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November 9, 2023

VIA ELECTRONIC MAIL

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

Re: Petition of Windsor Solar One, LLC for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Construction, Operation and Maintenance of a 3.0 MW AC Ground-Mounted Solar Photovoltaic Electric Generating Facility Located at 445 River Street in Windsor, Connecticut

Dear Ms. Bachman:

I am writing on behalf of my client, Windsor Solar One, LLC, in connection with the above-referenced Petition. With this letter, I am submitting an electronic copy of the Petition, and all appendices for the petition can be found at the following link:

https://vhb-my.sharepoint.com/personal/skochis_vhb_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fskochis%5Fvhb%5Fcom%2FDocuments%2FDesktop%2FWindsor%20Solar%20One%20CSC%20Petition&ga=1

Should you have any difficulties accessing this link, please advise. An original and fifteen copies of the Petition will be hand delivered to your office on Monday, November 13, 2023, along with a check for the filing fee of \$625.00. We will also transmit a hard copy of the Petition to the Town of Windsor at that time.

Should you have any questions concerning this submittal, please contact me at your convenience.

Sincerely,

Lee D. Hoffman
Enclosure

cc: Anna Posniak, Town Clerk, Town of Windsor (townclerk@townofwindsorct.com)

Windsor Solar One, LLC
Petition for Declaratory Ruling that no Certificate of
Environmental Compatibility and Public Need is
Required for the Proposed Construction, Operation and
Maintenance of a 3.0 MW AC Ground-Mounted Solar
Photovoltaic Electric Generating Facility Located at 445
River Street in Windsor, Connecticut

Prepared for
The Connecticut Siting Council

November 9, 2023



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1.0 Introduction

This is a Petition for a declaratory ruling, pursuant to Connecticut General Statutes §§ 4-176 and 16-50k, that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required for the development, construction, operation, and maintenance of a solar photovoltaic project proposed by Windsor Solar One, LLC (“Windsor Solar One” or “Petitioner”) in the Town of Windsor, Connecticut (the “Project”). The Project consists of the development of a 3.0-megawatt (“MW”) alternating current (“AC”) ground-mounted solar photovoltaic (“PV”) facility (the “Facility”) located on a 47.1 acre parcel at 445 River Street, Windsor, Connecticut (“Property”). See Figure 1 – Site Location Map and Figure 2 – Proposed Project Areas Aerial.

The Project was selected and awarded a twenty (20)-year contract to participate in Connecticut’s Shared Clean Energy Fund (“SCEF”) program. Through the State of Connecticut’s SCEF program, at least sixty percent of the total capacity of the Facility will be supplied to low- and moderate-income customers and/or low-income service organizations. The Project’s output will be used to help Connecticut meet its emissions reduction targets via the State of Connecticut’s Renewable Portfolio standards and Governor Lamont’s Greenhouse Gas (“GHG”) reduction goals. Energy produced by the Project will be sold to Eversource Energy (“Eversource”) at market rates specified in the applicable utility tariff with Eversource for any self-generation facility.

Authorization by the Connecticut Siting Council (“Council”) via approval of this Petition would allow the Petitioner to construct the Project and assist the State of Connecticut in achieving its goal of energy conservation and sustainability. Pending approvals, the Project will commence financing, detailed engineering, procurement, and construction efforts in 2024, with commercial operation planned for the Project by the end of 2024.

The Project is located on an approximately 13.5-acre portion (the “Project Site”) of the Property adjacent to where River Street runs due north, within the Town of Windsor’s Agricultural zoning district. The Town of Windsor’s Assessor’s Office identifies the Property as MBL – 39/126/10 and the parcel is owned by Steven Stosonis. See Figure 3 – Tax Parcel Map and Figure 4 – Site Survey.

