1.0 Project Description

Alcazar ESS, LLC (Applicant) proposes to construct, own, and operate the Alcazar Energy Storage Project (Project) at 430 Hurley Avenue in the Town of Ulster, Ulster County, New York. The Project will consist of a lithium-ion battery energy storage system (BESS) facility (Facility), to be located on approximately 40 acres of privately-owned land in the Town of Ulster, New York (Project Site), capable of storing and delivering approximately 250 megawatts (MW) of electric energy and associated ancillary services into the New York electric grid. This chapter provides a detailed description of the Project location and setting, background, purpose, and objectives, as well as construction activities, scheduling, and any required approvals.

1.1 Location and Setting

1.1.1 Project Location

The Facility is located at 430 Hurley Avenue, Hurley, Ulster County, New York on Assessor Parcel Number [APN] 48.17-1-26. The approximate Facility coordinates are 41°55'59.80"N, 74° 2'34.75"W (WGS84 coordinate system). The Project Site will comprise approximately 15 acres south of Hurley Avenue that will contain the proposed BESS facility and Project substation, including a stormwater retention basin, and a temporary area for construction staging, laydown, and access; an additional approximately 25 acres north of Hurley Avenue will contain an aboveground 0.3-mile gen-tie transmission line and associated transmission line structures that will connect to the existing Central Hudson Gas & Electric (CHGE) Hurley Substation. The proposed gen-tie line will be located within portions of Parcels 48.17-1-13.110 and 48.17-1-22.110, which are owned and operated by CHGE; no other structures are proposed to be constructed within these parcels.

The Project Site is a former site of Coleman High School, a private high school that has been shuttered since 2019. The school building was built in 1967, is more than 50 years old and will require NYSHPO approval for demolition. The Project is currently terraced into roughly 3 major levels, the lower field level in the front, the school building level in the middle and the upper parking lot level. Behind the parking lot, a steep slope rises southward toward Interstate Route 87 (New York State Thruway). The Project Site is bounded by the Central Hudson Gas & Electric (CHGE) Hurley Substation to the north across Hurley Avenue, a CHGE-owned parcel to the west with a 345kV transmission line corridor, the New York State Thruway to the south and an OM (Office and Manufacturing)-zoned parcel to the east, where a single-family residence is located approximately 160 feet from the Project site boundary (and approximately 400 ft from the closest proposed BESS container). There is another OM-zoned parcel with a single-family residence located to the North of the Property across Hurley Avenue and approximately 80 feet from the Project site boundary (300 feet from the closest proposed BESS container).

The Project Site is split into two (2) zoning districts – R-30 (Residential) and OM (Office and Manufacturing). The Town of Ulster does not have a local zoning or use ordinance specifically applicable to BESS. However, the Town Building Inspector issued a zoning interpretation letter effective March 18, 2025, confirming that the proposed BESS is classified as a “utility company structure” under the Town of Ulster Zoning Code. Utility company structures are categorized as an “industrial use” in the Town’s Table of Use Regulations and are permitted via site plan review by the Planning Board and special use permit from the Town Board.[1] A 100-foot setback for batteries from Hurley Road will be maintained. In addition, there are no existing easements running through the Project site.

[1] See Zoning Law §190-11 Table of Use Regulations and Table of Lot and Bulk Requirements; see also Local Law 3 of 2019, amending the Table of Use Regulations for Utility Company Structures).

1.2 Background, Purpose, and Objectives

1.2.1 Background

The Applicant proposes to construct and operate a lithium-ion battery energy storage facility, which includes a project substation, substation controls building and modular office and storage enclosures including additional safety requirements (as detailed in Table 2-1 below). This Facility will be capable of storing and delivering approximately 250 MW of electric energy and associated ancillary services into the NY electric grid.

