

**PETITION NO. 1572** – East Windsor Solar Two, LLC petition } Connecticut  
for a declaratory ruling, pursuant to Connecticut General Statutes }  
§4-176 and §16-50k, for the proposed construction, maintenance } Siting  
and operation of a 4.0-megawatt AC solar photovoltaic electric } Council  
generating facility located at 31 Thrall Road, East Windsor, }  
Connecticut, and associated electrical interconnection.

October 12, 2023

## Opinion

### Introduction

On May 5, 2023, East Windsor Solar Two, LLC (EWST) submitted a petition to the Connecticut Siting Council (Council), pursuant to Connecticut General Statutes (CGS) §16-50k and §4-176, for a declaratory ruling for the construction, maintenance, and operation of a 4.0-megawatt AC solar photovoltaic electric generating facility located at 31 Thrall Road in East Windsor, Connecticut, and associated electrical interconnection (Petition or Project).

After the filing of the Petition, the Council received requests for a Public Hearing from the Town of East Windsor (Town); East Windsor residents - Keith Yagaloff, Dawn Dolloff, Robin Cheskey, Kenneth and Lauri Desrosiers; and East Windsor Citizens for Responsible Solar Development. On June 8, 2023, the Council granted the requests for a public hearing which was held on September 7, 2023.

### Jurisdiction

As it applies to the Petition, CGS §16-50k states in relevant part, "...the Council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling...(B) the construction or location... of any grid-side distributed resources project... with a capacity of not more than sixty-five megawatts, as long as such project meets the air and water quality standards of the Department of Energy and Environmental Protection and the Council does not find a substantial adverse environmental effect..." The Project is a "grid-side distributed resources" facility, as defined in CGS §16-1(a)(37) and has a capacity of approximately 4.0 MW.

Public Act 17-218 requires, for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by the Department of Energy and Environmental Protection (DEEP) in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the Department of Agriculture (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 such land as core forest. PA 17-218 also requires that the Council not find a substantial adverse environmental effect in its exercise of jurisdiction over the facilities eligible to be approved by declaratory ruling under CGS §16-50k. There are no exemptions from this provision of PA 17-218.

By letter dated March 8, 2023, DEEP's Bureau of Natural Resources determined the proposed solar facility would not have a material impact on the status of core forest. By letter dated March 23, 2023, DOAg determined that the proposed solar facility would not have a material impact on the status of prime farmland with the condition that the proposed on-site agricultural co-use to graze sheep is implemented for the life of the Project.

Pursuant to CGS §16-50x, **the Council has exclusive jurisdiction over the construction, maintenance and operation** of the proposed solar photovoltaic electric generating facility.

PA 17-218 does not confer the Council's exclusive jurisdiction upon DOAg or DEEP nor does it 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. The proposed site is to be used principally for an electric generating facility as defined by CGS §16-50i(a)(3).

Furthermore, the Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the facility "site." This includes portions of the host parcel retained by the property owner and portions of the host parcel the property owner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the facility "site."

### **Public Benefit**

Pursuant to CGS §16-50p, a public benefit exists when a facility is necessary for the reliability of the electric power supply of the state or for the development of a competitive market for electricity. PA 05-1, An Act Concerning Energy Independence, portions of which were codified in CGS §16-50k, established a rebuttable presumption that there is a public benefit for electric generating facilities selected by the Public Utilities Regulatory Authority in Requests for Proposal.

The Project was selected in Years 1 and 2 of the Shared Clean Energy Facility (SCEF) program. The electricity and renewable energy credits (RECs) produced by the facility would be sold to Eversource in accordance with a 20-year Tariff Terms Agreement (TTA). A REC certifies that one megawatt-hour of renewable electrical energy has been generated.

EWST would not participate in an ISO-New England, Inc. (ISO-NE) Forward Capacity Auction during the term of the TTA.

### **Proposed Site**

Pursuant to a lease agreement with the property owner, EWST proposes to construct the solar facility on an approximate 24.6-acre site on an approximate 36.7-acre parcel, north of Thrall Road in East Windsor. The host parcel is owned by the Catholic Cemeteries Association (CCA) and zoned Residential (R-3). Approximately 23.8 acres of the host parcel is currently leased to a third party for agricultural purposes.

The surrounding land uses include low-density residential and agricultural to the east and west; undeveloped forest and forested wetland to the north; and Thrall Road to the south/southeast.