2.0 Petitioner

Windsor Solar One, LLC is a limited liability company with its principal place of business at 124 LaSalle Road in West Hartford, Connecticut. Windsor Solar One is a subsidiary of Verogy Holdings, LLC (“Verogy”). Verogy is a professional renewable energy business with decades of experience in the solar industry; the core of its business is developing, financing, constructing, managing, and operating solar projects. The management team at Verogy has constructed over 250 megawatts of solar projects across the United States.

Mailing Address:

Windsor Solar One, LLC
124 LaSalle Rd., 2nd Floor
West Hartford, CT 06107

Internet Address(es):

<https://www.verogy.com/>
<https://www.verogy.com/windsor-solar-one/>

Correspondence and other communications concerning the Project are to be addressed to, and notices, orders and other papers may be served upon, the following:

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All four individuals consent to electronic mailings of all Council and Petition-related correspondence.

3.0 Proposed Project

3.1 Project Site Overview

The Property is located at 445 River Street, Windsor, Connecticut in the north-central portion of Windsor. The Town of Windsor's Assessor's Office has the parcel listed as MBL – 39/126/10. See Figure 3 – Tax Parcel Map.

The Property is bounded to the west and south by River Street, which contains residential properties consisting of single-family homes and townhouse/condominium style buildings. To the east, the Property is bounded by a parcel that contains a large recently developed Amazon distribution facility. To the north, the Property is bounded by townhouse/condominium style buildings.

3.1.1 Existing Land Use

The current land use of the Property consists of forested areas, farm fields, and a commercial farm with a mix of green houses, barns, and animal grazing. According to Windsor's Zoning Map, the parcel is in the agricultural zoning district. See Figure 4 – Site Survey.

3.1.2 Surrounding Land Use

The area surrounding the Project Site consists of townhouse/condominium style residences to the north and to the west, on the opposite side of River Street. To the east of the Project is an existing wooded area located between the Project and the adjacent Amazon development. To the south of the Project, existing farm operations and related structures will be maintained in their current condition.

3.1.3 Project Site Selection

The Project Site was selected by Windsor Solar One after the evaluation of several key criteria, including but not limited to availability, suitability, proximity to utility infrastructure, and potential impacts to the environment and surrounding areas. The Project Site was selected because it was determined to be suitable for the development of

the Project with its proximity to suitable electrical grid access and minimal adverse impacts to natural resources and the environment.

3.2 Project Description

3.2.1 Site Access

The primary access point to the Project will be via a new curb cut on River Street, approximately opposite the mid-point of Sunrise Circle. From there, a proposed new gravel access road with a gate will extend due east for approximately 540 feet to the proposed equipment pad area. The Petitioner proposes the construction of the roadway on prepared subgrades with a gravel topping which would match existing grades to the greatest extent feasible. See Figure 5 – Proposed Project Layout and Appendix A – Sheet 2.0 Layout and Materials Plan.

3.2.2 Solar Facility Design and Layout

As currently designed, the 3.0 MW AC Project will consist of 7,280 First Solar Model FS-7520A-TR1, 520-Watt solar modules, 24 CPS 600V 125kW (SCH125KTL-DO/US-600) inverters, AC panel boards and/or switchgear, and two 1500 kVa transformers. The panels will be secured to a ground mounted steel racking structure utilizing a single-axis tracking system, which allows the panels to rotate from east to west for more efficient capture of sunlight. The steel racking structure will be anchored to the ground with driven posts, to a depth to attain sufficient structural capacity to resist the loads from the weight of the panels, as well as environmental loads including snow, wind, and seismic forces. The array of panels and the equipment will be surrounded by a seven-foot-high agricultural fence. The proposed utility service interconnection, owned and operated by Eversource, will include one pole adjacent to the southwestern corner of the Property and an underground cable extending approximately 360 feet north in the grass shelf on the eastern side of River Street to a second pole. The interconnection is located approximately 900 feet south of the proposed driveway, and 100 feet south of the first residence on Early Dawn Cir., to help reduce visibility to the residences on the west side

of River Street. The service will continue overhead on two poles on the Project Site before continuing underground north and east to the equipment pad location.

