators
 - Relays
 - Metering
- b. See attachment being provided as a separate file.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 12

Responding Witness: David L. Tummonds

- Q-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.
- A-12.
- a. The Company will not determine applicable safety data sheets until completion of technology selection.
 - b. See Environmental Impact Assessment beginning on p. 3-1 of the Site Assessment Report and Cumulative Environmental Assessment.
 - c. The extent of surveys related to environmental impacts were included in the previously submitted Site Assessment Report and Cumulative Environmental Assessment. Additionally, an Approved Jurisdictional Determination was completed for portions of the Brown facility that included the BESS site that identified no jurisdictional waters within the BESS site footprint.
 - d. The design life of the batteries is 20 years.
 - e. The EPC will complete a site level Hazard Mitigation Analysis ("HMA") to evaluate these units and any associated site-specific hazards in accordance with NFPA 855. The HMA and manufacturer specific UL 9540A test data will determine the site spacing to prevent failure propagation and other potential site-specific failures.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 13

Responding Witness: David L. Tummonds

- Q-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.
- A-13.
- a. The BESS facility will have its own separate security fencing, not connected to the fencing for the existing facilities.
 - b. The Company plans to install a 7-foot-high security fence with swing and cantilever access gates for operations and maintenance ("O&M") access.
 - c. The security fencing will be installed per NESC Section 11, Rule 11A and will be installed prior to energization of electrical components.
 - d. The substation and related facilities will have a separate security fence.

- e. No signage will be installed as the BESS facility will be located within the existing Brown Facility security fence.
- f. The Company will continue to control access to the Brown Facility, and the Company will work with the EPC contractor to ensure appropriately controlled access to the BESS construction site.
- g. Following construction, the Company will utilize its existing security software (Genetec Security Center) for monitoring purposes. During construction, the Company will identify optimal locations for additional security cameras to appropriately monitor the site.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 14

Responding Witness: David L. Tummonds

- Q-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.
- A-14. The design of the BESS facility will minimize the need to remove existing trees and vegetation while optimizing land use. It is anticipated that existing trees and vegetation, interior to the project site, will be removed on a limited basis (less than 1-acre). See attachment being provided as separate file.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 15

Responding Witness: David L. Tummonds

- Q-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.
- A-15. No vegetative buffers will be installed as the location of the BESS facility minimizes line of sight from adjacent property owners.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 16

Responding Witness: Philip A. Imber

- Q-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).
- A-16. KRS 278.216(2) provides that a “utility may submit and the commission may accept documentation of compliance with the National Environmental Policy Act (“NEPA”) rather than a site assessment report.” LG&E included a site assessment report with its application (Application Exhibit 1). NEPA’s procedural requirements apply to Federal agencies. NEPA does not apply when an action by a private entity does not require federal review. No NEPA coordination is needed for the project because it is designed to avoid Waters of the United States and other federal nexuses. In the event NEPA is triggered, the Companies will work with the appropriate federal agencies to complete the NEPA consultation process.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 17

Responding Witness: David L. Tummonds

- Q-17. Explain and detail whether any existing structures on the BESS project site will be demolished prior to or during construction.
- A-17. No existing structures on the BESS project site will be demolished prior to or during construction.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 18

Responding Witness: Philip A. Imber

Q-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.

A-18. No new or additional environmental permits are expected for the BESS project.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 19

Responding Witness: Philip A. Imber

- Q-19. Provide copies of any documents submitted to other federal or state agencies related to the BESS facility, other than those in the application.
- A-19. A water delineation and request for Approved Jurisdictional Determination for the BESS site and portions of the Brown site (approximately 158 acres) was submitted to the US Army Corps of Engineers. The Army Corps of Engineers issued an AJD for the submitted area that confirmed no jurisdictional waters in the project area. Both documents are attachments being provided as separate files.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 20

Responding Witness: David L. Tummonds

- Q-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.
- A-20. Approximately 1.4 acres will be comprised of facility components with the majority of the remaining 6.1 acres allowing appropriate spacing between modules.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 21

Responding Witness: David L. Tummonds

- Q-21. Describe the hazard detection systems, such as smoke and heat detectors, as well as gas meters, that will be used within the facility.
- A-21. The detection scheme deployed at site will be specific to the chosen manufacturer. The devices, quantities, and methodologies will comply with the UL9540 listing for the unit(s).

