

DRAFT

**Petition No. 1572
East Windsor Solar Two, LLC
Solar Facility – East Windsor
Development & Management Plan
Staff Report
November 29, 2024**

Introduction

On October 13, 2023, the Connecticut Siting Council (Council) issued a Declaratory Ruling to East Windsor Solar Two, LLC (EWST) for the construction, maintenance, and operation of a 4.0-megawatt (MW) AC solar photovoltaic electric generating facility on approximately 24.6 acres on an approximately 35.68 acre parcel located north/northwest of Thrall Road in East Windsor, and associated electrical interconnection (Project). In its Declaratory Ruling, the Council required EWST to submit a Development and Management (D&M) Plan in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies (RCSA).

On October 22, 2024, in compliance with RCSA §16-50j-61(d), EWST submitted the D&M Plan for the facility to the Council and the service list, inclusive of the Town of East Windsor. No comments were received.

On November 12, 2024, the Council issued interrogatories to EWST. On November 26, 2024, EWST submitted responses to the interrogatories.

Condition No. 1 of the Council's Declaratory Ruling requires a copy of the DEEP-issued Stormwater Permit to be submitted prior to the commencement of construction. The permit application has been filed with DEEP.

Condition No. 2 of the Council's Declaratory Ruling requires the following information to be included in the D&M Plan:

- a. A final site plan including, but not limited to facility layout, access roads, electrical interconnection design that reduces visibility to the extent feasible, farm style livestock fence design, equipment pads, stormwater management control structures, and final seed mix;**

The site plan consists of a single array area layout that will have a total of 9,932 mono-facial 545-Watt DC¹ solar panels installed on a single-axis tracking system and oriented in a north-south direction. At maximum tilt, the tops of the panels will be approximately 10 feet 10 inches above grade, and the bottoms of the panels will be approximately 3 feet above grade at the lowest point. The aisle widths between the rows will be approximately 8.7 feet. The total area of disturbance is approximately 24.7 acres.

Access to the site will utilize a new 15-foot wide gravel access drive extending generally in a north-south direction from Thrall Road to the equipment pad area. It will include a turnaround directly south of the equipment pad area. A T-shaped gravel area will connect to the west side of the access drive near the entrance to the facility to accommodate Eversource access to on-site utility poles.

¹ EWST is in the process of modifying the panel design to change from 545-Watt Phono Solar modules to 465-Watt First Solar Series modules located within the same fenced footprint.

The electrical interconnection to the distribution system will extend underground in a southerly direction from the equipment pad area to the southern portion of the host parcel. The interconnection will convert to overhead and split into two parallel rows of four poles and three poles, respectively, before rejoining into a single row of two poles prior to reaching the point of interconnection on the north side of Thrall Road.

The approved facility interconnection consists of eight utility poles at a height of approximately 40 to 45 feet above grade on the host parcel; one utility-owned recloser pole; one utility-owned junction pole; two utility-owned primary meter poles; two customer-owned gang-operated air break (GOAB) poles; and two customer-owned recloser poles. One additional customer-owned meter and riser pole is included in the D&M Plan because a customer-owned metering pole was not included in the proposed design. EWST consulted with Eversource on November 15, 2024. Eversource confirmed the final pole configuration, including the required customer-owned metering pole, and requested gravel access to the poles. EWST will maintain the existing tree line to the west and on-site buildings/structures to the east to minimize visibility of the poles.

A 7-foot high chain link fence will be installed around the array area. An agricultural-style split rail fence will be installed outside of the chain link fence along the southeastern side and portions of the southern and eastern sides of the facility site facing Thrall Road.

Two equipment pads would be installed in the north-central portion of the site: a 67-foot by 12-foot gravel pad and a 32-foot by 10-foot concrete pad.

An existing stormwater management basin located in the northern portion of the site would remain. No additional stormwater management basins are required.

The solar array area will be seeded with Fuzz & Buzz seed mix that provides sufficient forage for livestock and promotes pollinator species.

b. Plans to shift the equipment pads outside of the stormwater basin;

The equipment pads were shifted over 50 feet to the south (i.e. more interior to the facility) so that they would be located outside of the stormwater management basin.

c. Erosion and sedimentation control plan consistent with the 2002 Connecticut Guidelines for Erosion and Sedimentation Control and the DEEP-issued Stormwater Permit including, but not limited to, construction detail/phasing plan; installation of straw bales or other generally accepted similar control measures to reinforce silt fencing adjacent to wetland areas, temporary sediment basin detail, site stabilization measures during construction, inspection and reporting protocols, procedures for periodic cleaning of temporary sediment traps and swales during construction, and final cleaning of sediment traps/stormwater basins upon site stabilization;

The D&M Plan contains Erosion and Sedimentation Control Plans (E&S Control Plan) consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control (E&S Guidelines). The final site design is based on the 2002 version of the E&S Guidelines because the Project was beyond the preliminary design phase (approximately 50 percent of full design) before the March 2024 revision to such guidelines.