1.2.2 Purpose

The proposed Project is in response to New York's plan for a clean-energy future and a zero-carbon electricity supply by 2050. The purpose of the Project is to provide grid reliability and resiliency services to the local region and to help integrate renewable energy into the grid. The Project, with its interconnection to CHGE 345 kilovolt (kV) Hurley Substation, is strategically located at one of the most important substations in the Hudson Valley and Ulster County. Pursuant to New York State's Community Leadership and Climate Protection Act (CLCPA), the New York Public Service Commission has approved NYSERDA to procure 3,000 Megawatts (MW) of utility-scale battery energy storage projects like the proposed Project to address New York State's immediate need for battery storage. The Project will participate in the NYSERDA Request for Proposal (RFP) State solicitation process, with the first RFP being issued by NYSERDA in the summer of 2025 for Projects that can reach commercial operation as early as the summer of 2028.

Key Project benefits include the following:

- Meet New York State's immediate need for utility-scale energy storage as established by the New York State Public Service Commission's 2024 authorization for NYSERCA to procure 3,000 MW starting in the summer of 2025.
- Maximize renewable energy use by storing the energy during off-peak times when renewable energy supply is abundant for redistribution during peak demand when renewable supplies are offline.
- Support and optimize existing and future renewable energy generation investments and New York's goal of a zero-carbon future.
- Offset the need for additional electricity generated from fossil fuels and thereby assist the state in meeting its air quality goals and reducing greenhouse gas emissions.
- Supply up to 250 MW of reliable energy services to the region – enough electricity to supply approximately 250,000 homes for a 4-hour duration.
- Reduce dependence on costly, high risk transmission infrastructure by placing electric energy supplies close to the communities they serve.
- Reduce power bills by lowering peak power demand charges.
- Provide Ulster County and the local economy significant economic benefits via construction jobs and the ancillary economic stimulus associated with the construction and operation of the Project.
- Provide Ulster County with additional property tax revenues associated with the Project investment.

1.3 Project Overview

The Project will be capable of charging and discharging approximately 250 MW of electricity supply and grid ancillary services for a 4-hour duration or longer. The major components of the Project are described in the following subsections, with additional detail provided in Table 2-1. Project battery and equipment suppliers will not be selected until after the Project is awarded a contract by NYSERDA and the Project equipment's exact dimensions, specifications, and Facility layout will depend on the technology selected and equipment available for order and purchase to meet the project schedule and NYSERDA contract timeframe requirement. As such, the Project design assumptions provided herein are intended to establish the maximum Project Site footprint and environmental impacts that will allow for

flexibility in final Project manufacturer selection, design, specifications, and equipment layout. The Project equipment, design, and layout selected will be permitted, constructed, and operated pursuant to applicable federal, state, and local codes and regulations.

Table 2-1. Project Equipment Details

Equipment	Description	Number of Units/Size of Footprint in Acres	Height
Battery Enclosures	Integrated battery, battery controls, and ancillary equipment with HVAC	Contained within the approximately 15-acre BESS site and meeting lot coverage requirements	Up to 14 feet
PCS Skid	Skid containing PCS equipment (combined inverters, chargers, and LV-MV transformer) or similar configuration equipment	Contained within the approximately 15-acre BESS site and meeting lot coverage requirements	Up to 14 feet
Acoustic Panels	Acoustic panels adjacent to battery enclosures and PCS, if necessary	Contained within the approximately 15-acre BESS site, as may be required, and meeting lot coverage requirements	Up to 14 feet
PDC	Substation controls building	1 to 2; contained within the approximately 1-acre Project substation and meeting lot coverage requirements	Up to 25 feet
MV Collection System	Underground (trenched) or above ground (cable trays)	Approximately 5ft x 10ft, cable trays up to 3ft high	Up to 3ft
Operations and Maintenance (O&M) Building	Building for use by operations and maintenance personnel, equipment/tool storage, and office/restroom use.	Approximately 45 feet by 50 feet	Up to 25 feet
Fire Water Storage Tank	Aboveground water storage tanks for fire water use	1 tank contained within the Project Site with a total storage volume of up to 30,000 gallons	Up to 15 feet
Water Storage Tank	Aboveground water storage tank	1 tank contained within the Project Site with a total storage volume of up to 10,000 gallons	Up to 15 feet
Wastewater Holding Tank	Belowground wastewater holding tank	1 belowground wastewater holding tank of up to 5,000 gallons	n/a
MPT	Main power high-voltage transformer, also known as a generator step-up transformer	1 to 2 MPTs; contained within the approximately 1-acre Project substation and meeting lot coverage requirements	MPT up to 30 feet; fire wall up to 35 feet (if required)
Auxiliary Transformers	LV-MV auxiliary transformers for equipment backfeed power	Up to 10; contained within the approximately 15-acre BESS site and meeting lot coverage requirements	Up to 14 feet
Emergency Generators	Emergency generators to run critical auxiliary project load in the event of a system outage.	One to two generators, approximately 25'x10'x12'	Up to 14 feet
Transmission Towers or Poles and Static Masts	Steel monopole or wood pole electrical transmission	Approximately 4 transmission towers,	Transmission poles up to 150 feet depending on

