



FLAT CREEK SOLAR

Permit Application No. 23-00054

§ 1100-2.24 Exhibit 23

Site Restoration and Decommissioning

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Appendix 23-1 Decommissioning and Site Restoration Plan - **CONFIDENTIAL**

Acronym List

AC	alternating current
BMPs	Best Management Practices
DC	direct current
EPA	Environmental Protection Agency
LOC	Letter of credit
LOD	Limit of Disturbance
NYCRR	New York Codes, Rules, and Regulations
NYPA	New York Power Authority
NYS	New York State
NYSDAM	New York State Department of Agriculture and Markets
ORES	Office of Renewable Energy Siting and Electric Transmission
OSHA	Occupational Safety and Health Administration
the Plan	Decommissioning and Site Restoration Plan
Project	Flat Creek Solar Project
POI	Point of Interconnection
PV	photovoltaic
PVC	polyvinyl chloride
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
USCs	Uniform Standards and Conditions

Glossary Terms

Applicant

Flat Creek Solar NY LLC, a subsidiary of Cordelio Power LP, the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting and Electric Transmission (ORES) under Article VIII of the New York State Public Service Law.

Facility

Flat Creek Solar, a 300 MW solar generating facility located in the Towns of Root and Canajoharie, NY. The proposed Facility components to be constructed for the generation, collection, and distribution of energy for Flat Creek Solar include solar panel modules, electrical collection system, collection substation, point of interconnection (POI) switchyard, access roads, laydown/staging areas, and other ancillary facilities.

Facility Site

The participating parcels encompassing Facility components, which totals approximately 3,794 acres in the Towns of Canajoharie and Root, Montgomery County, New York (Figure 2-1).

Study Area

The Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses approximately 108,667 acres, inclusive of the approximately 3,794-acre Facility Site.

Limit of Disturbance (LOD)

The area to which temporary construction impacts will occur, totaling approximately 1,637 acres.

Exhibit 23: Site Restoration and Decommissioning

This Exhibit provides information required in accordance with the requirements of §1100-2.24 of the Article VIII Regulations.

23(a) Performance Criteria for Site Restoration

The Facility is anticipated to reliably and safely operate for up to 35 years. After this time, the Facility may be decommissioned, and the Facility Site restored to pre-existing conditions. The Decommissioning and Site Restoration Plan (Appendix 23-1) of this Exhibit includes details on site restoration, decommissioning, and financial assurance agreements.

The Decommissioning and Site Restoration Plan, to be submitted as a compliance filing, aims to provide a general overview of the Facility's decommissioning as well as a cost estimate to act as a mechanism for decommissioning financial assurance (the Plan). The Plan outlines the decommissioning activities required to remove Facility equipment, restore disturbed soil and vegetation, and return the site to pre-development conditions that will allow future use.

All above ground equipment and buried components down to a depth of 48 inches below grade will be removed by the Applicant. Underground collection lines deeper than 48 inches below grade will be abandoned in place in accordance with the New York State Department of Agriculture and Markets (NYSDAM) guidelines (NYSDAM 2019). The Point of Interconnection (POI) switchyard will be owned and operated by New York Power Authority (NYPA), will not be decommissioned, and will be left in place.

(1) Safety and the Removal of Hazardous Conditions

The presence of hazardous materials during construction and operation of the Facility is limited to minimal amounts of fluid in transformers and switchgear. Transformers and switchgear will be drained of any hazardous fluids before transport, as applicable, and such materials will be disposed of off-site at appropriate disposal facilities.

During decommissioning of the Facility, fuel and lubricating oils may be present on-site and will be managed in accordance with the Spill Prevention, Control, and Countermeasure (SPCC) Plan that will be developed for the decommissioning of the Facility and approved as a compliance filing. As further described in Exhibit 6 (*Public Health and Safety*), waste that can be

recycled will be appropriately recycled and non-recyclable waste materials will be disposed of in accordance with state and federal law at an approved licensed solid waste facility.

Exhibit 6 (*Public Health and Safety*) of this Application discusses safety of one of the most important performance metrics throughout the development and operation of the Facility. Safety protocols used during construction and operation of the Facility will be applied for the decommissioning and restoration efforts. The Applicant developed a Site Security Plan and a Safety Response Plan for the Facility; both plans are included in Exhibit 6, Appendix 6-1 and 6-2, respectively. Any hazardous fluids or materials will be removed in accordance with the Occupational Safety and Health Administration (OSHA), United States Environmental Protection Agency (EPA), or New York State (NYS) standards, as applicable.

