

DRAFT

**Petition No. 1442
SR Litchfield, LLC
Solar Facility -Litchfield and Torrington
Partial Development & Management Plan III**

**Staff Report
December 1, 2023**

Introduction

On September 23, 2021, the Connecticut Siting Council (Council) issued a Declaratory Ruling to SR Litchfield, LLC (SRL) for the construction, maintenance, and operation of a 19.8-megawatt (MW) AC solar photovoltaic electric generating facility on approximately 212 acres comprised of six contiguous parcels in Litchfield and Torrington (Project). The parcels are located generally south of Highland Avenue and east and west of Rossi Road in Torrington, and east and west of Wilson Road in Litchfield (collectively the Site). In its Declaratory Ruling, the Council required SRL to submit a Development and Management Plan (D&M Plan) in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies (RCSA).

On November 24, 2021, in compliance with RCSA §16-50j-61(d), SRL submitted Partial¹ D&M Plan I to the Council and the service list. Partial D&M Plan I included site plans and documentation specific to site clearing and grubbing to adhere to a Department of Energy and Environmental Protection (DEEP) clearing restriction from May 1 to August 14 associated with the red bat and hoary bat, special concern species listed on the Natural Diversity Database (NDDB), which may occur in the forested areas of the Site. On January 18, 2022, the Council approved Partial D&M Plan I.

On May 3, 2023, in compliance with RCSA §16-50j-61(d), SRL submitted Partial D&M Plan II to the Council and the service list, that included a landscape plan, DEEP NDDB correspondence and consultations with the Torrington and Litchfield Fire Marshals. On June 9, 2023, the Council approved Partial D&M Plan II.

On October 25, 2023, in compliance with RCSA §16-50j-61(d), SRL submitted Partial D&M Plan III to the Council and the service list. Partial D&M Plan III includes a final site plan, erosion and sedimentation control plan, site construction detail/phasing plan, and project construction hours. A final structural design for the racking system will be submitted in a future Partial D&M Plan.

On November 7, 2023, the Council issued interrogatories to SRL. SRL submitted responses to the interrogatories on November 28, 2023.

On November 8, 2023, Ronald Viola, a party to the proceeding, submitted comments regarding the inclusion of a stormwater control wet swale near his property in the Project design. The wet swale was approved by DEEP through the issuance of a Stormwater Permit on September 28, 2023. In compliance with Condition Nos. 1 and 2g of the Council's Declaratory Ruling, SRL submitted a copy of the DEEP Stormwater Permit issued for the Project and the results of consultation with the DEEP Dam Safety Division indicating there would be no permitting requirements for the stormwater basins. The Council acknowledged receipt of the DEEP Stormwater permit on October 18, 2023.

¹ Regulations of Connecticut State Agencies §16-50j-60(b) states, "A *partial* or full D&M plan shall be prepared in accordance with this regulation..." (Emphasis added).

Condition 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, final facility layout, access roads, fence design, equipment pads, stormwater management control structures, electrical interconnection including riser pole locations and increased setbacks to the property at 1119 Highland Avenue, Torrington;**

The final site plan includes the final facility layout, and specifications for the access drives, electrical interconnection and riser poles, equipment pads, perimeter fence and stormwater management control structures. As part of Partial D&M Plan I, SRL increased the fence line and solar array setbacks to the property at 1119 Highland Avenue, Torrington.

The facility consists of three non-contiguous areas separated by roads and the Gulf Stream riparian corridor. Each area and associated sub areas will be enclosed by a seven-foot tall chain link fence. The fencing, approximately 20,294 linear feet, will enclose a total of 65 acres². Barbed wire will not be included in the fence design.

The facility will consist of 48,144 Hanwha Q.Peak Duo 480 watt solar panels for a total Project output of 19.8 MW³. The solar panels will be installed at a 25-degree angle on a fixed, post-mount racking system. An 8.7-foot wide vegetated aisle will be established between panel rows.

The facility is electrically separated into 8 arrays each with an associated power station consisting of a transformer and racks of inverters on a 16-foot by 20-foot concrete pad. A total of 170 Sungrow 125-kW inverters and 8 transformers will be installed.