Table 2-1. Project Equipment Details

Equipment	Description	Number of Units/Size of Footprint in Acres	Height
	towers or poles and static masts	depending on interconnection conditions, and up to XX static masts located at the Project substation	interconnection and line crossing conditions; static masts up to 100 feet
Other Lighting, Electrical, Safety, Communications, and Security Equipment	Various, as required to conform to manufacturer's specifications and to meet building and fire safety codes.	Not applicable	Switchgear cabinets and power distribution panels up to 10 feet; junction boxes and telephony equipment up to 8 feet
Perimeter Site Security/Sound Wall and Fence and Substation Partitioning Fence	The Perimeter Site Security/Sound Wall will surround the BESS site and will be constructed of concrete masonry unit (CMU), composite, or a similar material and include Project gates. The Substation Partition Fence will be interior chain link fencing separating the Project substation within the BESS site.	The Perimeter Site Security Wall will be approximately 3,500 linear feet. The Substation Partitioning Fence will be approximately 300 linear feet.	The Substation Fence and Security Wall will be 8 and 14 feet, respectively

HVAC = heating, ventilation, and air conditioning
LV = low voltage
MPT = main power transformer
MV = medium voltage
O&M = operations and maintenance
PCS = power conversion system
PDC = power distribution center

1.3.1 Project Components

Project components are described in the following sections.

1.3.2 Battery Enclosures

The Project will consist of UL9540 listed, non-walk-in, outdoor enclosures utilizing lithium-based battery modules installed in racks and housed within the enclosures. A typical battery enclosure will house hundreds of battery modules, where each enclosure typically can store between 0.4 and 7.0 megawatt hours of energy.

Each individual module within an enclosure is monitored and controlled to ensure safe and efficient operations. Every enclosure is equipped with integrated operational management systems and fire and safety systems such as HVAC; gas, heat, and smoke detection; and alarms to ensure safe and efficient operations. The Project and its systems will be designed, constructed, and operated pursuant to the current NY and local building code and NY Fire Code requirements. The modules within each enclosure are accessed for maintenance from the outside via cabinet doors.

The dimensions of a typical BESS enclosure vary between manufacturers and are arranged in repeated "blocks" across the site. System blocks may consist of a single enclosure, or several smaller enclosures set side-by-side to create banks of batteries with similar overall dimensions. Smaller enclosures typically

are closely spaced or physically attached at the time of construction, and larger enclosures are placed in smaller groupings or individually. An enclosure grouping typically consists of 2 to 30 enclosures measuring up to 100 feet long by 8 feet wide or up to 70 feet long and up to 16 feet wide with heights up to 20 feet. Smaller enclosures may be as small as 3.5 feet long by 5 feet wide by 8 feet tall, while larger enclosures may measure more than 50 feet long by 12 feet wide with a height of up to 20 feet. However, the number, size, layout, and capabilities of each enclosure will vary depending on the battery, enclosure manufacturer design, and BESS system manufacturer selected for the Project. Regardless of the system manufacturer, the Project's developed footprint and overall capability will remain substantially the same. In some instances, the battery enclosures may contain inverters that convert LV direct current (DC) to alternating current (AC) (and vice versa when charging).

