



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
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**VIA ELECTRONIC MAIL & CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

January 14, 2022

Lee D. Hoffman, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702
lhoffman@pullcom.com

RE: **PETITION NO. 1463** - Greenskies Clean Energy, 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 1.0-megawatt (MW) AC solar photovoltaic electric generating facility located at a Mulnite Farms, Inc. parcel off Wapping Road, and a 4.0 MW AC solar photovoltaic electric generating facility located at a Mulnite Farms, Inc. parcel off Miller Road, East Windsor, Connecticut, and associated electrical interconnection.

Dear Attorney Hoffman:

At a public meeting held on January 13, 2022, 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 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. If developed, submit the Farm Co-use Plan with a document that shall indemnify and hold harmless the Council, its agents, representatives and employees from any and all losses, claims, actions, costs and expenses, judgments, subrogations, or other damages resulting from any injury to a person or to property arising out of the presence of third-party farmers within the fenced solar facility site;
3. The facility owner/operator shall file an annual report on a forecast of loads and resources pursuant to Conn. Gen. Stat. §16-50r;
4. Submit the final visual screening plan;
5. Submit Toxicity Characteristic Leaching Procedure (TCLP) test results for the selected solar panels that indicate the modules will not be characterized as hazardous waste under current regulatory criteria prior to the commencement of construction;
6. 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;
7. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction;

8. Consult with Eversource Energy to reduce the visual impact of the electrical interconnections by considering the installation of underground lines from the solar arrays to the approximately six poles near the street (for each interconnection) and minimizing the number of poles required (both near the arrays and near the street) and the use of pad-mounted equipment (e.g. meters and reclosers) near the street and submit the Final Interconnection Plan/Electrical Drawings as approved by Eversource Energy and a detailed report explaining the rationale for the final interconnection configurations including cost considerations prior to construction;
9. 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;
10. 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 East Windsor;
11. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
12. 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;
13. 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
14. 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 August 24, 2021 and additional information received on September 17, 2021, September 22, 2021, October 13, 2021, and November 12, 2021.

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

Sincerely,



Melanie A. Bachman
Executive Director

MAB/MP/lm

Enclosure: Staff Report dated January 13, 2022

c: Service List dated August 26, 2021
The Honorable Jason E. Bowsza, First Selectman, Town of East Windsor
(jbowsza@eastwindsorct.com)



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Petition No. 1463
Greenskies Clean Energy, LLC

Mulnite Farms, Inc., Wapping Road and Miller Road, East Windsor
Staff Report
January 13, 2022

Introduction

On August 25, 2021, the Connecticut Siting Council (Council) received a petition (Petition) from Greenskies Clean Energy, LLC (GCE or Petitioner) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k for the construction, maintenance and operation of a 1.0-megawatt (MW) alternating current (AC) solar photovoltaic electric generating facility at Mulnite Farms, Inc. on a parcel off of Wapping Road and a 4.0-megawatt AC solar photovoltaic electric generating facility located at Mulnite Farms, Inc. on a parcel off of Miller Road in East Windsor, and an associated electrical interconnection (Project).

Pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40 on or about July 20, 2021, GCE notified Town of East Windsor (Town) officials, state officials and agencies, the site property owner, and the abutting property owners of the proposed project. One abutter (25 Miller Road) did not claim the certified mailing. In response, GCE sent a second certified mailing to this abutter.

On September 2, 2021, the Council sent correspondence to the Petitioner noting a deficiency in the completeness of the Petition. Specifically, pursuant to RCSA §16-50j-40, the Petition did not provide evidence of notice to one abutting property owner (33 Wapping Road). The Council recommended that the Petitioner provide such information on or before September 16, 2021. The Council received such correspondence from the Petitioner on September 17, 2021 demonstrating notice. Accordingly, by letter dated September 20, 2021, the Council rendered the Petition complete.

The Council issued interrogatories to GCE on October 25, 2021. On November 12, 2021, GCE submitted responses to the Council's interrogatories of which one included photographic documentation of site-specific features intended to serve as a "virtual" field review of the project.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act (UAPA), an administrative agency is required to take an action on a petition for a declaratory ruling within 60 days of receipt. On October 21, 2021, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than February 21, 2022, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

Municipal Consultation

On July 15, 2021, GCE met with the interim Town Planner, the Town Zoning Enforcement Officer, Inland Wetland Agent and the Town Assessor to introduce the project and answer questions. There were no outstanding questions after the meeting. On July 28, 2021, GCE gave a presentation to the Town Planning & Zoning Commission.