Underground cables will connect the eight power stations except in two locations where an overhead line is required as follows: connection of the northeast arrays to the southeast arrays through a forested area that requires two utility poles and connection of the eastern arrays to western arrays across the Gulf Stream riparian corridor that requires two utility poles. The four new utility poles are required for interconnection of the facility to Eversource's distribution system on Wilson Road, south of the intersection with Litchfield Town Farm Road. No residences are near the interconnection point.

Access to the arrays will be from five new gravel driveways extending from public roads that total 7,792 linear feet (1.47 miles)⁴. Access roads will be 16 feet wide along straight sections and up to 20 feet wide at curves and turnaround areas. One 12-foot wide gravel drive will be constructed through a forested wetland, following an existing access way south from Highland Avenue in Torrington.

Bar gates will control gravel drive access from Highland Avenue in Torrington and from the east side of Wilson Road in Litchfield. Access to the fenced solar arrays will be from 20-foot swing gates. Once within the array areas, gravel drives extend to the facility power stations and along the sections of arrays to facilitate post-construction maintenance activities.

² The preliminary site plan indicated Project fencing would enclose a total area of 70.4 acres.

³ The Project previously specified 51,300 Hanwha Q.Peak Duo 475 Watt panels, 90 Sungrow 250-kW inverters, and 9 transformers.

⁴ The Project previously specified 8,170 linear feet of gravel access drive.

DEEP issued a Stormwater Permit to SRL on September 28, 2023 for the facility stormwater management system. The system includes stormwater basins, protective outfall devices, swales, level spreaders and berms.

SRL provided a preliminary Noise Impact Assessment to account for the additional inverters necessary for the Project re-design. The noise assessment determined operation of the facility will comply with DEEP Noise Control Regulations at the property lines of the adjacent residential receptors. A final Noise Impact Assessment will be submitted once completed.

- 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 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;**

Erosion and sedimentation (E&S) control measures consistent with the 2002 *Connecticut Guidelines for Erosion and Sedimentation Control* (2002 E&S Guidelines) will be established in accordance with the DEEP Stormwater Permit. E&S controls include but are not limited to, filter sox around the perimeter of the work area, temporary sediment traps, stormwater basins, diversion swales, check dams, erosion control blankets, mulch, temporary seeding and vegetative buffers.

Inspections and reporting will be conducted in accordance with the DEEP Stormwater Permit. Repairs to E&S controls by the contractor will occur daily, when necessary. All E&S controls will be inspected by an engineer on a weekly basis. The Northwestern Conservation District will inspect E&S controls devices monthly. Temporary sediment traps, basins, and swales will be inspected weekly and after storm events. Sediment traps and basins will be cleaned once sediment reaches half capacity. Disturbed areas will be stabilized no later than 7 days if no work is occurring in the specific area.

Once the site is 80 percent stabilized, sediment basins and swales will be cleaned and converted into permanent stormwater features.

- c. Site construction detail/phasing plan including, but not limited to, construction laydown area, site clearing/grubbing, site grading, soil stockpile locations, excess earth material disposal locations, wetland mitigation measures; and NDDB species protective measures;**

SRL provided portions of the construction detail/phasing plan specific to tree clearing/grubbing, including DEEP recommended measures to protect species listed on the DEEP NDDB, in Partial D&M Plan I.

The total area of disturbance is approximately 72.6 acres. Cut and fill total approximately 73,660 and 23,180 cubic yards, respectively. Excess material will be removed from the Site. Stockpiles will be located in designated locations, away from wetlands, and enclosed by E&S controls. Limited blasting will be required to construct access roads and stormwater basins. SRL will develop a Controlled Blasting Plan and obtain a blasting permit.

Consistent with the recommended species protection measures listed in the DEEP NDDB Determination letter dated April 28, 2022, SRL will not conduct tree clearing activities between March 30 and August 31.

The site plans include provisions for wetland and vernal pool protection, state listed species mitigation measures and provision for the utility line crossing of the Gulf Stream riparian corridor.

