

State Environmental Quality Review
NEGATIVE DECLARATION
Notice of Determination of Non-Significance

Project: KCE NY 31 Battery Energy Storage Facility (“Proposed Action”)

Date: December 17, 2024

This notice is issued in accordance with Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law and its implementing regulations at 6 NYCRR Part 617 and 21 NYCRR LXXXI Part 10052.

The Long Island Power Authority (the “Authority”) has determined, based on information provided by KCE NY 31, LLC (“KCE”) and PSEG Long Island and the Full Environmental Assessment Form 1, 2 & 3 and supplemental documentation (the “EA”) prepared by H2M Architects and Engineers (“H2M”) and analyzed, reviewed, and supported by PSEG Long Island, that the Proposed Action described below will not have a significant adverse impact on the environment and a Draft Environmental Impact Statement will not be prepared.

Name of Action: KCE NY 31 Battery Energy Storage Facility (“Proposed Action”)

Location: 1 Lilco Road, hamlet of East Shoreham, Town of Brookhaven, Suffolk County, New York 11786

SEQR Status: Unlisted

Conditioned Negative Declaration: No

Proposed Action Description:

The Proposed Action will involve the construction and operation of an approximately 50-megawatt (MW) Lithium-Ion Battery Energy Storage System Facility (BESS Facility), relocation of an existing heavy machinery operation training facility including demolition of an unoccupied two story administrative building, upgrades to the existing LIPA Shoreham Substation, and installation of a new underground generation interconnect line all within a LIPA-owned site in the hamlet of East Shoreham, Town of Brookhaven, Suffolk County, New York. KCE is expected to be contracted by LIPA to construct and operate the BESS Facility.

The Proposed Action will be located on Suffolk County Tax Map (SCTM) Number 0200-039.00-02.00-002.000, which is 46.98 acres in size. Only a portion of the 46.98-acre lot will be utilized for the BESS Facility (approximately 2.29 acres) which will be leased from LIPA (*see* Figure A-

1) and approximately 2.1 acres will be used for the open-air training facility relocated from the site intended for the BESS Facility.

The components of the BESS Facility include the following: battery modules; augmentation (CMA) units; medium voltage (MV) transformer units; one (1) auxiliary load transformer; a staging/storage area and associated storage shipping container; a project substation with an approximately 392 square foot (SF) control building; and a new 138kV underground generation interconnect line. Each battery module will be approximately 29'11" long, 5'5" wide and 9'4" tall. Each CMA unit will be approximately 5'3" long, 3'7" wide and 9'4" tall. Each MV unit will be 10'6" long, 11'0" wide, and approximately 9'4" tall. The storage shipping container will be 40'0" long, 8'0" wide and 8'6" tall. All of the battery modules are in containerized enclosures and contain all heating, cooling, sensors, and communication/control equipment necessary to support operation of the system. A water connection/fire hydrant will also be established adjacent to the BESS Facility to the west for emergency response purposes, to the extent required, the specific location to be determined as part of a formal Emergency Operations Procedures (EOP) and finalized with the Wading River Fire Department. Furthermore, the fire safety features included in the BESS Facility include a battery management system, site controller and monitoring, electrical fault protection devices, and explosion control systems. The battery management system can either prevent thermal runaway from occurring in the cell or prohibit the propagation of thermal runaway to adjacent cells by isolating the affected battery module temporarily or permanently disconnecting the module. Remote site monitoring is designed to automatically report faults to a local operations center, alerting them to the need for maintenance or response. The electrical fault protection devices and explosive control systems interrupt a fault current and mitigate the risk of uncontrolled combustion, respectively.

Components of the BESS Facility substation include the following: feeder breaker bays, disconnect switches, bus supports, a main power transformer (MPT) to increase and decrease the voltage of the energy entering and leaving the BESS, circuit breakers, and an underground generation interconnect line which will connect the proposed BESS Facility substation to the existing LIPA substation located approximately 485 feet the south. The tallest feature of the BESS Facility substation are nine existing lightning masts, each approximately 55'2" in height. Upgrades to the existing LIPA substation will also be implemented prior to it being connected to the BESS Facility substation via the interconnect line. These upgrades include installing disconnect switches, one (1) circuit breaker, metering potential transformer and current transformer, a termination structure with a ground switch, and an enclosure to contain the additional relay panels for the interconnection.

