COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMISSION

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

O R D E R

On March 28, 2024, Louisville Gas and Electric Company (LG&E) filed an application with the Commission seeking a Site Compatibility Certificate pursuant to KRS 278.216 to construct and operate a new approximately 125 MW Battery Energy Storage System (BESS) Facility entirely within the E.W. Brown Generating Station (E.W. Brown), which is currently owned by Kentucky Utilities (KU). Specifically, the proposed BESS Facility will encompass approximately 7.5-acres within the northern portion of the existing E.W. Brown property. Approximately 1.4 acres will be comprised of facility components with the majority of the remaining 6.1 acres allowing appropriate spacing between modules.

There are no intervenors in this matter. Pursuant to a procedural schedule established on April 9, 2024, LG&E responded to three rounds of discovery.[1] On July 9,

[1] LG&E's Responses to Commission Staff's First Request for Information (Staff's First Request) (filed May 21, 2024); LG&E's Responses to Commission Staff's Second Request for Information (Staff's Second Request) (filed June 21, 2024); LG&E's Responses to Commission Staff's Third Request for Information (Staff's Third Request) (filed July 26, 2024).

2024, LG&E filed a request for decision on the written record. The matter now stands submitted for a decision.

BACKGROUND

Case No. 2022-00402

On November 6, 2023, the Commission approved a Certificate of Public Convenience and Necessity (CPCN) for the Project, based on a finding that the Project is needed and will not result in wasteful duplication.[2] The Commission, in that case, also found that Brown BESS was generation; that with four-hour, 125 MW capacity, it exceeded the 10 MW threshold established in KRS 278.216; and as a result, LG&E/KU had to file an application for a site compatibility certificate for Brown BESS.[3]

Site Assessment Report (SAR)

In its application, LG&E submitted a SAR that was prepared by Trinity Consultants (Trinity). LG&E also submitted a noise impact study; a legal description and consolidated deed record; a baseline noise monitoring data; visual resource assessment data; and property valuation data.

Detailed Site Description

LG&E provided that the legal boundaries of the proposed site, approximately 7.5 acres of the 1,222-acre contiguous site, currently owned by Kentucky Utilities (KU).[4] LG&E stated that the existing E.W. Brown Station site is located between a residential

[2] Case No. 2022-00402*, 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 a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements* (Ky. PSC Nov. 6, 2023), Order. at 96.

[3] 2022-00402, Case No. 2022-00402, Nov. 6, 2023 Order at 137–138.

[4] Application, Exhibit 1 at 2-8.

area to the south and east and agricultural land to the northwest and west.[5] The majority of the existing Brown Station site is located within a zoning district that is designated as Heavy Industrial (I-2), which was established by Mercer County to preserve areas for industrial and related uses of such a nature that do not create serious problems of compatibility with other kinds of land uses.[6] However, LG&E stated that the approximately 7.5-acre area where the proposed BESS Facility would be installed is currently designated by Mercer County as Agricultural – Rural Residential (A-2).[7]

LG&E stated that access to the site is currently controlled with security fencing around the perimeter of the Brown Station property.[8] Site access is controlled and maintained via an attendant at the guard shack, video surveillance, and security patrols.[9] LG&E stated that the existing access control facilities will be modified and extended as necessary to control access to this site during construction and operation of the proposed BESS facility.[10] LG&E detailed that the BESS facility will have its own separate security fencing, and LG&E plans to install a 7-foot-high security fence with swing and cantilever access gates for operations and maintenance (O&M) access, which will be installed per National Electrical Safety Code (NESC) Section 11, Rule 11A and will be installed prior to energization of electrical components.[11] The substation and related facilities will have

[5] Application, Exhibit 1 at 2-8.

[6] Application, Exhibit 1 at 2-8.

[7] Application, Exhibit 1 at 2-8.

[8] Application, Exhibit 1 at 2-8.

[9] Application, Exhibit 1 at 2-8 to 2-9.

[10] Application, Exhibit 1 at 2-9.

