

Glastonbury 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 17 Wickham Road in Glastonbury, Connecticut

**Prepared for
The Connecticut Siting Council**

December 15, 2023



Table of Contents

1.0	Introduction	4
2.0	Petitioner	5
3.0	Proposed Project	6
3.1	Project Site Overview	6
3.1.1	Existing Site Land Use.....	6
3.1.2	Surrounding Land Use	6
3.1.3	Project Site Alternatives	6
3.2	Project Description	7
3.2.1	Site Access	7
3.2.2	Solar Facility Design and Layout	7
3.2.3	Electrical Interconnection	8
3.2.4	Fencing and Site Security.....	9
3.3	Stormwater Management	9
3.4	Construction Schedule and Phasing of Construction	10
3.5	Operation and Maintenance	11
3.6	Decommissioning	12
4.0	Project Benefits and Needs	13
5.0	State and Local Outreach/Input	14
6.0	Potential Environmental Effects/Impacts.....	14
6.1	Site/Community Setting and Scenic Character and Values.....	14
6.2	Public Health and Safety	15
6.3	Noise	16
6.3.1	Noise Level Guidelines and Regulatory Requirements	16
6.3.2	Proposed Project-generated Noise	16
6.4	Air Quality.....	17
6.5	Visual Impact Assessment	17
6.6	Federal Aviation Administration Determination	18
6.7	Site Soils and Geology.....	19
6.7.1	Existing Site Soils and Geology	19
6.7.2	Preservation of Prime Agricultural Soils	19
6.8	Historic and Archaeological Resources	19
6.9	Wetlands and Watercourses	20
6.9.1	Wetlands Delineation and Methodology	20
6.9.2	Existing Wetlands and Watercourses.....	20

6.9.3	Vernal Pools	20
6.9.4	Proposed Project and Mitigation	20
6.10	Wildlife and Habitat.....	21
6.10.1	Rare, Threatened and Endangered Plants and Wildlife	21
6.10.2	Potential Impacts and Mitigation	21
6.10.3	Core Forest	21
6.11	Water Supply	22
6.12	Stormwater Management	22
6.12.1	Existing Conditions.....	22
6.12.2	Proposed Conditions.....	22
7.0	Conclusions	24

LIST OF FIGURES

- Figure 1 – Site Location Map
- Figure 2 – Proposed Project Area Aerial
- Figure 3 – Tax Parcel Map
- Figure 4 – Site Survey
- Figure 5 – Proposed Project Layout
- Figure 6 – Wetlands Delineation Map
- Figure 7 – Aquifer Protection Area Map
- Figure 8 – Public Water Supply Watershed Map
- Figure 9 – Groundwater Quality Classifications (CTDEEP)
- Figure 10 – NRCS Soils Information

LIST OF APPENDICES:

- Appendix A – Permit Plan/Drawing Set
- Appendix B – Equipment Specifications & TCLP
- Appendix C – Operation & Maintenance Documentation
- Appendix D – Decommissioning and Restoration Plan
- Appendix E – Stormwater Report
- Appendix F – Cultural Resource Assessment Documentation
- Appendix G – Wetlands Delineation Report and Vernal Pool Study
- Appendix H – Wildlife and Habitat Review Documentation
- Appendix I – Public Outreach Documentation
- Appendix J – Visual Impact Assessment
- Appendix K – FAA Consultation
- Appendix L – Spill Prevention Control and Countermeasure Plan

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 proposed solar photovoltaic project proposed by Glastonbury Solar One, LLC (“Glastonbury Solar One” or “Petitioner”) in the Town of Glastonbury, Connecticut (the “Project”). The Project consists of the development of a 3.0-megawatt (“MW”) alternating current (“AC”) ground-mounted solar photovoltaic (“PV”) facility located on a 46.96 acre parcel at 17 Wickham Road, Glastonbury, Connecticut (“Property”). See Figure 1 – Site Location Map and Figure 2 – Proposed Project Area Aerial.

The Project was selected and awarded a twenty (20)-year contract to participate in Connecticut’s Shared Clean Energy Facility (“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 (“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 15-acre portion (the “Project Site”) of the Property fronting on Hebron Avenue, within the Town of Glastonbury’s Rural Residence zoning district. The Property is owned by the Connecticut Catholic Cemeteries Association. See Figure 3 – Tax Parcel Map and Figure 4 – Site Survey.

2.0 Petitioner

Glastonbury Solar One, LLC is a limited liability company with its principal place of business at 124 LaSalle Road in West Hartford, Connecticut. Glastonbury 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.