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 22

Responding Witness: David L. Tummonds

- Q-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.
- A-22. The EPC will install a site wide NFPA 72 compliant alarm system at the facility which will notify a central station in the local site control room. The system notification will align with the emergency response plan ("EAP") and be coordinated with the authority having jurisdiction.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 23

Responding Witness: David L. Tummonds

- Q-23. Describe how the facility will be designed to prevent thermal runaway. Include heating, ventilation and air conditioning (HVAC) systems that will be used.
- A-23. The prevention of thermal runaway is managed and mitigated by the Battery Management System ("BMS"). The BMS identifies risks to the battery system by monitoring cell temperature, voltage, and current. The BMS reduces risk of thermal runaway by disconnecting the batteries in case of overcharge, discharge, temperature, current, and other risks as identified in UL1973. The BMS mitigation strategy is part of the UL1973 listing associated with the battery module(s). Additionally, the manufacturer will provide a cooling system that maintains batteries at optimum operating temperature. The cooling and/or heating system is integrated into the battery system.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 24

Responding Witness: David L. Tummonds

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

A-24. See the response to Question No. 23.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 25

Responding Witness: David L. Tummonds

- Q-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.
- A-25. Battery system will be designed such that the Battery Management System ("BMS") will initiate protective action if batteries are operating outside of safe operating conditions. Back-up power will ensure continuous power to the BMS for safe shutdown in the event of power loss.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Question No. 26

Responding Witness: David L. Tummonds

- Q-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.
- A-26. Fire suppression requirements are a function of final technology selection. Once known, the Company will coordinate with the local authority having jurisdiction as aligned with the emergency response plan ("EAP"). Required systems will be designed and installed in accordance with site specific requirements.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 27

Responding Witness: David L. Tummonds

- Q-27. Explain how any overvoltage due to ground faults will be controlled.
- A-27. Insulation monitoring devices ("IMD") will be installed on all DC circuits. Overcurrent protection devices, protective relays, and grounding will be designed and installed per NFPA 70.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 28

Responding Witness: David L. Tummonds

- Q-28. Explain how the facility will comply with IEEE 1578 standards in relation to electrolyte spills.
- A-28. IEEE 1578 is specific to electrolyte spill containment and management for vented lead-acid ("VLA"), valve regulated lead-acid ("VRLA"), vented nickel-cadmium ("Ni-Cd") and partially recombinant Ni-Cd stationary batteries. This facility will not include these chemistries, so this standard does not apply.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 29

Responding Witness: David L. Tummonds

- Q-29. Considering the gas producing nature of batteries, state what ventilation systems will be in place to prevent the leaking of hazardous gases.
- A-29. Lithium-ion battery technology does not require ventilation during regular operation per NFPA 855. Where necessary, manufacturer specific guidance will dictate ventilation required to manage or mitigate explosion control and comply with the product UL9540 listing.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 30

Responding Witness: David L. Tummonds

- Q-30. Explain how the battery area will be adequately ventilated to remove potentially explosive gases that are generated from charging cycles.
- A-30. See the response to Question No. 29.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 31

Responding Witness: David L. Tummonds

Q-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.

A-31. To date, the Companies have not communicated with local emergency services on security and emergency protocols during construction and operations. The Companies will work with the EPC contractor to identify the proper training, instructor, timing, and audience to ensure local emergency services are fully informed prior to initiating construction activities. In addition, the Companies will ensure that the annual meeting with emergency responders at E.W. Brown appropriately discusses the status and pending progress of this project as well as the expected reiteration that the emergency responder action for the new site will likely closely follow that of the existing battery at the facility. This meeting is usually executed in October/November.

