

Docket 497
Burlington Solar One, LLC
Development and Management Plan
Prospect Street, Burlington
DRAFT Staff Report
September 17, 2021

On July 16, 2021, the Connecticut Siting Council (Council) issued a Certificate of Environmental Compatibility and Public Need (Certificate) to Burlington Solar One, LLC (BSO) for the construction, maintenance, and operation of an approximately 3.5 megawatt (MW) solar photovoltaic electric generating facility located at Lot 33, Prospect Street in Burlington, Connecticut and associated electrical interconnection. In its Decision and Order (D&O), the Council required BSO to submit a Development and Management (D&M) Plan.

On July 21, 2021, BSO submitted its D&M Plan for the facility. The Council submitted interrogatories to BSO on July 28, 2021. BSO submitted responses to the interrogatories on August 9, 2021.

Pursuant to Section 16-50j-75(d) of the Regulations of Connecticut State Agencies, the Council is required to take action on a D&M Plan within 60 days of receipt, and therefore, September 19, 2021 was the deadline for action on this D&M Plan. By letter dated August 13, 2021, the Council requested an extension of time until September 27, 2021 to take action on this D&M Plan. By letter dated August 27, 2021, BSO granted such extension of time.

On September 8, 2021, in compliance with Condition No. 12 of the Council's D&O, BSO, notified the Council of the transfer of upstream corporate ownership interests to DG Connecticut Solar III, LLC (DG), an affiliate of NextEra Energy Resources, LLC. BSO remains the Certificate Holder and remains responsible for compliance with the terms of the Certificate; thus, a transfer of Certificate to DG, the parent company of BSO, was not warranted.

The project is located on an approximately 22.11-acre site located on an approximately 62.98-acre parcel that originally consisted of farmland, including hayfields and pastureland. Between 1951 and 1970, and continuing presently, sand and gravel mining operations have occurred at the site. Portions of the former gravel mine extended east and north from the existing mine footprint on the site, and those areas have since reforested. The southeast corner of the project area will be located within formerly mined areas.

The D&O requires the following information to be included in the D&M Plan:

- a) **A final site plan including, but not limited to, final facility layout, access road, electrical interconnection including riser pole locations, equipment pads, fence design, equipment pads, and stormwater management control structures;**

The final site plan includes the final facility layout, access roads, electrical interconnection, fence design, equipment pads and stormwater management control structures.

Solar arrays will consist of 12,194 fixed tilt bi-facial solar panels, including 9,542 400-Watt direct current (DC) Trina panels and 2,652 380-Watt DC Risen panels installed at an angle of 25 degrees above the horizontal. The bottom of the panels would be at least three feet above grade, and the top of the panels would reach a height of about 8-foot 8-inches above grade. Inter-row spacing is approximately 12 feet. The fenced area of solar arrays would occupy approximately 11.34 acres.

Two equipment pads for the solar facility will be installed in the southern portion of the fenced facility near the access drive. Two smaller equipment pads (associated with the electrical interconnection) would be installed along the electrical interconnection route.

An existing approximately 30-foot wide and 1,400-foot long gravel access road extends to the north from Prospect Street and crosses the site's sand and gravel pit to the south of the project area. Approximately 648-foot long new gravel access will be installed in a north-south direction through the center of the solar facility. The new access drive will include a "hammer head" turnaround in the northern portion of the facility.

An eight-foot chain link fence with privacy slats will be installed along all sides of the solar facility perimeter.

The electrical interconnection would run underground from the equipment pads at the southern limits of the solar array towards the existing 23-kV Eversource electrical distribution line located along Prospect Street. The underground interconnection route would be in a roughly north-south direction and located west of the existing access drive. Three new utility poles approximately 40 to 45 feet in height would be installed at the end of the underground route to facilitate the single overhead connection to the existing Eversource-owned overhead distribution at existing Pole #1621.

Final site plans include stormwater management control structures including two stormwater quality basins located in the southern and southeastern portions of the facility footprint.

