

PETITION NO. 1592 – Santa Fuel, Inc. petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 3.85-megawatt AC solar photovoltaic electric generating facility located at 159 South Road, Somers, Connecticut, and associated electrical interconnection.	} } }	Connecticut Siting Council
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March 14, 2024

Opinion

Introduction

On September 19, 2023, Santa Fuel, Inc. (SFI) 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 3.85-megawatt AC solar photovoltaic electric generating facility located at 159 South Road in Somers, Connecticut, and associated electrical interconnection (Petition or Project).

On October 17, 2023, the Town of Somers (Town) requested a public hearing. On November 9, 2023, the Council granted the Town’s request and held a public hearing on January 11, 2024.

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 3.85 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. SFI did not seek a written determination of no material impact to prime farmland from DOAg as the proposed site does not contain prime farmland soils.

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 Proposals (RFP).

The Project was not bid into or selected through any RFP process. SFI intends to sell the power via a retail supply contract with a wholesale provider that is an ISO-NE, Inc. (ISO-NE) Market Participant. SFI anticipates it will secure a 20-year power purchase agreement with options for contract extensions. SFI may participate in an ISO-NE Forward Capacity Auction if the executed contract requires such participation.

Proposed Site

Pursuant to a lease agreement with the property owner, SFI proposes to construct the solar facility on an approximate 16.9-acre site located in the western portion of a 190-acre host parcel zoned residential. The site consists of an existing hay field, an abandoned orchard and a sloping, forested hillside.

A portion of the host parcel is currently used to farm hay and contains a farmhouse accessed from South Road. A majority of the host parcel is forested. Land use in the area includes residential to the west and south, land trust property to the east, and Geissler's Supermarket, a field and undeveloped land to the north.

Proposed Facility

The Project consists of 8,710 non-reflective photovoltaic panels rated at approximately 550 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 60 degrees. The tracker system would be powered by solar panels located between the panel racking tables. At maximum tilt, the panels would be approximately 15 feet above grade at the highest point and 3 feet at the lowest point. The tracker system would be arranged in north-south rows across the site, separated by 11.2-foot wide vegetated aisles.

Electrical equipment consisting of two transformers and switchgear would be installed on two 10-foot by 30-foot concrete pads along the east side of the site, away from South Road. Two inverter pads would be installed adjacent to each electrical equipment pad to support a total of 14 rack-mounted string inverters. Wiring would extend along the racking system and in underground conduits to the inverter and switchgear/transformer pads.

The Project would be enclosed by a seven-foot tall chain link fence although SFI is willing to install an agricultural-style security fence to match the agricultural use of the host parcel and other parcels in the surrounding area. The fence features an 8-inch gap at the bottom for small wildlife movement.

Access to the facility would be from a new 15-foot wide, 1,100-foot long gravel drive extending east from South Road. The new drive would ascend a hillside above South Road, then continue through the array area to the electrical pads on the east side of the site. Due to the amount of grading required to construct the access drive, SFI would use an existing dirt farm road extending from South Road along the north end of the host property during construction.

The nearest property line and off-site residence to the proposed solar array perimeter fence is approximately 42 feet and 66.5 feet, respectively, to the south at 187 South Road. Due to concerns regarding site work and grading in proximity to this residence and the lack of natural intervening vegetation to screen the residence from the site, SFI is willing to shift the entire site to the north by 10-15 feet. Although the Council recognizes SFI's willingness to relocate the site slightly, the effect of such a redesign on the stormwater basin and adjacent access road is unknown. Additionally, the Council is concerned about the significant grading required adjacent to South Road to develop the solar array access road and the associated installation of interconnection utility poles. Therefore, the Council will not approve the proposal without additional information regarding a redesign of this area.

Electrical Interconnection

The interconnection includes the installation of six 35- to 40-foot-tall utility poles clustered along the lower portion of the proposed access drive, near South Road, and one new utility pole on the west side of South Road. Four of the poles would be on the customer side of the interconnection with the remaining three on Eversource's side of the interconnection. The Council is concerned about the number of proposed utility poles adjacent to a residential area on South Road and does not have sufficient information to determine if pad-mounted interconnection equipment, either on Eversource's or SFI's side of the interconnection, or both, can be installed in lieu of the utility poles.

Due to limited hosting capacity on the existing circuit on South Road, Eversource would extend a new circuit on existing poles (overbuild) for approximately 670 feet to interconnect to an existing 23-kV electric distribution line circuit near the corner of South Road and Mountain View Road. The final design of the overbuild would be determined by Eversource.

The facility interconnection was reviewed by Eversource and is currently under review by ISO-NE.

Initial plans for the Project included a preliminary interconnection route following a new access drive extending across the forested, southern portion of the property instead of using the proposed access drive off South Road to interconnect with the existing circuit on Mountain View Road. SFI did not pursue this access road interconnection route due to difficulties in designing a suitable access road across the hillside, and access road entrance sight line issues on Mountain View Road. According to SFI, installing the interconnection route without the access road is not possible since Eversource requires vehicle access to the interconnection equipment mounted on the poles.

Although SFI stated an interconnection route with or without an accompanying access road is not possible, the Council is not convinced this option is not feasible and requires further research given the visual impact of the current proposed interconnection design. There has been no written documentation from Eversource stating vehicle access to the interconnection poles is required nor any design option from SFI demonstrating the adverse environmental impact or safety issues of such a design. Additionally, if vehicle access to the

utility poles is required, there has been no consideration of constructing a short access road extending from Mountain View Road to only serve the utility poles.

Project Alternatives

The host parcel was selected by SFI for the solar facility site due to availability; suitability in terms of parcel size, topography, lack of sensitive environmental resources, and proximity to electrical utilities for interconnection.