The area where the BESS Facility is proposed currently houses a training facility. Site work in this area is anticipated to include: removal of an existing metal trailer (to be relocated to the east); removal of electrical, water, drainage, and sanitary infrastructure; removal and disposal of concrete walls, curbs and columns, portions of the existing fencing, the existing gravel driveway, and areas of existing grass cover; construction of internal site driveways; installation of chain link fencing where needed; installation of a stormwater management system consisting of drywells and

associated yard inlets consistent with New York State Department of Environmental Conservation (NYSDEC) standards; and installation of the underground interconnection line. It is anticipated that 2.29 acres of the site will be disturbed during construction of the BESS Facility/interconnect line. The existing training facility will be relocated from where the BESS Facility is proposed, to an area just east of where the BESS Facility will be located, which is currently developed with a two-story brick administrative building, approximately 146' long and 139' wide. Site work in this area is anticipated to include demolition of the existing two-story administrative building; relocation of the existing metal trailer as described above, and general site preparation (e.g., grading, stabilization). It is anticipated that relocation of the training facility will result in approximately 2.10 acres of land disturbance.

Reasons Supporting This Determination:

Based on a review of the Proposed Action's scope of work in accordance with the requirements of SEQRA, to evaluate potential impacts of the Proposed Action, a Full Environmental Assessment Form Parts 1, 2 & 3 ("FEAF") was completed by H2M Architects and Engineers (H2M) and analyzed, reviewed, and supported by PSEG Long Island. The Proposed Action is an "Unlisted" Action as defined in SEQRA.

The FEAF evaluates the effect of the Proposed Action upon land use, natural resources, visual resources and character of the area, energy use, environmental hazards, and human health resources. Key findings are outlined below.

Land Use

The Proposed Action Site is approximately 46.98 acres, of which approximately 2.29-acre parcel is proposed to be leased to KCE for construction of KCE's BESS Facility. The 2.29-acre area where the BESS Facility is proposed is currently in use by PSEG Long Island as a heavy machinery training facility. The training facility will be relocated immediately to the east, to a 2.21-acre area that contains an unused administrative building, with 2.10 acres of this area to be disturbed. Other uses on the remaining portion of the 46.98-acre LIPA-owned property are industrial in nature and include warehouses, outdoor storage, an electrical substation, power supply support facilities, and low-voltage distribution lines. The Proposed Action Site also contains electrical transmission infrastructure and a long-decommissioned nuclear energy generation facility, which will remain the same with the implementation of the Proposed Action.

Land uses adjoining the Proposed Action Site include vacant/natural areas to the west, northwest, northeast, east, and southeast; surface waters to the north; and utility uses to the south. Land uses that occur within ½ mile of the Proposed Action Site primarily include utilities; vacant; residential; surface water; and preserved land, open space, and recreation (*see* Figure B-1).

Considering the existing electric transmission/utility infrastructure onsite, the presence of utility uses to the south, and vacant/natural areas separating the Proposed Action Site from nearby

residences, the Proposed Action will be consistent with the existing land uses in the area and will not result in any significant adverse land use impacts to the Proposed Action Site.

Natural Resources

Water Resources

Currently, development density in Suffolk County on specific properties is determined in accordance with Suffolk County Sanitary Code (SCSC) Article 6, the intent of which is generally to promote public health and safeguard water resources through requirements for installation and maintenance of onsite wastewater treatment infrastructure. The Proposed Action does not introduce new nitrogen discharges, wastewater treatment systems, or point source discharges, nor does it require treatment of sanitary sewer or industrial discharges.