First Solar is a leading American solar company that manufactures advanced thin film photovoltaic modules. First Solar has performed a Toxicity Characteristic Leaching Procedure (“TCLP”) test on their Series 7 solar modules and have determined that the panels are not characterized as hazardous waste. See Appendix B for project specifications and the Analytical Report summarizing the TCLP for the solar panel that the Petitioner intends to install as part of the Project.

The Facility has an anticipated service life of thirty-five (35) years. The total 3.0 MW AC system will have an expected net AC capacity factor of approximately 21.6%. The Project is expected to produce more than 5,513,000 Kilowatt-Hours (kWh) of energy in the first year of operation, enough energy to power 760 homes. Energy produced by the Project will be sold to Eversource as part of the Connecticut SCEF Program. The SCEF Program, passed by the legislature and signed into law by Governor Lamont in 2018 (Public Act 18-50), is a six-year competitive energy procurement program supporting up to 150 MW of clean energy. The Petitioner was a successful bidder in year four of the program for the Project’s 3.0 MW AC system. The SCEF Program seeks to deploy new and incremental Class 1 renewable generation projects ranging in size from 100 to 4,000 kW (AC) for a contract term of at least twenty (20) years.

3.2.3 Electrical Interconnection

The interconnection application for the solar array was submitted to Eversource on September 14, 2022, and a Distribution Impact Study was subsequently conducted by Eversource. The study was completed by Eversource with an indication of no impact to the transmission or distribution grid. An Interconnection Agreement was subsequently issued by Eversource on August 29, 2023, that indicates that a new service interconnection consisting of a three-phase line extension, recloser, and primary meter will need to be installed by Eversource to service the Project. The Interconnection Agreement with Eversource was subsequently signed by Windsor Solar One and returned to Eversource.

3.2.4 Fencing and Site Security

The Petitioner proposes installing a 7-foot high agricultural fence around the perimeter of the Project Site to provide site security, as well as to address National Electric Code requirements. In addition, the entrance to the Project Site will be gated—limiting access to authorized personnel and vehicles. Town emergency service personnel will be provided access to the Project Site via a Knox lockbox (emergency key box). Importantly, the Petitioner notes that the Project Site and Facility operations will be monitored remotely. The Petitioner will have the ability to de-energize all or some portion of the Facility in the event of an emergency. See Appendix A – Sheet 2.0 - Layout and Materials Plan.

3.3 Stormwater Management

The Petitioner prepared a Stormwater Management Report (the “Stormwater Report”) in accordance with the 2004 State of Connecticut Stormwater Quality Manual and the Connecticut General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (“Stormwater General Permit”) as modified November 25, 2022. A copy of the Stormwater Report is attached as Appendix E.

The Petitioner reviewed online soil mapping and no permanent stormwater basins are proposed; therefore, no in-situ soil testing is currently proposed that would be required by regulation. As indicated in the attached Stormwater Management Report, predevelopment drainage patterns have been maintained to the greatest extent feasible in an effort to maintain pre-development flows to off-site areas. The Town of Windsor does not contain any listed Aquifer Protection Areas.

The entirety of the development area drains to the south where it ultimately reaches an existing delineated wetland. One temporary sediment trap is proposed along the south side of the Project Site discharging stormwater to the southeast, where the existing runoff flows today. The proposed sediment trap does not exceed the 3 acre- foot volume limit; thus, a Connecticut Department of Energy and Environmental Protection (“CT DEEP”)

Dam Safety permit is not required. Upon completion of construction, the temporary sediment trap will be removed and restored to existing conditions.

The Petitioner developed a HydroCAD model, using TR-55 methodology, to evaluate the existing and proposed drainage conditions of the Property. The results of the analysis demonstrate that there would not be an increase in peak stormwater runoff rates for the 2-, 25-, 50-, and 100-year storm events to any sub-watershed. The Project proposes a de minimis amount of impervious cover and the promotion of long-term vegetation across the Project Site in lieu of the prior farming operations will ensure that water quality and sediment transport will be improved upon existing conditions.