1.3.3 Fire and Thermal Runaway Safety Equipment and Design Features

The Project will comply with all State, County, and Town codes and regulations related to health, fire, and safety. Specifically, the Project will be required to comply with the Code of the Town of Ulster, Section 61-1 enforcing the New York State Uniform Fire Prevention and Building Code. The Fire Code of New York State (FCNYS) is currently being amended to adopt the Governor's Interagency Fire Safety Working Group recommendations; the next version of the FCNYS is expected to be adopted by the time the Project is submitted for building permits. Additionally, the Project will voluntarily adhere to the latest version of The National Fire Protection Association (NFPA) standard No, NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, which contains best practices for energy storage safety, often leading the fire code by a number of years. Standard NFPA 855 and Chapter 1206 of the FCNYS applies to stationary electric energy storage systems and addresses development standards for design, installation, commissioning, operation, maintenance, and decommissioning of these systems, including the following elements:

Compliance with these advanced, nationally adopted standards is designed to ensure the safety of the site installation and operation of battery storage systems for operators, first responders, and the neighboring community. As a result of the implementation of these advanced standards, BESS projects today operate safely and efficiently throughout the state.

The Facility will be designed and equipped with Underwriter's Laboratories (UL) listed safety management equipment and NFPA-compliant fire and life safety systems designed to manage the risk of thermal runaway events. In the unlikely event that a thermal runaway will occur, the facility equipment, systems, and operational procedures are designed to prevent deflagration and mitigate propagation of a fire to surrounding equipment or areas. Specific features include:

Enclosure Type: The BESS enclosures will be a cabinet-type enclosure as defined by NFPA 855:2023 Section 3.3.9.2. Cabinet enclosures prevent employees from occupying enclosures and therefore enclosures are considered equipment and not building or occupied structures. The enclosures will be of non-combustible construction (i.e. steel) per FCNYS Section 1206.10.5 and will not exceed the maximum dimensions of 53' x 8' x 9.5'per NFPA 855:2023, Section 9.5.2.4.1.

Remote Outdoor Installation: The Project Site Plan and equipment design will meet the requirements of the NY State Fire Code, Section 1206.15.1 and NFPA 855 Chapter 9.3.2(1) for a remote outdoor installation where any installation 100 feet or more from buildings, lot lines, or public ways, stored combustible materials, hazardous materials, and other exposure hazards is considered a remote installation.

Detection and Monitoring: Each enclosure will include NYSFC Section 1206.12.4 and NFPA 855:2023 Section 9.6.1 compliant smoke or radiant heat detection and, additionally, gas detection in accordance with NYSFC Section 1206.13.3 and NFPA 855:2023 Section 9.6.5.6.7. Alarm, trouble, and supervisory signals will be aggregated to a master fire alarm control or annunciator panel at an on-site Fire Command Center location near the site entrance and approved by the Fire Authority Having Jurisdiction

(FAHJ) (NFPA 855:2023 Section 4.8.2.2). In addition, the alarm signals will be transmitted to an approved off-site supervising station, monitored 24/7/365, for prompt notification of the Spring Lake Fire Department of any alarms.

Fire Suppression: Each enclosure is designed utilizing passive thermal runaway protection, including protective coatings, spacing, barriers and insulation between cells, modules, racks, and enclosures. Passive thermal runaway control has replaced extinguishing agents and/or water-based fire suppression, as more reliable, safe and effective with lithium-ion based enclosures.

Explosion Control: Each enclosure will be equipped with explosion control equipment and measures complying with NYSFC Section 1206.13.3, and NFPA 69 via NFPA 855 Section 9.6.5.6 requirements. The NFPA 69 standard provides for active venting of gases via fans and dampers that are activated by gas sensors to maintain concentrations below explosion risk.

Emergency/Fire Water Supply: The Project will include a 30,000 gallon non-pressurized, fire water storage tank located at the Fire Command Center near the site entrance. Fire Authorities Having Jurisdiction (FAHJ) are authorized to utilize NFPA 1142, Standards on Water Supplies for Urban and Rural Fire Fighting, to establish flow requirements for fire fighting in areas where adequate municipal water systems do not exist. Under NFPA 1142, Section 3.3.23 establishes a flow rate of 250 gpm for 2 hours or 30,000 gallons. The methodology is the established precedent for emergency water supply tanks at enclosure-based battery energy storage facilities where adequate pressurized municipal water supplies are not available and this volume has been determined to meet the fire fighting needs of a credible fire at these facilities, where large quantities of water are not recommended as the appropriate method to address lithium-ion based fires. Additionally, the tanks will be designed, constructed, and maintained in accordance with NFPA 22.

