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January 5, 2024

Via Electronic Mail and Hand Delivery
Melanie Bachman
Executive Director / Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Petition of Hanwha Q Cells America Inc. for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the proposed Construction, Operation, and Maintenance of a 4.0 megawatt ("MW") Battery Energy Storage System, to be Located at 0 State Pier Road, New London, Connecticut

Dear Ms. Bachman:

I am writing on behalf of my client Hanwha Q Cells America Inc., a subsidiary of Hanwha Group, which is submitting the enclosed Petition for a Battery Energy Storage System facility to be located in New London, Connecticut. Please also find enclosed the original and fifteen hard copies of the Petition, including Figures and Exhibits to the Petition. Please also find enclosed a check for $625 for the petition fee.

Lastly, the electronic version of the Petition may be accessed via the link below.

https://www.dropbox.com/scl/fo/j5ums12g161hktnotzc8f/h?rlkey=bjuepnsp9uj12j9xd2iquewkz&dl=0

Please do not hesitate to contact me with any questions or concerns regarding this submission.

Sincerely,

Mark J. Cook, Esq.

Enclosures
cc: City Clerk, City of New London, Connecticut

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

PETITION OF HANWHA Q CELLS AMERICA INC. FOR A DECLARATORY RULING FOR THE LOCATION AND CONSTRUCTION OF A 4 MEGAWATT BATTERY ENERGY STORAGE SYSTEM AT 0 STATE PIER ROAD, NEW LONDON, CONNECTICUT

JANUARY 5, 2024

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CONNECTICUT SITING COUNCIL

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	)	January 5, 2024

PETITION OF HANWHA Q CELLS AMERICA INC.
FOR A DECLARATORY RULING

I. INTRODUCTION

Pursuant to Connecticut General Statutes ("Conn. Gen. Stat.") §§ 4-176 and 16-50k and Regulations of Connecticut State Agencies ("Conn. Agencies Regs.") § 16-50j et seq., Hanwha Q Cells America Inc. ("Qcells" or the "Company") respectfully requests the Connecticut Siting Council ("Council") issue a declaratory ruling that a certificate of environmental compatibility and public need is not required for the location, development, and construction of a Qcells 4 megawatt battery energy storage system facility ("Qcells BESS Facility") at 0 State Pier Road, New London, Connecticut (City of New London Assessor's ID: F10 0247 005A).

As described further in this Petition for Declaratory Ruling (the "Petition"), the construction, operation and maintenance of the Qcells BESS Facility satisfy the statutory elements of Conn. Gen. Stat. § 16-50k and will not have a substantial adverse environmental effect.

II. PETITIONER

A. Petitioner's Experience and Qualifications

Qcells is a leader in utility-scale solar and energy storage facility turn-key development, construction, and operations in the United States and across the globe. Qcells helps businesses and utilities reach long-term sustainability and resiliency goals.

Qcells' substantial experience in standalone BESS facilities is highlighted by Qcells' development and construction of a 190MW / 380MWh standalone BESS facility in Hunt County, Texas, one of the largest standalone BESS facilities in the United States. In addition, Qcells is in the process of planning for and/or onboarding an additional 7,000MW in BESS facilities across the United States.

Qcells has also installed its advanced battery management platform, Growing Energy Labs, Inc. ("GELI") Energy Management System ("EMS", and together with GELI, the "GELI EMS Platform") in over eighty-five sites under management across the United States, safely managing BESS facilities efficiently and effectively with a cumulative 236MW / 517MWh in battery energy storage.

To date, both Qcells, and its parent company Hanwha Group has invested over $200 Million in the development, construction, and acquisition of standalone BESS facilities in the United States.