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 facility¹.

Neighborhood Concerns

The Council held a publicly noticed public comment session via Zoom remote conferencing on January 11, 2024, commencing at 6:30 p.m. No members of the public made oral limited appearance statements at the public comment session. While the public comment record was open, two interested persons provided written limited appearance statements expressing concerns that included, but were not limited to, stormwater runoff, visibility, wildlife disruption and property devaluation.

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.

The facility would be remotely monitored on a 24/7 basis by a data acquisition system. Monitoring includes real time performance that can detect production abnormalities and if performance issues are detected, the facility can be remotely shut down.

Prior to commencement of operation SFI would conduct outreach/training to local emergency responders. Emergency responders could shut down the facility via a manual disconnect switch.

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

Notice to the Federal Aviation Administration (FAA) is not required for the solar facility. Notice to the FAA may be required if a crane is utilized at the site during construction.

Noise

Noise generated during facility operations would comply with the DEEP Noise Control Standards. To reduce ambient noise to a land trust property east of the northern inverter pad, SFI would be willing to install a noise control barrier. Noise resulting from construction is exempt from DEEP Noise Control Standards.

¹ *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007); CGS §16-50p(g) (2023)

Decommissioning

The Project has an anticipated design life of approximately 25 years but may continue operation for 35 years if lease extensions are executed. 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. The site would be restored to its original condition, with exception of the stormwater management system.

The lease is a private agreement between SFI 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.

Project components that cannot be recycled will be removed and disposed of in accordance with regulatory criteria. SFI intends to select solar panels for the Project that meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria for characterization as nonhazardous waste in the event the solar panels are not recycled during decommissioning.

Construction would occur over a six-month period with work hours of Monday through Saturday from 7:00 AM to 7:00 PM, and Sundays, if necessary.

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.

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

The host parcel and adjacent parcels are served by private wells. Vibrations from the installation of the tracking system are not expected to cause sediment releases, and thus, no disruption to well water flow or quality is expected.

SFI has developed a Spill Response and Control Plan that includes spill prevention, containment, cleanup and reporting procedures.

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 perimeter swales and two stormwater infiltration basins located on the west side of the site. The stormwater management system is designed to maintain existing drainage patterns and there will be no increase in water discharge from the site that would affect the existing South Road drainage system. SFI would provide stormwater outflow calculations to DOT as part of its encroachment permit application.

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*.

Two ponds with bordering wetlands are located in a wooded area in the western portion of the property. The ponds appear to have been formed from past excavation activities. Although the ponds support a diverse amphibian population, they do not exhibit vernal pool characteristics.

Although the Project includes a 50-foot buffer from the stormwater management system to the ponds and associated wetlands, in the absence of an amphibian survey of the ponds and a report on the potential effects of the Project on the ponds, the Council finds a larger buffer is warranted to protect the water quality of the ponds and associated wetlands.

Scenic, Historic and Recreational Values

The Project would have no effect on historic or archeologic resources listed on the State or National Register of Historic Places.

The Project would be visible from a hiking trail on an abutting land trust parcel to the east. There are no “blue-blazed” hiking trails maintained by the Connecticut Forest and Park Association within one mile of the site.

There are no Town or state designated scenic roads within one mile of the site.

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

The site would be visible to the abutting developed residential property to the south (187 South Road) and to residences on the west side of South Road in the area of the proposed access drive. The proposed stormwater basin and outflow control structures would be visible from South Road and residences across the street. To mitigate views of the facility, SFI would install spruce trees along the perimeter fence and is willing to install additional plantings to further reduce visibility of the facility.

The Council finds the visual impact of the electrical interconnection problematic in that the cluster of six new utility poles would be visible from South Road and residences across the street, whereas a pad-mounted design or an alternative interconnection route through a forested area abutting Mountain View Road could have less of a visual impact.

Fish, Aquaculture and Wildlife

The proposed site is not within a DEEP Natural Diversity Database (NDDB) buffered area.

SFI consulted with the U.S. Fish & Wildlife Service's (USFWS) which determined development of the site would not likely have an adverse effect on the northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species.

Agriculture

There are no prime farmland soils at the Site.

The landowner currently grows hay crops on the fields in the northeastern portion of the host parcel.

The host parcel is currently enrolled in the Public Act 490 Program for agricultural land tax abatement. Once constructed, the solar facility site portion of the host parcel would not be eligible for the program.

The solar array would be seeded with a pollinator-friendly plant mix.

Forest and Parks

The Shenipsit State Forest is located approximately 0.9 miles southeast of the proposed site.

Development of the site will require the removal of approximately 3 acres of edge forest that buffers a core forest block. Removal of the edge forest would decrease the core forest block by approximately 3 acres. There would be no material impact on the status of core forest.

Construction of the facility would also require the clearing of an approximate 5.3-acre former orchard adjacent to South Road.

Conclusion

Based on the record in this proceeding, the Council finds that there would be a substantial adverse environmental effect associated with the construction, maintenance and operation of an approximately 3.85 MW solar photovoltaic electric generating facility and associated electrical interconnection located at 159 South Road, Somers, Connecticut, as proposed.

Although the proposed Project is a grid-side distributed resources project with a capacity of less than 65 MW under CGS §16-50k and is consistent with the state's energy policy under CGS §16a-35k, as designed, the Council finds there is insufficient information regarding a potential redesign of the southwest corner of the site to reduce site grading adjacent to South Road and the residential property at 187 South Road; insufficient buffers to the ponds/wetlands adjacent to the site; and insufficient information relative to the potential use of a pad-mounted interconnection in lieu of six new utility poles, or in the alternative, an interconnection route extending from Mountain View Road. Therefore, the Council will not issue a declaratory ruling for the proposed Project.