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September 22, 2020

Mr. Chris Newell
Town of Cortlandville Planning Board
The Raymond G. Thorpe Municipal Building
3577 Terrace Road
Cortland, NY 13045

RE: SSC Cortlandville II LLC- Project Narrative
Delta Project No.: 2020.260.001 and 2020.261.001

Dear Mr. Newell:

We are providing this letter as supporting documentation for the above referenced solar projects.

The proposed project is 37 acres in total size and will be subdivided from a 113± acre site.

- Solar panel height will not exceed 15'.
- Two rows of 5' tall white spruce and/or norway spruce on a 10' spacing are included in the project to provide a visual screening from abutting residences who would otherwise have a clear view of the solar farm. Details depicting this are included in the submitted plan sets.
- As suggested by Cortland County, please find the attached Solar Decommissioning Plan and Schedule for the two separate proposed facilities.

As a community solar project local residents, businesses, and municipalities in the Greater Cortland area who are National Grid ratepayers will have the option of subscribing to purchase a portion of the energy from this project to offset their electric usage, at a discount to rates that they would otherwise purchase from National Grid.

The connection point for this project is on Blue Creek Road. Please see the site plans for additional information. The supports for the solar panels will be driven in the ground.

A Storm Water Pollution Prevention Plan (SWPPP) was prepared which addressed the two separate projects. The SWPPP evaluated the projects and incorporates mitigation measures to prevent erosion and maintains or slightly reduces post-construction flows as compared to pre-construction flows.

A review of past projects in the area identified glare concerns impacting the surrounding properties. While the attached literature is focused on an airport, a similar conclusion can be made for this project. It is our opinion that glare will not impact adjoining properties.

We appreciate the opportunity to submit this information and look forward to your feedback.

Respectfully,
DELTA ENGINEERS, ARCHITECTS, LAND SURVEYORS, & LANDSCAPE ARCHITECTS, DPC

Christopher J. Maby, CPESC
Sr. Project Manager

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SSC Cortlandville II LLC - Solar Decommissioning Plan

Introduction

Solar projects will produce clean, renewable energy throughout the life cycle of the facility. Decommissioning activities will be conducted in accordance with all applicable land use regulations in effect at that time of decommissioning.

Determination of Land Use after Closure

Following the anticipated 25 years of use as a solar facility, a future land use for the subject property will be established. The possible future land uses include continued use as a solar facility, or a return to agricultural use. For the purpose of this decommissioning plan, the specified future use will be agricultural in nature, and a cover crop will be planted following project decommissioning activities.

Project Description

The project would utilize photovoltaic (PV) technology on fixed-tilt or tracker mounting supports. The major components of the proposed Project are described as follows. The solar facility is designed for optimum performance and ease of maintenance. The Project would construct series of PV module arrays mounted on racking systems, which are typically supported by a pile-driven foundation design.

The solar field would be laid out in a PV block design to allow adequate clearances for maintenance and access roads. Inverters would be centrally located within a given block to minimize cable routing and trenching and ensure minimal electrical losses. The AC out from the inverters would be routed through an AC collection system and collected within system switchgear. The final output from the solar facility would be processed through a transformer to match the interconnection voltage and to comply with Utility interconnection requirements. Electrical safety and protection systems would be provided to meet regulatory codes and standards. The energy would be delivered to the regional electrical distribution network.

A security perimeter fence with appropriate signage for public protection will be installed. Points of ingress/egress would be accessed by locked gates for facility services and maintenance. Additional information for the specific elements of the solar facility is provided in the following sections.

Photovoltaic Modules

The solar facility would require installation of PV modules. The total number of PV modules required would depend on the technology selected, optimization evaluation, and detailed design. The market conditions, economic considerations, and the environmental factors would be taken into account during the detail design process. The following PV module technologies or equivalent are being considered for incorporation into the Project:

- PV thin-film technology
- PV crystalline silicon technology
- Fixed-tilt configuration

- Tracking design configuration

The modules configured with a fixed tilt would be oriented toward the south and angled at a degree that would optimize solar resource efficiency. For the tracking configuration, the modules would rotate from east to west over the course of the day. Modules would be non-reflective and highly absorptive.

Standard Installation, Array Assembly, and Racking

There are a variety of module mounting systems and manufacture that are available in the solar industry, the majority of which can be mounted on a variety of foundations. Fixed-tilt, single-axis trackers, and dual-axis trackers are under consideration for the project. The final racking system would be determined by optimization evaluations and economic assessments and incorporated into the detailed design.

The module mounting system provides the structure that supports the PV module arrays. The foundations are typically H beam piles which are driven into the soil using pneumatic techniques, similar to hydraulic pile driving. The final foundation design would be determined based on the geotechnical survey for the project location. Once the foundation has been installed, the module mounting system would be installed to support the PV modules. For a tracking configuration, small motors would be installed to drive the tracking mechanism.