B. Petitioner Contact Information

i. Petitioner

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ii. Petitioner's Counsel

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III. QCELLS BESS FACILITY

A. Benefits and Operation of the Qcells BESS Facility

The Qcells BESS Facility will help meet Connecticut's energy storage goals set forth in Connecticut Public Act 21-53, *An Act Concerning Energy Storage.* The Qcells Front-of-the-Meter ("FTM") New London BESS Facility will store energy already on the electric grid, and then supply that power back onto the grid as appropriate, particularly during high-peak demand timeframes. In doing so, the Qcells BESS Facility will help address the priorities set forth in Public Act 21-53, specifically by improving grid consistency and resilience. The Qcells BESS Facility will help improve grid consistency by supplying saved electricity during high peak demand times thereby helping to avoid numerous brownouts or power failures. The Qcells BESS Facility will provide grid resilience by making saved electricity available during an outage or supplementing the supply of electricity when that supply is temporarily interrupted due to large introductions of or removals of electricity from high-volume users.

The proposed location of the Qcells BESS Facility is within a load pocket area and can help alleviate and address the limited ability for this load pocket area to import electricity.

The Qcells BESS Facility will also help facilitate the integration of clean, renewable energy into the electric grid. This objective is also codified in the Connecticut General Statutes wherein the Connecticut General Assembly prioritized "energy…conservation, energy efficiency and the development and utilization of renewable sources of energy."[1] The Qcells BESS facility will accomplish this objective by saving energy produced by clean, renewable sources of energy, especially during high-generation timeframes, like when the wind or sun are especially strong and

[1] General Statutes of Connecticut ("Conn. Gen. Stat.") § 16a-35k.

consistent. Without the Qcells BESS Facility, that clean, renewable energy may go unused and wasted.

The Qcells BESS Facility will align with the *2022-2024 Conservation & Load Management Plan: Connecticut's Energy Efficiency and Demand Management Plan*, which emphasizes the importance of "battery storage"[2] in reaching its defined goals.

The Qcells BESS Facility will also align with this Council's White Paper as it can help mitigate negative impacts to the energy system during system interruptions.[3]

The Qcells BESS Facility is a proposed stand-alone energy storage system that will participate in wholesale energy, capacity, and frequency regulation markets.

The Qcells BESS Facility will also participate in the ISO-NE Forward Capacity Market to qualify and receive commitments to operate as a resource that can provide electric capacity.

The Qcells BESS Facility utilizes its advanced GELI EMS Platform to continuously respond to electricity market needs. The Qcells Operations Center can remotely and manually override the GELI EMS Platform at any time. If Qcells elects to contract with an entity to provide specific services, the Qcells Operations Center can remotely operate the Qcells BESS Facility to comport with the specific terms and conditions for dispatch management pursuant to such a contract.

The Qcells BESS Facility can charge and discharge between 0.0 MW and 4.0 MW. The Qcells BESS Facility can fully recharge in approximately 2.7 hours at 4.0MW and approximately

[2] See *2022-2024 Conservation & Load Management Plan: Connecticut's Energy Efficiency and Demand Management Plan*, Eversource Energy, United Illuminating, Connecticut Natural Gas Corporation, and Southern Connecticut Gas, p. 16

[3] See *An Act Concerning Electricity and Energy Efficiency*, Public Act 07-242, Sec. 8, White Paper on the Security of Siting Energy Facilities, Connecticut Siting Council, Oct. 8, 2009, p. 5.

5.4 hours at 2.0 MW. Year over year as the batteries approach replacement age, these rates may change.

The Qcells BESS Facility is a Front of Meter facility and has no associated net load. As a result, the Qcells BESS Facility will not reserve any battery storage capability for back-up power.

All BESS Units will be dispatched simultaneously and can operate at any value between 4.0 MW charge and 4.0 MW discharge. All BESS Units respond together to keep degradation equal across all BESS Units.

The Qcells BESS Facility is an energy storage system and not an energy generation system and as a result it does not have typical ramp rates compared to other forms of conventional generation. The Qcells BESS Facility is capable of changing from a full 4.0 MW charge to 4.0 MW discharge in less than 1 second.

B. Consultation and Outreach

Qcells counsel contacted the Honorable Michael Passero on May 17, 2023 regarding a proposal by Qcells to construct and operate the Qcells BESS Facility at 0 State Pier Road, New London.

