

STATE OF CONNECTICUT *CONNECTICUT SITING COUNCIL* Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: <u>siting.council@ct.gov</u> Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

May 7, 2021

Carrie Larson Ortolano, Esq. Lodestar Energy LLC 40 Tower Lane, Suite 201 Avon, CT 06001

RE: **PETITION NO. 1398A** - LSE Pictor, LLC 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 on an approximately 104 acre parcel located off of Platt Hill Road, Winchester, Connecticut and associated electrical interconnection. Reopening of this petition based on changed conditions pursuant to Connecticut General Statutes §4-181a(b).

Dear Attorney Ortolano:

At a public meeting held on May 6, 2021, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal meets air and water quality standards of the Department of Energy and Environmental Protection (DEEP) and would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

- 1. Approval of any project changes be delegated to Council staff;
- 2. Submit the final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;
- 3. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction;
- 4. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
- 5. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Winchester;
- 6. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;

- 7. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;
- 8. The facility owner/operator shall file an annual report on a forecast of loads and resources pursuant to Conn. Gen. Stat. §16-50r.
- 9. This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and
- 10. If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated January 15, 2021, and additional information dated April 7, 2021.

Enclosed for your information is a copy of the staff report on this project.

Sincerely,

s/Melanie A. Bachman

Melanie A. Bachman Executive Director

MAB/RDM/emr

Enclosure: Staff Report dated May 6, 2021

c: Service List, dated February 18, 2021
The Honorable Althea Candy Perez, Mayor, Town of Winchester (<u>mayorwinsted@gmail.com</u>)
Robert Geiger, Town Manager, Town of Winchester (<u>rgeiger@townofwinchester.org</u>)



STATE OF CONNECTICUT

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> Petition No. 1398A LSE Pictor, LLC Winchester, Connecticut

> > Staff Report May 6, 2021

> > Introduction

Petition 1398

On March 27, 2020, LSE Pictor, LLC (LSE) submitted a petition (Petition) to the Connecticut Siting Council (Council) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k for the construction, maintenance and operation of a 1.99-megawatt (MW) alternating current (AC) solar photovoltaic generating facility, and related electrical interconnection, located off of Platt Hill Road in Winchester. The Project proposed an access road that crossed two wetland areas to reach a solar field located on a hill. Additional wetland areas were located downslope of the proposed solar field. A stormwater detention basin was proposed adjacent to an intermittent stream.

On September 24, 2020, the Council denied the petition for a declaratory ruling without prejudice, on the bases that the petition was incomplete and that the proposed project appeared to have substantial adverse environmental effects, particularly with regard to water quality.

Petition 1398A

On January 15, 2021, pursuant to CGS §4-181a(b), LSE filed a Motion to Reopen the Council's September 24, 2020 decision to deny the petition based on changed conditions. In its Motion to Reopen, LSE requested that the Council reconsider the denial on the basis that LSE addressed the petition deficiencies and the Project's potential adverse effects on water quality that the Council identified in its final decision dated September 28, 2020.

There were no parties and intervenors of record to the original proceeding when the final decision on Petition 1398 was rendered, and therefore, there were no parties or intervenors of record to be notified of the Motion to Reopen nor to comment on the Motion to Reopen. On February 17, 2021, the Council granted the Motion to Reopen.

On March 23, 2021, the Council issued interrogatories to LSE. LSE responded to the Council's interrogatories on April 7, 2021.

The Project has been modified as follows;

- a) Reduced the number of solar modules from 7,930 modules to 7,288 modules (8.1% reduction). The Project output would remain the same by using 410 watt modules instead of 340 watt and 380 watt modules;
- b) Reduced the limits of work from 15.5 acres to 14.3 acres;