If any new chemicals are introduced above EPCRA Tier II reporting thresholds (10,000 pounds) then the Company is required to make notification to the Local Emergency Response Center, Kentucky Emergency Response Center, and local Fire Department within 60 days of those chemicals arriving on-site. The batteries will likely trigger Tier II reporting; however, specific battery chemistry will not be available until a contract for the project is awarded. Currently, the Company submits Tier II reports for both lead acid (sulfuric acid) batteries and lithium batteries related to the R&D storage facility at the site. If these battery technologies are used, there are no new chemical reporting triggers, and the additional quantities will be included in the 2024 Tier II report, which will be submitted prior to March 1, 2025.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
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Case No. 2024-00082

Question No. 32

Responding Witness: David L. Tummonds

- Q-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.
- A-32. See the response to Question No. 31.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 33

Responding Witness: David L. Tummonds

- Q-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.
- A-33. The facility will be secured via fencing and existing plant processes as indicated in the responses to Questions No's. 3 and 13. The design of the station will mitigate the potential impacts of extreme weather events, natural disasters, and environmental hazards by ensuring that the EPC contractor adheres to the following specific site conditions:
- Site structural (wind/snow/ice/seismic) per ASCE 7 as referenced by the Kentucky Building code.
 - Site ambient temperatures based on ASHRAE data with minimum/maximum extremes corresponding to 20-year dry bulb.
 - Site stormwater designed for a 100-year rain event.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 34

Responding Witness: David L. Tummonds

- Q-34. Explain how the BESS facility will monitor extreme weather and natural disasters and what protocols will apply.
- A-34. During construction, the Company will work with the EPC contractor to establish extreme weather and natural disaster protocols to ensure the safety of the workers. Upon transfer of care, custody, and control to the Company will monitor extreme weather and potential natural disasters and implement appropriate protocols consistent with the station Emergency Action Plan ("EAP"), which will be updated to include this installation.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 35

Responding Witness: David L. Tummonds

- Q-35. Explain what steps LG&E will take in designing the BESS facility to withstand environmental hazards that may arise within the area.
- A-35. See the response to Question No. 33.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 36

Responding Witness: David L. Tummonds

- Q-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.
- A-36. The BESS facility is not located in a floodplain. The proximity to Dix Dam presents no risk to the BESS facility.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 37

Responding Witness: David L. Tummonds

- Q-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.
- A-37. The Company does not yet have a plan for decommissioning the project upon reaching the end of its useful life. It is expected that the site will be repowered, repurposed, or returned to near preconstruction condition upon reaching the end of its useful life. Any demolition and disposal activities will comply with then applicable laws.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 38

Responding Witness: David L. Tummonds

- Q-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.
- A-38. As noted in the response to Question No. 29, the final design will comply with the manufacturer's recommendation and mitigate explosion risk to the full extent practicable through ventilation compliant with the product UL9540 listing. Existing components of potential concern include the nearest transmission line (running north out of the switchyard), the switchyard, and on-site generating assets. These components are greater than 300', greater than 800', and greater than 1,500' from the potential risk respectively. At the noted distances, the potential for notable damage to the referenced components is minimal in the unlikely event of explosion.

As noted in the response to Question No. 34, the Company will ensure appropriate update of the station Emergency Action Plan ("EAP") prior to project completion. This and the communication with local emergency responders noted in the response to Question No. 31 will facilitate any emergency response in the event of this unlikely occurrence.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 39

Responding Witness: David L. Tummonds

- Q-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.
- A-39. See the response to Question No. 38.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 40

Responding Witness: David L. Tummonds

- Q-40. Explain who will ensure all facility components and protection systems are adequate and effective before the start of operations.
- A-40. The EPC contractor is responsible, with oversight from the Company, to ensure all facility components and protection systems are adequate and effective before the start of operations.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 41

