



Solar System Decommissioning Plan Without Scrap Value

Decommissioning costs are equal for all three sites listed below:

- NSF Enfield Site 1, LLC
- NSF Enfield Site 2, LLC
- NSF Enfield Site 3, LLC

Synopsis

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A. Solar System Lifespan

Owner of Sites located at 00 Applegate Road South, Ithaca, NY 14850 (“Project”), to be subdivided, is responsible for decommissioning the Project. Commercial-scale solar fields are designed for a minimum expected operational life of 25 years but may operate for 40 years or more.

As the solar field approaches the end of its operational life, it is expected that technological advances will make more efficient and cost-effective solar arrays that will economically drive the replacement of the existing solar arrays.

The decommissioning plan provides financial assurance that there will be sufficient funds available for decommissioning and site restoration when the solar arrays have reached the end of their useful life.

B. Cost of Decommissioning

The cost of decommissioning a solar array more than 20 years into the future cannot be known with exact certainty.

NSF Enfield Decommissioning Costs Per 5 MW System

#	Task	Estimated Cost
D1	Remove Electrical Components, Racks & Rack Wiring	\$ 35,000
D2	PV Module Dismantling Removing Panels	\$ 45,000
D3	Breakup and Remove Concrete Pad	\$ 25,000
D4	Remove Cable	\$ 30,000
D5	Remove Fence	\$ 37,500
D6	Grading/Roadway	\$ 10,000
D7	Seed Disturbed Area	\$ 5,000
	Cost: Labor and Equipment to Decommission	\$ 187,500
	Total After 20 Years (2% Inflation Rate)	\$ 278,615

Three 5 MW systems, each with a Current Net Cost of \$187,500 per system, totaling \$562,500.

C. Ensuring Funds for Decommissioning and Site Restoration

The estimated cost of decommissioning as provided above will be updated upon commencement of commercial operations.

On or prior to December 31 of each calendar year beginning with the calendar year in which the Project commences commercial operations through and including calendar year 10, an amount based on the estimate provided herein, if any, to be updated upon commencement of commercial operations, shall be reserved for decommissioning and site restoration.

Such annual amounts may be in the form of a performance bond, surety bond, letter of credit, parental guaranty, or other form of financial assurance acceptable to the Siting Council (the "Financial Assurance").

On or prior to the end of calendar year 15 of the Project's operation, the estimated costs of decommissioning will be reassessed and an amount equal to the balance of such updated estimated cost of decommissioning less the amounts reserved, if any, will be reserved for decommissioning and site restoration.

The Financial Assurance shall be kept in place until such time as the decommissioning work has been completed, provided, however, to the extent available as liquid funds, the Financial Assurance may be used to offset the costs of the decommissioning.

D. Solar System Decommissioning Description

Decommissioning and restoration activities will adhere to the requirements of appropriate governing authorities, and will be in accordance with applicable federal, state, and local permits.

The decommissioning and restoration process comprise removal of above-ground structures; grading, to the extent necessary; restoration of topsoil (if needed) and seeding.

The process of removing structures involves evaluating and categorizing all components and materials into categories of recondition and reuse, salvage, recycling, and disposal.

The above-ground structures and below-ground structures are collectively referred to herein as the “Project Components.”

Temporary erosion and sedimentation control best management practices will be used during the decommissioning phase of the Project.

Control features will be regularly inspected during the decommissioning phase and removed at the end of the process.

D.1. Removal of Electrical Components, Racks & Rack Wiring

Control cabinets, electronic components, and internal cables will be removed. The panels, racks and inverters will be lowered to the ground where they may be transported whole for reconditioning and reuse or disassembled/cut into more easily transportable sections for salvageable, recyclable, or disposable components.

D.2. PV Module Dismantling & Panel Removal

Solar photovoltaic modules used in the Project are manufactured within regulatory requirements for toxicity based on Toxicity Characteristic Leaching Procedure (TCLP). The solar panels are not considered hazardous waste.

The panels used in the Project will contain silicon, glass, and aluminum which have value for recycling. Modules will be dismantled and packaged per manufacturer or approved recyclers specifications and shipped to an approved off-site approved recycler.

D.3. Breakup and Remove Concrete Pads or Ballast

Pads will be excavated to a depth sufficient to remove all anchor bolts, rebar, conduits, cable, and concrete to a depth of 24 inches below grade. The remaining excavation will be filled with clear sub-grade material of quality comparable to the immediate surrounding area. The sub-grade material will be compacted to a density similar to surrounding subgrade material.

All unexcavated areas compacted by equipment used in decommissioning shall be de-compacted in a manner to adequately restore the topsoil and sub-grade material to the proper density consistent and compatible with the surrounding area.

Concrete slabs used as equipment pads will be broken and removed to a depth of two feet below grade. Clean concrete will be crushed and disposed of off-site and/or recycled and reused either on or off-site.

D.4. Electrical Cable Removal

Electric wire made from copper or aluminum has value for recycling. DC wiring can be removed manually from the panels to the inverter. Underground wire in the area of the array will be pulled and removed from the ground. Overhead cabling for the interconnection will be removed from poles. All wire will be sent to an approved recycling facility.

D.5. Fencing and Racking Removal

All racking and fencing material will be broken down into manageable units and removed from facility and sent to an approved recycler. All racking posts driven into the ground will be pulled and removed.

D.6. Grading and Road Removal

During decommissioning, the processed stone access roads will be maintained for access and future use.

D.7. Seed Disturbed Areas

Following decommissioning activities, the sub-grade material and topsoil from affected areas may need to be de-compacted and restored to a density and depth consistent with the surrounding areas. If the subsequent use for the Project site will involve agriculture, a deep till of the Project site may be undertaken.

The affected areas will be inspected, thoroughly cleaned, and all construction-related debris removed. Disturbed areas will be reseeded to promote re-vegetation of the area unless the area is to be immediately redeveloped.

In all areas, restoration shall include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure establishment of suitable grasses and forbs, and to control noxious weeds and pests.

Decommissioning and Restoration Terms

The Project shall be decommissioned within 360 days of the end of the Project's operational life.

Areas disturbed during the decommissioning phase will be with seeded with a drought-tolerant grass seed mix appropriate for the area unless such areas are being immediately redeveloped for other uses.

The gravel access road will remain intact.