The BESS Facility will include the presence of chemicals, including dielectric/cooling fluid for the transformers, and lithium-ion electrolyte and cooling fluid encased within the BESS units. However, the design of the BESS Facility incorporates several features to mitigate potential discharges of these chemicals into the environment. Specifically, the dielectric/cooling fluid will arrive pre-sealed in the transformers, and the lithium-ion electrolyte and cooling fluids will be pre-sealed within each individual battery unit within the containers. In addition, the battery enclosures, transformers, and the BESS Facility substation equipment will be installed on concrete foundations; these features will be designed to minimize the potential for infiltration into impervious surfaces or transport via stormwater runoff. Secondary containment for the MPT and, if required by Environmental Protection Agency or NYSDEC regulatory standards, medium voltage transformer fluids will be designed and implemented.

A total of approximately 4.39 acres of land disturbance is anticipated to occur during construction activities under the Proposed Action (2.29 acres for construction of the BESS Facility and 2.10 acres for the relocation of the training facility). Construction activities that result in greater than or equal to one (1) acre of land disturbance must comply with the requirements of the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001 or General Permit). In consideration of this, KCE will prepare a Stormwater Pollution Prevention Plan (SWPPP) compliant with the General Permit and submit a Notice of Intent (NOI) to the NYSDEC for the construction of the BESS Facility and the interconnection. PSEG Long Island will prepare a SWPPP compliant with the General Permit and submit a NOI to the NYSDEC for the training facility.

During the demolition and construction phases, erosion and sediment control measures will be installed and inspected. Weekly SWPPP inspections will be required under GP-0-20-001 during the demolition and construction phases of the Proposed Action and will help to ensure that erosion and sedimentation controls are functioning as designed to minimize the potential for significant adverse impacts from stormwater runoff during demolition and construction. To manage post construction stormwater flows from the BESS Facility, a system of drywells and yard inlets will be installed. Yard inlets located throughout the development will capture runoff and convey

stormwater to the drywells designed to infiltrate stormwater into the subsurface soils, thus preventing off-site transport of stormwater runoff for the design stormwater criteria. Drywells are green infrastructure practices that provide infiltration of stormwater and can be utilized to count towards Runoff Reduction Volume (RRv) capacity.

The stormwater management system has been designed to meet the sizing criteria of the New York State Stormwater Management Design Manual, including Water Quality Volume (WQV), RRv, Channel Protection Volume (Cpv), Overbank Flood control (Qp), and Extreme Storm control (Qf) sizing criteria. Utilization of infiltration practices (leaching galleys) emulates natural stormwater runoff mitigation by allowing stormwater to infiltrate into onsite soils. The hydrology and hydraulics of the development site and stormwater management practices have been modeled to demonstrate no net increase in stormwater runoff leaving the developed project site when comparing pre- and post-construction conditions, thereby demonstrating compliance with Stormwater Management Design Manual Qp and Qf sizing criteria.

With the lack of new wastewater discharges, the integration of design elements which mitigate potential discharges of chemicals to the environment including concrete foundations, secondary containment for the MPT, and the implementation of a SWPPP to manage construction and post construction stormwater flows, no potential significant adverse impacts to water resources are anticipated.

Floodplains

According to the NYSDEC EAF Mapper, the Proposed Action Site is located within the 100-year floodplain. However, after further review of the FEMA National Flood Hazard Layer (NFHL) Viewer (*see* Figure C-1), the proposed BESS Facility, underground generation interconnect line, and relocated training facility will not be located in an area which is within the 100-year floodplain, 500-year floodplain, or designated floodway. Considering the Proposed Action Site is not within the 100-year floodplain, 500-year floodplain, or designated floodway significant adverse flooding impacts are not anticipated.

Wetlands

The Proposed Action Site contains and/or adjoins wetlands, waterbodies, or other potential surface water features. After further review of the NYSDEC Environmental Resource Mapper (ERM) and NYSDEC Info Locator Mapper (*see* Figures C-2 and C-3), there are NYSDEC regulated freshwater and tidal wetlands approximately 360 feet west, and federally regulated wetlands (approximately 150 feet west) within close proximity to the Proposed Action Site.

As shown in Figure C-2, federal wetlands are not located within the proposed BESS Facility area, underground generation interconnect line route, and the area where the training facility will be relocated.