3.4 Construction Schedule and Phasing of Construction

The Petitioner anticipates that construction of the Project will begin in the Spring of 2024 and will take approximately five (5) months to complete. Construction activities within the Project Site will include: erosion and sedimentation (“E&S”) control measures, and racking and module(s) electrical trenching; the installation of interconnection infrastructure; and, new access road construction. Existing grades throughout the Project Site will remain, except in areas where the Project’s E&S control measures are proposed. For those areas, some temporary regrading (i.e., cuts/fills) will be required. Upon completion of construction, the areas will be returned to existing conditions.

Initial work would involve the installation of erosion and sediment control measures, including installation of sediment trap. It is anticipated that a temporary staging area would be located in the open field to the south of the Project Site.

Upon completion of the installation of the erosion control measures, the Project will commence construction of the gravel access road and begin racking installation. Upon completion of the racking installation the modules and other electrical equipment will be installed. Final site stabilization, testing, and commissioning would be expected to be completed in the Fall of 2024. Construction activities would be expected to occur 7:00AM to 6:00PM Monday through Friday and Saturday between the hours of 8:00 a.m. and 5:00 p.m.

A Storm Water Pollution Control Plan (“SWPCP”) would also be developed and implemented by the Project’s civil engineer and will include regular inspection of erosion control measures to prevent sedimentation or water quality impacts. The Petitioner will also apply for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities from CT DEEP. The Stormwater Management Report (Appendix E) provides Erosion and Sedimentation Control Best Management Practices – Maintenance/Evaluation Checklists for Construction Practices and Long-Term Practices. Construction sequencing is described in detail on sheet C-4.0 in Appendix A.

3.5 Operation and Maintenance

Required maintenance of the Project will be minimal. The Petitioner proposes to use sheep grazing to maintain field grass that will be established within the limits of the Project Site. Routine maintenance of the electrical equipment will typically occur one (1) time per year and will typically involve two (2) technicians. The Facility would be monitored remotely 24 hours a day, 7 days a week. The Petitioner does not expect that any snow removal operations will be necessary for the Project, given that the daily rotation of the facility’s panels allow for any accumulating snow to “sheet” off. Repairs to the Facility components will be made on an as-needed basis. See Appendix C – Operation & Maintenance Documentation.

3.6 Decommissioning

At the end of its useful life, the Project will be decommissioned in accordance with the requirements of the Petitioner's land lease agreement and the Project's Decommissioning and Restoration Plan. See Appendix D – Decommissioning and Restoration Plan.

4.0 Project Benefits and Needs

The State of Connecticut has committed to developing its renewable energy market and mitigate the negative environmental impacts associated with traditional electric power generation. In so doing, it has set aggressive targets to reduce GHG emissions and to increase the deployment of Class I renewable energy.

The Governor's Council on Climate Change ("GC3") recommendation is that the Connecticut's Renewable Portfolio Standard ("RPS") reach a target of 40 percent Class I renewable energy sources by 2030, with an aim to reduce the carbon intensity of the RPS to achieve the State's decarbonization goals. Additionally, Governor Lamont has set a 100 percent zero carbon target for the energy sector by 2040. Owners of renewable-electricity generation projects receive one renewable energy certificate (REC) for every megawatt-hour of renewable electricity they produce. Those RECs are traded in a regional market for state RPS compliance. Connecticut establishes required annual REC percentages from three classes of renewable energy resources.