Qcells counsel met with Mayor Passero's designated agents Michelle Johnson Scovish, the City's Assistant Planner, and Barry Levine, the City's Planning & Zoning Chairman on May 24, 2023 and presented additional information regarding the proposed Facility's proposed location, operation, fire protection, security, and other details.

Ms. Scovish and Chairman Levine then invited Qcells counsel to present further details of the Qcells BESS Project to the entire Planning & Zoning Commission at a subsequent meeting.

Qcells counsel attended the June 15, 2023 meeting of the Planning & Zoning Commission and presented additional details regarding the Qcells BESS Project, including initial schematic site

plans depicting the Qcells BESS facility on the subject parcel and technical specification data regarding the BESS equipment. Members of the Planning & Zoning Commission also had the opportunity to pose questions during the presentation to which Qcells counsel provided substantive answers.

On July 5, 2023 Mayor Passero issued a letter recommending the proposed Qcells BESS Facility for approval by the CT Siting Council. The City recommended that the BESS Facility be enclosed by an eight foot chain link fence with nothing at the top of the fence. Qcells has incorporated the City's recommendation into its site plans in Exhibit A.

The City also recommended that Fire and Building codes should be met to the satisfaction of the City's respective appointed Fire and Building officials. The Qcells BESS Facility will comport with all Building and Fire codes.

In this regard Qcells has met with the City of New London Fire Marshal's office on November 22, 2023 providing the Fire Marshal with the Qcells Emergency Response Guide ("ERG"), the Qcells BESS facility site plans, and technical specifications. Qcells will continue to work closely with the Fire Marshal's office through every step of the design, construction and operations process.

Abutting property information is provided in Exhibit A and Exhibit I. Abutters and officials have been notified of the proposed Qcells BESS Facility via U.S. Certified Mail, return receipt requested and all logs regarding same can be found in Exhibit I.

Table 1 lists the outreach completed by Petitioner.

Table 1: Record of Outreach

Date	Contact	Type	Purpose
17-May-23	Mayor Michael Passero	Email	Qcells counsel reaches out to advise Mayor Passero of intended Qcells BESS Facility and request meeting with Mayor Passero and any other City officials deemed appropriate.
24-May-23	Mayor Michael Passero; Assistant Planner Michelle Johnson Scovish, Chairman of Planning & Zoning Commission Barry Levine	In person	Qcells counsel presents information regarding Qcells BESS Facility proposed location, operation, fire protection, and security.
15-Jun-23	Assistant Planner Michelle Johnson Scovish, Chairman of Planning & Zoning Commission Barry Levine and City Planning & Zoning Commission	In person	Qcells counsel presents information regarding Qcells BESS Facility proposed location, operation, fire protection, and security to City of New London Planning & Zoning Commission at the request of Mayor Passero and Assistant Planner Johnson Scovish. Field questions from the Commission and discussed recommendations the Commission would like to make.
26-Jun-23	Chairman of Planning & Zoning Commission Barry Levine, Assistant Planner Michelle Johnson Scovish	Email	Qcells counsel corresponds with Chairman Levine and Assistant Planner Michelle Johnson Scovish regarding the letter of recommendation.
5-Jul-23	Mayor Michael Passero	Email	Mayor Passero issues a letter of recommendation regarding the proposed Qcells BESS Facility recommending an 8 foot high chain link fence and compliance with all fire and building codes.
13-Nov-23	City of New London Fire Marshal Vernon Skau	Phone	Qcells counsel requests meeting with Fire Marshal Skau regarding Qcells BESS Facility fire protection systems.
22-Nov-23	City of New London Fire Marshal Vernon Skau	In person	Qcells counsel presents information regarding Qcells BESS Facility fire protection systems. Provided copy of most recent site plans, Emergency Response Guide, and Water-Based Fire Suppression System guide to Fire Marshal and discussed New London Fire Department emergency response procedures. Communicated to Fire Marshal that Qcells would continue to work closely with Fire Marshal office through every step of the design, construction, and operations process.