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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 17 Wickham Road, Glastonbury, Connecticut in the north-central portion of Glastonbury. The Town of Glastonbury's Assessor's Office has the parcel listed as MBL – G5/2920/S0054. See Figure 3 – Tax Parcel Map.

The Property is bounded to the north by Hebron Avenue (CT Rt. 94), to the east by Wickham Road, and to the south & west by residential properties located on Wickham Road, Glen Place and Orchard Street.

3.1.1 Existing Land Use

The current land use of the Property consists of the Holy Cross Cemetery along Wickham Road, agricultural fields, and a small farm stand with associated parking and access off Hebron Avenue. According to Glastonbury's Zoning Map, the parcel is in the rural residence zoning district. See Figure 4 – Site Survey.

3.1.2 Surrounding Land Use

The area surrounding the Project Site consists of single-family residences to the south and west and the Holy Cross Cemetery to the east. On the north side of Hebron Avenue opposite the Property is the Congregation Kol Haverim Synagogue, the Glastonbury Health Care Center, Addison Place at Glastonbury assisted living facility, and BrightPath Childcare Center.

3.1.3 Project Site Selection

The Project Site was selected by Glastonbury 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 Site will be via an existing curb cut on Hebron Avenue and an existing gravel & dirt farm road along the eastern edge of the Project Site, leading to a new gravel road that will continue south toward the solar array. The Petitioner would construct only a small amount of internal gravel roadway within the Project area along the eastern portion of the Project to provide access to the proposed facility. 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 6,840 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 minimum seven-foot-high agricultural security fence meeting applicable electrical codes. The proposed utility interconnection service poles, owned and operated by Eversource will be located at the northeast corner of the Project Site, where the existing access road connects to Hebron Avenue.

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 Toxicity Characteristic Leaching Procedures (“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 19.32%. The Project is expected to produce more than 5,077,000 Kilowatt-Hours (kWh) of energy in the first year of operation, enough energy to power 778 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 Energy on January 31, 2023, 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 25, 2023, that indicates that a new service interconnection consisting of a recloser and primary meter will need to be installed by Eversource to service the Project. The Interconnection Agreement with Eversource was subsequently signed by Glastonbury Solar One and returned to Eversource.

3.2.4 Fencing and Site Security

The Petitioner proposes installing a minimum 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. This will be a combination of both new and existing fencing. 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. 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 majority of the site drains to the east then to the south where it ultimately reaches an existing wetland. Two temporary sediment traps are proposed along the east side of the Project Site discharging stormwater to the southeast, where existing runoff flows today. The proposed sediment traps do 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.

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.

Initial work would involve the installation of erosion and sediment control measures, including installation of sediment traps. It is anticipated that a temporary staging area would be located in the existing parking area and/or open field area to the north of the Project Site, between the Project Site and Hebron Avenue.

Upon completion of the installation of the erosion control measures, the Project will commence construction of the small amount of 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

The 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 greenhouse gas (“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, Project will provide a wide range of environmental and economic benefits to the State of Connecticut and the Town of Glastonbury, 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 5,077 MWh of clean renewable energy per year. This is enough renewable energy to power 778 homes for an entire year and would effectively offset 3,998 metric tons of carbon dioxide annually—the same amount as 66,100 tree seedlings grown for ten (10) years, or 449,824 gallons 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 Glastonbury with no additional burden on town services.

5.0 State and Local Outreach/Input

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

On October 26, 2023, the Petitioner met with Glastonbury's Town Manager Jonathan Luiz, to discuss the Project. The Petitioner introduced some key members of its development team to the Town Manager, provided an overview of the Project and the benefits to the Glastonbury community.

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 November 8, 2023, Glastonbury 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/glastonbury-solar-one) to keep the public informed about the Project. See Appendix I – Public Outreach Documentation for copies of Glastonbury 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), Glastonbury 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 southwestern portion of the Property and will occupy approximately 15 acres of the 46.96 acres. The overall land use of the parcel/property consists of a cemetery and associated structures to the east, forested areas and wetlands to the south, and open agricultural fields in the western portion of the Property. The surrounding land use is primarily residential with some commercial (health and child care related) properties located to the north on the opposite side of Hebron Avenue.

6.2 Public Health and Safety

The proposed Project is not expected to create any adverse impact with regard to 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 section 22a-69 and Regulations of Connecticut State Agencies (RCSA) Section 22a-69 et. seq.

The State Noise Regulations prohibit the emission of continuous excessive noise beyond the boundary of their Noise Zone. The Project is considered a Class C Land use with residential receptors to the north and south of the Project Area, thus requiring a maximum level of 61 dBA during daytime hours (defined as 7 AM to 10 PM) and 51 dBA during night time hours (defined as 10 PM to 7 AM). Construction noise is exempt from the noise regulations.