If approved, the Project will provide a wide range of environmental and economic benefits to the State of Connecticut and the Town of Windsor, respectively, including:

- Through the State of Connecticut's SCEF program, at least sixty percent of the total capacity of the Facility will be supplied to low- and moderate-income customers and/or low-income service organizations;
- Once operational, the Project will generate approximately 5,513 MWh of clean renewable energy per year. This is enough renewable energy to power 760 homes for an entire year and would effectively offset 3,907 metric tons of carbon dioxide annually—the same amount as 64,608 tree seedlings grown for ten (10) years, or 439,665 gallons of gasoline of gasoline consumed;
- Reduction in energy demand during peak usage will decrease energy costs for ratepayers Statewide;
- The creation of construction jobs in the region; and
- The Project will effectively increase new annual municipal tax revenues for Windsor with no additional burden on town services.

5.0 State and Local Outreach/Input

Windsor Solar One has been in communication with and has engaged state and local regulators regarding the design and development of the Project.

On September 29, 2023, the Petitioner met with Eric Barz, Windsor Town Planner, and Patrick McMahon, Windsor Economic Development Director. In this meeting, Mr. Barz and Mr. McMahon asked the petitioner to present the project to the Town of Windsor's Staff Development Team, which includes key members of several departments that are typically associated with local permitting of development projects. The plan for this Project was presented to the group on October 17, 2023. Based on some of the feedback received at this meeting, some elements of the Project design were adjusted to their current proposal. This included modification of the access road design to accommodate fire truck access to the equipment pad and a relocation of the utility connection to the south to maintain more existing vegetation and minimize the visual impact to the condominium complex on the west side of River Street.

On September 6, 2023, the Windsor Solar One Project team, including VHB, met with Chris Stone and Laura Gaughran of the CT DEEP Stormwater Division to discuss the planned development of the stormwater management design and erosion & sediment control plans for the Facility. There were no specific comments on the Project from CT DEEP Stormwater Division.

On October 23, 2023, Windsor Solar One sent a Project Fact Sheet and other related information about the Project to the abutting property owners and established a Project-specific website (www.verogy.com/windsor-solar-one) to keep the public informed about the Project. See Appendix I – Public Outreach Documentation for copies of Windsor Solar One's Project Fact Sheet and a sample letter sent to abutting landowners as well as a list of the abutting landowners notified.

In addition, pursuant to the requirements of R.C.S.A. § 16-50j-40(a), Windsor Solar One has sent out formal notifications concerning this Petition to all abutters and applicable

governmental officials via the certificate of mailing process. A table summarizing this outreach is included in Appendix I.

6.0 Potential Environmental Effects/Impacts

6.1 Site/Community Setting and Scenic Character and Values

The Project is located in the northern and central portion of the Property and will occupy approximately 13.5 acres of the 47.1 acres. The overall land use of the parcel/property consists of an active farm with associated structures such as barns, green houses, a residence, forested areas, wetlands, and farm fields. The surrounding land use is primarily residential, except for a large Amazon distribution center that is located to the northeast.

6.2 Public Health and Safety

The proposed Project is not expected to create any adverse impact regarding public health or safety issues. The proposed Project will meet or exceed all local, state, national and industry health and safety standards and requirements. During construction and post-construction operations and maintenance, workers and personnel would follow all health and safety standards applicable to solar energy generating facilities.

A site-specific construction health and safety plan is typically developed prior to initiation of any on-site Project-related tasks. During the construction phase of development, all contractors, sub-contractors, and personnel will be appropriately trained and briefed on any potential site health and safety issues. There will be a designated construction manager, site safety officer, or representative present at all times during construction, and such an individual will be responsible for overseeing/implementing the site construction health and safety plan.

Construction traffic relative to the Project Site includes standard construction trucks, small earth moving equipment, and all-terrain forklift equipment. Vehicle trips would be relative to scheduled deliveries of the major materials such as solar racking, solar panels,

electrical equipment to serve the Facility, and fencing materials to be installed around the perimeter of the solar field. Construction activity and associated traffic would generally take place from 7:00 AM to 6:00 PM daily Monday through Friday and 8:00 AM to 5:00 PM Saturday.