Between July 7 and August 27, 2021, GCE spoke with four neighbors who expressed concerns about visibility of the solar panels from their properties, reflective glare, noise and proximity of the facility to property boundaries.

On August 27, 2021, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by September 24, 2021. No comments were received from the Town.

State Agency Comments

On August 26, 2021, the Council sent correspondence requesting comments on the proposed project from the following state agencies by September 24, 2021: Department of Energy & Environmental Protection (DEEP); 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).

In response to the Council's solicitation, CAA¹ and CEQ² submitted comments on August 30, 2021 and September 23, 2021, respectively. CAA's comments request that GCE file a Federal Aviation Administration (FAA) Form 7460-1 for a final Notice of Determination of No Hazard to Air Navigation. CEQ's comments relate to potential wildlife impacts, possible loss of prime farmland, and farm co-use plans (i.e. sheep grazing).

No other state agencies provided written comments on the proposed project.

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.³

Public Act 17-218

Public Act (PA) 17-218⁴ 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 project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such project will not materially affect the status of land as core forest." PA 17-218 requires a project developer to obtain a letter from DOAg **OR** DEEP. GCE has secured written confirmation from both DOAg and DEEP.

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over the construction, maintenance and operation of solar photovoltaic electric generating facilities throughout the state. PA 17-218 requires developers of solar facilities with a generating capacity of more than 2 megawatts (MW) to obtain a written determination from DOAg or DEEP that the project would not materially affect the status of land as prime farmland or core forest prior to submission of a petition for a declaratory ruling to the Council. PA 17-218

¹ [CAA Comment](#)

² [CEQ Comments](#)

³ *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007)

⁴ Codified at CGS §16-50k(a) and §16a-3k (2019)

does not confer the Council's exclusive jurisdiction over the construction, maintenance and operation of solar photovoltaic electric generating facilities throughout the state upon DOAg or DEEP. PA 17-218 also does not permit DOAg or DEEP to impose any enforceable conditions on the construction, maintenance and operation of solar photovoltaic electric generating facilities under the exclusive jurisdiction of the Council.

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.

GCE was awarded a contract with The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) under the state's Low and Zero Emissions Renewable Energy Credit Programs⁵ (LREC/ZREC Program) to sell the renewable energy credits from 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 PA 17-218.

The ZREC contract, executed on December 2, 2020, is for the 1 MW AC facility (Wapping Road Array). GCE would sell the renewable energy certificates (RECs) to Eversource under ZREC and sell the power to a third party via the Virtual Net Metering Program. The delivery term start date for the contract is October 22, 2022. The Project has a minimal operational life of 20 years but may operate for 25 to 30 years. The continued use of the facility after expiration of the ZREC contract or, alternatively, decommissioning of the facility would be evaluated based on market conditions at that time.

The 4 MW AC facility (Miller Road Arrays) would be a participant in the DEEP's Shared Clean Energy Facility (SCEF) Program. This shared use would promote agricultural activities and renewable energy. The Tariff Terms Agreement (TTA) Approval Date for In-Service Date for this portion of the project is December 31, 2023. The TTA has a term of 20 years. GCE anticipates that the facility would operate longer than the 20-year term; however, the actual use of the site after the expiration of the TTA would depend on market conditions at the time. If market conditions are not viable at that time, the project would be decommissioned.

Eversource completed its impact study and concluded that the project would not have any negative impacts to the distribution or transmission grid. Additionally, ISO-NE has determined that the project would not have a negative impact on the transmission system, and no transmission-level studies would be necessary.

GCE does not plan to participate in the ISO-NE Forward Capacity Auction at this time.

⁵ Zero emission renewable energy credit (ZREC) contracts are limited to 1 MW, and LREC contracts are limited to 2 MW. (CGS §16-244r)

Proposed Site

Pursuant to a lease agreement with the property owner, GCE proposes to construct the solar facility on an approximately 25 acre site⁶ located on two non-contiguous parcels (collectively, the host parcels) that total approximately 49.73 acres. The host parcels contain existing farm roads and tobacco barns, and have frontage to the west along Miller Road and Wapping Road.