IV. PROPOSED QCELLS BESS FACILITY SITE

A. Qcells BESS Facility Host Parcel, Access Parcel, and Site Description.

The Qcells BESS Facility will be located at 0 State Pier Road, New London also identified as City of New London Assessor's ID: F10 0247 005A (the "Host Parcel"). The Host Parcel is 0.84 acres, previously disturbed, partially graded and is currently vacant with no structures on it. The Company leases a portion of the Host Parcel within which the Facility will be located (the "Leased Premises"). There is an existing electric vault owned by The Connecticut Light & Power Company d/b/a Eversource Energy ("Eversource") located on the Host Parcel with which the Qcells BESS facility will interconnect. Please see Figure 1, Figure 3, and Exhibit A for additional information regarding the Host Parcel's topography and general character.

Access between the Qcells BESS Facility and the public State Pier Road will be via 163 State Pier Road, New London identified as City of New London Assessor's ID: F10 0247 005 on the existing access way on 163 State Pier Road, New London ("Access Parcel"), the adjacent lot hosting the electrical supply retail business. The same entity owns both the Host Parcel and the Access Parcel. Per its lease agreement, Qcells and its agents and contractors will have the non-exclusive right of ingress and egress on, under, over, and across the adjacent 163 State Pier Road parcel to access the Qcells BESS Facility.

The area around the Qcells BESS Facility is generally commercial and industrial in nature, including an electrical retail business to the immediate north and an auto repair shop to the northeast. A recreational park owned by the City of New London is located across Crystal Avenue and a portion of the recreational area is situated at the bottom of an embankment, approximately 210 feet away from the Qcells BESS Facility. Connecticut State Route 32 runs to the immediate south of the Host Parcel.

The Host Parcel is located in a City of New London General Commercial C-1 Zone, which generally allows other public and private utility facilities. There is substantial, regenerating vegetation and a growing, mature tree canopy on the Host Parcel's southern and western boundaries.

B. Qcells BESS Facility Description.

The Qcells BESS Facility will have a total power capacity of 4.0 megawatts ("MW") AC and can store 11.0 megawatt hours ("MWh") DC of energy (the "Facility"). Please see Exhibit A and Exhibit B.

The Facility will consist of the following:

- Four (4) Sungrow model ST2752UX-US liquid cooled battery energy storage units ("BESS Units") placed on poured concrete pads.
    - Each BESS Unit measures 30'-8"W x 8'-6"H x 5'-7"D and contains:
        - Forty-eight (48) lithium-ion batteries. All lithium batteries are hermetically sealed within individual protective cases and stored on battery racks within each BESS Unit, connected to the Facility.
        - One (1) liquid cooling chiller unit. Each liquid cooling unit utilizes 50-50 ethylene glycol and water for coolant. The ethylene glycol and water is similar to the antifreeze that automobiles utilize for cooling. Refrigerant is stored separately in a sealed system.
        - One (1) electrical cabinet containing accessory equipment.
        - A water-based fire suppression system consisting of sixteen (16) sprinkler heads, two (2) thermal detectors, two (2) gas detectors, and two (2) smoke detectors;

- One (1) Sungrow model SC4000UD-MV-US Power Conversion System ("PCS") unit measuring 19'-11"W x 9'-6"H x 8'D including one (1) 4,000 kVA medium voltage ("MV") transformer using degradable Ester Oil. PCS Unit located on poured concrete pad.
- One (1) AC MV switch board;
- One (1) surge arrestor;
- One (1) interconnection cable;
- One (1) communications and auxiliary unit;
- 8' high chain-link fence with locked gate;
- One (1) aluminum uniblend PVC high speed communications cable for communications between the BESS Units and the EMS.

The four (4) BESS Units will be connected to inverters via underground conduit. Facility inverters will export energy at 13.2 kV. As a result, no additional main step-up transformer or substation is needed.