- c) Shifted the Project to the south and east to create larger wetland buffers;
- d) Increased wetland buffer along the west access road from a minimum of 60 feet to 100 feet;
- e) The western limit of the solar field was shifted to the east to be a minimum of 200 feet from the delineated inland wetland boundary;
- f) Performed an in-field wetland inspection in October 2020 to verify the locations of wetlands first delineated in 2003-2005;
- g) Performed an in-field vernal pool investigation and a subsequent Project vernal pool impact analysis;
- h) Retained a third-party reviewer of the revised Site engineering and stormwater design to ensure that the Project revisions are consistent with the Department of Energy and Environmental Protection (DEEP)'s 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and 2004 Storm Water Quality Manual;
- i) Redesigned the stormwater management system from a single stormwater basin served by lengthy swales to four basins served by shorter swales, ensuring overland stormwater flows would not be diverted from the eastern sub-drainage area to the western sub-drainage area of the site;
- j) Relocated the western stormwater basin uphill and away from an intermittent watercourse to avoid constructing the basin along the edge of the watercourse;
- k) Increased the wetland buffer to the southwestern stormwater basin to enhance water quality treatment of basin outflow, and to protect wildlife, aquatic resources and cold water fisheries;
- Redesigned intermittent watercourses road crossings to utilize open-bottom box culverts to maintain existing stream flows/substrate to enable wildlife movement and to protect aquatic resources;
- m) Developed an invasive species mitigation plan and a wetland enhancement plan for areas along the access road;
- n) Received correspondence from the DEEP Dam Safety Program on January 27, 2021 indicating the stormwater basins would not need a Dam Safety Permit for basin construction;
- Received correspondence from the U.S. Army Corps of Engineers on January 19, 2021 stating that the project's wetland impacts would be authorized by the Corps of Engineers under the Connecticut General Permit process;
- p) Filed a registration for a DEEP Stormwater permit on January 15, 2021.

Municipal Consultation

On February 17, 2021, the Council sent correspondence to the Town of Winchester (Town) stating that the Council granted the Motion to Reopen and invited the Town to contact the Council with any questions or comments by March 13, 2021. The Town did not comment in response to the Council's solicitation; however, on December 4, 2020, the Town submitted a letter to the Council in support of the modified Project. A copy is attached.

State Agency Comments

On February 17, 2021, the Council sent correspondence requesting comments on the reopened petition from the following state agencies by March 13, 2021: DEEP; Department of Agriculture (DOAg); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Emergency Services and Public Protection (DESPP); Department of Consumer Protection (DCP); Department of Labor (DOL); Department of Administrative Services (DAS); Department of Transportation (DOT); the Connecticut Airport Authority (CAA); and the State Historic Preservation Office (SHPO).

The DOT submitted a no comment letter to the Council on March 24, 2021. No other state agencies provided comments to the Council.

While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies.¹

Public Act 17-218

Effective July 1, 2017, PA 17-218 requires, "for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by DEEP in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the DOAg represents, in writing, to the Council that such proposed project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such proposed project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such proposed project will not materially affect the status of such land as core forest." The proposed facility has a generating capacity of 1.99 MW, therefore, it is exempt from the provisions of Public Act 17-218.

Public Benefit

The project would be a distributed energy resource facility as defined in CGS § 16-1(a)(49). CGS § 16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." The 2018 Comprehensive Energy Strategy (2018 CES) highlights eight key strategies to guide administrative and legislative action over the next several years. Specifically, Strategy No. 3 is "Grow and sustain renewable and zero-carbon generation in the state and region." Furthermore, on September 3, 2019, Governor Lamont issued Executive Order No. 3, which calls for the complete decarbonization of the electric sector by 2040. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard and Global Warming Solutions Act as a zero emission Class I renewable energy source.

LSE executed a 15-year Low Emission Renewable Energy Credit (LREC) Agreement with Eversource Energy (Eversource) on July 26, 2019. LSE would sell renewable energy credits (RECs) to Eversource under the state's Low and Zero Emissions Renewable Energy Credit Programs (LREC/ZREC Program). If the Project size is reduced prior to achieving operation, the quantity of RECs sold to Eversource would be adjusted per the terms of the LREC Agreement. If the LREC Agreement is not renewed at the end of the 15 year period, LSE would examine other opportunities to sell the RECs produced by the facility. The LREC/ZREC Program was developed as part of Public Act 11-80, "An Act Concerning the Establishment of the [DEEP] and Planning for Connecticut's Energy Future." The LREC/ZREC Program is not among the competitive energy procurement programs that are exempt from Public Act 17-218.