The host parcels are a portion of 104 acres of farmland currently being used by Mulnite Farms Inc. to grow shade tobacco and corn. The host parcels are currently part of the Public Act 490 program and will continue to be used for agriculture. The property owners have not sold any development rights to DOAg as part of the State Program for the Preservation of Agricultural Land.

The host property is zoned A-1 Agricultural/Industrial and R-3 Residential. Surrounding land use primarily consists of farm fields and single-family residences. Most of the directly abutting residences are located east, west and south of the project site along Barber Hill Road, Miller Road and Lindsay Lane. A transmission line runs in a north-south direction through the Miller Road Arrays.

On April 26, 2021, the Council issued a declaratory ruling to GCE for the construction, maintenance and operation of a 4.99 MW AC solar photovoltaic electric generating facility located in the central portion of the Mulnite Farms, Inc. property.⁷ It is located south of the Wapping Road Array and north of the Miller Road Arrays. See attached figure titled, “Site Layout.”

GCE pursued the subject site because it is located on land suitable to support the Project, proximate to existing electrical infrastructure and would have minimal environmental impacts.

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.⁸

Proposed Project

The Wapping Road Array would occupy approximately 5 acres in the northern parcel, and the Miller Road Arrays would occupy 20 acres in the southern parcel.

The Wapping Road Array consists of the installation of 2,688 475 Watt bifacial photovoltaic modules. The Miller Road Arrays consist of the installation of 10,728 475 Watt bifacial photovoltaic modules.

The panels would be arranged in linear rows, oriented to the south at a fixed 30° angle. The rows of panels would be separated by a 16.5-foot wide aisle. The modules would be installed approximately 10.5 feet above final grade with a ground clearance of approximately 3 feet. The modules would be supported on a racking system attached to posts driven into the ground.

⁶ 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 [Petition No 1422 Greenskies East Windsor \(ct.gov\)](#)

⁸ *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007); CGS §16-50p(g) (2019).

Equipment for the Wapping Road Array would be installed on a 45-foot by 15-foot equipment pad. The Wapping Road Array would have eight 125 kilowatt (kW) inverters attached to the racking system. Equipment for the Miller Road Arrays would be installed on a 45-foot by 15-foot equipment pad and a 92-foot by 15-foot equipment pad. The Miller Road Arrays would have 32 125-kW inverters attached to the racking system. Where wiring is not installed on the racking system, it would be installed in underground conduit.

The Project is not designed to support a battery storage system. The current power purchase agreements and SCEF agreements do not have provisions for battery storage. The interconnection agreements also do not allow for AC coupled energy storage. The project cannot act as a microgrid because there is no direct energy load adjacent to the site, and there is no energy storage component.

The facility would have an anticipated service life of 20 to 35 years. The Project capacity factor is approximately 15.2 percent⁹. The power output would decline over time with a first-year power loss of up to 2 percent and subsequent annual power losses of approximately 0.45 percent.

The site would be accessed utilizing existing farm access roads off of Barber Hill Road, Rockville Road and Miller Road. Approximately 900 feet of new 15-foot wide gravel access would be installed within the fenced Miller Road Arrays areas. No new access would need to be installed at the Wapping Road Array area.

The proposed Project would interconnect to the existing three-phase electric distribution at two locations: at Rockville Road and at Barber Hill Road. Specifically, the electrical interconnection for the Wapping Road Array would run underground from the equipment pad and continue to the east along the northern limits of the Petition No. 1422 project before converting to overhead and crossing Barber Hill Road to reach an existing pole on Rockville Road. A total of 11 approximately 40-foot high poles would be required. Of the 11 poles, six would be located near Rockville Road.

The electrical interconnection for the Miller Road Arrays would run underground from the equipment pad and continue to the east generally following the access drive and convert to overhead and reach an existing pole on Barber Hill Road. A total of 22 approximately 40-foot high poles would be required. Of the 22 poles, six would be located near Barber Hill Road.

The demarcation points between GCE and Eversource ownership (for the two interconnections) are the production meters on the project site. Off-site upgrades to a short portion of existing electric distribution feeder would be required.