The Facility will be connected to the existing interconnection vault via an underground electrical interconnection cable. The Facility will also be connected via high speed communications cable to enable remote monitoring as well as communication with emergency responders. The Facility's water-based fire suppression system can be connected to water at the dry standpipe location. There is also an existing hydrant adjacent to the planned Qcells BESS Facility on the Host Parcel.

The Qcells BESS Facility will be installed, maintained and operated by Qcells and its agents and contractors.

No part of the Facility will be greater than 9'-6" in height. The Facility will occupy approximately 1,935 square feet, not including the underground interconnection line between the Facility and the existing underground interconnection vault.

C. Electrical Interconnection.

The Facility will interconnect with Eversource's local electrical distribution system from the existing underground vault on the subject parcel via an underground interconnection cable and travel along existing Eversource underground conduit and utility poles.

Qcells filed a request for interconnection with The Connecticut Light and Power Company d/b/a Eversource Energy ("Eversource") on February 10, 2023, designated as Eversource Project Number: INT-75032. Qcells entered into an Impact Study Agreement ("Impact Study") with Eversource on May 11, 2023. The Impact Study is currently underway and its anticipated to be completed in the second quarter of 2024.

The Facility will be connected to the existing interconnection vault via an underground interconnection cable type General Cable Uniblend PVC High Speed cable.

No new utility poles are needed at this time due to the existing underground interconnection vault and the proposed underground interconnection cable.

The Qcells BESS Facility will benefit the Eversource 13.2 kV 9L09 circuit.

V. ENVIRONMENT - AIR AND WATER QUALITY STANDARDS

A. Air

The Facility will not emit any harmful emissions during operation and therefore will comport with and will not require permitting under Conn. Gen. Stat. Chapter 446c.

Construction of the Facility will cause temporary air emissions from construction vehicles however, Qcells will enforce a well-regulated construction schedule which will seek to minimize

any temporary air emissions. During construction, Qcells will require a water spray to control emissions of dust.

B. Water

As discussed below**,** the Qcells BESS Facility will not impact water resources, will not impact the existing groundwater quality nor will it impact the existing drainage or stormwater discharge.

1. Wetlands / Vernal Pools / Culvert

No wetlands or vernal pools appear on the Southeastern Connecticut Council of Governments (”SCCOG”) State Wetlands mapping on the Host Parcel or the Access Parcel. No wetlands or vernal pools were noted during survey work conducted on the Host Parcel and Access Parcel. Briggs Brook was relocated by the State of Connecticut in the 1970’s through a drainage culvert off the Access Parcel to the north / northeast. No impact to this culvert is anticipated as a result of the construction or operation of the Facility. Please see Figure 4 and Figure 5.

2. FEMA Flood Zone

The Qcells BESS Facility is located within a FEMA Flood Zone X, outside any special FEMA flood zones. Please see Figure 5 for a map depicting the Qcells BESS facility’s location in a FEMA Flood Zone X.

3. CT DEEP Coastal Boundary

The Facility is located within a Connecticut Department of Energy and Environmental Protection (“CT DEEP”) Coastal Boundary (please see Exhibit A) due to its relative proximity to the coastline. The placement of the Qcells BESS Facility aligns with the goals and policies articulated in Conn. Gen. Stat. §§ 22a-92 and 22a-93. The Qcells BESS Facility will not emit any harmful emissions during standard operation. The access way on the Host Parcel and

the areas surrounding the concrete equipment pads within the fence will be gravel. As a result, no effects to drainage patterns or storm water discharges are anticipated. The Qcells BESS Facility will occupy less than one acre of land area on a previously disturbed and vacant lot surrounded by existing mature tree canopy and regenerative brush and as such, it will not disrupt the natural environment and will not compromise coastal resources. The Qcells BESS Facility will also support long-term, sound economic growth by helping to improve resilience in the electric grid, making available stored electricity during an outage or supplementing the supply of electricity when that supply is temporarily interrupted, encouraging investment in businesses and homes in the area.

4. Water Supply Not Required for Standard Operation

The Qcells BESS facility does not use water for standard operations and only utilizes water should the sprinkler system be engaged. The Facility's liquid cooling system only requires an initial fill-up of water but then recycles the same water for the liquid cooling process.