[11] LG&E's Response to Staff's First Request, Item 13b and 13c.

a separate security fence.[12] No signage will be installed as the BESS facility will be located within the existing Brown Facility security fence.[13]

LG&E stated that access to the generating site will be monitored and controlled by the Brown Station's existing site security.[14] LG&E does not anticipate any modifications to existing security protocols at the Brown Station once the BESS facility is in operation.[15]

LG&E stated that the BESS Facility will utilize the existing onsite electrical transmission system to connect to KU's existing Brown Station transmission infrastructure to the south and additional utility service connections are not proposed.[16] LG&E stated that the proposed BESS facility is anticipated to include the following primary structures and approximate components: up to 192 individual Samsung SDI ESS or equivalent batteries/enclosures; up to 48 Freemaq PCSK or equivalent power inverters; main power transformer; substation; and control house enclosure.[17] LG&E stated that the proposed facility is anticipated to include onsite storage structures; fire suppression equipment/systems; facility access and interior roadways; and underground cable connections.[18]

[12] LG&E's Response to Staff's First Request, Item 13d.

[13] LG&E's Response to Staff's First Request, 13e.

[14] LG&E's Response to Staff's First Request, Item 3a.

[15] LG&E's Response to Staff's First Request, Item 3b.

[16] Application, Exhibit 1 at 2-9.

[17] Application, Exhibit 1 at 2-6.

[18] Application, Exhibit 1 at 2-6.

LG&E noted that the proposed BESS Facility is within an area where geologic units indicate an "intense" Karst potential; however, there are no known Karst features (e.g., sinkholes, sinking streams, caves, springs, etc.) mapped within the Project boundary.[19]

Compatibility with Scenic Surroundings

Trinity assessed the visual impacts and stated that the visual impacts are presented and quantified utilizing applicable assessment practices employed by the Bureau of Land Management (BLM).[20] Both the BLM's visual resource management VRM scenic quality and visual contrast rating systems were utilized. LG&E stated that both the pre-project/existing views and the post-project views were considered.[21]

LG&E stated that the areas surrounding the BESS Facility site are generally comprised of low-rolling hills and open meadows, with no elevated viewpoints or topographical features of note.[22] Various agricultural fields and rural residences are scattered throughout the Project region.[23] LG&E stated that the design of the BESS facility will minimize the need to remove existing trees and vegetation while optimizing land use.[24]

LG&E stated it will incorporate project design features to ensure any potential visuals effects are minimized to the extent feasible.[25] For example, only minimal grading

[19] LG&E's Response to Staff's First Request, Item 49.

[20] Application, Exhibit 1 at 3-8.

[21] Application, Exhibit 1 at 3-8.

[22] Application, Exhibit 1 at 3-8.

[23] Application, Exhibit 1 at 3-8.

[24] LG&E's Response to Staff's First Request, Item 14.

[25] Application, Exhibit 1 at 3-22 and 3-23.

and site preparation would be required to construct the new BESS Facility, and the project would generally be developed on top of the existing site topography, at-grade, to the extent feasible.[26]

LG&E stated that, consistent with LG&E's existing protocols, any new exterior lighting installed at the site would be minimized, to the extent feasible, and would primarily be installed for safety and security purposes only.[27] According to the application, any new lighting fixtures installed would be downcast, and light would be confined to areas within the existing facility footprint.[28] Where feasible, fixtures consistent with the lighting currently used on exterior areas of the station (or equivalent International Dark Sky Association [IDA]-approved fixtures) would be used.[29]

LG&E concluded that the proposed BESS Facility will not have a significant impact on the surrounding visual/scenic environment.[30] LG&E stated that, given the low profile of the batteries and ancillary structures, the project is not expected to be visible from most offsite locations, other than those immediately north of the Brown Station property.[31] LG&E stated that even at the viewpoints to the north, where topography does not break line-of-sight, there is existing vegetation and trees that would most likely fully obscure views of the BESS Facility.[32]

[26] Application, Exhibit 1 at 3-19.

[27] Application, Exhibit 1 at 3-19.

[28] Application, Exhibit 1 at 3-19.

[29] Application, Exhibit 1 at 3-19.

[30] Application, Exhibit 1 at 3-22.

