



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

October 12, 2018

Steve Broyer
Senior Project Manager
Ecos Energy
222 South 9th Street, #1600
Minneapolis, MN 55402

RE: **PETITION NO. 1137** – Windham Solar, LLC declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of five 1.0 MW Solar Photovoltaic Renewable Energy Generating facilities located at 1 Williams Crossing Road, Lebanon, Connecticut. **Request for Third Amendment.**

Dear Mr. Broyer:

At a public meeting held on October 11, 2018, the Connecticut Siting Council (Council) considered and approved the request to amend the above referenced facility, as indicated in the submittal to the Council dated September 17, 2018. All work is to be implemented as specified in the request to amend and associated site plans and is subject to the following conditions:

1. Implementation of DEEP recommended wood turtle protection guidelines during construction, in accordance with DEEP's letter of June 29, 2017;
2. Submission of a copy of the DEEP-approved updated SWPCP prior to commencement of construction; and
3. Approval of any minor project changes be delegated to Council staff.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction.

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

Sincerely,

Robert Stein
Chairman

Enclosure: Staff Report dated October 11, 2018

RS/RDM/lm

- c: The Honorable Betsy Petrie, First Selectman, Town of Lebanon
Philip Chester, AICP, Town Planner, Town of Lebanon
The Honorable Charles Grant, First Selectman, Town of Franklin
Ronald Chalecki, Zoning Enforcement Officer, Town of Franklin
The Honorable Victor Funderburk, Mayor, Town of Windham
Matthew Vertefeulle, Town Planner, Town of Windham
James Rivers, Town Manager, Town of Windham





STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Petition No. 1137

Windham Solar LLC - Lebanon, Connecticut

Third Request to Amend Declaratory Ruling

Staff Report

October 11, 2018

Introduction

On March 5, 2015, the Connecticut Siting Council (Council) approved a Petition filed by Windham Solar, LLC (WS) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, operation and maintenance of a 6.1 megawatt (MW) Solar Photovoltaic Generating facility located at 1 Williams Crossing Road in Lebanon, Connecticut.

A request to amend the declaratory ruling to construct a 5.0 MW facility was approved by the Council on August 31, 2017. Although a 5.0 MW facility was approved and subsequently constructed, WS envisioned installing additional solar modules at the site to increase the overall facility output close to the 6.1 MW initially proposed once additional Eversource interconnection studies were completed.

On September 18, 2018, WS submitted a request to amend the approved facility to the Council to construct a 1.0 MW expansion (Phase II), as well to implement stormwater design features in accordance with the General Permit issued by Department of Energy and Environmental Protection (DEEP). Additionally, WS incorporated project recommendations made by the Town of Lebanon's consultant, Yantic River Consultants, into the Project expansion design.

On September 21, 2018, WS submitted a copy of a DEEP consent order pertaining to stormwater control issues associated with the construction of the 5.0 MW facility and unauthorized site disturbance outside of the 5.0 MW facility footprint. WS must comply with the terms of the DEEP consent order before proceeding with the construction of Phase II.

On September 17, 2018, WS submitted design documents to the Town of Lebanon and to Yantic River Consultants. On September 18, 2018, the Council notified the Towns of Lebanon and Franklin of the third request to amend and requested that comments be submitted on the proposal by October 1, 2018. No comments were received.

Proposed Project Amendment

The Project site is located on an approximate 44-acre property located along the Lebanon-Franklin town line, west of Route 32 and south of Williams Crossing Road. The property was formerly used as a farm and contains a 2.6 acre farmstead area, consisting of several buildings and an abandoned farmhouse. Thirty-nine acres of the parcel are located in Lebanon and are zoned industrial. The remaining 4 acres of the parcel are located in Franklin and are zoned commercial, C-2. The existing 5.0 MW facility is located in both Lebanon and Franklin.

The proposed Project amendment consists of a 1.0 MW expansion of the facility (Phase II), thereby increasing the total Project output to 6 MW, close to the 6.1 MW the Council initially approved in 2015. Approximately 3,456 new solar modules are proposed, consisting of a mix of 370 watt and 375 watt panels arranged in two modules in portrait layout at a 15 degree angle. There will be 24 string inverters for the expansion with 20 serving the 375 watt panels and the remaining 4 serving the 370 watt panels.



The solar arrays would be supported by a concrete ballast racking system with four round ballast “tubs” per section of racking. The ballast system was selected for Phase II to avoid some of the issues using a driven post support system that were encountered during construction of Phase I where the underlying cobble and stone dominated soils slowed installation.