In addition, LSE executed a 20-year Virtual Net Metering (VNM) Agreement with the Town of Winchester. The VNM credits produced by the facility will be allocated among the Towns of Winchester (2/3) and South Windsor (1/3).² At the end of the term of the VNM Agreement, the Towns of Winchester and South Windsor may renew or LSE may seek to enter an agreement with other municipalities for the remaining useful life of the facility.

¹ Corcoran v. Connecticut Siting Council, 284 Conn. 455 (2007)

² Pursuant to CGS §16-244u, the state's VNM program incentivizes the use of renewable energy by allowing municipalities and other end use customers to assign surplus energy production to other metered accounts.

Proposed Site

Pursuant to a lease agreement with the property owner, the Petitioner proposes to construct the solar facility on a site³ located on an approximately 104-acre parcel owned by Trade Wind Farms, LLC. The parcel, zoned Rural Residential, is located on the east side of Platt Hill Road in the southern portion of Winchester. In 2005, a 24 lot subdivision was approved for the parcel by the Town but it was never constructed.

Considerations in LSE's site selection process include, but are not limited to, the following:

- a) Parcel size, topography, wildlife and site hydrology;
- b) Availability of land for lease or purchase;
- c) Proximity to electrical infrastructure; and
- d) Access to the site.

The parcel consists of a wooded hill in the central portion of the property, old field habitat and a farm pond along Platt Hill Road, intermittent streams, wetland corridors and vernal pools. Wetlands comprise approximately 21.6 acres of the parcel.

The parcel ranges in elevation from approximately 1,372 feet above mean sea level (amsl) at the top of the hill to approximately 1,165 feet amsl along a wetland area at the southeast property boundary. Land use in the surrounding area consists of undeveloped forest land, residential areas and State-owned Platt Hill State Park and Paugnut State Forest.

The proposed facility site would occupy approximately 20.64 acres of forest and old field areas of the parcel, mostly on the south side of the hill.

Pursuant to CGS §16-50p(g), the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility.⁴

Proposed Project

The proposed solar facility consists of 7,288 solar photovoltaic modules (410 watt) totaling 1.99 MW AC at the point of interconnection. The modules would be installed at a 25 degree tilt facing south. The panels would be installed in a portrait orientation at a 25 degree angle. The panels would be attached to a fixed-post racking system with inter-row spacing of approximately 15 feet.

Approximately 800 piles would be embedded to a depth of 5 to 7 feet below grade to support the racking system. Soil testing completed at this site indicates the posts can be installed without hitting bedrock. If bedrock was encountered, post installation could be accomplished using concrete foundations or by moving the post to a more favorable area. The modules would be installed approximately 11-feet above final grade with a ground clearance of approximately 3 feet.

A 30-foot by 15-foot concrete pad located adjacent to the access road would contain 16 inverters, one switchgear and one transformer. The majority of the wiring would be installed on the racking system. Where wiring is not installed on the racking system, it would run in conduit. An underground three-phase

³ 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.

⁴ Corcoran v. Connecticut Siting Council, 284 Conn. 455 (2007); CGS §16-50p(g) (2019).

23 kV line would extend approximately 900 feet from the switchgear to a riser pole that would be installed at the west end of the property. Two additional wood utility poles would be installed to provide interconnection to an existing Eversource 23-kV overhead distribution circuit along Platt Hill Road.

The Project would be enclosed by a 7.5-foot high chain-link fence with a single access gate near the equipment pad area. The bottom of fence would be set to a minimum of 8-inches above grade to allow for small wildlife movement.

The projected annual capacity factor for the proposed Project is 19.1 percent with an expected degradation rate of 0.5 percent per year.

The project is not designed to operate as a microgrid nor is it designed to accommodate a future battery storage system.

