



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

July 14, 2023

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

RE: **PETITION NO. 1578** - LSE Horologium LLC (Lodestar Energy) petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.99-megawatt AC solar photovoltaic electric generating facility located at Parcel No. 5-6-236-21, 163 North Windham Road, Windham, Connecticut, and associated electrical interconnection.

Dear Attorney Ortolano:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than August 4, 2023. Please submit an original and 15 copies to the Council's office and an electronic copy to siting.council@ct.gov. In accordance with the State Solid Waste Management Plan and in accordance with Section 16-50j-12 of the Regulations of Connecticut State Agencies, the Council requests all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Please be advised that the original and 15 copies are required to be submitted to the Council's office on or before the August 4, 2023 deadline.

Copies of your responses are required to be provided to all parties and intervenors listed in the service list, which can be found on the Council's website under the "Pending Matters" link.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

Melanie Bachman
Executive Director

MB/rm

c: Service List dated June 13, 2023

Petition No. 1578
LSE Horologium LLC (Lodestar Energy)
163 North Windham Road, Windham, Connecticut

Interrogatories
July 14, 2023

Project Development

1. What is the estimated cost of the project?
2. Is the project, or any portion of the project, proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant?
3. Referencing Petition pages 10-11, what were the concerns of the residents that attended the March 9, 2023 Windham Inland Wetland Commission and Planning Commission meeting?
4. Referencing Petition page 11, has Lodestar Energy received any comments since the petition was submitted to the Council? If yes, summarize the comments and state how these comments were addressed.
5. If the project is approved, identify all permits necessary for construction and operation and which entity will hold the permit(s)?

Proposed Site

6. Submit a map clearly depicting the boundaries of the solar facility site and the boundaries of the host parcel(s). Under Regulations of Connecticut State Agencies (RCSA) §16-50j-2a(29), “**Site**” means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located.
7. In the lease agreement with the property owner, are there any provisions related to decommissioning or site restoration at the end of the project’s useful life? If so, please describe and/or provide any such provisions. What is the length of the lease?
8. Is the site, or any portion of the host parcel, part of the Public Act 490 Program? If so, how does the municipal land use code classify the parcel(s)? How would the project affect the use classification?
9. Has the State of Connecticut Department of Agriculture purchased any development rights for the facility site or any portion of the facility site as part of the State Program for the Preservation of Agricultural Land?
10. Referring to Petition p. 1, is any portion of the site currently in productive agricultural use? If yes, how many acres? Are any portions of the site under lease by another party? If yes, when does the lease expire?
11. For each solar array area, provide the distance, direction and address of the nearest property line and nearest off-site residence from the solar field perimeter fence.

12. Referring to the Site Plans, how was the elevation data obtained? What is the degree of accuracy for this dataset?
13. Referring to the Property Survey, provide more information regarding the “leaching areas” on Parcel A.

Energy Output

14. What is the anticipated capacity factor of the project? Identify what electrical loss assumptions been factored into the output of the facility, if any.
15. Referring to Petition pp. 3-4, provide additional information as to how the energy from the facility and the associated renewable energy certificates are allocated under the Non-Residential Renewable Energy Solutions Program (NRES). Is there a renewal option beyond the 20-year contract term?
16. If the facility operates beyond the terms of the NRES contract, will Lodestar decommission the facility or seek other revenue mechanisms for the power produced by the facility?
17. Is the project being designed to accommodate a potential future battery storage system? If so, please indicate the anticipated size of the system, where it may be located on the site, and the impact it may have on the NRES contract(s).
18. If one section of the solar array experiences electrical problems causing the section to shut down, could other sections of the system still operate and transmit power to the grid? By what mechanism are sections electrically isolated from each other?
19. Would Lodestar participate in an ISO-NE Forward Capacity Auction? If yes, which auction(s) and capacity commitment period(s)?
20. Would Lodestar construct the project if the solar array footprint was reduced? If yes, indicate the minimum project output (MW) required to retain the project’s viability.

Site Components and Solar Equipment

21. Is the wiring from panels to the inverters installed on the racking system? If wiring is external, how would it be protected from potential damage from weather exposure, vegetation maintenance, or animals?
22. Referring the Site Plan C-2.1;
 - a. Describe the how the wiring from Area A transitions to overhead. Is there equipment on a pad that facilitates the transition?
 - b. List the equipment that would be installed on the concrete pad adjacent to the North Windham Road access drive.

Interconnection

23. Referring to Petition p. 9, did the executed interconnection agreement with Eversource require a review from ISO-NE?
24. Referring to the Site Plan C-2.1, what is the height above ground level of the utility poles across the wetland and at the interconnection point on North Windham Road after installation? Discuss the feasibility of relocating the four interconnection utility poles further to the west, set back from North Windham Road?
25. What are the industry Best Management Practices for Electric and Magnetic Fields at solar facilities?

Public Safety

26. Would the project comply with the current Connecticut State Building Code and National Electrical Code?
27. Would training be provided for local emergency responders regarding site operation and safety in the event of a fire or other emergency at the site?
28. In the event of a brush or electrical fire, how are potential electric hazards that could be encountered by emergency response personnel mitigated? What type media and/or specialized equipment would be necessary to extinguish a solar panel/electrical component fire?
29. Referring to p. 4 of the Operations and Maintenance Plan, does a Lodestar representative have to be on-site to assist emergency response personnel to manually shut down the facility in the event of an emergency?
30. Does the transformer have a containment system in the event of a leak? Can the SCADA system detect an insulating oil leak?
31. Referring to the Environmental Assessment, p. 37, is Windham Airport a federally-obligated airport? If not, identify the distance/direction of the nearest federally-obligated airport from the proposed site. Is a glare analysis required to comply with FAA policy?