DC Collection, Inverters, AC collection, and Transformers

Modules would be electrically connected into series strings. Each string would be wired to combiner boxes located throughout the solar field power blocks. The output power cables from the combiner boxes feed the DC electricity to the DC-to-AC conversion equipment (called inverters). Underground electrical cables would be installed using ordinary trenching techniques, which includes excavation of trenches to accommodate direct-buried cables. Wire depths and trench backfill would be in accordance with local, State, and Federal codes. The AC energy would be stepped up to the appropriate interconnection voltage by system transformers to match the voltage at the grid interconnection. As required, switchgear cabinetry would be provided where necessary for circuit control. All electrical inverters and inverter step-up transformers would be placed on H beam pile structures. All substation gear is placed on poured concrete foundations (discussed in the next section). The SGF would be designed and laid out in MW increments/blocks including inverter equipment.

SGF Interconnection Description

Each inverter would be outdoor rated and mounted on a steel skid (rigid frame) and will be approximately 90 inches in height. The AC output of the inverters would be fed into the low voltage side of the inverter step-up transformer, generally within a few feet of the inverters. Each transformer would be mounted on the inverter skid. The AC collection system cables would be connected in parallel and collected at the site switchgear. The primary switchgear includes the main circuit breaker and utility metering equipment, and it would be pole mounted within 300’ of the point of interconnection to National Grid. The gen-tie would consist of three phases of overhead conductor and a disconnect switch mounted on wood poles.

Decommissioning Plan

Decommissioning Timeline

This decommissioning plan will be implemented following the establishment of a future land use at the project site. The expected duration of decommissioning activities is approximately 6 months. Removal of all associated solar facility equipment is expected to last for approximately 3 months, and final land restoration activities are expected to take approximately 3 months (weather dependent).

Removal of Equipment

All equipment, H beam foundations, concrete foundation, and fencing will be removed from the site so that it may be used as productive farmland.

Solar modules will be unbolted from the support structures and consolidated in the laydown area. The modules have value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved offsite. Bids will be taken from vendors whose costs will include purchasing the equipment and removing it from a site consolidation area.

The H beams supporting the panels will have been driven up to 12 feet deep. These H beams will be pulled out of the ground and the entire 16 foot length of beam moved to the lay down area where they will be cleaned, stock piled and consolidated. The H beams have significant value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved offsite by the selected recycler.

The top layer of soil will be removed from all buried electrical conduit trenches with a backhoe and the electrical conduit will be pulled out of the ground by the backhoe. All electrical conduits will be moved to the lay down area and stockpiled. The conduit has value and will be sold to an off-site recycler. The conduit will be loaded onto trucks in batches and moved offsite by the selected recycler.

The inverters will be removed from the site and moved onto an impermeable base in the lay down area. Care will be taken so that no leaks or spills occur from this temporary storage area. The inverters have value and will be sold to an off-site recycler. They will be loaded onto trucks in batches and moved offsite. The H beam pile foundations will be removed.

The H beam pile foundations for the inverter boxes and the substation will be removed using a back hoe. None of the H beams will be left in the ground. These will be sold to a recycler as specified above.

The chain link fence will be removed and recycled with the other scrap material. Any other miscellaneous equipment will be removed from the site.

All road and pathways within the solar blocks will be tilled and soils spread.

Contouring, Erosion, and Sediment Control

The site will not be substantially altered from grading and contouring. Following decommissioning, the site will be suitable for agricultural use or development for other uses. Contouring of the site will be conducted using standard grading and farming equipment to return the land to approximately match the pre-construction surface conditions. The site drainage features will be restored to their original condition. Temporary erosion and sediment control measures such as sediment fences, hay bales, mulch and soil stabilizers will be used as needed. As noted above the original site conditions will be recorded prior to beginning construction on the site.

Weed and Pest Management

Weed and pest management will be undertaken throughout the life of the project. Weeds and pests will not be present in a significant manner at decommissioning as to prevent agricultural activities from resuming.

Chemicals and Hazardous Materials

Removal of all chemicals, fuels, oils, transformer oils, and other potential hazardous chemicals and wastes from the site will occur immediately following the start of decommissioning activities. All waste will be disposed of in accordance with state and federal laws. Any areas of known chemical spills will be identified and all impacted soils will be excavated for disposal. It should be noted that chemicals and hazardous materials will not be stored on-site, but rather at an off-site operations and maintenance building. In the event that a spill or release was to occur at the site, all contaminated material will be removed and disposed of immediately. However, based on the use of the site, hazardous materials will not be present in significant quantities and the risk of spill or release is extremely low.