[31] Application, Exhibit 1 at 3-22.

[32] Application, Exhibit 1 at 3-22.

Impact on Property Values

The SAR concluded that the proposed Project would be unlikely to have a negative impact on local property values.[33] The data used in the assessment was obtained from the Mercer County Property Valuation Administrator (PVA) in collaboration with Valbridge Property Advisors.[34] LG&E stated that, as with the assessed property values, linear regression is used to determine whether a correlation exists between the distance of a given property from Brown Station and the most recent sale value for that property. [35]

Trinity determined that based on the analysis of assessed and sales values for surrounding properties, there is no correlation between a property's value and its distance from Brown Station.[36] Therefore, the models suggested there will be no measurable detriment to property value with the installation of the proposed BESS Facility.[37] Trinity stated that 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.[38]

LG&E argued that, given the lack of existing evidence indicating a negative impact on property values for the surrounding area or an incompatibility with the area's

[33] Application, Exhibit 1 at 3-27.

[34] Application, Exhibit 1 at 3-25.

[35] Application, Exhibit 1 at 3-26.

[36] Application, Exhibit 1 at 3-27.

[37] Application, Exhibit 1 at 3-27.

[38] LG&E's Response to Staff's First Request, Item 5.

designated land use, it is reasonable to conclude that the proposed BESS Facility will not have a negative impact on local property values.[39]

Anticipated Noise Level

LG&E's noise impact study was completed by Trinity.[40] Trinity's noise impact study was quantified using the A-weighted decibel scale (dBA).[41] Trinity completed a noise monitoring program to measure the baseline levels of the current operations of Brown Station.[42] Six locations along the facility's boundary were chosen to complete the noise baseline measurements of the current noise levels associated the existing Brown Station.[43]

Trinity stated that the construction noise will primarily occur during daylight hours with occasional off-shift work performed on night shift.[44] The maximum operation noise impacts occurred at location 6, at E.W Brown's northwestern existing property boundary of Webb Road, which was a level 53.[45] LG&E stated that typical workdays can range between eight to twelve hours per day and four to seven days per week during daylight hours and does not anticipate the need for non-daylight work hours; however non-daylight

[39] Application, Exhibit 1 at 3-27.

[40] Application, Exhibit 1 at 3-1.

[41] Application, Exhibit 1 at 3-1.

[42] Application, Exhibit 1 at 3-2.

[43] Application, Exhibit 1 at 3-2.

[44] Application, Exhibit 1 at 3-6.

[45] Application, Exhibit 1 at 3-7, Figure 3-3.

workhours will be utilized if required to maintain the project schedule.[46] LG&E does not anticipate the need for pile driving activities for the BESS facility.[47]

Trinity stated that based on the noise impact assessment, and the assessment of existing noise conditions at the Brown Station site, the BESS Facility construction and operation phases are not anticipated to generate noise levels that exceed the applicable United States Environmental Protection Agency (USEPA) guidance limits.[48] Trinity stated that the worst-case noise impacts are predicted to potentially be slightly above the existing levels in limited locations; however, modeled sound levels on average are lower than the observed sound levels.[49] Therefore, no additional mitigation should be required.[50]

Impact on Roads, Railways, and Fugitive Dust

As part of the SAR, Trinity conducted a roadway capacity analysis near E.W. Brown for roads that are expected to accommodate travel through Mercer County to E.W. Brown.[51] 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.[52] All roadways have a gross weight capacity of 80,000 lbs.[53]

[46] LG&E's Response to Staff's First Request, Item 42.

[47] LG&E's Response to Staff's First Request, Item 42.

[48] Application, Exhibit 1 at 3-5.

[49] Application, Exhibit 1 at 3-5 to 3-6.

[50] Application, Exhibit 1 at 3-6.

[51] Application, Exhibit 1 at 3-27.

[52] LG&E's Response to Staff's First Request, Item 6.

[53] LG&E's Response to Staff's First Request, Item 6.