- b) **Erosion and sedimentation control plan consistent with the 2002 Connecticut Guidelines for Erosion and Sedimentation Control including, but not limited to, temporary sediment basin details, site stabilization seeding/growing season details prior to the installation of post driving/racking system, site stabilization measures during construction, inspection and reporting protocols, methods for periodic cleaning of temporary sediment traps and swales during construction, and final cleaning of stormwater basins upon site stabilization;**

BSO included its erosion and sedimentation (E&S) control measures consistent with the 2002 Connecticut Guidelines for Erosion and Sedimentation Control (2002 E&S Guidelines) under Drawings 4 through 6 of the D&M Plan. E&S control plans were submitted to DEEP as part of the pending stormwater permit review process. Pursuant to Condition No. 1 of the Council's D&O, a copy of the DEEP-issued Stormwater Permit is required to be submitted prior to commencement of construction. On September 9, 2021, DEEP approved the stormwater permit for this project, and on September 13, 2021, BSO submitted a copy of the stormwater permit to the Council.

All erosion control measures will be inspected at least weekly and following any storm event of at least 1/4-inch of rain. Specifically, silt fence and/or straw/hay barriers will be inspected immediately after each rainfall and at least daily during prolonged rainfall. Council staff suggests including a condition that the final plans for periodic cleaning of temporary sediment traps and swales and permanent stormwater basins be submitted.

- c) **Site construction detail/phasing plan including, but not limited to, construction laydown area, site clearing/grubbing, site grading, excess earth material disposal locations, site stabilization seeding/growing season details, soil stockpile locations, and an amended Petroleum Materials Storage and Spill Prevention Plan that is protective of groundwater resources including the response to a leak and/or spill of the transformer insulating fluid and relevant contact information and phone numbers;**

BSO submitted its site/clearing grubbing, site stabilization details and construction sequence information as well as its temporary soil stockpile location to the east of the access drive turnaround location. Council staff suggests including a condition that the final construction laydown area be submitted.

BSO submitted its amended Petroleum Materials Storage and Spill Prevention Plan that includes plans to respond to a leak and/or spill of the biodegradable transformers insulating fluid and site contact and emergency contact information.

BSO submitted its tree clearing plans. The final tree clearing area associated with the approved Revised Project is approximately 15.4 acres or about 3.8 percent less than the Original Project.

d) Final Landscaping Plan including, but not limited to, landscape plantings, berms, pollinator plantings, and final seed mix;

BSO included its Landscaping Plan in the D&M Plan. BSO would plant a total of 156 norway spruces or white pines with an initial height of 5 to 6 feet tall along the northern, western and southern fence lines of the solar facility and along the property lines of the Smaldone and Czerczak Properties. BSO would also plant a total of 18 sugar maple or heritage birch trees along the northern, western and southern fence lines of the facility, and plant a total of 7 catawva rhododendrons along the northern and western fence lines.

BSO would also install a 4-foot tall berm along a portion of the northwest and northeast fence line and a 6-foot tall berm along a section of the north fence line. All berms would be located immediately outside of the fence.

The seed mix for the solar facility footprint will consist of 45 percent Creeping Red Fescue, 45 percent Tall Fescue and 10 percent Redtop. The seed mix for the infiltration basin slope areas and outside the fenced array areas include pollinator friendly plantings including, but not limited to, butterfly milkweed and Purple Joe-Pye Weed.

e) Final eastern box turtle and eastern hognose snake protection plan;

BSO included its final Eastern Box Turtle and Eastern Hognose Snake Protection Plan (EBTEHSPP). The EBTEHSPP was amended to take into account the pre-construction phase that was already implemented by the property owner in connection with the existing gravel operations.

f) Final structural design for solar module racking system stamped by a Professional Engineer duly licensed in the State of Connecticut; and

BSO provided the final structural design for the Trina and Risen solar module racking system stamped and signed by a Professional Engineer licensed in the State of Connecticut.

g) Project construction hours/days of the week.