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 religious, daycare, & healthcare activities and single-family residential development.

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 residence is located at 1238 Hebron Avenue approximately 145 feet to the north of the Project Site and 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 an 85 dBA would reduce to approximately 51.3 dBA at a distance of 145 feet, which is below the maximum allowable of 61 dBA daytime limit. The inverters only operate during daytime hours.

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 (USEPA) and, with the above mitigation measures, should reduce the exhaust emissions.

6.5 Visual Impact Assessment

Petitioner anticipates that the location of the proposed Project, coupled with the design of the proposed solar energy facility, would significantly limit, if not eliminate, any potential views from any public viewsheds or private properties. The Project has been sited on land which is generally low visibility from surrounding roads, residences, and any designated public recreation area (i.e. playing fields, walking trails, or parks). Visual impacts of the Project from multiple directions are naturally mitigated due to a variety of distance, topography, and existing vegetation. A cross section displaying the proposed Project elements in relation to the nearest residence, along the southern boundary, has

been prepared in support of this Petition and is included in Appendix J. There is an approximate 50-to-60-foot gap in the existing vegetation in the location of this residence where the cross section was taken.

The nearest public recreation area is the athletic fields in front of the Hebron Avenue School, located approximately 950 feet northeast of the Facility. The combination of distance, change in topography, and existing vegetation between the two locations make it unlikely that there will be even seasonal views from these recreational fields.

The nearest scenic road is Tryon Street (Rt. 160) in Glastonbury, located approximately 4 miles southwest 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 September 13, 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 presence of multiple soils throughout the project area, with Hydrologic Soil Groups ranging from “A” to “C” and slopes ranging from 1 to 10%. Soils information is included in Figure 10 – NRCS Soils Information.

6.7.2 Preservation of Prime Agricultural Soils

The site is currently undeveloped farmland and woodlands. A review of the USDA’s soil mapping for the area indicates that a majority of the development area is prime farmland. It is currently anticipated that no soils will be exported from the site and that any excess material will be reused on 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 1A Cultural Resources Assessment Survey in July 2023. Heritage found that portions of the Project Site contained a moderate-to-high sensitivity for archaeological resources and recommended that a Phase 1B study be performed within these areas. Petitioner is currently engaging Heritage Consultants to perform a Phase 1B shovel test in these areas. 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 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 using a tile spade and soil augers that were used to examine soil profiles and evaluate drainage classes. A Wetlands Delineation Report dated September 25, 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. The wetland system within the study area exists to the southeast of the Project Site. All delineated wetlands on site discharge to a tributary of Hubbard Brook. A more comprehensive analysis of the various wetland systems can be found in the Wetland Delineation Report included in Appendix G.

6.9.3 Vernal Pools

No habitat for vernal pools were discovered within the study 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 over 180-feet from the existing 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 (NDDDB) State Listed Species Review was completed and distributed to CTDEEP Wildlife Division for review. In return, a Final Determination dated October 6, 2023, was provided by CTDEEP Wildlife Division which found that extant populations of one State Species of Concern: Eastern Box Turtle (*Terrapene carolina Carolina*) in vicinity of the project. Therefore, CTDEEP recommended protection strategies during construction activities.

The final determination letter approves construction as proposed. A copy of this letter is included in Appendix H.

6.10.2 Potential Impacts and Mitigation

The Final Determination provided by CTDEEP Wildlife Division lists Eastern Box turtle as the identified protected species at the site and suggests proposed conservation measures for each. The Petitioner has incorporated these conservation measures into the site development plan and will coordinate the construction work with CTDEEP Wildlife Division as needed.

6.10.3 Core Forest

Review of CTDEEP Forestland Habitat Impact Map indicates that no known core forest exists at or in proximity to the site, and no tree clearing is proposed in the development.

A letter of no material impact to core forest was received from the Connecticut Department of Energy and Environmental Protection 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 to 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 will 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 a majority of the Project Site generally flows northerly overland towards an existing on-site depression with the farm fields not being developed. Runoff from this depression surcharges to the east, combining with two other sub watersheds prior to discharging from the farm fields in the southeast corner of the Project Site. The remaining two small sub watersheds within the facility's development footprint (less than one acre each) convey stormwater runoff to the west off the Property.

All the Project Site is comprised of farmland. Generally, the site is at its highest elevation within the central/western portions of the Project Area, and slopes to the west and to the east towards the adjacent forest systems. The majority of terrain slopes in the Project Site range from 0% to 5% with portions ranging up to 10% 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 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 CT DEEP'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 multiple directions are naturally mitigated due to a variety of distance, topography, and existing vegetation; nor will there be any impacts from noise.

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