The NYSDEC issued a Letter of Non-Jurisdiction (dated July 19, 2019) determining that the majority of the LIPA-owned property (including the Proposed Action Site) is beyond the NYSDEC's Tidal Wetlands Act (Article 25) jurisdiction. Specifically, no NYSDEC regulated tidal wetlands or adjacent areas are located within the proposed BESS Facility area, underground generation interconnect line route, and the area to which the training facility will be relocated (*see* Appendix B).

The NYSDEC regulates an adjacent area extending 100 feet landward of all New York State-regulated freshwater wetlands. The proposed BESS Facility area, underground generation interconnect line route, and the area to which the training facility will be relocated are more than 100 feet from the edge of the existing cleared and disturbed areas of the LIPA-owned property and more than 200 feet from the bottom of the steep slope to the west of the property where any wetlands would be located. Accordingly, the Proposed Action is outside of the jurisdictional areas for NYSDEC's freshwater wetlands regulations.

With the lack of wetlands and wetland adjacent areas onsite, the integration of design elements which mitigate potential discharges of chemicals to the environment including concrete foundations, secondary containment for the MPT, and the implementation of a SWPPP that will manage construction and post construction stormwater flows, no potential significant adverse impacts to wetlands are anticipated.

Coastal Zone

The entire site of the Proposed Action is located within the New York State Coastal Zone Area (*see* Figure C-4). A New York State Coastal Assessment Form was completed by PSEG Long Island, and submitted to New York Department of State (NYSDOS) (*see* Appendix C). The Proposed Action will be consistent with and will not substantially hinder the achievement of any of the coastal policies set forth in 19 NYCRR Part 600.5. Thus, no potential significant adverse impacts to coastal zones are anticipated.

Terrestrial Ecological Communities and Vegetation

The area where the BESS Facility is proposed currently houses a training facility, which contains a metal trailer, a gravel pathway, a concrete slab, sand piles, grass areas, and is surrounded by a chain-link fence. The area where the new underground generation interconnect line will be located contains internal gravel/paved roadways. The area where the training facility will be relocated to, just east of the proposed BESS Facility, is currently developed with an unoccupied two-story brick administrative building. The Proposed Action Site area is best described as a mix of five (5) unranked cultural communities with wide distribution throughout New York State, including "Mowed lawn", "Construction/road maintenance spoils", "Paved road/path", "Interior of non-agricultural building", and "Unpaved road/path."

The Proposed Action will involve the removal of existing grass areas where the new BESS Facility and relocated training facility is proposed. These areas will be stabilized with gravel or grass seeding in certain areas. No vegetation removal is required for the installation of the underground interconnection line, as the proposed route is located in areas that contain gravel/paved roadways.

Due to the lack of sensitive ecological communities, and the Proposed Action Site currently developed with training facilities, an administration building, and internal gravel/paved roadways, the Proposed Action will not result in significant adverse impacts to terrestrial ecological communities and vegetation.

Wildlife

Terrestrial wildlife use of the Proposed Action Site is limited due to the disturbed/developed nature of the Proposed Action Site. Due to these existing conditions, the Proposed Action will not result in the elimination of high quality or otherwise undisturbed wildlife habitat and will not adversely affect the limited suburban species expected to occur in the vicinity of the Proposed Action Site. Suburban species are able to adapt quickly to changes in habitat with any displacement being temporary in nature, and therefore are tolerant of disturbance. Individuals of these species that may temporarily be displaced from the Proposed Action Site during construction will likely ultimately occupy abundant surrounding suitable habitats.

Threatened, Endangered, and Special Concern Species and Significant Habitats

Piping Plovers and Least Terns were identified by the NYSDEC EAF mapper as present in the vicinity of the Proposed Action Site. These protected shorebirds utilize beach, shoreline/wetland, and coastal habitats which are not found within the area of the Proposed Action. The NYSDEC regulates a 200-meter buffer around known Piping Plover and Least Tern nesting habitats to protect the species from disturbance during construction or other development activities. Beach and shoreline habitats that are likely to be used by Piping Plover or Least Tern as nesting and/or foraging habitat are more than 300 meters from the Site (*see* Figure C-6). There are no known nests within the nearest shoreline habitat. Further, no blasting or other noise intensive activity is proposed during construction and demolition of the Proposed Action, and best management practices will be utilized for dust control. Considering that there are no known occurrences of nests on nearby shoreline habitats, and due to the large spatial separation from nearby shoreline habitat and lack of noise intensive activity during construction and demolition, construction-related noise and disturbances are not expected to result in adverse effects to plovers or terns.

