



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

May 10, 2023

Carrie Larson Ortolano, Esq.
General Counsel
LSE Hercules LLC
c/o Lodestar Energy LLC
40 Tower Lane, Suite 201
Avon, CT 06001
cortolano@lodestarenergy.com

RE: **PETITION NO. 1557** – LSE Hercules LLC (Lodestar Energy) declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 4-megawatt AC solar photovoltaic electric generating facility located at 99, 105 and 113 Raffia Road, Enfield, Connecticut, and associated electrical interconnection.

Dear Attorney Ortolano:

The Connecticut Siting Council (Council) is in receipt of your correspondence dated May 8, 2023, regarding compliance with Condition No. 5 of the Council's Declaratory Ruling issued on April 14, 2023 for the above-referenced facility. The correspondence includes contact phone numbers and the spill response contractor contacts/phone numbers for the Spill Prevention Control Plan in accordance with Condition No. 5.

Therefore, the Council acknowledges that Condition No. 5 has been satisfied. This acknowledgment applies only to the condition satisfied by the May 8, 2023 correspondence.

Please be advised that deviations from the standards established by the Council in the Declaratory Ruling are enforceable under the provisions of Connecticut General Statutes §16-50u.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman
Executive Director

MB/MP/laf



May 8, 2023

Attorney Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Petition #1557 -- LSE Hercules LLC Petition for a Declaratory Ruling that No Certificate of Environmental Compatibility and Public Need is Required for the Construction, Operation and Maintenance of Solar Photovoltaic Facility in Enfield, Connecticut

Dear Attorney Bachman:

In accordance with the Council's decision dated April 13, 2023 (the "Approval"), petitioner LSE Hercules LLC ("Lodestar") submits a revised operations and maintenance plan including contact numbers, spill prevention plan and incident reporting forms.

Please contact me directly if you have any questions.

Sincerely,

Carrie L. Ortolano

Carrie Larson Ortolano

Enclosure



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

O&M Provider Contact Information:
Ameresco
Phone: (800) 916 -8066
Email: 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.

Spill Prevention Plan Contractor Contact Information:

LSE Hercules LLC

40 Tower Lane, Suite 201

Avon, CT 06001

Phone: (410) 274 -2716

Email: rchristie@lodestarenergy.com

V. Incident Report Form

Any accidents or injuries should be reported through an Incident Report Form and sent to the Owner and O&M Provider. A blank copy is attached for reference.

Incident Report Form

ACCIDENT INVESTIGATION REPORT

Project: _____

Date of Accident: _____

Accident Description:

Location of accident: _____ Time of Day: _____ Day of Week: _____

Vehicle No. or Type: _____ Were police called? _____ Police Report No.: _____

Describe any equipment or environmental damage/estimate cost:

WITNESSES: (attach written statements)

Name: _____ Job Title: _____ Telephone: _____

Name: _____ Job Title: _____ Telephone: _____

Name: _____ Job Title: _____ Telephone: _____

INJURY INVESTIGATION REPORT

Department/Division: _____ Project: _____

Injured Employee's Name: _____ Date of Injury: _____

Sex: ____ Age: ____ Employment Status: ____ Full Time ____ Part Time ____ Seasonal ____ Temporary

Regular assigned position: _____ Length of time in this position: _____

Was employee performing regular job duty? ____ If not, explain: _____

Was employee working overtime? ____ If yes, explain: _____

Does employee work a rotating shift? ____ Was there a recent change in the shift? _____

Explain: _____

Location of accident: _____ Time of Day: _____ Day of Week: _____

Body part injured: _____ Type of injury: _____

Severity of injury:

____ First Aid ____ Dr. Visit ____ Emergency Care ____ Restricted Duty ____ Lost Time ____ Near Miss

Vehicle No. or Type: _____ Were police called? ____ Police Report No.: _____

Describe in detail what happened: _____

Has this employee received training in the prevention of this type of injury? ____ Date: _____

Describe any equipment damage/estimate cost: _____

WITNESSES: (attach written statements)

Name: _____ Job Title: _____ Telephone: _____

Name: _____ Job Title: _____ Telephone: _____

Name: _____ Job Title: _____ Telephone: _____

ROOT CAUSE ANALYSIS

Use this listing as an aid in identifying the factors that contributed to this event

STEP 1 – CONTRIBUTING FACTORS

<p>PROCEDURES</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Not Developed</p> <p>Developed – Not Communicated</p> <p>Developed – Not Understood</p> <p>Developed – Not Followed</p> <p>Lack of Disciplinary Policy</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>	<p>COMMUNICATION</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Insufficient Planning for Tasks</p> <p>Lack of Worker Communication</p> <p>Lack of Supervisor Instruction</p> <p>Work Team Breakdown</p> <p>Confusion After Communication</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>
<p>HAZARD(S)</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Unidentified</p> <p>Known But Not Corrected</p> <p>Created by External Factors</p> <p>Documented But Not Repaired</p> <p>Condition Changes Not Conveyed</p> <p>Repaired Deficiently</p> <p>Unforeseen Emergency</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>	<p>TRAINING</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Deficient Orientation Training</p> <p>Deficient Job-Specific Training</p> <p>Insufficient for New Conditions</p> <p>Lack of Follow-Up Reinforcement</p> <p>Lack of Supervisor Training</p> <p>Hazards Overlooked in Training</p> <p>Tool(s) Used Incorrectly</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>
<p>PRODUCTION FACTORS:</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Heavy Workload</p> <p>Tight Schedule</p> <p>Long/Unusual Working Hours</p> <p>Falsely Perceived Need to Hurry</p> <p>Co-worker Competition</p> <p>Lack of Teamwork</p> <p>Changes in Production</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>	<p>WORK BEHAVIOR</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Shortcuts taken</p> <p>Required PPE Not Used</p> <p>PPE Not Used Properly</p> <p>Tool/Equipment Used Incorrectly</p> <p>Over-exertion/Fatigue</p> <p>Distraction</p> <p>Drug/Alcohol Use/Influence</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>
<p>FACILITIES/EQUIPMENT</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Poor/Faulty Equipment Design</p> <p>Corrosion/Wear</p> <p>Equipment Not Guarded</p> <p>Awkward Workspace Design</p> <p>Lack of Preventive Maintenance</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>	<p>ENVIRONMENT</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Weather, Temperature</p> <p>Poor Housekeeping</p> <p>Poor Lighting</p> <p>Poor Visibility</p> <p>Air Quality</p> <p>Other</p> </div> <div style="border-left: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, black 49% 51%, black 51% 53%, transparent 53%);"></div> </div> </div>

ROOT CAUSE ANALYSIS

(continued)

STEP 2- MAJOR CAUSE

- | | |
|--|---|
| <input type="checkbox"/> Procedures | <input type="checkbox"/> Production Factors |
| <input type="checkbox"/> Communication | <input type="checkbox"/> Work Behavior |
| <input type="checkbox"/> Hazard | <input type="checkbox"/> Facilities/Equipment |
| <input type="checkbox"/> Training | <input type="checkbox"/> Environment |

STEP 3 – ANALYSIS OF MAJOR CAUSE(S):

List out 5 reasons why major cause(s) happened to get to root cause:

1. _____
2. _____
3. _____
4. _____
5. _____

Corrective steps for contributing factors: _____

Corrective steps for major cause: _____