SRL developed a construction phasing plan that was approved as part of the DEEP Stormwater Permit. It includes three main phases as follows:

Phase 1

Installation of a construction entrance at each access drive location. The limits of disturbance will be flagged followed by the removal of trees and other vegetation to establish perimeter E&S controls, followed by the installation of sediment traps, basins and swales. Following establishment of all E&S controls, all disturbed/graded areas will be seeded or stabilized with erosion control blankets. After stabilization, clearing and grubbing in the southeastern portion of the Site can commence in stages of no more than 5 acres. Each 5-acre area must be stabilized before work begins in another 5-acre area.

Phase 2

Establishment of the contractor staging area in the northwest portion of the site. Clearing and grubbing the remainder of the Site in 5-acre increments. Each 5-acre area must be stabilized before work begins in another 5-acre area. Installation of culverts as access roads are constructed. Final grading of disturbed areas followed by seeding. Phase 3 work cannot commence until disturbed areas are stabilized as determined by the inspection protocols established in DEEP Stormwater Permit.

Phase 3

Installation of facility infrastructure and further stabilization of disturbed areas. Upon completion of construction, the Site will be stabilized with specified seed mixes. Stormwater basins and structures to remain will be cleaned for conversion into permanent stormwater features. Temporary sediment traps that will not be used post-construction will be graded and stabilized.

d. A final DEEP NDDDB determination letter prior to commencement of construction;

Partial D&M Plan II included the DEEP NDDDB letter that details recommended construction and post-construction protective measures for state-listed species known to occur within or proximate to the Site.

e. A final Landscaping Plan;

Partial D&M Plan II included the final Landscaping Plan. It includes shrubs in areas where the Site abuts residential parcels and near the intersection with Town Farm Road and Rossi Road. Seed mixes include a variety of grasses and forbs, including native species that support pollinator species, and species that are tolerant of moist areas for stormwater basins.

f. A final structural design for the racking system, stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;

A final structural design for the racking system will be provided in a future Partial D&M Plan.

- g. Consult with the DEEP Dam Safety Division regarding permitting requirements, if any, for the proposed stormwater basins prior to site construction;**

SRL submitted correspondence to the Council on October 16, 2023 as part of its DEEP Stormwater Permit approval indicating Dam Safety Permits are not required for the stormwater basins.

- h. A Spill Prevention and Response Plan;**

Partial D&M Plan I and Partial D&M Plan II included the Spill Prevention and Response Plan.

In addition to the previously submitted Spill Prevention and Response Plan, SRL submitted Petroleum and Hazardous Materials Storage, Refueling, and Spill Prevention Procedures for construction, dated October 2023, as part of Partial D&M Plan III.

- i. A livestock co-use plan for the site, including, but not limited to, provisions for rotational grazing, water access and emergency evacuation;**

In Partial D&M Plan II, SRL indicated it does not intend to host livestock grazing at the Site at this time.

- j. Consult with the state and local fire marshals regarding compliance with the CT State Fire Prevention Code, Section 11.12.3 - Ground Mounted Photovoltaic System Installations prior to commencement of construction; and**

Partial D&M Plan II included the results of consultation with the fire marshals. In response to Condition 1 of the Council's Partial D&M Plan II decision, SRL confirmed the Site perimeter fence will be a minimum 10-feet from the solar array, in compliance with the 2018 CT State Fire Prevention Code, Section 11.12.3.1 (superseded by 2022 CT State Fire Prevention Code, Section 11.12 1.4 Clearances).

- k. Project construction hours/days of the week.**

Work hours are as follows:

- i) Between November 1 and March 31, Monday through Saturday from 7:00 a.m. to 7:00 p.m.
- ii) Between April 1 and October 31 Monday through Saturday from 7:00 a.m. to 5:00 p.m.

Conclusion

Partial D&M Plan III is consistent with the Council's Declaratory Ruling dated September 23, 2021. If approved, staff recommends the following conditions:

- 1. Install seven-foot-tall perimeter chain link fence without barbed wire;
- 2. Submit the final updated Noise Impact Assessment report demonstrating compliance with the CT DEEP Noise Control Regulations at abutting property lines prior to commencement of construction; and
- 3. Submit a copy of the Controlled Blasting Plan and approved Blasting Permit prior to commencement of construction.