

**ConnectGen Chautauqua County LLC** 

South Ripley Solar Project Matter No. 21-00750

# 900-2.24 Exhibit 23

# **Site Restoration and Decommissioning**

Supplement

REDACTED

## TABLE OF CONTENTS

EXHIBIT	23 SITE RESTORATION AND DECOMMISSIONING	1
(a)	Decommissioning and Site Restoration Plan	1
(b)	Site Restoration, Decommissioning and Security Agreements on Land Owned by Others	4
(c)	Gross/Net Decommissioning and Site Restoration Cost Estimates	5
REFERE	NCES	7

## LIST OF TABLES

Table 23-1. Decommissioning Performance Criteria	1
Table 23-2. Summary of Decommissioning Cost Estimate	6

### LIST OF APPENDICES

Appendix 23-A Decommissioning Plan

### **EXHIBIT 23 SITE RESTORATION AND DECOMMISSIONING**

#### (a) Decommissioning and Site Restoration Plan

The Applicant anticipates a Facility lifespan of up to 35 years. After this time, the Facility will be decommissioned, and the areas hosting Facility components will be restored. In the event the Facility reaches its end of life without expectation of returning to operation, ceases operation, or if initial construction cannot be completed, the Facility will be decommissioned per the Decommissioning and Site Restoration Plan, a draft of which is provided in this Application as Appendix 23-A.

Decommissioning will be conducted in accordance with the following standards and criteria:

Consideration	Performance Standard or Criteria
Site Safety and Removal of Hazardous	The decommissioning of the Facility shall be supervised and carried out
Conditions	by trained personnel familiar with the risks associated with the
	decommissioning of electrical and/or potentially hazardous equipment.
	During the decommissioning process, transformers and switchgear
	would be drained of fluids before transport, as applicable, and such
	materials will be disposed of off-site at appropriate facilities. During
	decommissioning, all non-recyclable waste materials will be disposed of
	in accordance with state and federal law in an approved licensed solid
	waste facility.
Environmental Impacts	The Applicant commits to obtaining proper permits and implementing
	plans to address potential environmental impacts associated with
	decommissioning. Spill control and countermeasures will be outlined in
	the Facility's SPCC Plan (Appendix 13-F). The Applicant also commits
	to utilizing stormwater and erosion control measures like those used
	during the construction phase. These methods are included in the
	Facility's SWPPP (Appendix 13-E). Stormwater and erosion control
	measures will remain in place until the restored site is stabilized.
	Additional potential impacts from decommissioning efforts include
	elevated sound levels; however, such activities will occur during daylight
	hours and will conform to any local sound ordinances and applicable
	restrictions.

Table 23-1. Decommissioning Performance Criteria

Consideration	Performance Standard or Criteria
Aesthetics	All aboveground features will be removed, including the project collector
	substation, as described in Appendix 23-A. However, the POI switchyard
	or substation equipment, 34.5kV underground collection lines, access
	roads (upon landowner request), and/or support structures that may be
	deemed necessary for National Grid's continued operation of the
	transmission infrastructure located in Ripley may not be removed. The
	Facility Site will be graded to meet adjacent ground contours, to the
	extent practical. Disturbed areas will be seeded using native plant
	material and seeds appropriate for the area. Additional plantings may
	occur in agricultural areas in coordination with the landowner or
	agriculture producer.
Recycling	Most of the materials used for the Facility are reusable or recyclable,
	including PV modules. Facility components with no wholesale reusable
	value will be salvaged and sold as scrap for recycling or disposed of at
	an approved offsite licensed solid waste disposal facility. Any materials
	remaining due to decommissioning will be removed and disposed of off-
	site at appropriate local facilities. During the Facility's lifespan it is
	anticipated that technology will continue to advance and new recycling
	and reuse practices will be available. The Applicant will determine the
	best method of disposal for solar modules and additional components at
	the time of decommissioning and in accordance with manufacturer's
	guidelines and State, local, and federal regulations. See Preliminary
	Decommissioning and Site Restoration Plan (Appendix 23-A) for
	additional discussion of salvage details.
	Please note that the Salvage Values associated with the Preliminary
	Decommissioning and Site Restoration Plan (Appendix 23-A) were
	updated for October 2021 values and are inflated due to the COVID-19
	pandemic and material demands. These values are subject to change at
	the time of decommissioning and will be updated in subsequent reporting
	updates as required by the Applicant's Host Community Agreement with
	the Town of Ripley.