LG&E stated that the Brown Station and BESS facility are currently served by rail and vehicle access, rail access occurs via internal rail spurs, which is accessible by the Norfolk Sothern Railway line to the west of the facility.[54] It is anticipated that traffic associated with the BESS construction will utilize KY 342 connecting to Dix Dam Road to access the site; however, some vehicular access during construction may also be provided via Webb Road, which connects to Dix Dam Road/Curdsville Road Extension to the north.[55]

LG&E stated that for the construction of the proposed BESS Facility, site labor is estimated to peak at approximately 60 onsite construction personnel between months seven and ten of the project's construction phase.[56] LG&E stated that it assumed 70 percent of the construction personnel will drive their vehicles to the site and the remaining 30 percent will carpool and included in within the 70 percent of personnel driving personal vehicles.[57] LG&E calculated approximately 56 total construction related vehicles will be entering the project site. .[58] The site-generated traffic will most likely occur from 6 a.m. to 6 p.m. on weekdays, with site-generated peak traffic likely occurring during typical morning (7 a.m. to 9 a.m.) and evening (4 p.m. to 6 p.m.) workday peak periods.[59]

[54] Application, Exhibit 1 at 2-9.

[55] Application, Exhibit 1 at 2-9.

[56] Application, Exhibit 1 at 3-30.

[57] Application, Exhibit 1 at 3-30.

[58] Application, Exhibit 1 at 3-30.

[59] Application, Exhibit 1 at 3-30.

Currently, LG&E has no traffic mitigation protocols in place to minimize existing worker and truck traffic into the Brown Station during the reference hours.[60] Daily traffic at Brown Station includes 115 employees/contractors and infrequent coal truck traffic which rounds to zero daily.[61] LG&E stated it has a practice of working with the city of Burgin, Kentucky to restrict non-personnel vehicles from traveling though Burgin. LG&E stated it will work with the engineering, procurement, and construction (EPC) contractor to continue this practice.[62]

LG&E stated that the expected weights for the vehicles and equipment are unknown at this time but may require approval from the Kentucky Transportation Cabinet due to shipment weight, and LG&E will require the EPC contractor to comply with Kentucky Transportation Cabinet requirements as well as posted weight limits for roads, bridges, culverts, etc.[63] LG&E stated that it has not communicated with the Mercer County Road Department, but if necessary, will work with the EPC contractor to engage the Mercer County Road Department to present its construction plan and potential mitigation measures.[64]

LG&E asserted that, based on the peak-hour and peak-direction total volume on the studied roadways, the construction traffic is not expected to adversely affect the roadway usability.[65] LG&E concluded that no permanent impacts are anticipated on

[60] LG&E's Response to Staff's First Request, Item 7.

[61] LG&E's Response to Staff's First Request, Item 7.

[62] LG&E's Response to Staff's First Request, Item 7.

[63] LG&E's Response to Staff's First Request, Item 7.

[64] LG&E's Response to Staff's First Request, Item 8.

[65] Application, Exhibit 1 at 3-30 to 3-31.

roadway capacity as a result of commercialization and operation of the proposed BESS facility, and similarly there would be no increase in potential road degradation or congestion.[66] LG&E stated that it anticipated minimal to no impact to school related traffic during the referenced hours of construction.[67]

LG&E stated that the potential for fugitive dust emissions, specifically due to on-/off-road vehicles, will be of most concern during construction activities.[68] During BESS construction, potential fugitive dust emissions will be associated with ground excavation, cut-and-fill operations, on-site transport of materials and equipment, operation of heavy equipment, and other activities.[69] Vehicles travelling on unpaved and/or un-swept roadways also have the potential to generate fugitive dust.[70]

LG&E stated that best management practices will be used during construction to limit fugitive dust emissions, including watering unpaved roadways, daily sweeping/maintenance of paved roadways, limiting the area of open excavation/grading areas, and providing temporary cover for soil stockpiles.[71] LG&E stated that standard erosion and soil stabilization measures would also be employed throughout the BESS's construction phase.[72] LG&E stated that these strategies are anticipated to be

[66] Application, Exhibit 1 at 3-33.

[67] LG&E's Response to Staff's First Request, Item 7b.

[68] Application, Exhibit 1 at 3-33.