Responding Witness: David L. Tummonds

- Q-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.
- A-41. The Company's Neighbor to Neighbor ("N2N") newsletter is distributed to local landowners. The Companies have utilized this approach at its generating assets for over ten years, including communication related to construction of the Cane Run 7 facility and other construction projects. The N2N newsletter allows the Company to periodically update the community on recently concluded, current, and upcoming items of potential interest and concern. The newsletter also provides methods to contact the Company so that landowners can respond to items or raise points of concern. Publication frequency has evolved to the current state of three times per year (Spring, Summer, and Fall), but the contact information is monitored throughout the year. See attachment being provided in a separate file for the most current N2N newsletter.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 42

Responding Witness: David L. Tummonds

- Q-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.
- A-42. Typical workdays can range between 8-12 hours per day 4-7 days per week during daylight hours. The Company does not anticipate the need for non-daylight work hours; however non-daylight workhours will be utilized if required to maintain the project schedule. The Company does not anticipate the need for pile driving activities for the BESS facility.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 43

Responding Witness: David L. Tummonds

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

A-43. See the response to Question No. 41.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 44

Responding Witness: David L. Tummonds

- Q-44. State whether any additional easements will be needed for construction or operation of the BESS facility.
- A-44. No additional easements will be needed for construction or operation of the BESS facility.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 45

Responding Witness: David L. Tummonds

- Q-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.
- A-45. See attachment being provided as a separate file.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 46

Responding Witness: Philip A. Imber

- Q-46. Provide a table of noise receptors within 1,500 feet of the construction site boundaries with expected noise levels during construction and operation.
- A-46. See attachment being provided as a separate file that includes updated versions of Figures 3-2 and 3-3, as well as Tables 3-5 and 3-7, presented in the SAR-CEA report, which show the estimated noise levels at receptors within 1,500-feet of the proposed BESS Facility. Specifically, Trinity has mapped six receptors within 1,500-feet of the site (i.e., Location #6, and Points of Reception [POR] 01 through 05), and has estimated both daytime (7:00 a.m. – 10:00 p.m.) and nighttime (10:00 p.m. – 7:00 a.m.) noise levels at these receptors resulting from both onsite “construction” activities, as well as subsequent “operations”.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 47

Responding Witness: David L. Tummonds

- Q-47. Provide any geotechnical surveys done on the project area. If no geotechnical survey has been done, explain why not.
- A-47. See the attachment being provided as a separate file that includes the geotechnical survey for this project.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 48

Responding Witness: David L. Tummonds

- Q-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.
- A-48. The onsite residential structures were demolished in late 2022 and will have no impact to the construction of the BESS facility.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 49

Responding Witness: Philip A. Imber

- Q-49. Provide a map presenting all karst features within the project boundary.
- A-49. The attachment being provided as a separate file shows relevant Karst information/features as mapped by the Kentucky Geologic Survey in relation to the proposed BESS Facility. As shown, while the proposed BESS Facility is within an area where geologic units indicate an "intense" Karst potential, there are no known Karst features (e.g., sinkholes, sinking streams, caves, springs, etc.) mapped within the Project boundary (https://kgs.uky.edu/kgsmap/helpfiles/karst_help.shtm).

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 50

Responding Witness: Philip A. Imber

- Q-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.
- A-50. Section 106 of the National Historic Preservation Act requires federal agencies to consider the effect their activities may have on properties listed in, or determined eligible, for the National Register of Historic Places. These activities include any projects that are federally funded, permitted, or licensed. Section 106 does not apply when an action by a private entity does not require federal review. No field studies to locate historic or cultural resources are planned for this project because it is designed to avoid Waters of the United States and other federal nexuses. In the event Section 106 consultation is triggered, the Company will complete any required field studies as directed by the State Historic Preservation Office.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated May 2, 2024**

Case No. 2024-00082

Question No. 51

Responding Witness: David L. Tummonds

- Q-51. State the expected operational life of the project.
- A-51. The expected operational life of the project is 20 years.