

PETITION NO. 1558 – Community Power Group LLC petition } Connecticut
for a declaratory ruling, pursuant to Connecticut General Statutes }
§4-176 and §16-50k, for the proposed construction, maintenance } Siting
and operation of a 4-megawatt AC solar photovoltaic electric } Council
generating facility located at 24 Middle Road, Ellington, }
Connecticut, and associated electrical interconnection.

August 3, 2023

Opinion

Introduction

On January 30, 2023, Community Power Group LLC (CPG) 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 4.0-megawatt AC solar photovoltaic electric generating facility located at 24 Middle Road in Ellington, Connecticut, and associated electrical interconnection (Petition or Project).

After the filing of the Petition, the Council received requests for a Public Hearing from Mary Cardin, James and Gail Dixon, and the Town of Ellington. On March 16, 2023, the Council granted the requests for a public hearing which was held on May 18, 2023.

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 4.0 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 January 29, 2021, DEEP's Bureau of Natural Resources determined the proposed solar facility would not have a material impact on the status of core forest. By letter dated May 18, 2022, DOAg determined the proposed solar facility would not have a material impact on the status of prime farmland with the condition that proposed on-site and off-site agricultural co-uses are implemented and existing farming activities are continued for the life of the project.

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 Proposal.

The Project was selected in April 2022 as part of the Shared Clean Energy Facility (SCEF) program. The electricity and renewable energy credits (RECs) produced by the facility would be sold to Eversource in accordance with a 20-year Tariff Terms Agreement (TTA). A REC certifies that one megawatt-hour of renewable electrical energy has been generated.

CPG would not participate in an ISO-New England, Inc. (ISO-NE) Forward Capacity Auction during the term of the TTA.

Proposed Site

Pursuant to a lease agreement with the property owner, CPG proposes to construct the solar facility on an approximate 28.4-acre site on an approximate 60.5-acre parcel, south of Middle Road and west of Pinney Street in Ellington. The host parcel is zoned Rural Agricultural Residential and is currently used for agriculture.

The surrounding land uses include residential to the north and east, and agricultural and undeveloped land to the south and west.

Proposed Facility

The Project consists of 9,963 bifacial photovoltaic panels rated at approximately 600 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 55 degrees. At maximum tilt, the panels would be approximately 8 feet above grade at the highest point and 2.5 feet at the lowest point. The panels would be arranged in linear rows facing south, separated by 14-foot wide vegetated aisles.

Two 15-foot by 25-foot concrete pads, each supporting one switchgear and one transformer, would be installed on the north side of the site, adjacent to and outside of, the fenced array area. Thirty-two string inverters would be mounted on the end of select panel rows, with underground wiring extending from the inverters to the transformer pads.

The Project would be enclosed by an eight-foot tall agricultural style fence (game fence).

Access to the facility would be from a new 20-foot wide, 515-foot long gravel access drive extending south from Middle Road, using an existing property entrance apron between 28 and 22 Middle Road.

Electrical Interconnection

The electrical interconnection includes the installation of four new utility poles along the access road to support an overhead line that interconnects to a 13.8-kV Eversource distribution line on Middle Road. The new poles would be approximately 34 feet above ground level. The overhead interconnection requires four utility poles in accordance with Eversource's protective equipment design standard.

During the proceeding, CPG relocated the four poles to increase the setback from Middle Road, with the closest pole being approximately 100 feet from Middle Road. Although the Council recognizes CPG's efforts to reduce visibility of the four poles by moving them further from Middle Road, the Council recommends that CPG consult with Eversource regarding the possible installation of underground lines and pad-mounted equipment on the customer side of the electric distribution interconnection, or other interconnection design(s), to further reduce visibility to the extent feasible.

Project Alternatives

Given the selection of the Project in the DEEP SCEF program, and a 20-year TTA contract with Eversource, CPG did not consider alternative locations.

CPG selected the proposed site due to the presence of open fields, limited ground disturbance and tree clearing, the presence of forested buffers along property lines and close proximity to an existing three phase electric distribution line.