Access to the site would be from a new 12-foot wide gravel road with several wider passing lanes that extends east from Platt Hill Road, generally following the route of a logging path. The total length of the access road is approximately 1,400 feet. From the end of the access road along the southwest edge of the solar field, 8-foot wide gravel paths (300 feet total length) would extend to two stormwater basins for maintenance access.

Approximately 14.3 acres of the site would require clearing, and of that, approximately 9.0 acres would require grubbing. No grubbing would occur in areas outside of the fenced solar field and stormwater features.

Although site disturbance would be kept to a minimum to the extent feasible, grading will be required for installation of the access road, equipment pad, stormwater management system, and to re-contour the solar field area. The solar array, an approximate 8.0 acre area, would be located on the south side of the hill that has grades near flat at the summit to grades exceeding 15 percent along the eastern side of the hill. In total, approximately 1.25 acres of the solar array exceed slopes of 15 percent.

A 0.25 acre project laydown area containing equipment areas, an office trailer, soil and wood chip stockpiles and a concrete washout station would be established in the old field area along Platt Hill Road.

Project construction would occur over 3 to 4 months. Construction hours would be Monday through Saturday between the hours of 7:00 AM and 5:00 PM.

Public Safety

The proposed project would meet or exceed applicable local, state, national and industry health and safety standards and requirements including, but not limited to, the National Electric Code, National Electric Safety Code and applicable National Fire Protection Association codes and standards.

Remote monitoring of project operation would occur on a 24/7 basis via a data acquisition system, which has the capability to send alarms identifying communication and power generation issues should they occur. In the event of a fault or power outage within the solar facility or on the Eversource distribution circuit, the Project would be isolated from the distribution circuit at the switchgear location. In the event there is an issue with an inverter serving a section of the array, the inverter would fault and restrict power flow within the array section experiencing the issue, allowing for the remainder of the Project to continue operating.

The Petitioner would ensure that first responders are trained in the procedures necessary to address the event of a fire or emergency. In addition, the Petitioner would ensure that Project access is provided to first responders.

A private floatplane landing is located on Highland Lake approximately 1.25 miles from the site. The Federal Aviation Administration (FAA) issued Determinations of No Hazard to Air Navigation for the project and a glare analysis is not required.

Noise modeling of the Project inverters, indicates that Project operational noise would not exceed 13.91 dBA at the nearest property line (320 feet northwest of inverter pad). Noise associated with Project construction would be temporary in nature and exempt per DEEP Noise Control Regulations.

LSE has consulted with the DEEP Dam Safety Program regarding the stormwater detention basins. DEEP indicated the stormwater basins will not need a DEEP Dam Safety Permit because they will each retain less than three acre-feet of water at maximum storage elevation. Once the stormwater basins are constructed, a dam registration form must be submitted to DEEP.

Environmental Effects and Mitigation Measures

Historic and Recreational Resources

The project would have no effect on State or nationally listed historic resources. Three locally-listed historic structures were identified near the site but the project would not be visible from these structures due to intervening vegetation and area topography.

LSE conducted field evaluations of the Project area and found no areas of archaeological significance or areas potentially eligible for the national or state registers of historic places. SHPO determined that no historic properties would be impacted by the proposed project.

Existing openings in two stonewalls would be widened to accommodate the access road. A stone wall parallel to the access road from Platt Hill Road would remain in place.

No blue blazed hiking trails maintained by the Connecticut Forest and Parks Association are in the immediate Project area.

Visibility

The project is set back from Platt Hill Road by approximately 900 feet. Vegetation surrounding the site is heavily forested and contains steep slopes that limit area development.

The nearest residential properties to the solar array area are the Kolek property, approximately 130 feet northwest of the clearing limit, and the Guillett property, approximately 178 feet to the northwest. Due to heavily forested terrain between the clearing limits and the property lines, no Project visibility is expected outside of the host property.

Potential observation points from abutting properties to the northeast, north and west would be screened by existing forest.

Agriculture

Approximately 6.25 acres of prime farmland soil is located on the site. One approximate 4.0-acre area is near Platt Hill Road and the second area, approximately 2.25 acres, is on the north side of the central hill. Neither would be impacted by the Project.