[69] Application, Exhibit 1 at 3-33.

[70] Application, Exhibit 1 at 3-33.

[71] Application, Exhibit 1 at 3-33.

[72] Application, Exhibit 1 at 3-33.

incorporated in the construction stormwater permit that will be obtained for the construction operations and disturbances.[73]

LG&E stated that access throughout the proposed site would be existing paved roads in conjunction with temporary internal unpaved roadways installed during construction.[74] LG&E indicated that these roads provide direct access to locations necessary for construction activities and therefore fugitive dust emissions should be minimal from onsite traffic and that new ground disturbance will be minimized to the extent feasible.[75]

Safety Measures

LG&E proposed several safety measures related to the BESS facility. First, LG&E stated that the hazard detection scheme deployed at site will be specific to the chosen manufacturer.[76] The devices, quantities, and methodologies will comply with the Underwriters Laboratories' safety standards, UL9540 listing for the unit(s).[77]

LG&E stated that the prevention of thermal runaway is managed and mitigated by the Battery Management System (BMS) and that the BMS mitigation strategy is part of the UL1973 listing associated with the battery module(s).[78] Additionally, the manufacturer will provide a cooling system that maintains batteries at optimum operating temperature.[79]

[73] Application, Exhibit 1 at 3-33.

[74] Application, Exhibit 1 at 3-33.

[75] Application, Exhibit 1 at 3-33.

[76] LG&E's Response to Staff's First Request, Item 21.

[77] LG&E's Response to Staff's First Request, Item 21.

[78] LG&E's Response to Staff's First Request, Item 23.

[79] LG&E's Response to Staff's First Request, Item 23.

The cooling and/or heating system will be integrated into the battery system.[80] LG&E stated that battery system will be designed such that the BMS will initiate protective action if batteries are operating outside of safe operating conditions.[81] According to LG&E, back-up power will ensure continuous power to the BMS for safe shutdown in the event of power loss.[82] Insulation monitoring devices ("IMD") will be installed on all direct current (DC) circuits and overcurrent protection devices, protective relays, and grounding will be designed and installed per NFPA 70.[83]

LG&E stated that fire suppression requirements are a function of final technology selection and, once known, will coordinate with the local authority having jurisdiction as aligned with the emergency response plan.[84] LG&E stated that the EPC will install a site wide National Fire Protection Association (NFPA) 72 compliant alarm system at the facility.

LG&E stated that, during construction, it would work with the EPC contractor to establish extreme weather and natural disaster protocols to ensure the safety of the workers.[85] Upon transfer of care, custody, and control of the facility to LG&E, it will monitor extreme weather and potential natural disasters and implement appropriate protocols consistent with the station Emergency Action Plan, which will be updated to

[80] LG&E's Response to Staff's First Request, Item 23.

[81] LG&E's Response to Staff's First Request, Item 25.

[82] LG&E's Response to Staff's First Request, Item 25.

[83] LG&E's Response to Staff's First Request, Item 27.

[84] LG&E's Response to Staff's First Request, Item 26.

[85] LG&E's Response to Staff's First Request, Item 34.

include this installation.[86]

Mitigation Measures

LG&E discussed various mitigation measures throughout its SAR. Regarding environmental mitigation measures, LG&E stated that secondary containment will be designed and installed.[87] LG&E stated that any spills would be reported to appropriate regulatory agencies and would be promptly cleaned up and disposed.[88] LG&E provided that E.W. Brown's existing spill, prevention, containment and countermeasure (SPCC) plan will be updated following installation of the BESS facility to include oil-containing equipment.[89]

Next, LG&E stated that construction contractors will be required to develop and implement a soil and erosion control plan; insure all storage of chemicals and fuel onsite will be provided with secondary containment, and all unloading areas will have their own containment; and in the unlikely event of a fuel or oil spill during construction, the contaminated soil will be fully remediated, likely by removal and disposal by a licensed contractor for disposal at a licensed facility.[90]

In terms of karst features, LG&E stated that, if such features are identified, they will be mitigated during design or during initial earthwork activities.[91] LG&E listed that mitigation measures can include, but are not limited to, deep foundations and/or exposing

[86] LG&E's Response to Staff's First Request, Item 34.