1.3.4 Operations and Maintenance (O&M) Building

The Project will construct an operations and maintenance building on the Project Site that will be used as office space for Facility personnel and include a restroom, and tool and equipment storage. The Building will be approximately 45 feet by 50 feet wide and up to 25 feet tall. The Building will support O&M personnel who will visit the site periodically. Project-related batteries are not proposed to be stored within the O&M Building. However, the Building may contain end-consumer battery equipment such as cellular phones and other communications devices, laptops, computers, uninterruptable power supplies, and similar equipment.

1.3.5 Power Conversion System

LV DC cables will connect the battery enclosures to low-profile, pad-mounted PCS inverter-transformers located adjacent to each enclosure. Inverters within the PCS convert electricity from LV DC to LV AC when power is being taken (discharged) from the battery into the grid. The opposite occurs when charging the battery from the grid. An MV transformer within the PCS is used to convert LV AC current to MV AC current and vice versa.

1.3.6 Medium-Voltage Transformers

As stated previously, in some instances, the inverter is contained within the battery enclosures and a standalone transformer is used instead of a PCS. In this instance, the MV transformer equipment is connected directly to the battery enclosures via LV AC wiring.

1.3.7 Power Distribution Center

The Project will include one or more PDC enclosures to house and protect critical LV and MV electrical, life-safety, communications, and command equipment, plus computers and related equipment. Typically, the PDC is located near the main step-up transformer within the onsite substation area.

1.3.8 Project Substation

The Project's onsite substation will be a secure, separately fenced (chain link security fencing) area where high-voltage electrical equipment, switchgear cabinets, auxiliary transformers, meters, communications equipment, and safety equipment and structures (including static masts and block fire walls) are located, including the PDC and one or two main step-up transformers (also referred to as the battery step-up transformers or generator step-up transformers), which step up the MV from the PCS to the high-voltage level of the transmission system and vice versa, where it then is interconnected with the NYISO electric grid at the Point of Interconnect (POI) via the Project gen-tie line. The Project POI is an existing bay position at CHGE Hurley Substation.

1.3.9 Gen-Tie Line and Interconnection to CHGE Hurley Substation

An approximately 0.3-mile-long, aboveground, high-voltage (345 kV) gen-tie line and fiber optic cables will be constructed from the onsite Project substation, head northwest on the property just west of and parallel to the existing CHGE 345 kV transmission lines located on the property to the west. The gen-tie line will continue across Hurley Avenue and then onto CHGE Hurley Substation property to the Project's POI. This Route Option will require approximately 4 poles, each up to approximately 100 feet in height, depending on final alignment within CHGE property. The ultimate length of the line will depend on final engineering and alignment of the gen-tie line by CHGE.

Crossing Hurley Avenue will require a crossing easement from the Town of Ulster. Precise routing of the gen-tie line within the CHGE property will be determined during the engineering phase of the NYISO interconnection process.

1.3.10 Site Security

The BESS facility will be constructed with a 10' perimeter wall. The site will include an interior access route within the fenced interior. The site access route, interior roads, gates, and other security features will be fully compliant with all local and state building codes for fire and emergency response.

1.3.11 Wall and Landscaping

The Project will be constructed with a 10' solid, concrete masonry unit (CMU) or composite or similar material wall with a stone façade finish. Landscaping, pursuant to an approved landscaping plan will be installed fronting Hurley Avenue.

1.3.12 Other Site Design Features

The Project will include other design features to ensure safety and efficiency as well as compliance with all building, fire, and health and safety regulations, including aboveground and belowground electrical duct banks; electrical systems, meters, communications systems, and security systems; yard lighting; fencing enclosures, barriers and walls, including noise attenuation devices and structures; and fire and O&M access roads within the Facility. Appropriate setbacks and separation between equipment and other features will be accounted for in the overall Project design.