Visual Resources

A Visual Analysis was prepared for the Proposed Action which illustrates that the BESS Facility will not be visible from public rights-of-way and visual resources (*see* Appendix D and Figures D-2 and D-3). A radius of one mile (the “Study Area”) was assessed to be appropriate for the inventory of scenic and aesthetic resources. Most of the identified visual resources within the Study Area have intervening vegetation and/or structures that block the view of the Proposed Action.

Given the location of the proposed BESS Facility's project equipment, setback distance, existing tree/vegetation screening, and consistency with onsite and surrounding uses/facilities, the BESS Facility does not have the potential to result in significant increased adverse visual impacts.

The relocation of the training facility, construction of the underground interconnect line, upgrades to the existing LIPA substation, and the proposed BESS Facility were accounted for and will not have any adverse visual impacts. The relocation of the training facility includes the removal of the larger existing administrative building, replacement with the training facility and will be consistent with onsite and surrounding uses/facilities.

Based on the results of the visual impact assessment, the Proposed Action will not result in significant adverse impacts on the visual character of the Study Area and will not result in significant alteration to the existing visual quality and resources in the Proposed Action area. The Proposed Action will not significantly impair the visual landscape as experienced from scenic or aesthetic resources and will not interfere with or reduce the public's enjoyment or appreciation of the appearance of any inventoried scenic, open space, or other resource. Thus, there will be no significant adverse visual impacts from the Proposed Action.

Archaeological/Historic Resources

The Proposed Action is close to one property that is listed on the State or National Register of Historic Places (Josiah Woodhull House). A consultation request was submitted to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) on May 4, 2023, to evaluate the potential impact from the Proposed Action on historic resources. A response was received from the OPRHP on May 20, 2023 stating that since the Proposed Action is located in close proximity to the Josiah Woodhull House, that a visual analysis of the Proposed Action on this historic resource should be performed. As stated above, there is intervening vegetation that will screen the historic resource from the Proposed Action, and therefore the Proposed Action will have no impact on historic resources listed in or eligible for the New York State and National Register of Historic Places. A copy of the OPRHP's Letter of No Impact is provided in Appendix E.

Energy

The BESS Facility will support New York's Climate Leadership and Community Protection Act (CLCPA) and the Public Service Commission's (PSC) Order establishing a statewide energy storage goal of installing 1,500 MW of energy storage by 2025 and 3,000 MW by 2030. Governor Hochul announced a doubling of the latter goal to 6,000 MW by 2030 during her State of the State address in January 2022. In June 2024, PSC approved an updated roadmap submitted by New York State Energy Research and Development Authority (NYSERDA)/Department of Public Service (DPS) staff which outlines how this will be achieved. Long Island's electric grid is rapidly changing in preparation for expected offshore wind and solar generation and the retirement of aging power plants. The local grid will need fast-responding, flexible solutions like battery energy storage to accommodate these changes. The Proposed Action will respond to intermittent grid fluctuations to enhance the power grid by charging during periods of excess generation and

discharging during peak load hours. The BESS Facility will also enhance power grid reliability by providing ancillary services (e.g., voltage uplift) to the New York Independent System Operator (NYISO).

Considering the above, the Proposed Action will have positive impacts on the existing energy resources.

Noise and Electromagnetic Field (EMF)

A detailed Noise Impact Assessment Study (“Noise Study”) was completed to evaluate the potential sound level impact of future operational noise levels of the Proposed Action (*see* Appendix F). The substation upgrades and interconnect line components of the Proposed Action do not include any operational-phase noise-generating equipment and therefore are excluded from the Noise Study. The relocation of the training facility immediately adjacent to the proposed BESS Facility within the Proposed Action Site will not change the amount of noise generated by the training facility’s continued operation.