Earthwork would include excavation and grading to develop stormwater control basins. The typical slope tolerances for construction and racking system installation are less than 15 percent. Regrading of the solar array areas is not expected to be necessary because the entire site is very flat with no slopes within the array areas exceeding 8 percent. Approximately 8,000 cubic yards of cut material would be excavated to construct the proposed stormwater basins and swales.

Construction is expected to start in the spring of 2022, and final installation of array equipment and landscaping/screening measures would occur in the summer or fall of 2022. Final site stabilization, testing and commissioning are expected to be completed in the late fall of 2022. Typical construction hours and work days of the week are as follows: Monday – Friday 7:00 AM to 5:00 PM.

⁹ This is calculated on an AC MWh/DC MWh basis.

A site construction phasing plan has been developed that includes two main construction phases. Phase 1 includes all work necessary to establish stormwater basins and sediment traps and other erosion control measures at the site. Phase 2 includes any remaining earthwork, followed by site infrastructure installation and site stabilization.

The estimated cost of the project is approximately \$10.5M. Of this total, approximately \$8M is associated with the Miller Road Arrays, and \$2.5M is associated with the Wapping Road Array.

Public Safety

The proposed project would comply with the National Electrical Code, National Electrical Safety Code and National Fire Protection Association codes and standards, as applicable. A 15-foot minimum aisle would be maintained between the perimeter fence and the solar panels, in accordance with the CT State Fire Prevention Code, Section 11.12.3 - Ground Mounted Photovoltaic System Installations. Crop production within the fenced solar facility is not anticipated to have an impact on fire safety.

The nearest federally-obligated airport to the site is Bradley International Airport, located approximately 11 miles from the proposed facility. On August 3, 2021, the Petitioner performed a glare analysis and the results predicted zero glare. On September 17, 2021, the FAA issued a Determination of No Hazard to Air Navigation for this project.

The Facility would be remotely monitored, and it would have the ability to de-energize in the event of a fault or other power outage event and/or emergency. GCE would offer to host a site walk, training and Project design review with the appropriate Town emergency services officials.

The solar field would be enclosed by a 7-foot high chain link fence¹⁰. The entrances to the facility would be gated, limiting access solely to authorized personnel. Emergency responders would be provided keys or the code to access the gates to enter the facility.

The proposed facility would be in compliance with DEEP Noise Control Standards. Project-related operational noise would be from the facility inverters. The proposed inverter specification has a maximum sound level of approximately 55 dBA at a distance of one meter. The nearest residential property line is approximately 54 feet from the nearest inverter; thus, the projected noise level at the nearest residential property line would be approximately 31 dBA¹¹, which would comply with DEEP Noise Control Standard of 61 dBA for a commercial emitter to a residential receptor during the day. The inverters are inactive at night. Construction noise is exempt from DEEP Noise Control Standards.

The Site is not located within a Federal Emergency Management Agency designated 100-year or 500-year flood zone.

The proposed stormwater basins would not exceed the 3 acre-feet volume limit that would necessitate a dam safety permit; notwithstanding, GCE would register such basins with the DEEP Dam Safety Program.

¹⁰ Section 691.4(2) of the National Electrical Code (NEC), 2020 Edition notes that, “Access to PV electric supply stations shall be restricted by fencing or other adequate means in accordance with 110.31...” Section 110.31 notes that for over 1,000 Volts, “...a wall, screen, or fence shall be used...A fence shall not be less than 7 feet in height or a combination of 6 feet or more of fence fabric and a 1 foot or more...utilizing barbed wire or equivalent.”

¹¹ The inverse square law states that the intensity of sound decreases by approximately 6 dB for each doubling of distance from the sound source.

GCE conducted a Phase I Environmental Assessment (ESA) of the host property in June 2019. The Phase I ESA Report concluded that there is a likely presence of pesticides, herbicides and fertilizer in the groundwater within the area of the site given its agricultural use. It is recommended that any material exported from the site be tested first. Additionally, GCE would utilize dust suppression and anti-tracking pads during construction.

Fuel is anticipated to be stored on site during construction. GCE developed a Spill Prevention, Control and Countermeasure Plan and Soil Contact Best Practices Plan for the project.