1.3.13 Stormwater Drainage

An engineered stormwater drainage system will be constructed on the Project Site to reroute offsite flows from the adjacent farm fields that flow onto the Project Site and to collect onsite stormwater flows. The stormwater drainage system will include drainage swales and a stormwater detention basin near northern edge of the site, where the majority of stormwater currently exits the area. Because the Project will increase impervious areas, increased runoff is anticipated during storm events. Increases in stormwater will be detained in the retention basin to maintain or reduce the flow rate exiting the site at the existing discharge point. The stormwater drainage system will comply with all local requirements and is proposed near the area where flows currently exit the site.

1.3.14 Lighting

Security and safety lighting will be incorporated into the Project design. Onsite lighting will be turned on only for motion-activated security, emergency, and maintenance purposes; the Project Site will not be lighted during normal operations. The lights will be shielded and directed downward per local building code requirements. If nighttime maintenance activities will be required, maintenance personnel will bring temporary, portable maintenance lighting to the specific area needing maintenance. A Project lighting plan is under way and will be provided for evaluation in the EIR.

1.3.15 Water Service

During the approximate 12-month construction period, the Project will need up to 15 acre-feet (AF) of water for construction-related activities, including grading, concrete installation, dust control, and erosion control. Water usage during decommissioning also is anticipated to require up to 15 AF.

During operations, total onsite annual water use will be no more than 1 AF per year, primarily for landscaping irrigation. Landscaping will comprise a combination of drought-tolerant and native plantings that will minimize water demand. Potable water demand for domestic use and restroom facilities for workers during operations is up to 0.02 AF (5,200 gallons) annually. The Project also will include one or more water tanks that will hold approximately 30,000 gallons of water for emergency fire water supply.

Water supplies during construction and operations are discussed in the following subsections.

1.3.16 Construction

The Project proposes the following options for construction water supply:

- **Water supply:** Current water supply is by Rolling Meadows Water Corporation. The Town of Ulster indicated that it could be transferred under them at some point since the Project Site is located within the Town's Water Program Service Area Boundary. This will be used for the Project's construction, irrigation, fire water supply, and any other uses. Given there was a school onsite, it is expected that water supply should be adequate for construction purposes however alternative measures to truck in recycled water will be investigated if not. An onsite 30,000 gallon water storage tank will be installed for fire safety purposes.

1.3.17 Operations

Water for operations includes irrigation, fire suppression and drinking water. The Project will require up to 1 AF per year of reclaimed water supply to support operations, primarily for irrigation of the Project's planned landscaping. The Project will use existing water supply for irrigation purposes and for other uses.

The Project also will require up to 0.02 AF per year of potable water supply to support operations and maintenance activities on the site. The existing potable water supply line that serves the parcel today will be used for this.

For purposes of fire suppression, the Project will maintain a 30,000-gallon tank of water onsite for emergencies. This tank will be maintained full at all times.

1.3.18 Site Access and Traffic

The northernmost approximately 500 feet of the existing two-lane Hurley Road to the proposed Project Site entrance will be used for construction, operations and emergency vehicle access. A new automatic gate will be installed at the access road intersection with Hurley Road for site access.

Construction of the Project will generate additional traffic in the surrounding area. Construction traffic relates to the traffic generated from construction vehicles, which consist primarily of heavy-duty trucks, smaller vendor trucks, and worker vehicles. Construction activities will include clearing and grubbing, grading, earthwork, trenching, and facility equipment installation.

When construction has been completed, the Project will be monitored and operated remotely 24 hours per day, 7 days per week from the Applicant's offsite control center. The Project will be unstaffed during normal operations. It is estimated that maintenance will include two to four staff members performing maintenance visits biweekly and as needed. The Project will not require specific parking stalls because there are no occupied structures on the site and the facility will be closed to the public. As such, the Project will generate virtually no traffic after construction completion.

1.3.19 Temporary Construction Staging Area

One temporary construction staging area is proposed to be located within the Facility Site and will comprise of the BESS for laydown area, construction management facilities (office trailers), materials and equipment storage, worker parking, and secondary construction access to the site. Vehicle parking, equipment laydown, and vehicle access routes will be clearly marked and limited to areas away from any sensitive cultural resources and habitat. Upon completion of construction, equipment in the staging area will be removed and the area restored to pre-Project conditions.