Wetlands and Watercourses

A large forested wetland system (Wetland 1) is located in the western portion of the site. It consists of two separate wetland corridors in the northwestern portion of the site that eventually converge in the southwestern portion of the site. The wetland eventually drains to Taylor Brook, a cold water fishery south of the Project site.

The proposed access drive would traverse the two wetland area corridors in the northwestern portion of the site. The crossings occur in locations that were previously approved by the Town as part the Town-approved subdivision.

The Petitioner examined the feasibility of constructing a new access road to avoid the wetland crossings by entering the northeast portion of the site off an unimproved section of Dayton Road. The Petitioner determined this option was not feasible due to necessary upgrades required to Dayton Road to make it passable for vehicles and that new road construction on the site would increase site clearing and disturbance by ascending steep slopes near wetlands and a high quality vernal pool.

Originally, the wetland/watercourse crossings consisted of 15-inch HDPE piping with boulder headwalls. LSE redesigned the crossings to include a 6-foot by 3-foot pre-cast open-bottom box culvert at each crossing to preserve the existing watercourse substrate and flow patterns and facilitate wildlife passage under the road. Access road construction would result in approximately 1,617 square feet of direct wetland impact and approximately 2,319 square feet of temporary wetland impact.

After the wetland crossings, the access road would extend south, along the west edge of the solar field. Tree clearing along this access drive would maintain a 100-foot undisturbed buffer to the Wetland 1 boundary.

The proposed limit of disturbance associated with the western stormwater basin/level spreader would generally be located 100 feet from Wetland 1 except for a few wetland extensions where the closest wetland boundary to west is approximately 75 feet at its nearest point and a wetland extension to the east where the closest wetland boundary is approximately 60 feet at its nearest point.

Two larger wetland areas and a few wetland seep areas are located along the eastern slopes and base of the hill. The Project limit of disturbance is over 200 feet to the nearest hillside wetland seep and 371 feet from the large wetland area at the base of the hill in the southeast corner of the property.

A vernal pool study of the site was conducted on April 1, 2021 that identified three vernal pools (VPs) on the site property; one located along the northeast slope of the hill and two located within a red maple swamp along the eastern property line. The study also surveyed two previously identified potential vernal pools along the north slope of the hill and determined that these two depressional areas do not meet the characteristics of a VP.

A Project impact analysis of the VPs determined than the Vernal Pool Envelope of each VP, the area that extends from 100 feet from the VP, would not be impacted by the Project. Additionally, Project development would affect 4.7 percent of the Critical Terrestrial Habitat (CTH), the area that extends from 100 feet to 750 from the VP edge, of one of the pools, well below the 25 percent development value as recommended by the United States Army Corps of Engineers Vernal Pool Best Management Practices to maintain quality vernal pool habitat. The CTH of the other two VPs would not be affected.

LSE would implement an invasive species mitigation plan and a wetland enhancement plan for areas along the access road. Invasive species would be removed/controlled out to a distance of 25 feet on either side of the access road. The wetland enhancement plan includes the removal of invasives, seeding with a New England conservation/wildlife mix and the planting of native shrub vegetation at the two wetland/watercourse crossings, restoring an approximate 3,270 square foot area.

Wildlife

The Project development area consists predominantly of second growth forest and former agricultural land, with the remaining areas consisting of wetland and watercourse habitats. Wildlife expected to be found at the site are species that would utilize larger tracts of woodland such as chipmunk, squirrel, deer, wood thrush, downy woodpecker and wood frog. The wetland areas were identified in a property study (2005) as having well developed tree, shrub and herbaceous layers that are valuable to wildlife.

Once construction is completed, native meadow seed mixtures would be applied within the solar array area for site stabilization and habitat improvement. Areas that were cleared but not grubbed would also be seeded and managed in a shrub state.

LSE requested a DEEP Natural Diversity Database (NDDB) review in October 2019 and DEEP responded on February 28, 2020, indicating that two aquatic species were identified in the watershed and downstream of the project area: bridle shiner (State Special Concern) and eastern pond mussel (State Special Concern).