### **Proposed Facility**

The Project consists of 9,932 mono-facial photovoltaic panels rated at approximately 545 Watts. The panels would be installed on a single-axis tracker system that would move in a north-south axis to a maximum angle of approximately 60 degrees. At maximum tilt, the panels would be approximately 10 feet 10 inches above grade at the highest point and 3 feet at the lowest point. The panels would be arranged in linear rows in a north-south direction, separated by 8.7-foot wide vegetated aisles.

Two 17-foot by 14-foot concrete pads would be installed within 53-foot by 16-foot gravel pad areas on the north side of the site adjacent to the access drive. Each pad area would support an electrical transformer, and electrical switchgear. 32 string inverters would be installed on top of a racking system on top of the concrete pads.

The Project would be enclosed by a seven-foot tall chain link fence with privacy slats installed from the access gate (in a counterclockwise direction) to the northeastern corner of the fence line. Due to the planned sheep grazing at the site for an agricultural co-use, the proposed fence design would not have a wildlife gap at the bottom in order to protect and contain the sheep.

Access to the facility would be from a new 15-foot wide, 920-foot long gravel access drive extending north from Thrall Road to the transformer/switchgear pads.

#### *Electrical Interconnection*

The electrical interconnection includes the installation of eight new utility poles to the west of the access road to support an overhead line that interconnects to a 23-kV Eversource distribution line on Thrall Road. The new poles would be approximately 40 to 45 feet above ground level. The Council recommends that EWST consult with Eversource regarding other utility interconnection designs, including, but not limited to, a pad-mounted design, to reduce visibility of the electrical interconnection to the extent feasible.

#### *Project Alternatives*

Given the selection of the Project in the DEEP SCEF program, and a 20-year TTA contract with Eversource, EWST did not consider alternative locations.

EWST selected the proposed site due to availability, parcel size and topography; proximity to electrical utilities for interconnection; compatibility with surrounding land use; and overall impacts on the environment and surrounding area.

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<sup>1</sup>.

#### *Cost*

The estimated construction cost of the Project is \$8.9 million, inclusive of interconnection costs.

#### **Neighborhood Concerns**

The Council held a publicly noticed public comment session via Zoom conferencing on September 7, 2023, commencing at 6:30 p.m. 13 members of the public made oral limited appearance statements at the public comment session. While the Council public comment record was open, seven interested persons provided written limited appearance statements expressing concerns that included, but were not limited to, site is near residences; visibility; noise; and loss of farmland. Prior to submission of the Petition to the Council, based on neighborhood concerns, EWST modified the proposed facility by developing a landscape plan, conducting a noise study, proposing fence privacy mesh, selecting a different inverter model, and locating inverters in the middle of solar array area at least 300 feet from any property line.

#### **Public Safety**

The Project would comply with the current National Electrical Code (NEC), the National Electrical Safety Code and the National Fire Protection Association code.

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<sup>1</sup> Corcoran v. Connecticut Siting Council, 284 Conn. 455 (2007); CGS §16-50p(g) (2019)

The facility would be remotely monitored on a 24/7 basis by the Operations & Maintenance (O&M) provider. The O&M provider would analyze performance data and dispatch crews for system maintenance and repair issues.

EWST would conduct outreach/training to local emergency responders. Emergency responders would be able to shut down the facility via a disconnect switch. The Council will require that EWST provide an emergency key box for emergency responders.

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

#### *Noise*

Two independent noise analyses dated April 26, 2023 and August 31, 2023, respectively, were performed for the Project. The first analysis took into account the noise attenuation effects associated with vegetation, and the second analysis conservatively excluded such effects. Both analyses indicate that noise generated during facility operations would comply with the DEEP Noise Control Standards. Noise resulting from construction is exempt from DEEP Noise Control Standards.

#### *Decommissioning*

The Project has an anticipated design life of approximately 35 years. At the end of the Project's lifespan, it will be fully decommissioned and removed from the property in accordance with provisions of the site lease. In coordination with CCA, EWST developed a Decommissioning and Restoration Plan for the site to facilitate the future use of the site by CCA as a cemetery.

The lease is a private agreement between EWST and the property owner. At the end of the lease term, control of the solar facility site reverts back to the property owner. The Council does not have the authority to supersede restoration provisions of the site lease or require additional site restoration conditions beyond those established by the site lease. The property owner would determine site restoration conditions at the time of Project decommissioning, including, but not limited to, access road, fencing, and the stormwater management system.