[87] LG&E's Response to Staff's First Request, Item 9.

[88] LG&E's Response to Staff's First Request, Item 9.

[89] LG&E's Response to Staff's First Request, Item 10.

[90] Application, Exhibit 1 at 5-1.

[91] LG&E's Response to Staff's Second Request, Item 2.

the karst feature and backfilling with an engineered fill or lean concrete.[92]

LG&E stated that no mitigation is merited for potential impacts on the surrounding transportation infrastructure based on the results of this analysis.[93] LG&E stated that, although the roadway capacities surrounding the Brown Station are sufficient to handle the construction and operation of the BESS Facility, consistent with KU's existing protocols[94], carpooling and other trip reduction measures in the area will continue to be encouraged to the extent feasible.[95]

LG&E provided that sufficient containers (barrels, trailers, bins, etc.) will be placed around the site for accumulation and storage of solid waste.[96] LG&E stated that solid waste generated in conjunction with routine maintenance of the BESS facility will be properly collected, containerized, stored, marked/labeled, transported, disposed of, and tracked.[97]

LEGAL STANDARD

KRS 278.216(1) states that no utility shall begin the construction of a facility for the generation of electricity capable of generating in aggregate more than 10 MW without having first obtained a site compatibility certificate from the Commission.

KRS 278.216(3) states that the Commission may deny an application for a site compatibility certificate or require reasonable mitigation of impacts disclosed in the site

[92] LG&E's Response to Staff's Second Request, Item 2.

[93] Application, Exhibit 1 at 3-34.

[94] KU owns the Brown Station with which the BESS Facility will be located within.

[95] Application, Exhibit 1 at 3-34.

[96] Application, Exhibit 1 at 5-2.

[97] Application, Exhibit 1 at 5-2.

assessment report but the Commission shall, in no event, order relocation of the facility.

KRS 278.216(2) states that:

> An application for a site compatibility certificate shall include the submission of a site assessment report [SAR] as prescribed in KRS 278.708(3) and (4), except that a utility which proposes to construct a facility on a site that already contains facilities capable of generating ten megawatts (10 MW) or more of electricity shall not be required to comply with setback requirements established pursuant to KRS 278.704(3).

The requirement that a utility file a SAR, like those filed before the Kentucky State Board on Electric Generation and Transmission Siting when a merchant generator seeks to obtain a construction certificate, indicates that the legislature intended for the Commission to consider the factors discussed in the SAR when determining whether to approve a site compatibility certificate or impose mitigation measures.[98] However, KRS 278.216(2) also states 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," which indicates that the Commission is able to consider other factors, at least compliance with NEPA, in lieu of at least certain factors in the SAR.

KRS 278.708(3) and (4), which are written in reference to merchant generating facilities as opposed to utility owned facilities, state that the SAR shall include (1) a detailed description of the proposed site, including surrounding land uses, compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5),

[98] See Case No. 2014-00133, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Site Compatibility Certificates for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and a Solar Photovoltaic Facility at the E.W. Brown Generating Station* (Ky. PSC Dec. 19, 2014), Order at 2–3 (applying factors required to be discussed in the SAR when granting the site compatibility certificate for a solar facility).

and evaluation of the noise levels expected to be produced by the facility; (2) an evaluation of the compatibility of the facility with scenic surroundings; (3) potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the site; (4) evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the property boundary; (5) the impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility; and (6) any mitigating measures to be suggested by LG&E/KU to minimize or avoid adverse effects identified in the SAR.

KRS 278.704(2), which must be discussed in the SAR pursuant to KRS 278.708(3)(a)(7), states that, in relevant part:

> For purposes of applications for site compatibility certificates pursuant to KRS 278.216 [which are only filed by utilities], only . . . the proposed structure or facility to be actually used for solar or wind generation shall be required to be at least one thousand (1,000) feet from the property boundary of any adjoining property owner and two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility.