The Facility will be unmanned and does not require sewer services.

5. Existing Drainage and Stormwater Discharge

The Qcells BESS Facility will be constructed within an area of less than one acre of land and as a result, the project will not require a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities under Conn. Gen. Stat. § 22a-430b. Total disturbance of land area by the Qcells BESS Facility is estimated at approximately 2,500 square feet. The access way on the Host Parcel and the areas encompassing the concrete equipment pads within the fence will be gravel. As a result, no effects to drainage patterns or storm water discharges are anticipated. Qcells will implement sedimentation and erosion controls during

construction in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

6. Existing Water Quality

The ground water quality is classified by CT DEEP as Class GB. Designated uses for Class GB ground water are industrial process water and cooling waters and baseflow for hydraulically-connected water bodies and is presumed not suitable for human consumption without treatment. See Figure 5.

There are a total of three (3) monitor wells on the Host Parcel in accordance with a Notice of Activity Use ("NAUL") in place regarding the Host Parcel and Access Parcel. Pursuant to the NAUL, industrial/commercial activities are permitted on the Host Parcel. Residential activities are not permitted on the Host Parcel.

7. Connecticut Aquifer Protection Area

The nearest Connecticut Aquifer Protection Area is more than 4 miles away from the proposed location of the Facility. As a result, no effects to drainage patterns or storm water discharges are anticipated. See Figure 5.

C. Soils

According to the CT DEEP Soil Survey Geographic Database (see Figure 6), the Soil Parent Material of the Site is categorized as Urban Influenced, meaning the soil is composed of materials that show extreme variability from one location to another due to disturbance.

A geotechnical analysis of the location of the Qcells BESS Facility was performed and the results of such analysis have been included in a report dated September 5, 2023, attached hereto as Exhibit D.

D. Habitat

The Host Parcel is previously disturbed, is partially graded, and is currently vacant with no structures on it.

A CT DEEP Natural Diversity Database Review indicates that the Peregrine falcon has been documented more than 660 feet from the Project Site. The NDDB Determination recommends only the standard Best Management Practice of avoiding creating collision hazards for birds and bats, which is already incorporated into the Qcells BESS Facility's design. For example, the proposed Qcells BESS Facility design serves as a visible barrier to birds. Please see the CT DEEP NDDB Determination attached as Exhibit C.

No trees six inches in diameter or greater will need to be cleared for the proposed Qcells BESS Facility.

E. Traffic Patterns

The Qcells BESS Facility will not affect traffic patterns as it will be visited by one (1) technician for regular maintenance no more than twice per year.

F. Noise

Qcells engaged Veneklasen Associates to complete an acoustical modeling analysis. The analysis finds that the Qcells BESS facility will comport with the State of Connecticut's Control of Noise requirements as per Regs. Conn. Agencies § 22a-69 as well as the City of New London's standards regarding noise standards. The analysis also concluded that no additional noise mitigation is required. The complete acoustical modeling analysis can be found as Exhibit E attached hereto.

G. Visibility / Buffer / Screening

The Qcells BESS Facility will be screened by the existing berm to the south as well as the existing mature trees and extensive regenerative vegetation to the south and southwest. Additionally, an opaque material will be installed inside the west end of the Qcells BESS Facility's fencing, further screening views of the Qcells BESS Facility. A portion of the Qcells BESS Facility and its fencing will be visible from the adjacent Access Parcel where the retail commercial electrical store is located.

H. Cultural Analysis

The Qcells BESS Facility will not be located within a federal, state or City of New London historic district.

A Phase 1A cultural resources survey is underway by Heritage Consultants. A final report will be submitted to the Connecticut State Historic Preservation Office ("CT SHPO") for review. Petitioner will supplement this Petition with a copy of the Phase 1A cultural resources survey report as soon as completed and will provide the results of the CT SHPO review.