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.

Cost

The estimated construction cost of the Project is \$4.1 million to \$4.5 million not including interconnection fees.

Neighborhood Concerns

The Council held a publicly noticed public comment session via Zoom conferencing on May 18, 2023, commencing at 6:30 p.m. Seven members of the public made oral limited appearance statements at the public comment session. While the Council public comment record was open, twelve interested persons provided written limited appearance statements expressing concerns that included, but were not limited to, site is near residences; visibility; wildlife disruption; noise; loss of farmland; and potential for interconnection problems. Prior to submission of the Petition to the Council, based on neighborhood concerns, CPG modified the proposed facility by developing a landscape plan, conducting a noise study and relocating the Project utility poles so that they are farther away from Middle Road.

¹ Corcoran v. Connecticut Siting Council, 284 Conn. 455 (2007); CGS §16-50p(g) (2019)

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 CPG personnel using a computer monitoring system which can detect production abnormalities. If abnormalities occur, the facility can be remotely shut down in its entirety or partially at the level of the string inverters.

CPG would coordinate and conduct outreach/training with the Town emergency responders to provide information regarding facility operations and emergency response, locations of manual shut offs and how to disable temporary electric fencing used by the sheep farmer. CPG would provide emergency responders access to the site via a Knox Box at the entrance to the facility.

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

Noise

Noise generated during facility operations would comply with the DEEP Noise Control Standards. Although noise modeling indicates operational noise will be below DEEP criteria, the Council will order CPG to install solid fencing adjacent to the transformer pads to deflect noise away from nearby residences. Additionally, the Council will order CPG to perform a post-construction noise analysis to ensure noise from facility operation meets DEEP's Noise Control Standards. Noise resulting from construction is exempt from DEEP Noise Control Standards.

Decommissioning

The Project has an anticipated life of 30 - 40 years. 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 pre-existing condition as a farm field.

The lease is a private agreement between CPG 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, including, but not limited to, soils and retention of the stormwater management system.

Project components that cannot be recycled will be removed and disposed of in accordance with regulatory criteria. CPG provided Toxicity Characteristic Leaching Procedure (TCLP) results from the solar panel manufacturer for selected panels that indicate the panels would not be characterized as hazardous waste in the event the solar panels cannot be recycled at the end of the Project's life.

Construction hours would be Monday through Friday from 7:00 AM to 5:00 PM and Saturday from 8:00 AM to 4:00 PM.

Environmental Effects and Mitigation Measures

Air and Water Quality

The project would meet DEEP air quality standards. There would be no air emissions associated with site operation.

Operation of the facility would not require water use.

Groundwater is classified as “GA” which indicates it is presumed suitable for human consumption without treatment. The residences in the area are served by private wells. The Project is not expected to impact groundwater quality. Manure from livestock grazing would not impact subsurface water quality. In order to ensure subsurface water quality is maintained, the Council will order CPG to prepare a Spill Prevention and Control Plan for construction and operation of the facility.

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

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 management basins; one located in the southwest portion of the site, and one located in the southeastern portion of the site.

In accordance with the Stormwater Permit, the stormwater management system is designed to maintain existing drainage patterns during 2, 10, 25, and 100-year storm events. Once the site is stabilized, CPG would conduct annual inspections of the stormwater control features. In addition to these annual events, the Council will order CPG to conduct inspections of the stormwater controls after extreme rainfall events to ensure the controls were not compromised or damaged.

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 wetlands were identified on the host parcel, as follows; an intermittent wetland system that extends from north to south in the eastern portion of the site, and a forested wetland, including a farm pond, located in the western portion of the host parcel. The farm pond most likely supports amphibians.

The Council finds the proposed 100-foot buffer between the pond and the Site, as well as non-disruption of the forested wetland corridor to the north and south of the pond, sufficient to protect amphibian populations in this area.