LSE submitted a report on these two species to DEEP on March 27, 2020, indicating that the shiner and mussel are found in watercourses downslope of the site and that these species are susceptible to adverse water quality impacts. Although these species are not expected to be present on the on-site intermittent watercourses, LSE would implement an erosion control plan that includes project phasing and an on-site erosion control monitor. DEEP responded to LSE by email on April 3, 2020 by accepting the erosion control plan without further recommendations.

The Petitioner's consultation with DEEP NDDB did not identify any bats or bat habitat that may occur at the site.

Forest and Parks

The forested areas of the site consist of northern hardwoods and small stands of white pine in the southeastern portion of the site, with trees typically 50 feet in height. A selective timber harvest was conducted on a portion of the property in 2006 with approximately 700 trees harvested.

Due to residential development and local roads in the surrounding area, the site is not defined as core forest. Approximately 14.3 acres of forest on the site would be cleared for the project.

Platt Hill State Park Scenic Reserve is approximately 0.5 mile north of the proposed facility. Paugnut State Forest is approximately 0.25 mile east of the facility. Neither area is developed with recreational areas or formal hiking areas.

Air Quality

The project would comply with air regulations and would not require an air permit. The solar project would not produce air emissions of regulated air pollutants or greenhouse gases during operation.

The Petitioner estimates that there would be an 84 percent reduction in greenhouse gas emissions from Project operation over a 20-year period when compared to the operation of a natural gas fueled electric generating facility with equivalent megawatt-hour (MWh) production.

Water Quality

The Project site is located within the Federal Emergency Management Agency-designated unshaded Zone X, an area outside of the 100-year and 500-year flood zones. The site is not located within a DEEP-designated Aquifer Protection Area.

Groundwater in the area is classified as GA, suitable for consumption without treatment. The nearest residential well is approximately 800 feet from the solar array. No blasting would be conducted at the site to install the facility and therefore no site blasting will be necessary for the Project, there would be no impact to residential wells.

The intermittent watercourses on-site are identified by DEEP as cold water habitat. Taylor Brook, located downstream of the site supports wild brook trout, a cold water species. To minimize water quality impacts to the intermittent watercourses that drain to Taylor Brook, LSE would maintain a 100-foot wooded buffer between the intermittent watercourses and site clearing, except for the access road crossings. The southwestern stormwater basin was relocated to maintain an undisturbed 100-foot buffer to the intermittent watercourses.

Stormwater

Pursuant to CGS Section 22a-430b, DEEP retains final jurisdiction over stormwater management and administers permit programs to regulate stormwater pollution. DEEP regulations and guidelines set forth standards for erosion and sedimentation control, stormwater pollution control and best engineering practices. The DEEP Individual and General Permits for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Stormwater Permit) requires implementation of a Stormwater Pollution Control Plan to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a project after construction is complete. A DEEP-issued Stormwater Permit is required prior to commencement of construction.

LSE proposes to construct the Project in four main phases, as follows: Phase 1 - Tree and brush removal and installation of E&S controls; Phase 2 - Grubbing and construction of access road and stormwater swales and basin; Phase 3A - Grubbing and construction of northern half of solar array followed by 75 percent stabilization; Phase 3B - Grubbing and construction of southern half of solar array. Perimeter E&S controls would include compost sox. No temporary sediment traps are proposed since the size of Phase 3A and Phase 3B are less than five acres each.

LSE would scarify the ground surface in disturbed areas after installation of solar modules is complete to loosen any compacted soils prior to final seeding. The loosened soil would promote vegetation growth leading to stabilized soils. The scarifier would be mounted on a small tractor and is sized to extend under the panels.

Four post-construction stormwater basins are proposed; three would be located along the east edge of the solar field with the fourth located in the southwestern portion of the site. Two of the basins, the southeastern basin and southwestern basins would be designed as wetland stormwater detention basins to allow for treatment of non-point stormwater pollution sources. Shallow berms on the bottom of the basins, seeded with New England Wetmix, would to provide directional stormwater flow before flows to a concrete level spreader and stone filled trench. The other two basins would be grass-lined basins to promote infiltration. Grass-lined parabolic swales, two feet in depth and eight feet wide, would be constructed along the east and sides of the project development area to collect and direct stormwater to the stormwater basins.