VI. PUBLIC HEALTH AND SAFETY

A. Overview

The Qcells BESS Facility will be constructed in compliance with the National Electric Code, the International Building Code, the International Fire Code, applicable National Fire Protection Association standards, and the National Electrical Safety Code all as follows, as well as all other State and local Building and Fire standards.

- 2020 National Electric Code ("NEC")

- 2021 International Building Code ("IBC")

- 2021 International Fire Code ("IFC")

- 2023 National Fire Protection Association ("NFPA") Standard 855

- 2022 NFPA Standard 110

- 2022 NFPA Standard 111

- 2023 National Electrical Safety Code ("NESC")

An eight-foot chain link fence will be constructed around the perimeter of the Qcells BESS Facility.

The battery cabinets themselves are double-walled and tamper-resistant thanks to multi-level battery protection layers formed by discreet standalone systems including locks on each BESS Unit as well as each BESS Unit having its own DC fuse.

The BESS will have a water fire suppression system with dry standpipe. The Water-Based Fire Suppression System in each BESS Unit also include:

- Smoke detectors
- Thermal detectors
- Gas detectors
- Sprinkler heads
- Ventilation exhaust system

Thermal runaway is designed to be avoided by the thermal detectors signaling to the GELI EMS Platform to trigger the Fire Suppression System and to communicate a potential emergency event to the City of New London Fire Department.

The liquid cooling system will circulate cool air to cool the battery modules within the enclosure when appropriate.

Each BESS Unit is capable of storing 241.3% of the total volume of liquid coolant contained within each Unit via built-in collection reservoirs acting to collect any leaks of the 50-

50 ethylene glycol and water solution. The solution may be safely drained from the reservoir by a trained technician pursuant to all safety protocols.

Each BESS Unit is monitored by an advanced GELI EMS Platform complemented by numerous smoke, thermal, and gas detectors, as well as ventilation exhaust system, and sprinkler heads throughout the BESS Unit. The self-check GELI EMS Platform monitors the BESS Units 365/24/7 for any malfunction, temperature inconsistency, and/or leaks. The smoke, thermal, and gas detectors can also signal the Qcells BESS Facility's GELI EMS Platform to immediately shut down individual Units or the entire BESS Facility depending on the information supplied by the detectors.

The Qcells BESS Facility's smoke, thermal, and gas detectors are pre-wired into a fire alarm control panel that has the ability to notify the City of New London Fire Department 24 hours per day / 7 days per week / 365 days per year of a potential emergency situation requiring the Fire Department's response. The Facility will also be remotely monitored by Qcells weekdays 12:00pm – 8:00pm Eastern Standard Time from the Qcells Operations Center.

An Emergency Response Guide ("ERG") is provided as Exhibit F and acts as a reference guide for emergency personnel. Qcells has met with the City of New London Fire Marshal's office providing the Fire Marshal with the Qcells ERG and will continue to work closely with the Fire Marshal's office through every step of the design, construction and operations process. The ERG will continue to be refined as the Project progresses through the design and engineering phases. Prior to construction, the ERG will be finalized and emergency responder groups listed in the ERG will have received the ERG as well as be able to attend a one-day initial safety training pursuant to the ERG. First responders would access the Qcells BESS Facility via 163 State Pier Road.

The Qcells BESS Facility will be considered a Tier 1 facility by the United States Environmental Protection Agency ("USEPA"). Consequently, Qcells' Spill-Prevention, Control, and Countermeasure ("SPCC") Plan is included as Exhibit J herein. Qcells will finalize a final version of the SPCC as the Qcells BESS facility receives its final approvals.

During construction, a site-specific health and safety plan will be developed and implemented to protect the safety of construction personnel and Project staff.

B. Operations and Maintenance Plan

Operations and maintenance of the Qcells BESS Facility will be conducted in accordance with all manufacturers' recommendations, safety, building, and fire codes and regulations, and all general safety and industry practice standards.

Maintenance will be conducted by a composite team of Qcells personnel as well as trained and qualified manufacturer partners.