Environmental Effects and Mitigation Measures

Historic and Recreational Resources

GCE performed Phase 1A and Phase 1B Cultural Resources Assessments at the site. No properties/districts are listed on the National Register of Historic Places within one mile of the proposed facility. No known archeological sites are located within one mile of the proposed facility. The project would not result in the removal of any existing tobacco barns and none of the tobacco barns would be used by the project. All of the tobacco barns will continue to be used by the property owner.

Based on a review of historic maps, aerial photographs, and soil profiles, approximately 79 acres of the proposed site possessed a moderate archaeological sensitivity. As part of the Phase 1B Cultural Resources Survey, 314 shovel tests were performed within the project area. No cultural materials or evidence of cultural features were identified as a result of the shovel tests. Thus, no impacts to significant cultural resources would be expected, and no additional archaeological examination was recommended. The Phase 1B Survey results were submitted to SHPO on November 4, 2021.

The nearest publicly-accessible recreational area is Pierce Memorial Park, located approximately 0.6 mile from the proposed site. The proposed project would not be visible from Pierce Memorial Park.

Visibility

Both the Wapping Road Array and the Miller Road Arrays would be expected to have a low visibility from surrounding roads and residences due to distance, topography and existing vegetation. Notwithstanding, the abutting properties at 37 Miller Road, 24 Barber Hill Road and 25 Lindsay Lane were evaluated by GCE for possible screening mitigation because these residential properties may have a potential view of the Miller Road Arrays. As a mitigation measure, GCE proposes to add a section of decorative slotted perimeter fence long enough to block views of the solar array and provide about 8 to 10 feet in height. Evergreen vegetation could also be included along with the decorative slotted fence. If approved, Council staff suggests including a condition for submission of the final visual screening plan.

No town-designated scenic roads are located near the site.

No exterior lighting is proposed.

Agriculture

The subject property contains prime farmland soils according to mapping maintained by the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). Under PA 17-218, “prime farmland” means land that meets the criteria for prime farmland as described in 7 Code of Federal Regulations (C.F.R.) 657, as amended from time to time. 7 C.F.R. 657 defines prime farmland in relevant

part as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses.”

The host parcels are currently used to grow shade tobacco and corn. The facility would occupy approximately 25 total acres of prime farmland.

By letter dated August 24, 2021, pursuant to PA 17-218, DOAg indicated that the proposed project would not materially impact the status of prime farmland as long as an agricultural co-use plan is implemented, as follows:

- a. utilize sheep grazing within the project fenceline at the Miller Road Arrays in partnership with the American Solar Grazing Association (ASGA) and University of Connecticut for this purpose;
- b. allow new or smaller growers/farmers to utilize available space within the project fenceline at the Wapping Road Array for crop production and work with the US Department of Agriculture’s Natural Resources Conservation Service on a marketing campaign to attract growers/farmers to utilize such land; and
- c. provide water for irrigation.

GCE proposes to allow third party farmers to grow crops and host sheep within the fenced solar facility sites. Since June 2021, GCE has sought out third party sheep farmers through ASGA to graze within the Miller Road Arrays area. Two prospective sheep farmers have responded via the ASGA, and GCE has been contact with at least 22 other prospective sheep farmers via outreach at agricultural fairs. GCE anticipates hosting a flock of approximately 2 to 3 sheep per acre for the approximately 20 acre area.

GCE plans to seek out third party growers/farmers to raise crops within the Wapping Road Array area. Currently, the plans involve growing crops between the solar panels. However, some farmers may choose to also grow crops under the panels in the future.

A detailed Farm Co-use Plan would be developed once the third-party farmers and available space for crop production are identified.

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over the proposed solar electric generating facility “site.” Under 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. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the project “site.” This includes portions of the parcel retained by the landowner and portions of the parcel the landowner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the project “site.”

Core Forest

Under PA 17-218, “core forest” means unfragmented forest land that is three hundred feet or greater from the boundary between forest land and nonforest land, as determined by the Commissioner of DEEP. UCONN’s Center for Land Use Education and Research defines “core forest” as forested areas that are essentially surrounded by more forested areas and fall into three classes – small core forest, medium core forest and large core forest. Small core forest is comprised of core forest patches that are less than 250 acres. Medium core forest is comprised of core forest patches that are between 250-500 acres. Large core forest is comprised of core forest patches that are greater than 500 acres. Forestland that does not meet the definition of core forest is considered “edge forest”. Edge forest is a forested area extending up to 300 feet from a non-forest feature such as a road.