The additional solar modules would be installed in two separate areas south of the existing facility: an approximate 2.8 acre area within the Town of Lebanon (Lebanon expansion area) and an approximate 1.2 acre area within the Town of Franklin (Franklin expansion area). An approximate two-acre portion of the Lebanon expansion area was previously disturbed during the construction of Phase I and is enclosed by a fence although no panels were installed in this area.

The Lebanon expansion area would contain approximately 2,592 modules. The Franklin expansion area would contain approximately 864 modules. The aisle width between the rows of panels would be approximately 9.5 feet in both expansion areas. Although some shading of panels would result due to the relatively narrow aisle spacing, the use of higher wattage panels would compensate for any shade related energy losses.

Consistent with the previously approved project, the expanded solar field would be enclosed by a seven-foot tall chain link fence with a six-inch wildlife passage along the lower edge. An internal fence with swing gates would separate the Phase II expansion area from the existing solar field. Fence posts would be driven into the ground or augured and backfilled with concrete depending on location.

An interconnection agreement for the Phase II expansion area has been executed with Eversource. WS expects to energize the Phase II expansion in December 2018. A new Eversource transformer would be installed on-site to interconnect the facility to the electric distribution system.

Environment, Cultural and Scenic Values

Both Phase II expansion areas were previously cleared as part of past agricultural use and now contain old field and shrub areas. Two wetland areas occur in the southern portion of the site: a wetland associated with Cold Brook and an isolated wetland. The Cold Brook wetland (W1) traverses the southern extent of the property and features steep slopes to the west that become gentle towards the east. The isolated wetland (W2) has no surface water and supports a minimal diversity of wetland plants. Wetland soil indicators for W2 were found at the bottom limits of the record soil profile. An undeveloped area would remain between W1 and W2.

Stormwater features for the Lebanon expansion area consist of a swale and a permanent stormwater detention basin. The proposed perimeter fence line enclosing the expansion area and stormwater detention basin would be approximately 25 feet from W2 at its nearest point. The perimeter fence, solar arrays, and a stormwater detention basin in the Franklin solar field expansion area would be approximately 55 feet from the east edge of W2 and approximately 75 feet from W1.

The ballast racking system would be installed on existing slopes, thus reducing site soil disturbance. The ballast tubs can be installed on grades up to 15 percent. Some of the ballast tubs may be leveled through the addition of gravel. Concrete would be applied to the ballast tubs on-site. A concrete washout station would be established on the site as determined by the construction contractor and in accordance with a DEEP-approved Stormwater Pollution Control Plan (SWPCP).

WS submitted a detailed SWPCP for the amended Project to DEEP on September 11, 2018. The SWPCP requires implementation of erosion control measures that conform to the *2002 Connecticut Guidelines for Erosion and Sediment Control* and the *2004 Connecticut Stormwater Quality Manual*. WS intends to implement perimeter silt fencing, diversion swales and sediment traps to control runoff during construction. WS cannot proceed with Phase II construction without DEEP's approval of the SWPCP for the amended Project.

Upon the completion of construction and site stabilization, the sediment traps would be converted to permanent stormwater detention basins and seeded with a New England erosion control/restoration seed mix. A grass mix would be used in disturbed solar field areas.

The Project site is within the range of the wood turtle, a state listed Species of Special Concern. WS would adhere to DEEP's recommended wood turtle protection measures detailed within the NDDDB determination letter issued for the Project on June 29, 2017. Consistent with the NDDDB determination letter, no project construction would occur within 50 feet of any streams or brooks. Due to the presence of the wood turtle, WS would utilize biodegradable, all-natural fiber erosion control mats for slope stabilization at the site.

Visibility of the amended project would be essentially the same as the previously approved project. No development exists in proximity to the Phase II expansion area. The Franklin expansion area abuts an active railroad. A wooded strip of land separates the railroad from Route 32, east of the site.