Sheet EC-1 contains the construction details/phasing plan. Phase 1 of construction includes, but is not limited to, installation of perimeter erosion controls, access drive, racking posts, solar panels,

and electrical installation. Phase 2 of construction includes, but is not limited to, installation of remaining solar panels, completing remaining site work, landscape screening, chain link fence and final stabilization.

A temporary sediment basin with silt sack and hay bales will be installed in the northeastern portion of the site as part of the E&S Control Plan. Also, silt fence will be installed along the southern and eastern portions of the site.

The contractor would inspect E&S controls daily for tears or breaches and accumulation of sediment, particularly following storm events. The temporary sediment basin will be inspected at least once per week and within 24 hours of a rain event of greater than 0.5 inches. Upon completion of construction, the existing stormwater basin will be cleaned.

d. Final Vernal Pool Best Management Practices

The final Vernal Pool Best Management Practices include, but are not limited to, a sweep for herpetofauna by an environmental monitor prior to and following the installation of silt fencing; filling in any ruts or artificial depressions to avoid creating decoy pools; and removal of E&S controls no later than 30 days after final site stabilization to avoid impeding migration of herpetofauna or other wildlife.

e. Perform pre-construction investigation of area wells and provide plans to prevent impacts to such wells;

A Well Location Plan was prepared and includes the results of an investigation of area wells and potential impacts associated with construction of the facility. The nearest off-site well is located approximately 180 feet to the southeast at 44 Thrall Road and at a drilled depth of 205 feet.

Solar facility tracking system support piles would reach a depth of approximately 10 to 14 feet. Test borings were performed to a depth of 17 feet, and no ground water was encountered. Thus, no impacts to surrounding area wells are expected to result from construction of the facility.

f. Final Post-Construction Operations and Maintenance Plan that includes an inspection/maintenance schedule of facility components, vegetation/landscaping, including the replacement of dead or dying landscape plantings, and stormwater basin/controls;

The final post-construction Operations and Maintenance Plan for this facility was included in the D&M Plan. Inspection and maintenance of facility components will be performed at least once annually or per equipment manufacturer requirements.

Sheep grazing is intended to be the primary method of vegetation maintenance. Notwithstanding, mowing and trimming will be performed on an as-needed basis.

Landscape plantings will be inspected at least once annually or more often if necessary due to extreme weather conditions.

The stormwater management system will be inspected at least once annually or in accordance with the Stormwater Management Plan associated with the DEEP Stormwater Permit.

- g. Final Petroleum Storage and Spill Prevention Plan (PSSPP) for site construction and operation with worker training and contact information including, but not limited to, regulatory agencies, spill cleanup contractors, and local responders;**

The final Spill Prevention and Material Storage Plan is included in the D&M Plan. EWST will familiarize workers with the Plan and include requirements in job briefings. The SPMSPP includes emergency contact information for EWST, a spill cleanup contractor, DEEP, and local first responders.

- h. Detailed Landscape Plan with a natural looking vegetative screening design;**

EWST included a detailed landscaping plan in the D&M Plan. Specifically, the following plantings with their approximate size at time of planting noted, would be located between the split rail fence and the chain link fence:

- a) 5 ea. – red oak (4 to 6 inches diameter);
 - b) 12 ea. – balsam fir (7 to 8 feet tall);
 - c) 22 ea. – eastern red cedar (7 to 8 feet tall);
 - d) 17 ea. – white spruce (7 to 8 feet tall);
 - e) 7 ea. – Canadian serviceberry (8 to 10 feet tall);
 - f) 33 ea. – inkberry holly (2 to 3 feet tall);
 - g) 38 ea. – northern bayberry (3 to 4 feet tall); and
 - h) 18 ea. – rosebay rhododendron (3 to 4 feet tall).
- i. Final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut; and**

EWST will submit the final structural design drawings for the racking system based on the final solar panel design and stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction.

- j. A final sheep grazing co-use plan for the site, including, but not limited to, provisions for rotational grazing, water access and emergency evacuation with a document that shall indemnify and hold harmless the Council, its agents, representatives and employees from any and all losses, claims, actions, costs and expenses, judgments, subrogations, or other damages resulting from any injury to a person or to property arising out of the presence of third-parties within the fenced solar facility site.**

The D&M Plan includes a final sheep grazing co-use plan for the site. Specifically, sheep grazing will be conducted by establishing four temporary paddocks within the solar array area, isolated by temporary electric fencing. Approximately 42 sheep will be on-site and rotated among the four temporary paddocks (one paddock at a time) for about 15 days per paddock, as established by the sheep farmer.

Water would generally be delivered to the site and provided to the sheep in troughs.

Signage will be displayed at the main gate with emergency contact information for the sheep manager. In the event of an emergency, animals would remain inside the site until the sheep manager can safely remove them.

EWST included a draft Hold Harmless Agreement in the D&M Plan.

Conclusion

The D&M Plan is consistent with the Council's Declaratory Ruling for Petition 1572.

If approved, staff recommends the following conditions:

1. Submit revised site drawings for the updated solar panel design and quantity and including the modified access drive to reach the utility poles prior to commencement of construction;
2. Submit the final structural design drawings for the racking system based on the final solar panel design and stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction; and
3. Submit a fully-executed and signed Hold Harmless Agreement.