1.3.20 Operations and Maintenance

The Project will be operated and monitored 24 hours per day, 7 days per week from an offsite control center. Maintenance staff, typically in crews of 1 to 2, are expected to visit the site quarterly and as needed for Project maintenance. During maintenance, crews will park within the facility and circulate among the equipment on the site. No structures on the site will be occupied full-time and the facility will be closed to the public. In addition to regularly scheduled maintenance and as part of Project operations, replacement of batteries and battery enclosures will be required during the life of the Project.

1.3.21 Decommissioning

The Applicant has provided a draft Decommissioning Plan as part of this Application. The Project has an anticipated operational life of up to approximately 20 years, after which the Applicant or proponent may make one of two choices: (1) update site technology and recommission, or (2) decommission the site and remove the systems and their components. All decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and be completed in accordance with all applicable federal, state, and County regulations. If any portion of the Project Site is decommissioned, it could be converted to other uses in accordance with the applicable land use regulations in effect at that time.

1.3.22 Cultural Resources

Initial Cultural Resource Information System (CRIS) Correspondence was submitted to the New York State Historic Preservation Office (NYSHPO) on 1/17/2025 to determine NYSHPO's initial opinions on Project. Correspondence from NYSHPO was received on 3/26/2025 indicating that NYSHPO had determined that the John A. Coleman Catholic High School is eligible for listing in the State and National

Registers of Historic Places. The Applicant is currently working on next steps with NYSHPO, including the preparation of an alternatives analysis to demonstrate that the Project, as proposed is the only feasible outcome for the Project. The expected next steps for the Project following the submittal of the alternatives analysis are that NYSHPO will determine that the demolition of the school will constitute an adverse impact that will likely require a Historic American Building Survey (HABS) documentation and mitigation in order to receive a Letter of Resolution (LOR). This LOR will be forwarded under separate cover following its receival.

1.3.23 Threatened and Endangered Species

Please refer to Attachment 14 of the Application Package for a Threatened and Endangered Species Memorandum detailing the Project impacts on Federal and State listed species.

1.3.24 Wetlands and Watercourses

Please refer to Attachment 15 of the Application Package for the Wetland Delineation report conducted for the at 430 Hurley Avenue Parcel (48.17-1-26). Please note that a wetlands reconnaissance memo for two parcels (48.17-1-22.110 & 48.17-1-13.110) located at 435 Hurley Avenue is included in this Attachment as well. The results of this reconnaissance effort will need to be confirmed during the growing season. A formal wetland delineation will be completed during the growing season (early spring) to confirm the results of the memorandum. Please note that the detailed engineering of the gen tie will need to be coordinated with CHGE for their approval. To the extent that NYSDEC wetland 100 ft buffer modification (tree trimming, etc.) is required during construction, NYSDEC will be engaged accordingly for their permission and appropriate permits.

1.4 Construction Activities and Schedule

1.4.1 Construction Activities

Project construction activities are expected to be as follows:

- Site preparation, including installation of construction stormwater runoff controls and best management practices (BMPs)
- Grading and surfacing of staging area (including laydown area)
- Installation of drainage swales and a drainage detention basin and site grading
- Installation of concrete foundations and supports or driven-pile foundations
- Installation of deep foundations
- Underground trenching for electrical cable and telecommunications, wiring, and electrical system installation, including grounding
- Installation of shallow foundations
- Installation of batteries and other electrical equipment, structures, and buildings
- Assembly and connection of the accessory components, including inverter-transformers and generation step-up transformers
- Installation of HVAC equipment
- Substation and gen-tie line installation for connection to CHGE Hurley Substation
- Addition of finished surfacing materials and landscaping
- Commissioning of the Project

The Project is expected to require approximately 50,000 cubic yards of earthwork, including up to 15,000 cubic yards of imported engineered materials, primarily aggregates. Required fill will be trucked to the site from a source determined by the construction contractor, which is expected to be within 50 miles of the Project Site. Raw materials required for construction will include gravel for onsite roads; concrete, sand, and cement for foundations; water for concrete, dust control, and erosion controls; and landscaping materials. The anticipated workforce and heavy equipment, listed in Table 2-2, will be used during construction activities. Equipment used for construction will run primarily on diesel fuel.