(2) *Environmental Impacts*

Environmental impacts related to the Facility have been evaluated extensively as part of this Application and the Applicant will implement the proper procedures as outlined in the Uniform Standards and Conditions (USCs), approved Site-specific Conditions, and the Decommissioning and Site Restoration Plan (Appendix 23-1) during decommissioning of the Facility and Site restoration. Erosion control and stormwater management measures and Best Management Practices (BMPs) will be utilized to maintain downstream water quality and prevent soil erosion and/or adverse impacts that may result from stormwater runoff. These methods are included in the Facility's Preliminary Stormwater Pollution Prevention Plan (SWPPP), Exhibit 13, Appendix 13-2, and will be further clarified in the Final SWPPP to be filed as a Compliance Filing. Following the removal of Facility components, grading (as applicable) and revegetation of the Facility Site will take place.

During the decommissioning process a short, temporary increase in sound levels due to decommissioning activities at the Facility Site may occur; however, decommissioning activities will occur during daytime hours.

(3) *Aesthetics*

Above-ground Facility components such as photovoltaic (PV) arrays, trackers, inverters, the collection substation, and generation-tie line will be removed during the decommissioning process, and the site will be graded, as applicable, to achieve preconstruction contours. Additionally, permanent access roads, fencing, and gates present at the Facility Site will be

removed. Disturbed areas that require grading back to previous contours shall be revegetated with native species unless the area is planned for agricultural activities. The Applicant will work closely with participating landowners during the restoration process to determine if areas will be put back into agricultural use. Installed landscaping modules surrounding the Facility will also be removed. The decommissioning cost estimate included in Appendix 23-1 assumes all access roads will be removed.

(4) Recycling

Facility components will be sold, salvaged, and/or recycled to the maximum extent practicable at approved facilities, with preference given to local recycling/salvage facilities, if available. Facility components may be relocated or reused if feasible. Metal components (steel, copper, and aluminum), including the solar array racking, will be salvaged and sold for scrap metal if not reused. Gravel removed from the access roads may be removed and reused. The PV solar modules are also recyclable and contain materials that may be reclaimed (silicon, metal). PV manufacturers are currently establishing programs to receive recycled PV modules. The Applicant will determine the best method of disposal for solar modules and other components at the time of decommissioning and in accordance with manufacturer's guidelines and State, local, and federal regulations. See Appendix 23-1 for discussion of salvage details.

(5) Potential Future Uses for the Site

Decommissioning shall be performed by the Applicant in a manner consistent with allowable future intended use of land within the Facility Site. The Facility Site currently primarily consists of agricultural uses and vacant land. At the end of the Facility's life, if decommissioning is determined to be the most optimal option for the site, as opposed to repowering, land will be restored to its pre-construction use. Pre-construction land use includes agricultural production, and previously forested lands may also be restored as a young-growth forest or converted to alternate land uses as appropriate. The operation of a solar facility and planned decommissioning will not inhibit future land use options.

(6) Funding

Financial assurance will be provided by the Applicant in the form of a letter of credit (LOC) or other financial assurance (e.g., surety bond or performance bond), and will be coordinated with the Towns of Root and Canajoharie prior to construction. The financial assurance will cover the

net estimate of decommissioning and restoration activities, plus a fifteen percent contingency cost, and will be based on a Professional Engineer's certified estimate of decommissioning cost. This financial assurance will be approved by the Office of Renewable Energy Siting and Electric Transmission (ORES) and established by the Applicant to be held by the Towns of Root and Canajoharie through the life of the Facility.

The Applicant is seeking a waiver from the Town of Canajoharie and the Town of Root's decommissioning security requirements. The Towns security requirements are unreasonably burdensome as they overestimate costs, causing additional costs to the Facility in the form of the financial security, which creates a financial disincentive without any additional benefit to the community. For example, salvage value may not be taken into consideration in determining the estimated cost of decommissioning under the Towns' Laws (Town of Canajoharie Solar Energy Law, Section 8(B)(2)(ix)(b); Town of Root Solar Energy Facilities Law Section 9.2(A)). A prohibition on taking salvage value into consideration is unreasonably burdensome and inconsistent with the regulations adopted by ORES. Accounting for salvage value of materials is standard decommissioning practice across the industry and leads to a more accurate estimate of the actual costs associated with decommissioning, as it reflects the recoverable value of the materials. Excluding salvage value would result in an overestimate of decommissioning costs, which would cause the Applicant to incur additional financial costs for the Facility which acts as a financial disincentive with no actual provided benefit to the host community.

In addition, the local laws require a greater than 15% contingency. The Town of Canajoharie requires a 50% contingency (Town of Canajoharie Solar Energy Law, Section 8(B)(2)(ix)(b)) and the Town of Root requires a 25% contingency with a 2 percent annual escalator for the life of the project (Town of Root Solar Energy Facilities Law Section 9.2(A)). A 15% contingency more than protects the Towns should decommissioning be required. Actual costs may be more or less than the estimate prepared depending on the conditions present at the time of decommissioning. A 15% contingency is more than sufficient to cover unexpected costs associated with the decommissioning of a solar facility, and any uncertainty related to inflation and costs increases is already covered by the Article VIII regulations (16 New York Codes, Rules, and Regulations (NYCRR) 1100-10.2(b)) which requires that the security be reviewed every fifth year, thereby eliminating the need for a 2% escalator and increased contingency.

