

**STATE OF CONNECTICUT SITING COUNCIL**

**PETITION OF LSE HERCULES LLC  
FOR A DECLARATORY RULING  
THAT NO CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED IS  
REQUIRED FOR THE CONSTRUCTION,  
OPERATION, AND MAINTENANCE OF  
A 4 MW AC SOLAR PHOTOVOLTAIC  
FACILITY IN ENFIELD, CONNECTICUT**

**PETITION NO. 1557**

**MARCH 1, 2023**

**LSE HERCULES LLC'S SUPPLEMENTAL FILING**

Petitioner LSE Hercules LLC ("Petitioner") submits this supplemental filing in this proceeding. Petitioner provides the following information/updates:

1. Address of the Property. In response to the comments received from the Town of Enfield submitted on February 23, 2022, Petitioner requests that the street numbers associated with the parcels that are the subject of the petition need to be updated in include 99, 105 and 113 Raffia Road. The plans accurately reflect the layout of the Project across these parcels and abutting property owners to all of the parcels where the Project is located were provided notice (please see Exhibit 5 of the petition filing). 95 Raffia Road is also owned/controlled by the same owners as the remaining parcels. As a result of a lot line revision completed by the owner in 2021, none of the Project is located on 95 Raffia Road. However, the Town's tax assessor has not updated its records to reflect such lot line revision since it was completed in 2021.

2 Aquifer Protection Area. The Town of Enfield has raised a concern about the existence of an aquifer protection area on the Site. LSE agrees that there is one incorrect reference in the narrative of the petition (page 16) stating that the Site is not in an aquifer protection area. The correct references and documentation are included in: Figures 2 and 3 and pages 16-17 of the Environmental Assessment, Exhibit 7 of the petition. Contrary to the Town's assertion, the petition (Exhibit 7 therein) does depict the aquifer boundary on the Site. And, as noted therein, the Petitioner will consult with the Hazardville Water District prior to the commencement of construction.

The Project's Resource Protection Plan includes specific protections for the aquifer protection area and is included in the petition filing. Sheet GN-2 of the Site Plans (Exhibit 1 of the Petition) details the Resource Protection Plan. The Resource Protection Plan will ensure that there is no impact to the aquifer protection area on the Site and LSE is committed to implementing it. Exhibit 3 of the Petition has been updated to confirm this commitment. Please see revised Operations and Maintenance Plan attached hereto as Exhibit 3-A at Section IV (1).

In addition, related to the aquifer protection area on the Site, the Town of Enfield has requested that the Petitioner commit to prohibiting refueling in the aquifer protection area. Petitioner has agreed to this prohibition and it is noted in Exhibit 3-A.

3. Escarpment. The Town has noted its concern regarding the terrace escarpment on the Site of the Project, which is located outside of the limit of disturbance as shown on the Site Plans included with the petition (see Exhibit 1). As stated by the Town, the Town has a GIS layer depicting escarpments although it is unclear how often that is maintained/updated. As Petitioner informed the Town during the 2/21 hearing that Petitioner did, indeed, review state and local GIS information. Petitioner conducted a wetlands/soil delineation of the Site, which included review and confirmation of the terrace escarpment. As the Council is aware, the on-Site delineation is a far superior. Because the slopes in question in the terrace escarpment were recognized as highly erodible, the Project design avoids any development within or in proximity to them and avoids impact to the terrace escarpment. The avoidance of impacts to the terrace escarpment are also required by the DEEP Stormwater Appendix I. Petitioner is in full compliance with Appendix I and, as noted in the petition, met with DEEP Stormwater personnel to confirm that compliance. The Project's relationship to wetlands is detailed in the Environmental Assessment report contained in the Petition.

4. Emergency Response Plan. The Town of Enfield has requested that Petitioner add the Town's zoning enforcement officer to the emergency contact list in the operations and maintenance plan. The updated operations and maintenance plan, including that contact information, is attached hereto as Exhibit 3-A.

5. Work on Site. In the Town's comments to the Siting Council, the Town referenced work being done on the Site and stated that it was "unclear" whether Petitioner was conducting such work. Petitioner has not engaged in any construction activities or site preparation activities on-Site and will not do so until all appropriate permits are obtained for the Project.