Environmental

32. What is the distance from the limit of disturbance to the nearest wetland boundary for each solar array area and associated stormwater management features (excluding gravel access roads).
33. Will the project require a U.S. Army Corps of Engineers permit/notification for work within wetlands/watercourses?
34. Can the project be revised to include larger wetland buffers in Solar Array Areas A & B, including but not limited to relocation of array areas to other portions of the property or the use of higher wattage panels?
35. What is the function and value of Wetland 3? Can the project be designed to incorporate a larger buffer around this wetland? Where does this wetland drain to?

36. How would project design/output be affected if it was designed with a 50-foot wetland buffer from the limit of disturbance (excluding the access road/ electrical interconnection)?
37. Referring to Environmental Assessment pp. 9 and 12, provide a copy of the wetland and vernal pool assessments.
38. Referring to Environmental Assessment p. 16, are bottomless culverts proposed for the intermittent stream crossings?
39. Would the proposed gravel access road between Vernal Pools 3 and 4 and Wetland 1 serve as a barrier to wood frog and mole salamander migration? If yes, what measures can be taken to enhance migratory corridors between Vernal Pools 3 and 4 and Wetland 1?
40. Referring to Environmental Assessment p. 17, which stormwater basins would have permanent isolation barriers to prevent access by obligate vernal pool amphibians? Provide a Site Plan detail of the isolation barrier.
41. Referring to Environmental Assessment Attachment B, the May 10, 2023 letter from the USFWS Information, Planning, and Conservation System lists the Monarch Butterfly. Is additional consultation with the USFWS required for this species?
42. Referring to Petition p. 10, is the soil at the site capable of supporting native milkweed?
43. Would any residences have year-round views of the solar array areas/fencing? Can landscaping be installed to mitigate views?

Facility Construction

44. Has Lodestar submitted an application for a stormwater permit? If yes, what is the status of such permit?
45. DEEP's General Permit Appendix I mentions wetlands buffers composed of existing dense herbaceous vegetative ground cover. Provide information regarding the presence of this ground cover type within the proposed wetland buffer areas.
46. Referring to Petition p. 20, what solar array areas were considered impervious during the preparation of the May 11, 2023 Stormwater Management Report?
47. Referring to Site Plan C-2.2 Solar Array A, would the placement of racking posts/solar panels within the detention basin affect facility operation or create maintenance issues?
48. Referring to Site Plan C-2.3, provide more information/detail regarding the proposed rain garden. Why was a rain garden selected for this location? Can rain gardens be incorporated into other detention basins proposed for the site?
49. Referring to Site Plan C-6.1, the construction sequence does not include notes regarding site stabilization after construction of the access roads and temporary sediment traps/swales. Explain.
50. What time interval is anticipated to achieve stabilization of disturbed areas?

51. Would construction of the four solar array areas occur concurrently or in phases? Would the facility be constructed in five-acre increments?
52. Referring to Site Plan C-6.2, the Resource Protection Program states no construction vehicles, equipment or material shall be stored within 100 feet of wetlands. Site Plans 3.2 & 3.3 show construction laydown areas within 100 feet of wetlands. Explain.
53. What effect would runoff from the drip edge of each row of solar panels have on site drainage patterns? Would channelization below the drip edge be expected?
54. Submit photographic site documentation with notations linked to the site plans or a detailed aerial image that identify locations of site-specific and representative site features. The submission should include photographs of the site from public road(s) or publicly accessible area(s) as well as Site-specific locations depicting site features including, but not necessarily limited to, the following locations as applicable:

For each photo, please indicate the photo viewpoint direction and stake or flag the locations of site-specific and representative site features. Site-specific and representative site features include, but are not limited to, as applicable:

1. wetlands, watercourses and vernal pools;
2. forest/forest edge areas;
3. agricultural soil areas;
4. sloping terrain;
5. proposed stormwater control features;
6. nearest residences;
7. Site access and interior access road(s);
8. utility pads/electrical interconnection(s);
9. clearing limits/property lines;
10. mitigation areas; and
11. any other noteworthy features relative to the Project.

A photolog graphic must accompany the submission, using a site plan or a detailed aerial image, depicting each numbered photograph for reference. For each photo, indicate the photo location number and viewpoint direction, and clearly identify the locations of site-specific and representative site features show (e.g., physical staking/flagging or other means of marking the subject area).

Facility Maintenance/Decommissioning

55. Would replacement modules be stored on-site in the event solar panels are damaged or are not functioning properly? If yes, in what location?
56. Referencing Operations and Maintenance Plan, p. 5, it states the *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.* Where will refueling occur as the laydown areas are within 100 feet of wetlands? What is the name/boundary of the referenced aquifer protection area?

57. Has the manufacturer of the proposed solar panels conducted Toxicity Characteristic Leaching Procedure (TCLP) testing to determine if the panels would be characterized as hazardous waste at the time of disposal under current regulatory criteria? If so, submit information that indicates the proposed solar modules would not be characterized as hazardous waste. If not, would Lodestar agree to install solar panels that are not classified as hazardous waste through TCLP testing?
58. Would project decommissioning include stormwater management features? If yes, how would the stormwater management system be removed?