Consideration	Performance Standard or Criteria
Future Uses for the Site	The Applicant will perform decommissioning in a manner consistent with
	allowable future intended use of land within the Facility Site. All
	components will be removed to a minimum depth of 48 inches within
	agricultural land and 36 inches in non-agricultural land, or the depth of
	bedrock in accordance with 94-c regulations. Restoration measures will
	be compliant with the 2019 NYSDAM Guidelines for Agricultural
	Mitigation for Solar Energy Projects (NYSDAM, 2019) and will be carried
	out in accordance with landowner agreements.
Funding	Financial assurance will be provided prior to the start of construction in
	the form of a letter of credit or other form of security to be coordinated
	with the Town. The amount in the letter of credit or other security will be
	based on a Professional Engineer's certified estimate of
	decommissioning cost at the time of decommissioning (as regulations
	and methods may change from construction to decommissioning), in the
	amount of one hundred percent (100%), including restoration.
Schedule	Decommissioning will begin within 12 months of the Facility ceasing
	operation. Decommissioning of the Project will be conducted within 40
	weeks generally using the following sequence:
	(1) Pre-dismantling activities
	a. Prepare access roads for equipment removal
	b. De-energize solar arrays
	c. Install temporary construction site control devices
	(2) Equipment dismantling and removal
	a. Remove panels and wiring
	b. Remove racking and piles
	c. Remove inverters/transformers
	d. Remove underground and overhead cabling
	e. Remove fencing and access roads
	f. Remove collection substation and BESS
	(3) Site rehabilitation and restoration

#### (b) Site Restoration, Decommissioning and Security Agreements on Land Owned by Others

All Facility components will be located on private land under lease, option, or easement agreements with the landowners and all such agreements contain a provision on decommissioning and site restoration. The Decommissioning and Site Restoration Plan (Appendix 23-A) addresses the decommissioning process and funding methods and includes a detailed cost estimate. Utility-scale solar facilities typically have a life expectancy of 20 to 40 years (NYSUN, 2016), with the Facility having an anticipated life expectancy of up to 35 years. Decommissioning may be triggered if the Facility is non-operational for a continuous period of 12 months. At the end of the Facility's life or cessation of operations, decommissioning will restore the land used for the Facility to pre-construction conditions, to the maximum extent practicable. The Applicant will provide notification to the Town, County, impacted landowner(s), and all other required parties at least two (2) weeks prior to the commencement of any decommissioning activities or site restoration. Notification may be in the form of letters, newspaper notices, and updates on the Project website.

Decommissioning will consist of the following activities:

- All above-ground structures, including PV panels, racking structures, inverters, fencing, above-ground collection cables and poles, energy storage systems, and the collection substation, will be disassembled and transported offsite for reuse, recycling, reclamation, or sale. It is assumed that the mentioned equipment can be salvaged as raw materials and stripped-down parts. The POI switchyard will remain in place if deemed necessary for National Grid's continued operation of the transmission infrastructure located in the Town of Ripley. Support structures connecting the collection substation to the POI switchyard will be removed, unless deemed necessary for National Grid's continued operation of its infrastructure. The removal and disposal of all components will comply with applicable federal, state, and local regulations.
- Access roads will be removed, de-compacted, and graded to reflect pre-construction conditions. Culverts and drainage infrastructure will also be removed; streams or drainage channels will be restored to preexisting elevations. Where appropriate, the Applicant will leave in place any access roads, fences, gates, buffer plantings, culverts, and/or buildings which underlying landowners have sought to retain following decommissioning of the Facility.
- All below ground infrastructure including buried collection lines at a depth of up to 48 inches in agricultural land and 36 inches in non-agricultural land will be removed.
- The Applicant will adhere to the 2019 NYSDAM Guidelines to the maximum extent practicable.