There is no basis to require more financial security than what is already required by the ORES regulations. See Exhibit 24, Local Laws and Ordinances, for more information regarding waiver requests.

(7) Schedule

The Facility will be shut down, de-energized, and disconnected from the gen-tie line at the substation prior to the commencement of decommissioning activities. The Applicant will coordinate with NYPA and local utilities, if applicable, for de-energization efforts to ensure disruption to the overall electric utility system does not occur. The Applicant will provide notice by mail to the participating landowners, adjacent landowners, NYSDAM, the Towns of Root and Canajoharie, and ORES prior to the commencement of decommissioning activities.

The estimated time frame for decommissioning, demolition, and dismantling of the Facility and site restoration is twelve months from the date of abandonment or discontinuance of operations. Soil disturbance will not take place during months when the soil is typically frozen, but removal of above ground equipment may occur during winter months. This decommissioning timeline is consistent with the local laws, which require that decommissioning be completed within 12 months (Town of Root Solar Energy Facilities Law, Section 9.3(B); Town of Canajoharie Solar Energy Law, Section 12(B). If this timeline needs to be extended due to a delay beyond the control of Applicant including, but not limited to, inclement weather conditions, planting requirements, equipment failure, or the availability of equipment or personnel to support decommissioning, the Applicant will coordinate with the Towns and DPS. The Applicant will engage one or more reputable contractors to perform the Facility decommissioning. The decommissioning and restoration work will generally involve the following:

- Planning, permitting, and consultation;
- Disassemble and remove PV panels, inverter stations, combiner boxes and switchboards;
- Removal of all transformers low voltage above ground direct current (DC) cable, and applicable underground medium voltage alternating current (AC) cables, and transport to a licensed facility for draining and disassembly;
- Remove circuit breakers and transport for degassing and disassembly;
- Dissemblance of substation steel and components, and tracker steel components;
- Removal of access roads, perimeter fencing, and tracker I-beam posts;

- Collection and disposal of non-recyclable materials (loose debris, road filter fabric, select substation components, above ground polyvinyl chloride (PVC) conduits);
- Re-vegetation, regrading and decompaction as needed; and
- Clean up and inspection.

23(b) Site Restoration, Decommissioning, and Guaranty/Security Agreements on Property Not Owned by Applicant

This Project is a temporary use of land. Facility components will be located on privately-owned land pursuant to lease, option, or easement agreements with landowners and all such agreements contain a provision on decommissioning and site restoration. The Decommissioning and Site Restoration Plan, provided as Appendix 23-1, details the site restoration, decommissioning, and financial assurance agreements for the Facility Site.

As noted above, the Applicant will work with the Towns of Root and Canajoharie on an acceptable form of financial assurance. The financial assurance will remain active for the life of the Facility until decommissioning. The Towns of Root and Canajoharie will hold the financial assurance and the Applicant will execute a decommissioning agreement with the Towns of Root and Canajoharie to establish a right for them to draw on the financial assurance should the Applicant fail to complete decommissioning and restoration activities.

The Applicant will provide notification to landowners, the Towns of Root and Canajoharie, and ORES at least 14 days prior to the commencement of decommissioning activities. Notification may be in the form of letters, newspaper notices, and updates on the Flat Creek Solar Project website.

Portions of the Facility Site that have been excavated and backfilled will be graded as previously described to restore land contours as near as practicable to pre-construction conditions. Upon decommissioning, restoration of agricultural land within the Facility Site will be performed in accordance with landowner agreements and NYSDAM (NYSDAM Guidelines for Agricultural Mitigation for Solar Energy Projects (NYSDAM 2019). Additionally, all ground that has been compacted throughout as part of the Facility will be decompacted to a depth of 18 inches as required by the NYSDAM guidelines. Disturbed areas not planned for agricultural purposes will be revegetated by the Applicant using native seed mix that is appropriate for the Facility Site. All areas will be returned to pre-construction condition, to the maximum extent

practicable, through grading, backfilling, and stabilization (as applicable). All underground components will be removed to a depth of 48 inches.

23(c) Gross and Net Decommissioning and Site Restoration Estimate

The Decommissioning and Site Restoration Plan included as Appendix 23-1, provides a gross and net decommissioning and site restoration estimate, including a 15 percent contingency of the gross decommissioning costs. The estimate includes the anticipated cost of decommissioning and restoration activities associated with each Facility component, as well as projected salvage value.

References

New York State Department of Agriculture and Markets. (2019). *Guidelines for Solar Energy Projects – Construction Mitigation for Agriculture Lands* (Revision 10/18/2019). Available at: https://agriculture.ny.gov/system/files/documents/2019/10/wind_farm_guidelines.pdf. Accessed June 2024.