The Project would not require tree clearing. By letter dated August 2, 2021, pursuant to PA 17-218, DEEP indicated that the proposed project will not materially affect the status of core forest.

Wetlands and Watercourses

One wetland was identified in the southern limits of the subject property near Lindsay Lane. It is located within 100 feet of the proposed development area. However, it is located upstream of the project, and no portion of the project area discharges stormwater runoff towards it. No perennial or intermittent watercourses were identified on the site.

No vernal pool habitat was observed on or proximate to the site during the wetland investigation conducted between July 24, 2019 and August 5, 2019.

Wildlife

By letter dated October 22, 2020, DEEP indicated that no negative impacts to state-listed species are expected to result from the project.

No gap for small wildlife movement is proposed at the bottom of the perimeter fencing.

Air Quality

The Project would not produce air emissions as a result of operation. The solar project would not produce air emissions of regulated air pollutants or greenhouse gases during operation.

Water Quality

The site parcel is not within a DEEP-designated Aquifer Protection Area or a mapped Public Drinking Supply Watershed. There are no wells on or proximate to the site.

The facility would generally not use or discharge water during site operations, except for minimal water for solar module cleaning. Water for module cleaning purposes would be brought to the site by truck.

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.

A construction sequence is included on the site plans that include the establishment of erosion control measures that comply with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*, and construction and installation of sediment basins followed by installation of site infrastructure.

Once the facility is completed and the site stabilized, the stormwater management system would consist of four stormwater management basins. One would be located on the eastern side of the Wapping Road Array; two would be located along the western side of the Miller Road Arrays; and one would be located on the southeastern side of the Miller Road Arrays.

GCE met with the DEEP Stormwater Division on June 21, 2021 to review the Project. DEEP Stormwater Division had no further comments. As of November 12, 2021, a DEEP Stormwater Permit application had not yet been filed.

Operation and Maintenance

A post-construction Operations and Maintenance Program has been established that includes provisions for periodic inspections of physical site features and structural and electrical components. A field visit to check mechanical and vegetative site conditions would be performed annually. The Wapping Road Array (which does not include sheep grazing) would be mowed two to three times annually. The Miller Road Arrays (which include sheep grazing) would be mowed intermittently as needed when sheep cannot graze or are removed at the request of the leasing sheep farmer.

An evaluation of facility components and preventative maintenance activities would be conducted in accordance with manufacturer recommendations.

Module cleaning would be conducted on an as needed basis with water that is trucked into the site.

Decommissioning

Project decommissioning will involve removal and disposal or recycling of all above-surface project components. All recyclable materials will be transported to the appropriate nearby recycling facilities. Any non-recyclable materials will be properly disposed of at a nearby landfill. The equipment pads would be removed. Underground infrastructure within a two-foot depth would be removed. The access roads would be stripped of the processed stone and geotextile underneath to expose the original soil surface. The compacted soil may require ripping with a subsoiler plow to loosen it before it could be returned to crop production. Other disturbed areas would be seeded with a drought-tolerant grass seed mix, unless such areas are immediately redeveloped for other uses.

GCE has not selected a manufacturer for the solar panels. GCE would ensure the selected panels pass a Toxicity Characteristic Leaching Procedure (TCLP) test that indicates the panels would not be characterized as hazardous waste at the time of disposal, under current testing criteria.