Project components that cannot be recycled will be removed and disposed of in accordance with regulatory criteria. EWST provided Toxicity Characteristic Leaching Procedure (TCLP) results from the solar panel manufacturer for selected panels that indicate the panels would not be characterized as hazardous waste in the event the solar panels cannot be recycled at the end of the Project's life.

Construction hours would be Monday through Friday from 7:00 AM to 6:00 PM and Saturday from 8:00 AM to 5:00 PM.

### **Environmental Effects and Mitigation Measures**

#### *Air and Water Quality*

The project would meet DEEP air quality standards. There would be no air emissions of regulated pollutants or greenhouse gases associated with site operation.

Operation of the facility would not require water use.

Groundwater is classified as “GA” which indicates it is presumed suitable for human consumption without treatment. The host parcel, existing residential structures and adjacent parcels are served by private wells. Vibrations from the installation of the racking system are not expected to cause sediment releases, and thus, no disruption to well water flow or quality is expected. Notwithstanding, the Council will require that EWST perform a pre-construction investigation of area wells and provide plans to prevent impacts to such wells.

Sheep grazing at the site is not expected to impact nearby wells. In order to ensure subsurface water quality is maintained, the Council will order EWST to amend its final Petroleum Storage and Spill Prevention Plan (PSSPP) for construction and operation of the facility to include worker training and contact information.

The site is located outside of a DEEP-designated Aquifer Protection Area.

#### Stormwater

Pursuant to CGS §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) require implementation of a Stormwater Pollution Control Plan (SWPCP) 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.

DEEP has the authority to enforce Project compliance with its Stormwater Permit and the SWPCP, including, but not limited to, the installation of site-specific water quality protection measures in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* (2002 E&S Guidelines).

The Project has been designed to comply with DEEP Stormwater Permit Appendix I and the 2002 E&S Guidelines. Post-construction stormwater would be controlled by the existing stormwater basin located in the northern portion of the site. The equipment pads can be shifted approximately 25 to 50 feet to the south so they would be completely outside of the stormwater basin. The Council will require EWST to submit plans to shift the equipment pads outside of the stormwater basin.

In accordance with the Stormwater Permit, the stormwater management system is designed to maintain and/or reduce existing drainage patterns during 2, 10, 25, and 100-year storm events. Once the site is stabilized, EWST would conduct annual inspections of the stormwater control features.

#### Wetlands and Watercourses

The Inland Wetland and Watercourses Act (IWWA) strikes a balance between economic activities and wetlands preservation. The impact of a proposed activity on the wetlands and watercourses that may come from outside the physical boundaries of the wetlands or watercourses is a major consideration. Defined upland review areas, such as 100 feet, provide a trigger for reviewing whether a regulated activity is likely to affect wetlands and watercourses. Under CGS §22a-41(d), regulatory agencies shall not deny or condition an application for a regulated activity in an area outside wetlands or watercourses on the basis of an impact or effect on aquatic, plant, or animal life *unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses*.

One wetland was identified along the northwestern boundary of the host parcel. It is a broad interior emergent swamp system. Two potential vernal pools (PVPs) were identified within the wetland. To minimize any potential impacts to vernal pool resources, EWST would implement best management practices during peak amphibian migration periods. The Council will require EWST to submit final Vernal Pool Best Management Practices.

The Project would comply with 2002 E&S Guidelines and the 2015 U.S. Army Corps of Engineers Vernal Pool Best Management Practices. Potential vectors of migration of obligate species from the PVPs are expected to be into forested habitat to the north, east and west, rather than to the south into the open field where the proposed facility is located.

The Project would include a wetland buffer of at least 50 feet to stormwater control features and at least 100 feet to solar panels, in accordance with the criteria established in DEEP Stormwater Permit Appendix I.

The Council finds the proposed 169-foot buffer between the wetland and the facility limit of disturbance sufficient to protect the wetland and associated PVPs.

#### *Scenic, Historic and Recreational Values*

There are no properties listed on the State or National Register of Historic Place located within or proximate to the Project site. A Phase 1B Survey determined that no significant impacts to cultural resources are anticipated to result from the Project construction, and no additional archaeological investigation is warranted.

The nearest publicly accessible recreational resource is Pierce Memorial Park (PMP), a Town park located approximately 0.18-mile southwest of the proposed site.

There are no Town or state designated scenic roads within one mile of the site. The nearest scenic road is a portion of Route 74, located approximately 5.7 miles southeast of the Project in the Town of Tolland. The facility would not be visible from that location.