Qcells has met with the City of New London Fire Marshal's office and will continue to work with the Fire Marshal as well as with other local emergency responders through every step of the design, construction and operations process. A one-day safety training session will be made available to all fire and other local emergency responders prior to commencing operations. Qcells will also provide a plan depicting the Qcells BESS facility layout to all local emergency responders.

Each BESS Unit is monitored by an advanced EMS software platform complemented by numerous smoke, thermal, and gas detectors, as well as ventilation exhaust system, and sprinkler heads throughout the BESS Unit. The self-check EMS monitors the BESS Units 24 hours per day / 7 days per week / 365 days per year for any malfunction, temperature inconsistency, and/or leaks.

The EMS has the ability to shut down a particular BESS Unit, or the entire BESS Facility immediately and can also disconnect the battery racks from the inverters in an emergency.

The Facility will also be remotely monitored by Qcells weekdays 12:00pm – 8:00pm Eastern Standard Time from the Qcells Operations Center. The Qcells Operations Center monitors the Qcells BESS Facility via ethernet connection.

Qcells will conduct on-site inspections and maintenance from time to time in accordance with the manufacturers' recommendations. Qcells will maintain the Facility pursuant to all manufacturers' specifications and applicable codes and/or laws as well as all safety best practices and industry best practices. Qcells will maintain the area within the fenced Qcells BESS Facility area, including vegetative control, snow removal, and litter clean-up as necessary. The property owner is responsible for maintaining the landscaping including vegetative control, mowing, snow plowing, and litter clean-up outside the fenced Qcells BESS Facility, including the access way over 163 State Pier Road.

VII. CONSTRUCTION SCHEDULE

The Host Parcel is vacant and is partially graded. As a result, Qcells projects that site preparation will be minimal. Site preparation, installation and interconnection of equipment, and commissioning will require a total of approximately 3 and one-half months to 4 months.

Planned, routine construction will take place Monday through Friday from 8:00 AM to 5:00 PM.

Site Preparation: 2 – 4 weeks

- Including grubbing, grading, brush removal, installation of temporary erosion and sedimentation ("E&S") controls pursuant to the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, and equipment staging.

Installation: 4 – 6 weeks

- Including construction of concrete equipment pads poured on site, installation of BESS Units, power conversion unit, interconnection equipment, accessory equipment, fencing, and final grading and seeding as needed.

Commissioning: 4 – 6 weeks

- Including operational acceptance testing; Start-up; Acceptance testing; Function acceptance testing; Shakedown.

Petitioner will not require more than a 145' mobile crane to complete construction and installation at the proposed Site. This information was run along with the proposed Site information in the Federal Aviation Administration's ("FAA") Notice Criteria Tool and the FAA Notice Criteria Tool concluded that mobile crane height does not exceed Notice Criteria. The FAA Notice Criteria Tool report is included herein as Exhibit G.

Table 2 – Qcells BESS Facility – New London Milestones

Qcells BESS Facility - New London Milestones	**Date Projected**
Interconnection	
Impact Study Report	June 2024
Interconnection Agreement Executed	December 2024
Permitting	
All Approvals and Permits Secured	August 2024
Final Engineering and Design	
90% Construction Engineering Design	June 2025
90% Interconnection Engineering Design	August 2025
Procurement	
BESS Supplier Contract Awarded	February 2025
EPC Contract Awarded	April 2025
Other Major Equipment Procured	September 2025
BESS Delivered to Site	January 2026
Aux. Power Transformer Procured	May 2026
Construction	
Qcells BESS Facility - New London - Online	September 2026

VIII. DECOMMISSIONING AND RESTORATION

Upon expiration, Qcells will restore the surface of the Leased Premises to a condition and contour reasonably similar to that existing in the area of the Leased Premises at the commencement of the lease. A complete Decommissioning and Restoration Plan is included as Exhibit H.

IX. CONCLUSION

As set forth herein, this Petition satisfies the statutory elements of Conn. Gen. Stat. § 16-50k and the construction, operation and maintenance of the Qcells BESS Facility will not have a substantial adverse environmental effect. Accordingly, this Petition should be approved by the Council.