Conclusion

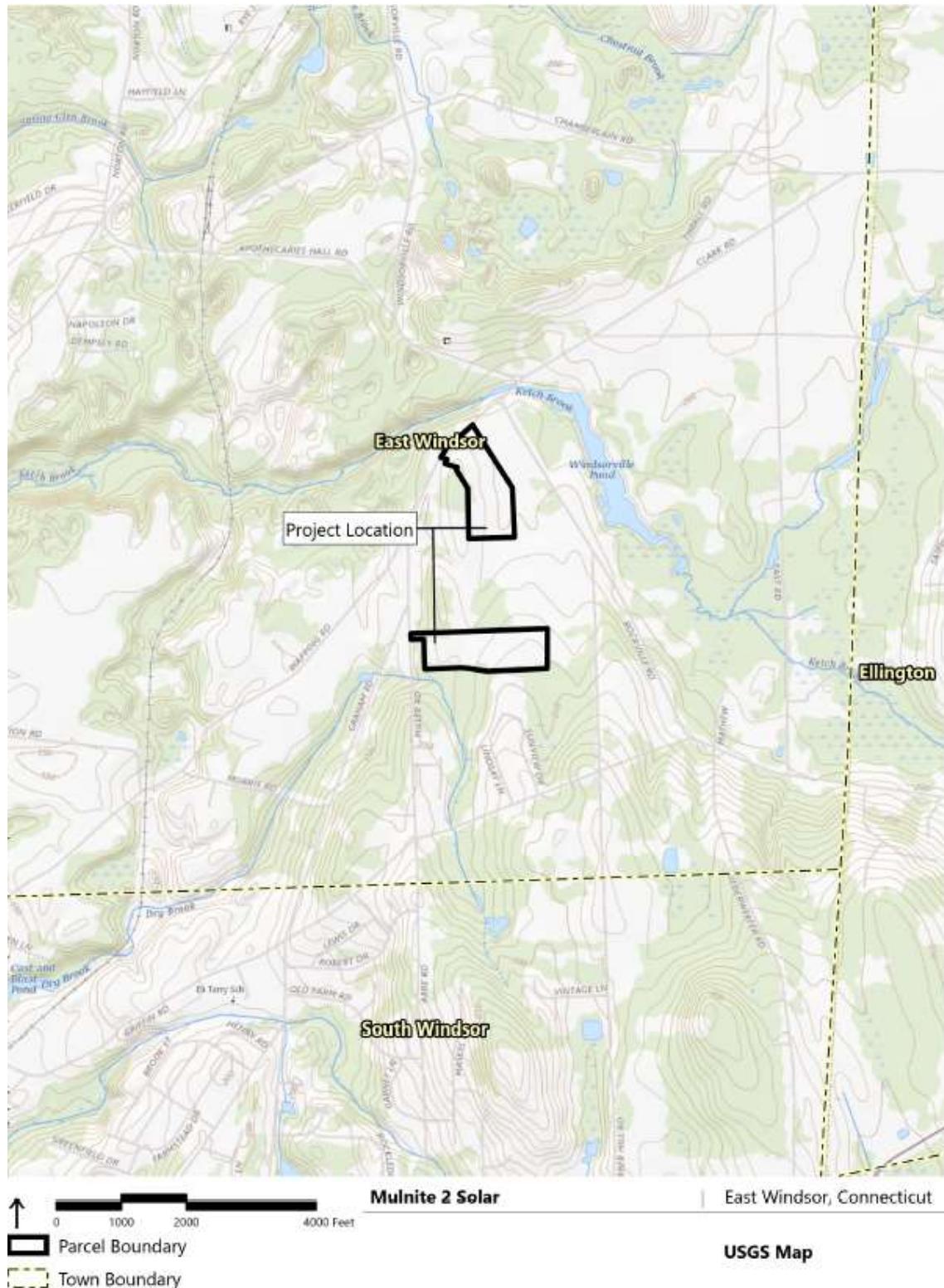
The project is a grid-side distributed resource with a capacity of not more than sixty-five megawatts, meets air and water quality standards of the DEEP, and would not have a substantial adverse environmental effect. The proposed project will not produce air emissions, will not utilize water to produce 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 and SCEF Programs and would further the state's VNM program.

Recommendations

If approved, staff recommends the following conditions:

1. Approval of any project changes be delegated to Council staff;
2. If developed, submit the Farm Co-use Plan with a document that shall indemnify and hold harmless the Council, its agents, representatives and employees from any and all losses, claims, actions, costs and expenses, judgments, subrogations, or other damages resulting from any injury to a person or to property arising out of the presence of third-party farmers within the fenced solar facility site;
3. The facility owner/operator shall file an annual report on a forecast of loads and resources pursuant to Conn. Gen. Stat. §16-50r;
4. Submit the final visual screening plan;
5. Submit Toxicity Characteristic Leaching Procedure (TCLP) test results for the selected solar panels that indicate the modules will not be characterized as hazardous waste under current regulatory criteria prior to the commencement of construction;
6. 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
7. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction.

Site Location



Site Layout



Wetland Delineation