The Project would include a wetland buffer of 50 feet to stormwater control features and 100 feet to solar panels, in accordance with the criteria established in DEEP Stormwater Permit Appendix I. The Council will order the installation of straw bales or other generally accepted similar control measures to reinforce silt fencing adjacent to wetland areas.

Scenic, Historic and Recreational Values

The Project would have no effect on properties listed on the State or National Register of Historic Places, located within or near the Project site.

Several areas of the site have the potential for moderate archaeological sensitivity and the State Historic Preservation Office recommended an archaeological reconnaissance survey of these areas. CPG would perform the recommended archaeological reconnaissance survey in the Fall of 2023.

No recreational resources are in the vicinity 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.

A majority of the facility would be shielded from view due to existing vegetation and its location set back from Middle Road and Pinney Street. Most of the views from residential areas to the north would be screened by existing vegetation along the property line. Abutting residences to the east are also screened by existing vegetation but the quality of the vegetative buffer varies. During the proceeding, CPG developed a landscape plan that consists of evergreen plantings along the north and east sides of the site. The plantings would be 4 to 6 feet tall at installation and would reach a height of 20-25 feet. To supplement the proposed landscape plan, the Council will order CPG to install plantings perpendicular to the access drive to screen views from Middle Road and incorporate landscape planting inspections for replacement of dead or dying plantings.

Fish, Aquaculture and Wildlife

The proposed site is not within a DEEP Natural Diversity Database (NDDDB) buffered area, and thus, no consultation with the DEEP NDDDB program is required.

CPG obtained correspondence from the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System, indicating that there are no critical habits of threatened or endangered species at the site.

Pinney Brook flows from north to south through the western portion of the host parcel. The brook is not a DEEP-designated cold-water fishery.

Agriculture

The host parcel contains a large field accessed from Middle Road and a smaller field adjacent to Pinney Street. It has been used for agricultural purposes over the past century. The site would occupy the large field. Consistent with the May 18, 2022 No Material Impact to Prime Farmland letter from DOAg, existing agricultural activities would continue in the small field adjacent to Pinney Street.

Approximately 20.3 acres of the Site are classified as prime farmland soils. CPG would use minimally intrusive construction methods to limit substantial grading on the site. Excavation and grading would be required to establish the equipment pads, stormwater basins and swales.

In accordance with DOAg's No Material Impact to Prime Farmland letter dated May 18, 2022, CPG would implement a sheep grazing program within the fenced solar array area of the site. CPG would also establish a community garden and an apiary research area on the host parcel but outside of the solar facility site boundaries. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the Project "site." This includes portions of the parcel retained by the landlord and portions of the parcel the landlord may lease to third parties.

Sheep grazing would be conducted by establishing temporary paddocks within the solar array, isolated by temporary electric fence. It is anticipated 11 sheep would be on-site for two separate two-week periods, rotating among five temporary paddocks, as established by the sheep grazer. The Council will require CPG to submit a sheep grazing co-use plan at the site.

The design of the agricultural-style fence around the perimeter of the site would allow for the passage of small wildlife species while preventing access by livestock predators such as coyote.

The solar array would be seeded with a seed mix developed that provides sufficient forage for livestock and promotes pollinator species. The Council will require that the final seed mix be included in the D&M Plan.

Forest and Parks

There is no mapped core forest at the site. No state forests or parks are located in the vicinity of the site. No tree clearing is proposed.

Conclusion

Based on the record of this proceeding, the Council finds that there would not be a substantial adverse environmental effect associated with the construction, maintenance and operation of an approximate 4.0 MW solar photovoltaic electric generating facility and an associated electrical interconnection located at 28 Middle Road in Ellington, Connecticut.

The proposed Project is a grid-side distributed resources facility with a capacity of less than 65 MW under CGS §16-50k, it was selected under the state's SCEF Program, it is consistent with the state's energy policy under CGS §16a-35k, and the proposed Project would meet all applicable U.S. Environmental Protection Agency and DEEP Air and Water Quality Standards. Therefore, the Council will issue a declaratory ruling for the proposed Project.