DISCUSSION AND FINDINGS

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that LG&E has satisfied the requirements of KRS 278.216 for the E.W. Brown BESS Facility, subject to the conditions discussed herein.

There are no residential neighborhoods, schools, hospitals, or nursing facilities located within 2,000 feet of the BESS facility. Secondly, the facility's location at the existing E.W. Brown Station along with LG&E's proposed mitigation measures results in

the Project having a limited visual impact. The SAR also indicated that the construction and operation of the BESS facility would have limited noise impacts and effects on property values. The SAR noted that the project was unlikely to have a significant impact on road and rail traffic, provided that LG&E follow all discussed mitigation measures. Finally, the SAR did not indicate any adverse environmental effects. For these reasons, the considerations required by the SAR generally support approving the Site Compatibility Certificate.

As required by KRS 278.708(4), LG&E proposed various mitigation measures consistent with the statutes regarding traffic, noise, roadway preservation, permitting, public safety, and scenic preservation. The Commission finds that LG&E's proposed mitigation measures are generally reasonable and should be implemented as proposed, unless modified or added to herein to ensure that the goals of KRS 278.216 are met.

To ensure that the Commission can monitor compliance with the mitigation measures as it relates to the project, the Commission also finds that it is necessary to require LG&E to make various filings, such as a final plan layout and any changes in the Project boundary, as explained in more detail in the Appendix, which lists some but not all mitigation measures proposed by LG&E and those required by the Commission. The Commission finds that, as part of the outreach to nearby residents, LG&E should notify residents and businesses within 2,000 feet of the Project boundary about the construction plan, the noise potential, and any mitigation plans, at least one month prior to the start of construction. As part of LG&E's outreach to emergency services, the Commission finds that LG&E shall provide a finalized emergency response plan to the local fire district, first responders, and any local county emergency management agency

as well as provide site-specific training for local emergency responders, if requested, after consultation with local authorities. Finally, LG&E should file a decommissioning plan six months prior to the BESS facility ceasing operations.

Next, as KU owns the land that the BESS facility sits on, LG&E shall file a notice of accounting as it relates to the building and construction of the BESS and any land assets made prior to construction, at 50 percent completion of construction, and upon completion of construction. In addition, any transfer of either the land or the BESS that occurs within six months after construction, LG&E should provide the accounting entries for LG&E as it relates to that transfer or sale.

For the reasons discussed above, the evidence presented by LG&E supports approving the Site Compatibility Certificate subject to the mitigation measures proposed by LG&E and finds that, in addition to those LG&E has initially proposed, the mitigation measures set forth in the Appendix to this Order and discussed throughout this Order are appropriate and reasonable because they achieve the statutory purpose of mitigating the adverse effects identified in the SAR in accordance with KRS 278.708.

CONCLUSION

After carefully considering the criteria in KRS 278.216, the record and being otherwise sufficiently advised, the Commission finds that LG&E has presented sufficient evidence to support the issuance of a Site Compatibility Certificate for the 125 MW BESS Facility in Mercer County, Kentucky, and therefore, finds that LG&E's certificate should be conditionally approved as requested. However, the Commission's approval of the site compatibility certificate is conditioned on LG&E's full compliance with all mitigation measures it committed to implement and all mitigations required by the Commission

herein, including, but not limited to those listed in the Appendix to this Order.

IT IS THEREFORE ORDERED that:

1. LG&E's application for a Site Compatibility Certificate to install and operate a 125 MW BESS in Mercer County, Kentucky, is granted subject to its full compliance with all mitigation measures and conditions listed in the Appendix to this Order and all mitigation measures that LG&E committed to implement in this matter.

2. LG&E shall fully comply with the mitigation measures and conditions prescribed in Appendix to this Order and any other mitigation measures that LG&E committed to implement in this matter.

3. In the event the mitigation measures within the body of this Order conflict with those prescribed in the Appendix to this Order, the measures in the Appendix shall control.

4. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION

Chairman

Commissioner

Commissioner

ATTEST:

Executive Director

ENTERED
NOV 26 2024 jdc
KENTUCKY PUBLIC SERVICE COMMISSION

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2024-00082 DATED NOV 26 2024

MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Louisville Gas and Electric Company (LG&E) to ensure that the facilities proposed in this proceeding are constructed as ordered.