The Proposed Action contains several types of noise producing equipment, which were evaluated in the noise study including battery units, MV transformer units, one (1) auxiliary load transformer, one (1) substation transformer, and one (1) HVAC unit.

The Proposed Action only sound levels were calculated at each receptor, which were combined with the assumed ambient sound level of 50 dBA to estimate future sound levels with the Proposed Action in place. As the calculated Proposed Action-only sound levels are significantly lower than typical suburban nighttime ambient noise levels and both noise levels are well below the thresholds set by NYSDEC guidance, site specific ambient noise measurements would provide no significant information and are unwarranted.

The difference between the Proposed Action sound level and typical local nighttime sound level were also determined. Typical nighttime levels were utilized, as this is the time when the lowest ambient noise levels occur. The noise generation at the Proposed Action Site will be constant, as there is no increase in daytime activity associated with the proposed BESS Facility.

Electromagnetic Field (EMF)

The potential EMF impact of the Proposed Action has been evaluated based on a comparison of the EMF levels calculated for the PSEG Long Island’s West Bartlett Substation Project and the Proposed Action (*see* Appendix G). According to the PSC’s Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued and effective September 11, 1990), the prudence avoidance health standard for a magnetic field is 200 milligauss (mG) at the edges of major transmission facility rights-of-way (100 feet for circuits with voltage less than 230kV with the transmission line centered). Major transmission facilities are defined as

transmission line facilities that are subject to Article VII of the Public Service Law. Although the Proposed Action is not subject to Article VII, the PSC standard will be used for EMF evaluation.

For comparison purposes, the LIPA West Bartlett Substation is a 69kV substation with two connecting overhead 69kV transmission circuits. The Proposed Action will include an approximately 500-foot 138kV underground transmission line. As a conservative approximation, projected EMF for the Proposed Action was doubled as compared to the West Bartlett Substation. This is a conservative estimate as the National Institute of Environmental Health Sciences identifies typical average EMF fields for transmission lines between 115kV and 230kV as ranging from 29.5mG to 57.5 mG at the source (*see* Appendix H). The strongest EMF is anticipated adjacent to the substation equipment and the transmission lines. EMF rapidly decreases with distance, and EMF levels outside of the Proposed Action Site should not be distinguishable from the typical background conditions.

The EMF study undertaken for the West Bartlett Substation Project included calculating average and peak-load magnetic fields for post-project conditions. Peak-load conditions represent the highest anticipated load conditions during summer months when power demand is highest. The EMF Study calculated project operational magnetic fields at several profile locations extending outward from the West Bartlett Substation fence and across the interconnecting 69kV transmission circuits. The maximum magnetic field measurement collected from all profile locations (including around the substation and across the 69kV transmission circuits) was 26.1 mG (under peak-load conditions). A projection of twice the EMF at the higher voltage associated with the BESS transmission results in a calculation of 52.2 mG associated with the Proposed Action, which is well below the PSC's prudence avoidance health standard of 200 mG. Based on a comparative analysis of the West Bartlett Substation, the predicted EMF levels from of the Proposed Action will be below the 200 mG prudence avoidance health standard established by the PSC and will not result in significant adverse impacts.

Air Quality

Overall, the emissions generated by the Proposed Action will be limited to the operation of demolition and construction equipment and vehicles during work hours. These emissions are temporary, lasting approximately six months for the building demolition and approximately 16 months for the construction of the BESS Facility and the interconnection, with no additional emissions to be generated after construction of the Proposed Action is complete. Since demolition vehicles, construction vehicles, worker vehicles, and demolition and construction equipment are not expected to operate on a continuous basis during any day, any generated air emissions will not result in significant adverse impacts to air quality. In addition, best management practices will be utilized in order to limit off-site migration of dust, including by wetting soils and demolition materials, covering stockpiles and roll-off containers, and limiting vehicle speed within the Proposed Action Site. Therefore, construction activities will not result in significant adverse impacts to air quality.

For Further Information:

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Dated: December 17, 2024