The Petitioner submitted its revised site plans to the DEEP Stormwater Division on January 15, 2021 to determine if it needs to submit a new stormwater permit for the site or could move forward under the previously-granted stormwater permit. In correspondence to LSE dated February 2, 2021, the DEEP Stormwater Division acknowledged the stormwater basin was pulled back from adjacent wetlands in accordance with the new general permit Appendix I and that no new filing is required.

Decommissioning

A Decommissioning Plan was submitted to the Council and has provisions for project removal and component recycling when operation of the facility is discontinued. Following the removal of project related equipment, the Petitioner would stabilize and restore the site in accordance with the lease agreement with the property owner.

The manufacturer of the selected solar panels (Phono Sumec) has conducted Toxicity Characteristic Leaching Procedure (TCLP) testing on the panels to determine waste characterization of the panels when disposed of at the end of the Project's life. The TCLP test indicates the selected panels would not be characterized as hazardous waste at the time of disposal, under current testing criteria. LSE is committed to the installation of standard polycrystalline silicon modules that are not considered toxic or hazardous waste.

Conclusion

The project is a grid-side distributed resource with a capacity of not more than sixty-five megawatts, meets air and water quality standards of the DEEP, and would not have a substantial adverse environmental effect. The proposed project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize environmental impacts, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. Furthermore, the project was selected under the state's LREC/ZREC Program.

Recommendations

If approved, staff recommends the following conditions:

- 1. Approval of any project changes be delegated to Council staff;
- 2. Submit the final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction; and
- 3. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction

Site Location



Site Plan – Access Road Area



<u>Site Plan – Solar Field Area</u>



Location of Wetlands/Watercourses







Attachment A – Town Comments dated December 4, 2020



TOWN OF WINCHESTER - CITY OF WINSTED

Town Hall - 338 Main Street WINSTED, CONNECTICUT 06098

OFFICE OF THE TOWN MANAGER

December 4, 2020

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

RE: LSE Pictor LLC ("Lodestar Energy") Petition for Declaratory Ruling pursuant to Connecticut General States § 4-7176 and § 16-50k for the proposed construction, operation and maintenance of a 1.99 MW AC ground-mounted solar photovoltaic electric generating facility to be located at Platt Hill Road, Winchester, CT

Dear Attorney Bachman:

I am writing this letter to express the Town of Winchester's support for Lodestar Energy's 1.99 MW AC solar photovoltaic facility to be located at 100 Platt Hill Road in Winchester, Connecticut (the "Site"). As you are aware, the Siting Council has the formal approval associated with the siting of any utility facility and the petitioner is appearing before the Siting Council to address any issues and questions the Council and its staff deems appropriate. As you are further aware, petitioner previously submitted petition #1398, which was denied without prejudice by the Siting Council on September 24, 2020. This project is a part of the State's ongoing efforts to address the fragile power supply serving our area. The Town of Winchester shares the state and regional concerns about the significant electric generation capacity shortage projected for northern Connecticut.

Representatives of Lodestar Energy have met on a number of occasions with Town of Winchester staff and other local organizations since the fall of 2019 through the present. Lodestar Energy has kept town officials apprised of the status of the proposed project. It is our understanding that, as a result of the September 24th denial, Lodestar Energy has made significant changes to the design of the project to address the concerns previously raised by the Siting Council, the Town and neighbors.

The Town of Winchester supports the proposed facility at the Site. Due to the location and topography of the Site, we agree with Lodestar Energy that there will be little to no impact to abutting property owners and surrounding area. We are confident that Lodestar Energy will continue to cooperate with the Town throughout the construction and implementation phases of this Project and it will be of great benefit to the Town of Winchester. Therefore, the Town of Winchester writes to confirm its support of the re-submission of this petition and urge the Siting Council to approve the re-filed petition as submitted. Please let me know if you have any questions at 860-738-6962.

Sincerely Robert Geiger Town Manager