As noted in the Petition, the property owner has historically and continues to process landscaping materials on-Site. There are (and have been) stockpiles of woodchips on Site associated with the property owner's operation, as depicted in the photographs included with the Town's comments.<sup>1</sup> Petitioner has not yet taken possession of the land pursuant to its lease, and therefore the landowner has the right to continue his existing agricultural operation on-site. Petitioner can confirm without hesitation that no excavation has or will occur on site to date, and none will occur prior to Petitioner receiving all of the necessary permits to conduct work at the Site. The survey contained in the Project drawings and used as the basis for the plans, reflects the piles of materials, as found at the time the survey was performed. The property owner intends to remove the stockpiled materials prior to Petitioner's occupancy of the Site.

---

<sup>1</sup> At no time has Petitioner referred to the current use of the Site or the zone of the Site as industrial.

Respectfully submitted,

**Petitioner**  
**LSE HERCULES LLC**

By: *Carrie L. Ortolano*  
Jeffrey J. Macel, Manager  
Carrie Larson Ortolano, General Counsel  
% Lodestar Energy LLC  
40 Tower Lane, Suite 145  
Avon, CT 06001

**EXHIBIT 3-A**  
**REVISED OPERATIONS AND MAINTENANCE PLAN**



## **REVISED OPERATIONS AND MAINTENANCE PLAN**

### **I. Introduction**

Upon completion of the proposed Project, Petitioner will enter into a third-party Operations and Maintenance contract with an experienced third-party operations and maintenance provider (“O&M Manager”). With a fleet of electricians, production analysts and vegetation management personnel, the O&M Manager works diligently to ensure the Project maintains peak performance, reliability and safety.

Prior to energization of the PV Project, the O&M contractor will perform a quality and safety inspection. This inspection is a detailed and site wide inspection to ensure all mechanical and electrical components are installed per manufacturer specifications and per site design. The O&M Manager will also provide detailed safety and emergency response training for Enfield municipal employees.

Upon energization, the O&M Manager is responsible for the health and safety of the plant. The site will be continuously monitored (24/7/365 monitoring) remotely via a data acquisition system (“DAS”). The DAS has the ability to send alarms identifying communication, power generation or safety related issues. The O&M Manager has a team dedicated to on call service dispatches to address immediate issues from its data acquisition center. In addition to its dedicated on-call team, the O&M Manager will perform detailed annual inspections and will perform routine vegetative management on the Site.

### **II. Scope of Work**

Daily Monitoring of Plant Operation: For each solar Project, an O&M Manager monitors the Project continuously and receives data from the DAS of any performance or safety related issues. When an alert occurs, it is the responsibility of the O&M Manager to assess the severity of the alert and dispatch the on-call team if necessary. From there, the on-Site service technicians will assess the severity and repair/replace equipment as required. The service details of the O&M Manager are as follows:

- Monitoring Operations:
- Monitoring, 24 hours a day, 7 days a week, 365 days per year
- Alarm Notification

- Remote Corrective Diagnostics
- Remote Power Plant Operation
- Performance Optimization Services:
- Performance Trend Analysis
- Performance Engineering
- Data Storage

Annual Inspection, Testing & Preventative Maintenance: The O&M Manager is also responsible for performing an annual site wide inspection. This inspection is targeted towards securing the safety, performance and reliability of the solar Project. A full report is outputted from the results of the inspection. This inspection includes the following:

#### Aerial Thermal Imaging and Reporting:

Full Site aerial inspection of all PV modules. UAV (drone) coupled with thermal imaging camera and Raptor Maps proprietary mapping and diagnosis software will identify module level inefficiencies and failures.

#### PV Modules

##### Module Inspection, Front

Inspect front of modules for broken glass, delamination, yellowing or browning, burnt or oxidized cells, or cracks in cells. Inspect module frames for cracks or bends. Inspect module conductors for tension and indicators of heat.

#### Mounting System

##### Mounting System, Support Structure

Visually inspect support posts and structural components for evidence of rust, corrosion, settling, or tilt. Visually inspect mounting system hardware for tightness and evidence of rust or corrosion. Inspect and test rack grounding, check for torque levels, re-torque as necessary. Measure and record earth to ground resistance between rack and ground rod with low-resistance ohmmeter.

#### DC Combiner

Inspect enclosure and devices for corrosion, heat distortion, moisture entry, insect and rodent infestation, and exterior damage. Confirm that all signage and labeling is in place. Inspect surge protection devices for indication of failure. Perform thermographic survey of all terminations and overcurrent protective devices.

#### DC/AC Raceway

Inspect all DC raceways for loose connections, missing sealant, corrosion and above-grade moisture intrusion.