The Town has not developed a scenic road ordinance but expressed concern about disruption to the aesthetics of a scenic road loop, envisioned in its 2016 Plan of Conservation and Development (POCD), that is approximately 16 miles located along portions of Scantic Road, Route 191, Route 140, East Road, Chamberlain Road, Clark Road, Thrall Road, Wapping Road, and Plantation Road.

No comments were received from the Office of Policy and Management or DEEP regarding impacts to scenic quality or resources.

Visibility of the facility from the north would be obscured by existing mature vegetation. Seasonal views of the facility may be possible in areas to the south, southwest, northwest and northeast. To provide screening along Thrall Road to the south/southeast, EWST proposes planting 170 evergreen trees in a staggered formation outside of the proposed chain link fence with privacy mesh.

In this proceeding, the Town expressed concerns relative to the Project's compatibility with the surrounding area. A natural berm of variable elevation occurs along the northern side of the host parcel between the Project limit of disturbance and the wetland. Installation of a berm under the landscape plantings along the site perimeter would increase the Project limit of disturbance and require soil to be brought to the site as no net cut material would result from construction of the Project. Accordingly, the Council will order EWST

to design and submit a detailed, natural-looking landscaping plan, to screen views from Thrall Road and incorporate landscape planting inspections for replacement of dead or dying plantings, prior to commencement of construction.

Additionally, consistent with the preference of the Town, the Council will order a farm style livestock fence design with wood posts. While this fence design will not achieve the additional screening provided by the privacy mesh of the proposed chain link fence, the Council notes that the farm style livestock fence design would be more aesthetically consistent with the rural, agricultural character of the surrounding area.

#### *Fish, Aquaculture and Wildlife*

The proposed site is not within a DEEP Natural Diversity Database (NDDB) buffered area, and thus, no consultation with the DEEP NDDB program is required.

EWST obtained correspondence from the U.S. Fish & Wildlife Service's (USFWS) Information, Planning and Consultation (IPaC) service indicated that the northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species, may occur at the site. Per USFWS NLEB guidance, EWST utilized the USFWS NLEB planning tool which determined the Project would not likely have an adverse effect on or incidental take of NLEB.

The Monarch butterfly is a candidate species for potential federal listing. The proposed facility is not anticipated to adversely affect the butterfly, and the seed mix for site restoration includes common milkweed, which is a host plant for butterfly egg laying.

#### *Agriculture*

Most of the host parcel is open field, formerly used for growing tobacco. Approximately 23.8 acres of the host parcel is currently leased to a third party for agricultural purposes.

Approximately 11.2 acres of the site are classified as prime farmland soils.

In accordance with DOAg's No Material Impact to Prime Farmland letter dated March 23, 2023, EWST would implement a sheep grazing program within the fenced solar array area of the site. 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 CCA and portions of the parcel CCA may lease to third parties.

Sheep grazing would be conducted by establishing four temporary paddocks within the solar array, isolated by temporary electric fencing. It is anticipated approximately 43 sheep would be on-site and rotated among four temporary paddocks (one paddock at a time) for about 15 days per paddock, as established by the sheep farmer. The Council will require EWST to submit a final sheep grazing co-use plan at the site.

The solar array would be seeded with a seed mix developed that provides sufficient forage for livestock and promotes pollinator species. The Council will require that the final seed mix be included in the D&M Plan.

#### *Forest and Parks*

There is no core forest at the site. No state forests or state parks are located in the vicinity of the site. There is significant tree buffer between PMP and the facility site. However, views of the facility from PMP through the trees during leaf-off conditions are possible.

There would be approximately 0.1 acre of tree removal and/or trimming for the Project near the existing farm buildings to accommodate the electrical interconnection. The Project would not have a material impact on the status of core forest.

### **Conclusion**

Based on the record of this proceeding, the Council finds that there would not be a substantial adverse environmental effect associated with the construction, maintenance and operation of an approximate 4.0 MW solar photovoltaic electric generating facility and an associated electrical interconnection located at 31 Thrall Road in East Windsor, Connecticut.

The proposed Project is a grid-side distributed resources facility with a capacity of less than 65 MW under CGS §16-50k, it was selected under the state's SCEF Program, it is consistent with the state's energy policy under CGS §16a-35k, and the proposed Project would meet all applicable U.S. Environmental Protection Agency and DEEP Air and Water Quality Standards. Therefore, the Council will issue a declaratory ruling for the proposed Project.