Some hazardous substances are required to be used or stored on the Property during construction or operation of the Project. Namely, gasoline or diesel-powered equipment will be in regular use during construction activities, requiring some on-Property fuel storage. Further, the inverter step-up transformers located at each equipment pad will use biodegradable oil for cooling. Accordingly, a Spill Prevention, Control, and Countermeasure (“SPCC”) Plan and an Operations and Maintenance (“O&M”) Plan have been developed for the Project. See Appendix L – Spill Prevention Control, and Countermeasure Plan.

6.3 Noise

6.3.1 Noise Level Guidelines and Regulatory Requirements

Potential Project-related noise is regulated by Connecticut General Statutes § 22a-69 and the Town of Windsor’s Noise Ordinance (<https://ecode360.com/30374450>).

The Town of Windsor’s Noise Ordinance provides: “No person in a residential zone shall emit noise beyond the boundaries of his/her premise exceeding the levels stated herein and applicable to adjacent residential, commercial or industrial zones.” For the Residential District which the Property, and surrounding receptors to the north, south, and west, are located in, local ordinance prescribes a maximum level of 55 dBA for daytime hours (defined as 7 AM to 10 PM, Monday through Saturday, and 9 AM to 10 PM on Sundays) or 45 dBA for nighttime hours (defined as 10 PM to 7 AM, Sunday evening through Saturday morning, except that night shall mean between 10 PM Saturday and 9 AM Sunday). For the Industrial District which abuts the Property to the east, the local ordinance prescribes a maximum level of 62 dBA. Noise generated by the operation of any tools or equipment used in construction, drilling, or demolition work between the hours of 7:00 a.m. and 9:00 p.m. is exempt.

Connecticut General Statutes § 22a-69 is applicable to the proposed Project and requires the Project to meet the following sound levels: 61 dBA at the nearest residential property during the day (when the Project would be generating electricity); 51 dBA at the nearest residential property at night (when some accessory equipment might still be in operation); 66 dBA at the nearest commercial/educational property; and 70 dBA at the nearest agricultural/industrial property. The statute also accounts for impulse and other types of noise. Construction noise is exempt from the statute.

6.3.2 Proposed Project-generated Noise

Due to the nature of the use, Facility design, required equipment and distance from potential noise receptors, the proposed Project is expected to have no adverse noise-related impact on the surrounding area. Existing uses around the perimeter of the Project site include condominium/town-house style residences, single-family residential development, and a large distribution warehouse.

The selected inverter has an acoustic noise rating 65 dBA at 1 meter distance, as noted on the inverter specification sheet provided in Appendix B, and field testing by acoustical engineers. All other selected system equipment will typically generate the same or lower levels of noise.

The nearest residential zone is located approximately 455 feet to the west of the closest equipment pad. Per a previously completed sound analysis, a combined inverter bank has a calculated sound power level of under 85 dBA. The Petitioner applied the Inverse Square Law to evaluate the relative sound level of the inverters to the nearest residential property line, and the calculations show that 85 dBA would reduce to approximately 26 dBA at a distance of 455 feet, which is below the maximum allowable 61 dBA daytime State limit and 55 dBA Town limit. The inverters only operate during daytime hours. The nearest industrial zone is located approximately 95 feet to the east of the closest equipment pad. The Petitioner applied the Inverse Square Law to evaluate the relative sound level of the inverters to the nearest industrial property line, and the calculations

show that 85 dBA would reduce to approximately 39 dBA at a distance of 95 feet, which is below the maximum allowable of 61 bBA daytime State limit and 62 dBA Town limit.

6.4 Air Quality

Because the Project is a solar energy generating facility, no air emissions will be generated during operations and, therefore, an air permit would not be required. Temporary, potential construction-related mobile source emissions would include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities can be considered *de minimis*. Such emissions would be mitigated using available measures including limiting idling times of equipment; proper maintenance of all vehicles and equipment and watering/spraying to minimize dust and particulate releases. In addition, all on-site and off-road equipment would meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency (“EPA”) and, with the above mitigation measures, should reduce the exhaust emissions.