#### DC/AC Disconnect

Inspect enclosure and devices for corrosion, heat distortion, moisture entry, insect and rodent infestation, and exterior damage. Confirm that all signage and labeling is in place. Perform thermographic survey of all terminations and overcurrent protective devices.

#### Inverter

Inspect enclosure, door seals, latches and door stops for signs of corrosion, heat distortion, moisture entry, insect and rodent infestation, and exterior damage in accordance with manufacturer's recommendations and requirements. Confirm that all signage and labeling is in place. Clean all ventilation plates, air ducts, screens, devices and seals in accordance with manufacturer's recommendations and requirements. Inspect Surge Protection Devices for indication of failure. If any single SPD indicates failure mode, replace all SPD modules. Perform thermographic survey of all terminations and overcurrent protective devices.

#### Medium Voltage Transformer

Inspect enclosure and devices for corrosion, heat distortion, moisture entry, insect and rodent infestation, and exterior damage. Confirm that all signage and labeling is in place. Inspect anchorage and alignment.

#### SCADA/DAS System

Inspect devices and enclosures for physical damage. Clean as needed. Check tightness of electrical connections. Inspect weather station and all sensors for proper alignment.

#### Vegetative Maintenance

Maintenance within the array is typically performed (3) times annually during the growing season. During this time, the site is inspected for evidence of erosion and vegetation health. Vegetative growth exterior to the array is analyzed annually for shade impacts on the array. Any vegetative or site concerns are noted within the annual report. No pesticides or herbicides will be used in the vegetative maintenance of the site. Grass will be cut 2-3 times per year depending on the growing season. Weedwhackers are used where mowers cannot reach so that no chemicals will be used.

Module Washing and Snow Removal: Module washing and snow removal is performed on an as needed basis. Due to the tilt of the modules included within the proposed design, soiling effects due to snow build up, pollen or dust is naturally removed from the module surface. In the event the modules require cleaning, clean water with no chemicals or additives will be used.

### **III. Emergency Response:**

Enfield Police Department:  
293 Elm St  
Enfield, CT 06082  
Phone: (860)-763-6400

Enfield Fire Department:  
200 Phoenix Ave  
Enfield, CT 06082  
Phone: (860) 745-1818

Town of Enfield  
Zoning Enforcement Office  
820 Enfield Street  
Enfield, CT 06082  
Phone: (860)-253-6355

Utility Contact Information:  
Eversource CT  
(800) 286 -2000

Owner Contact information:  
LSE Hercules LLC  
40 Tower Lane, Suite 201  
Avon, CT 06001  
Phone: (410) 274 – 2716  
Email: [rchristie@lodestarenergy.com](mailto:rchristie@lodestarenergy.com)

O&M Provider Contact Information:  
Ameresco  
Phone: (800) 916 -8066  
Email: [ROC@ameresco.com](mailto:ROC@ameresco.com)

If it is determined the site must be shut down, the following emergency shutdown procedure should be conducted in conjunction with representatives of police and fire department:

- 1) Open AC disconnect located on equipment pad
- 2) Turn off DC disconnects on all inverters located on equipment pad
- 3) Turn off all DC disconnects on DC combiners located throughout array
- 4) Contact the Enfield Fire Department and Police Department if not already present.

#### **IV. Spill Prevention Control Plan**

Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill to avoid possible impact to nearby habitats.

A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.

The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.



1. Petroleum and Hazardous Materials Storage and Refueling
  - a. Refueling of vehicles or machinery shall occur within the Construction Laydown Area ONLY and shall take place on an impervious pad with secondary containment designed to contain fuels. This area must be a minimum of 100 feet from wetlands or watercourses and the aquifer protection area on the Site.
  - b. Any fuel or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.
  
2. Initial Spill Response Procedures
  - a. Stop operations and shut off equipment.
  - b. Remove any sources of spark or flame.
  - c. Contain the source of the spill.
  - d. Determine the approximate volume of the spill.
  - e. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
  - f. Ensure that fellow workers are notified of the spill.
  
3. Spill Clean Up & Containment
  - a. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
  - b. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
  - c. Isolate and eliminate the spill source.
  - d. Contact the appropriate local, state and/or federal agencies, as necessary.
  - e. Contact a disposal company to properly dispose of contaminated materials in accordance with all local, state and federal regulations.
  
4. Reporting
  - a. Complete an incident report.
  - b. Submit a completed incident report to the appropriate Connecticut Department of Environmental Protection, municipal officials, Connecticut Siting Council and other applicable local, state and federal officials.