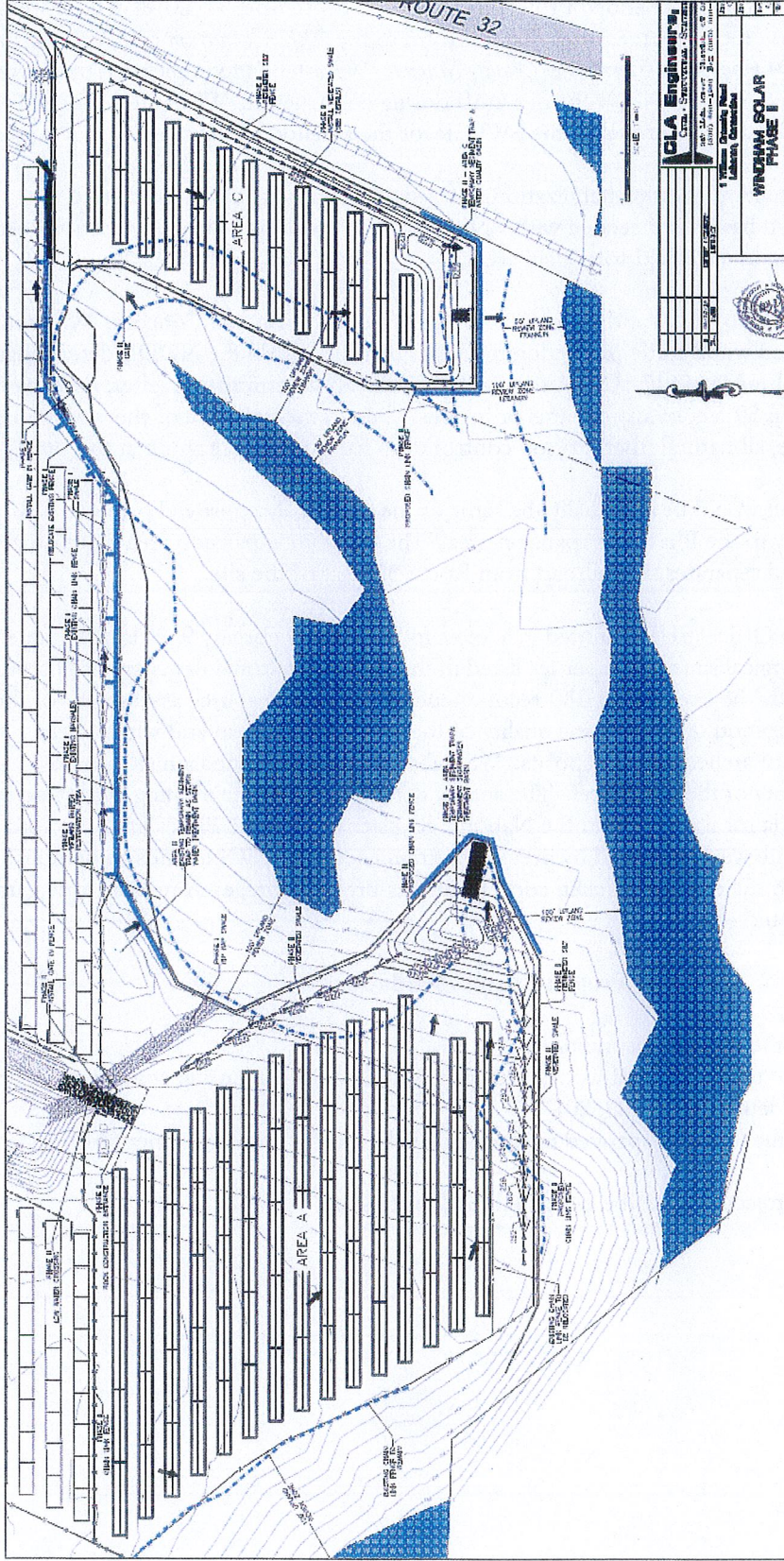
The State Historic Preservation Office (SHPO) noted in a letter to WS dated February 9, 2015 that there were no previously recorded archeological sites or properties listed in the state or National Registers of Historic Places that would be impacted by the Project. SHPO recommended a cultural resource assessment of the Project site, including an investigation of the historic quality of the existing farmstead and whether the potential exists for any significant archeological deposits. WS subsequently performed a historic and archeological survey on a majority of the site parcel. The survey determined that the existing farmstead on the property did not meet criteria for listing within the National Register of Historic Places and that soils through a large portion of the site were disturbed by previous farming activities. WS intends to demolish the dilapidated farmhouse but retain the existing chicken coop for use as Project storage. A non-historic garage building near the farmhouse would also be retained.

Amended Project Recommendations

Staff recommends inclusion of the following conditions:

1. Implementation of DEEP recommended wood turtle protection guidelines during construction, in accordance with DEEP's letter of June 29, 2017;
2. Submission of a copy of the DEEP-approved updated SWPCP prior to commencement of construction; and
3. Approval of any minor project changes be delegated to Council staff.

Amended Project Site Plan



Phase II Expansion
"Area A" is in Lebanon
"Area C" is in Franklin