In addition to providing detailed information concerning the site decommissioning process, the Decommissioning and Site Restoration Plan includes:

• A detailed cost estimate to support the proposed decommissioning and site restoration funding upon the cessation of operation of the Facility based on the expected equipment to be used;

- Details of the methodology for removal of the equipment, salvage value, and wage assumptions for future equipment removal;
- Site rehabilitation and restoration practices;
- Environmental protection measures; and
- Decommissioning schedule and public notification.

Consistent with the Town of Ripley code and the South Ripley Solar Host Community Agreement (approved by the Town of Ripley on December 30, 2021), financial assurance will be provided prior to the start of operation in the form of a letter of credit or other form of security reasonably accepted by the Town. The amount of the letter of credit or other security will be in the amount of 100% of the cost of decommissioning, including restoration. The value of the financial assurance will be based on a Professional Engineer's certified estimate of decommissioning cost at the time of decommissioning (as regulations and methods may change from construction to decommissioning). When the Applicant posts financial assurance, it will provide the Town with clear instructions on how to access the financial assurance should it become necessary. The entire decommissioning financial assurance amount will be allocated to the Town of Ripley. The Plan and amount of financial security will be updated every fifth year, considering inflation and other cost increases, and specifying changes by a professional engineer with solar experience. The Decommissioning and Site Restoration Plan will be binding upon the Applicant, or any of its successors, or assignees.

Former agricultural lands will be returned to their former state where suitable conditions exist. Restoration of agricultural land will be performed in accordance with landowner agreements and NYSDAM's Guidelines for Agricultural Mitigation for Solar Energy Projects (NYSDAM, 2019). Disturbed areas not used for agricultural purposes will be revegetated by the Applicant using native plant material and seeds appropriate for the Facility Site or allowed to revegetate naturally. Portions of the Facility intended to return to agricultural production will be re-seeded by the landowner. In addition to seeding, these areas will be returned to pre-construction condition, to the maximum extent practicable, through grading, backfilling, and stabilizing.

#### (c) Gross/Net Decommissioning and Site Restoration Cost Estimates

Table 23-2 below summarizes the gross and net decommissioning and site restoration estimate, including a 15% contingency of the gross decommissioning costs. As stated in Section (b) above, the Decommissioning and Site Restoration Plan (Appendix 23-A) includes a more detailed cost estimate in Section 10.

# Table 23-2. Summary of Decommissioning Cost Estimate

### BEGIN CONFIDENTIAL INFORMATION<

Description	Total Cost (\$)
Estimated Decommissioning Costs (Gross)	< >
Contingency (15%)	< >
Estimated Salvage Value	< >
Total Net Decommissioning Costs	<

>END CONFIDENTIAL INFORMATION

### REFERENCES

New York State Department of Agriculture and Markets. 2019. Guidelines for Solar Energy Projects - ConstructionMitigationforAgriculturalLands(Revision10/18/2019).Accessibleat:<a href="https://agriculture.ny.gov/system/files/documents/2019/10/solar\_energy\_guidelines.pdf">https://agriculture.ny.gov/system/files/documents/2019/10/solar\_energy\_guidelines.pdf</a> (Accessed January 2021).

NYSUN. 2020. New York Solar Guidebook for Local Governments – Decommissioning Solar Panel Systems. Accessible: <u>https://www.nyserda.ny.gov/All%20Programs/Programs/Clean%20Energy%20Siting/Solar%20Guidebook</u> (Accessed January 2021).