6.5 Visual Impact Assessment

The Petitioner acknowledges that the location of the proposed Project, coupled with the design of the proposed solar energy Facility, will be visible from River Street and the parcels to the west. Cross sections displaying the proposed Project elements in relation to the nearest residence have been prepared in support of this Petition and are included in Appendix J. To help mitigate the visibility of the Facility the Petitioner intends to incorporate screening into the site development plan as needed to address screening deficiencies which may exist. See Appendix A – Sheet C-6.0 - Planting Plan Notes and Details.

The nearest public recreation area is River Street Park, adjacent to the Farmington River, which is located approximately 780 feet to the west of and 50 feet below the Facility. The combined distance and elevation change along with the existing wooded open space property in between the two locations make it unlikely that there will even be seasonal views from River Street Park.

The nearest scenic road is South Street (Rt. 75) in Suffield, located approximately 5 miles north of the Project Site. This scenic road is not visible from the Project Site.

6.6 Federal Aviation Administration Determination

The Petitioner used the Federal Aviation Administration (“FAA”) Notice Criteria Tool to screen the Project Site to assess if the Project triggers the FAA Notice Criteria. The result of the initial screening on October 6, 2023, is that no additional FAA notice is required. See Appendix K - FAA Consultation.

6.7 Site Soils and Geology

6.7.1 Existing Site Soils and Geology

A review of available NRCS online soils mapping indicated the majority presence of a single map unit (Windsor loamy sand) throughout the Project Site, with Hydrologic Soil Group “A” and slopes ranging from 0 to 3%. Soils information is included in Figure 9 – NRCS Soils Information.

6.7.2 Preservation of Prime Agricultural Soils

The site is currently undeveloped farmland. A review of the US Department of Agriculture’s soil mapping for the area indicates that no portions of the development area are prime farmland. It is currently anticipated that no soils will be exported from the Project Site and that any excess material will be reused on the Project Site. The CT Department of Agriculture (“DoAg”) has reviewed the Petitioner’s proposed solar development plan that includes the use of rotational sheep grazing for vegetative management. DoAg determined that the plan as presented will not materially affect the status of the Project Site as prime farmland, subject to adherence with the plans and information presented.

6.8 Historic and Archaeological Resources

Heritage Consultants prepared a Phase 1A Cultural Resources Assessment Survey in July 2023. Heritage found that portions of the Project Site contained a moderate sensitivity for archaeological resources and recommended that a Phase 1B study be performed within these areas. Petitioner retained Heritage Consultants to perform a Phase 1B shovel test in these areas and the work is ongoing. A copy of the Phase 1A report is included in Appendix F and the Petitioner will provide the results of the Phase 1B investigation, as well as any SHPO correspondence, to the Council.

6.9 Wetlands and Watercourses

6.9.1 Wetlands Delineation and Methodology

On September 1, 2023, soil scientists from VHB investigated the Project Site to determine if regulated Inland Wetlands or Watercourses were present. In Connecticut, Inland Wetlands are defined by areas of poorly drained or very poorly drained soils or alluvial soils of any drainage class. The investigation was facilitated by the use of a tile spade and soil augers that were used to examine soil profiles and evaluate drainage classes. A Wetlands Delineation Report dated September 13, 2023, was prepared outlining the survey process and findings. A copy of this report is included in Appendix G.

6.9.2 Existing Wetlands and Watercourses

A single wetland system was delineated as a result of this effort and is depicted in the report. Generally speaking, the wetland system within the study area exists to the south of the Project Site. All delineated wetlands on the Property discharge to a tributary of the Farmington River. A more comprehensive analysis of the delineated wetland systems can be found in the Wetland Delineation Report included in Appendix G. There is also a known wetland stream delineated by others to the southeast of the Project Site on the Property.

6.9.3 Vernal Pools

No habitat for vernal pools were discovered within the Project Area during the on-site field investigation in 2023 and VHB soil scientists attest that no further in-season surveys are required as part of the development.