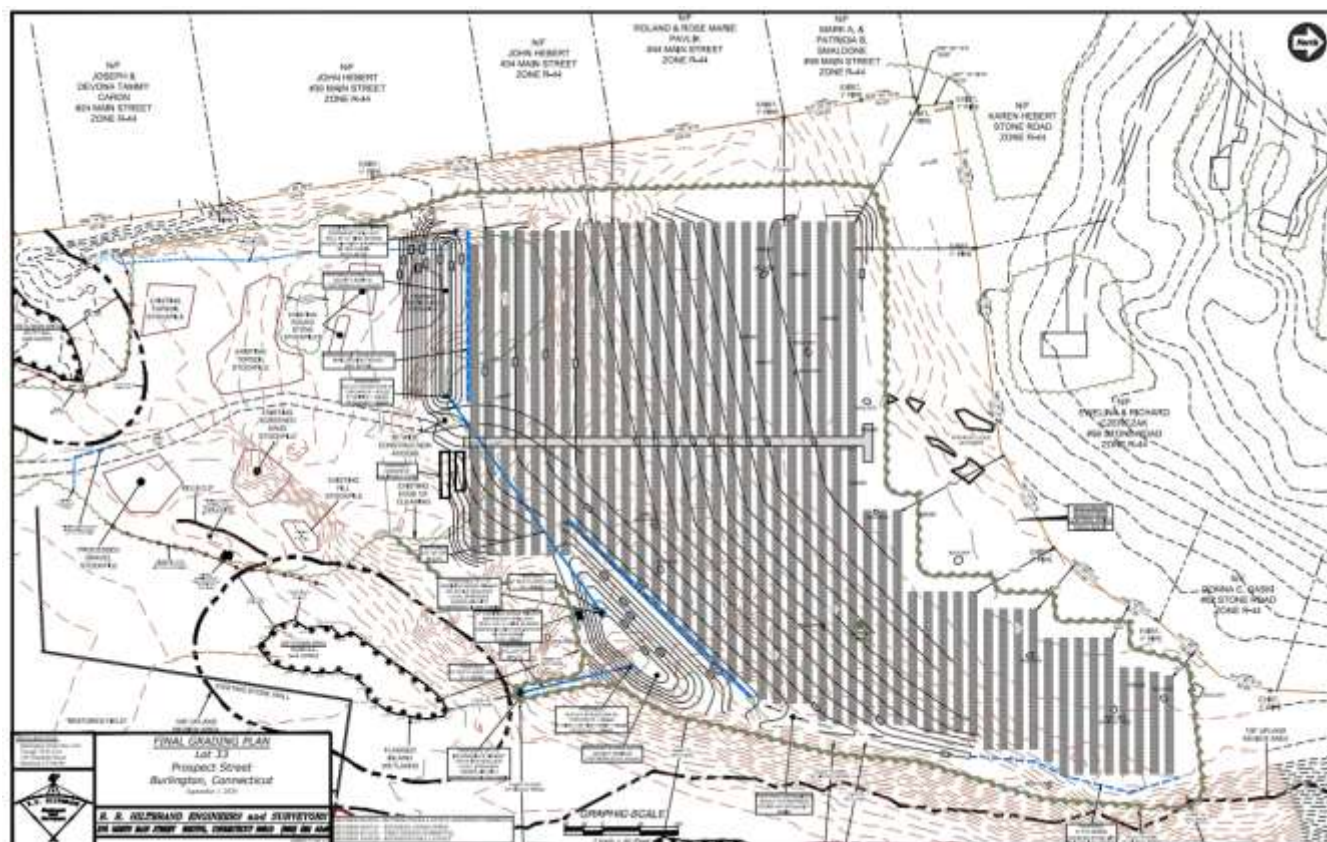
Construction will occur Monday through Saturday between 7:00 a.m. and 4:00 p.m. If Sunday construction hours become necessary, a request would be submitted to the Council.

Recommendations

If approved, staff recommends the following conditions:

1. Submission of the final laydown area location;
2. Submission of the final plans for periodic cleaning of temporary sediment traps and swales and permanent stormwater basins; and
3. Submission of specific requests for Sunday work hours, if necessary.

Grading and Tree Clearing Area Map



Landscaping Plan