1. A final site layout plan shall be submitted to the Commission upon completion of the final site design. Deviations from the preliminary site layout should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, location of batteries, inverters, transformers, substation, operation and maintenance building, transmission line route, or other Project facilities and infrastructure. The filing shall reference this case number and be filed in post-case correspondence.

2. Any change in the Project boundaries from the information that formed this evaluation shall be submitted to the Commission for review.

3. The Commission shall determine whether any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts.

4. Thirty days prior to commencement of construction, LG&E shall provide a finalized Emergency Response Plan to the local fire district, first responders, and any local county emergency management agency. LG&E shall provide site-specific training for local emergency responders at their request. Access for fire and emergency units shall be set up after consultation with local authorities.

5. LG&E, or its contractor, shall control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.

6. LG&E's access control strategy shall also include appropriate signage to warn potential trespassers. LG&E must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.

7. The security fence must be installed prior to activation of any electrical installation work in accordance with National Electrical Safety Code (NESC) standards. The substation shall have its own separate security fence and locked access installed in accordance with NESC standards.

8. LG&E is required to limit noise related to construction activity to daylight hours, when practical, and keep construction noise from occasional off-shift work performed on night shift to a minimum. If any pile driving occurs, it shall be limited to the hours of 8 A.M. and 6 P.M.

9. LG&E shall notify residents and businesses within 2,000 feet of the Project boundary about the construction plan, the noise potential, any mitigation plans, at least one month prior to the start of construction.

10. LG&E shall provide the Merce County Judge Executive contact information for individuals within LG&E that can be contacted with concerns. This shall include contract information for the general public to reach individuals within LG&E, or its contractor, that can address concerns. LG&E shall update this contact information yearly or within 30 days of any change in contact information.

11. LG&E shall comply with all laws and regulations regarding the use of roadways.

12. LG&E shall implement ridesharing between construction workers when feasible, use appropriate traffic controls, or allow flexible working hours outside of peak hours to minimize any potential traffic delays during AM and PM peak hours.

13. LG&E shall develop special plans and obtain necessary permits before transporting heavy loads, especially the substation transformer, onto state or county roads.

14. LG&E shall develop and implement a traffic management plan to minimize the impact on traffic flow and keep traffic safe. Any such traffic management plan shall also identify any traffic-related noise concerns during the construction phase and develop measures that would address those noise concerns.

15. LG&E shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process, including the use of water trucks. Dust impacts shall be kept at a minimal level. LG&E shall comply with 401 KAR 63:010.

16. LG&E, or its contractor, shall utilize appropriate best management practices to control site runoff and attain necessary or modify any construction permits such as Kentucky Pollution Discharge Elimination System (KPDES) stormwater construction permit.

17. LG&E, or its contractor shall develop and implement practices and procedures to control, prevent and respond to any spills or releases of materials that could potentially impact water quality.

18. LG&E, or its contractor, are prohibited from dumping solid waste into the waterways and shall design the Project to provide secondary and appropriate containment.

19. LG&E, or its contractor, shall evaluate the potential increases in peak stormwater discharge rates and apply any appropriate engineering control.

20. LG&E shall follow all safety measures laid out in its SAR or in its subsequent data responses.

21. LG&E shall provide the accounting entries for LG&E for any transfer of the Project property or the BESS facility that occurs within six months of construction.

22. LG&E shall file a decommission planning within six months of the BESS facility ceasing operations.

23. LG&E shall acquire all permitting necessary for construction of the Project.

24. Any disposal or recycling of Project equipment, during operations or decommissioning, shall be done in accordance with applicable laws and requirements.

25. Within 30 days of service of this Order, LG&E shall send a copy of this Order to all the adjoining landowners who previously were required to receive notice of this Project, if any.

*Honorable Allyson K Sturgeon
Vice President and Deputy General Counsel-
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Rick E Lovekamp
Manager Regulatory Affairs
Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40202

*Robert Conroy
Vice President, State Regulation and Rates
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010