Table 2-2. Construction Workforce and Equipment Required for a Typical Battery Storage Facility

Construction Activity	Workforce	Typical Construction Equipment
Office Staff/Management	5	Pickup trucks and small vehicles
Grading, foundations or driven piles, and underground electrical work	12	Dozer, grader, excavator or drill rig, crane, concrete pump trucks, concrete trucks, pickup trucks with trailers, all-terrain forklifts, water trucks, dump trucks, compactors, generators, welders, pile drivers
Fence and Wall Construction	10	Forklift, backhoe, pickup trucks
Roads/Pad Construction	12	Dozer, grader, front-end loaders, roller, pickup trucks, water trucks, dump trucks, compactors, scrapers
Battery Placement	10	Crane, forklift, pickup trucks
Laborers	30	Pickup trucks
Owner Representatives	5	Pickup trucks
Battery Supplier	30	Pickup trucks
Total Number of Workers[a]	***114***	

[a] The total number of workers provided is throughout Project construction. It is expected that on average 40 to 50 workers will be onsite daily with a peak daily workforce of approximately 60 to 80.

1.4.2 Overall and Construction Schedule

Overall project schedule is below

	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	2027	2028
Land Control	Option Signed										Land purchase	
Site Permit		Permit filing process started				Permit receipt						
Interconnection	Queue filed		Phase 1		Phase 2				ISA negotiation	Agreement signed		
NYSERDA RFP				RFP issued		RFP Award						
Construction										Construction Start		COD

The proposed construction schedule is 12 months to conduct grading activities, install facility equipment, and interconnect to CHGE Hurley Substation. Seasonal constraints are not anticipated to prevent construction from occurring in accordance with this schedule (refer to Table 2-3). Construction activities will occur in a manner consistent with County requirements for workdays and hours.

Table 2-3. Construction Schedule

Timeframe	Construction Activity
Month 1	Commence site preparation and grading
Months 2 to 11	BESS enclosure construction (trenching, foundations, and other components)
Months 3 to 11	Installation of equipment and commercial delivery
Month 12	Site restoration complete

The sequence of construction activities for the BESS facility generally will occur as follows:

1. Stage and mobilize equipment.
2. Install construction stormwater controls, BMPs, and temporary fencing.
3. Prepare the site and perform mass grading and compaction.
4. Trench for electrical cables, wires, and conduits.
5. Install deep foundations, belowground conduit banks, and conduit, then backfill excavated areas.
6. Prepare earthwork for equipment foundations.
7. Pour cast-in-place concrete footings, pad foundations, and/or piers and install driven pilings.
8. Perform foundation backfill and site compaction (as necessary).
9. Install PCS, PDC, BESS equipment, and pad-mounted transformers.
10. Pull cables and connect equipment.
11. Install aboveground utilities.
12. Place finished surface material.
13. Install safety features, permanent fencing, and security lighting.
14. Perform commissioning.
15. Complete site cleanup and restoration.

In addition, the installation of a Project substation and gen-tie line to CHGE Hurley Substation will occur and overlap with these activities. This will entail installation of power poles; stringing of electrical wire/cable; installation of the main power transformer, circuit breakers, lightning protection static mast, and grounding; and installation of the control house.

1.5 Required Approvals

The Project will require various permits and approvals from public or quasi-public agencies. Table 2-4 includes a list of approvals that may be required from the lead agency, trustee agencies, and responsible agencies.

Table 2-4. Potential Approvals Required

Permit/Action Required	Agency	Lead/Trustee/Responsible Agency Designation
SEQR Determination	Town of Ulster	Lead Agency
Special Use Permit (SUP)	Town of Ulster	Lead Agency
MS4 Approval	Town of Ulster	Lead Agency
The NYS SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001, Construction General Permit (CGP)	NYSDEC	NYSDEC
Ministerial Permits (grading, building, encroachment)	Town of Ulster	Lead Agency
Incidental Take Permit, if required	NYSDEC	NYSDEC

2.0 References

Town of Ulster, NY 2023, Town code 2023-12-31-TOWN-CODE-UPDATED-1-1.pdf