6.9.4 Proposed Project and Mitigation

The Project has been designed to provide a vegetated buffer between the limits of disturbance and the described wetland systems to maintain an ecological edge zone that separates the solar development and stormwater features from the wetland communities. The wetlands will be further protected by incorporation of the inclusion of permanent vegetation at the site.

The Project's limits of disturbance are greater than 100-feet and the closest panel is approximately 375-feet from the delineated tributary wetland. These distances are in concurrence with CTDEEP Stormwater General Permit minimum buffer requirements.

6.10 Wildlife and Habitat

6.10.1 Rare, Threatened and Endangered Plants and Wildlife

A Request for Natural Diversity Data Base (“NDDB”) State Listed Species Review was completed and distributed to CTDEEP Wildlife Division for review. The Petitioner is awaiting a species list from CTDEEP in order to prepare conservation measures for any known species. This list, along with any proposed conservation measures as a result of it, will be distributed to the Council upon receipt and design.

6.10.2 Potential Impacts and Mitigation

The Petitioner is awaiting a response from CTDEEP Wildlife Division for the request for species and will coordinate the construction work with CTDEEP Wildlife Division as needed.

6.10.3 Core Forest

Review of the CTDEEP Forestland Habitat Impact Map indicates that no known core forest exists at or in proximity to the Project Site. A letter of no material impact to core forest was received from CTDEEP on October 4, 2023.

6.11 Water Supply

No water for the construction of the Facility will be sourced on site from either a well or utility hook up. All water used for construction will be trucked into the Property. Although module cleaning is rarely necessary in Connecticut, if the solar modules were to experience enough soiling to adversely affect production, the modules would be cleaned using water brought in by tanker trucks.

6.12 Stormwater Management

6.12.1 Existing Conditions

Under existing conditions, untreated stormwater runoff from most of the Project Site generally flows southerly overland towards the delineated onsite wetland system. This wetland system conveys stormwater to the south and connects with a tributary of the Farmington River, prior to discharging under River Street and into Farmington River.

The Project Site is comprised 100% of active farmland. Generally, the Project Site is at its highest elevation within the northeastern portions of the development area, and slopes to the west and to the south towards the adjacent forested wetland system. The majority of terrain slopes in the Project Site range from 0% to 2% with portions ranging up to 5% slope.

Information and computations regarding existing conditions hydrology is contained in the Stormwater Report. A copy is included in Appendix E.

6.12.2 Proposed Conditions

The proposed stormwater management system for the Project has been designed to meet State standards found within the 2004 Connecticut Stormwater Quality Manual and CTDEEP Stormwater General Permit as modified November 25, 2022. As the Project contemplates seeding active farmland to create a grassy environment, stormwater runoff

from the Project will be reduced upon Project completion. A seed mix of permanent turf forming grasses will be used to establish vegetation directly under the modules to help stabilize the topsoil from erosion, sequester nutrients and pollutants, and lower runoff rates. The only impervious surfaces created by the Project will be a small amount of gravel access road and equipment pads.

Post-construction stormwater runoff will follow existing drainage patterns. Information and computations regarding proposed conditions hydrology is contained in the Stormwater Report. A copy is included in Appendix E.

7.0 Conclusions

The Project clearly meets the standards set forth in Conn. Gen. Stat. § 16-50k(a). Specifically:

- The Project meets CTDEEP's air and water quality standards, with no material emissions associated with either construction or operation, and water quality standards associated with construction and operational stormwater management a primary focus of the Project's design;
- The Project has been configured to avoid any substantial environmental impacts by largely utilizing land which has been subject to former agricultural uses; and
- The Project will not impact areas of core forest; and

In addition, the majority of visual impacts of the Project from River Street will be addressed by the Petitioner; nor will there be any impacts from noise.

Given the benefits this Project will provide to the State of Connecticut, Windsor Solar One respectfully requests that the Council approve this Project as currently designed and issue a declaratory ruling that a Certificate is not required.