# New York Community Solar Facility Decommissioning Plan

March 2023

Prepared For:

LANSING COMMUNITY SOLAR, LLC

GENIE SOLAR ENERY

5.00 MW AC/ 6.252 MW DC Solar Project

Lansingville Road, Lansing, NY 14882

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#### **Decommissioning Plan for Solar Facility**

#### 1. <u>Introduction</u>

Lansing Community Solar, LLC (the "**Project Company**") proposes to build a photovoltaic (PV) solar facility ("**Solar Facility**") under New York State's Community Solar initiative. The Solar Facility is planned to have a cumulative nameplate capacity of 6.252 megawatts (MW DC) and be built on approximately 18.0 acres of private land located off Lansingville Road, Lansing, NY 14882 with Tax Map No. 16.-1-19.2 (the "**Facility Site**").

The proposed Solar Facility will have an expected operating life of at least 40 years limited only by the land lease under which it operates. While economically unlikely for reasons outside the scope of this document, were the Solar Facility to cease operations, we are prepared to offer the following Decommissioning Plan (this "**Plan**"). This Plan provides an overview of activities that will occur during the decommissioning phase of the Solar Facility, including activities related to the restoration of land, the management of materials and waste, projected costs, and sets forth the terms by which such activities shall be carried out, including the payment and disposition of certain funds in connection therewith.

The Plan assumes the Solar Facility will be dismantled, and the applicable portion of the Facility Site restored to a state as close as reasonably possible to its pre-construction condition (normal wear and tear excepted) within 150 days following the permanent cessation of operations of such Solar Facility. The Plan also covers the case of the abandonment of a Solar Facility, for any reason, in case of early termination. The lack of production for 6 months (or for 12 of any 18 months) and the violation of any site plan conditions, the lack of a current permit or violation of permit conditions, including, but not limited to maintenance of any required decommissioning bond or security, shall be an event requiring decommissioning and the Solar Facility would be considered "Abandoned". Except if such status is caused by events outside of System Operator's reasonable control. Examples of this include Utility Initiated shutdowns which may occur (a) to eliminate conditions that constitute a potential hazard to Utility personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Utility system; (c) for routine maintenance, construction, and repairs on the Utility EPS.

Decommissioning of the Solar Facility will include the disconnection of the Solar Facility from the electrical grid and the removal of all Solar Facility components, including:

- Photovoltaic (PV) modules, panel racking and supports;
- Inverter units, substation, transformers, and other electrical equipment;
- Access roads, wiring cables, perimeter fence; and,
- Concrete foundations.

At the time of decommissioning, if the Landowner (as defined in Section 2 below) desires to keep any access roads, fencing, and trees installed as part of the Solar Facility, Landowner shall provide written notice of the same to the Project Company and the Project Company will not be obligated to remove such components. Subject to mutual

agreement by the Landowner and Project Company, responsibility of such improvements shall pass to the Landowner, who will be solely liable for such improvements, including maintenance. The Project Company shall have no further maintenance or removal obligations.

This decommissioning plan is based on current best management practices and procedures. Activities carried out in connection with this Plan should be in conformance with any applicable new standards and emergent best management practices at the time of decommissioning. All applicable permits will be obtained prior to decommissioning.

#### 2. <u>The Proponent</u>

The Project Company will (i) manage and coordinate the approvals process in connection with the construction of the Solar Facility, and (ii) obtain all necessary regulatory approvals that vary depending on the jurisdiction, project capacity, and site location. The Project Company should strive to build a long-term relationship with the community hosting a Solar Facility and will be committed to the safety, health, and welfare of the townships.

Contact information for the proponent is as follows:

Project Company: <u>Lansing Community Solar, LLC</u>

Contact: Nathan Knapke, Genie Solar Energy

Address: <u>520 Broad Street</u>

Newark, NJ 07102

**Email:** nknapke@geniesolarenergy.com

**Project Information:** 

Address: Lansingville Road, Lansing, NY 14882

Coordinates: <u>Latitude 42.591761; Longitude -76.561025</u>

**Project Size:** <u>5.00 MW AC / 6.252 MW DC</u>

**Landowner:** David and Frank Turek

Own/Lease: Lease

#### 3. <u>Decommissioning of the Solar Facility</u>

Within 150 days following the permanent cessation of operations, including in the case of early termination, of the Solar Facility (the "**Decommissioning Phase**"), Project Company or its successors and/or assigns shall remove the installed components of each such Solar Facility, and use commercially reasonable measures to restore the applicable portion of the Facility Site to a state as close as reasonably possible to its pre-construction condition, normal wear and tear excepted (the "**Decommissioning Activities**"). All Decommissioning Activities will be done in accordance with any then-applicable regulations and manufacturer recommendations. All applicable permits required in connection with the Decommissioning Activities will be acquired.

#### 3.1 Equipment Dismantling and Removal

Generally, the decommissioning of a Solar Facility proceeds in the reverse order of the installation.

- 1. The Solar Facility shall be disconnected from the utility power grid.
- 2. PV modules shall be disconnected, collected, and disposed at an approved solar module recycler or reused / resold on the market.
- 3. All aboveground and underground electrical interconnection and distribution cables shall be removed and disposed off-site by an approved facility.
- 4. Galvanized steel PV module support and racking system support posts shall be removed and disposed off-site by an approved facility.
- 5. Electrical and electronic devices, including transformers and inverters shall be removed and disposed off-site by an approved facility.
- 6. Concrete foundations shall be removed and disposed off-site by an approved facility.
- 7. Fencing shall be removed and will be disposed off-site by an approved facility.

#### 3.2 **Environmental Effects**

Decommissioning Activities, particularly the removal of project components could result in environmental effects similar to those of the construction phase. For example, there is the potential for disturbance (erosion/sedimentation/fuel spills) to adjacent watercourses or significant natural features. Mitigation measures similar to those employed during the construction phase of the Solar Facility will be implemented as required by applicable law or regulation. These mitigation measures will remain in place until the applicable portion of the site is stabilized in order to mitigate erosion and silt/sediment runoff and any impacts on the significant natural features or water bodies located adjacent to the Facility Site as required by law or permit. Any surface restoration may require permit coverage for soil disturbance in effect at the time of decommissioning, whether it be of Town or State level.

Road traffic will temporarily increase due to the movement of decommissioning crews and equipment. There may be an increase in particulate matter (dust) in adjacent areas during the Decommissioning Phase. Decommissioning activities may lead to temporary elevated noise levels from heavy machinery and an increase in trips to the project location. Work will be undertaken during daylight hours and conform to any applicable restrictions.

## 3.3 Site Restoration

During the Decommissioning Phase of the Solar Facility, Project Company or its successors and/or assigns shall restore the applicable portion of the Facility Site to a state as close as reasonably possible to its pre-construction condition.

Except to the extent requested by the Landowner and allowed by the Town Planning Board, all project components (discussed in **Table 1**) will be removed. Decompaction of soils up to 18 inches within the array area and removal of any installed materials to 4 feet shall occur. The access road outside of the fence line leading to the facility may remain in place at the discretion of the Landowner. Site restoration shall generally follow the New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Solar Energy Projects, as applicable. Rehabilitated lands will be seeded with a non-invasive and native species to help stabilize soil conditions, enhance soil structure, and increase soil fertility.

#### 3.4 Managing Materials and Waste

During the Decommissioning Phase of the Solar Facility a variety of excess materials and wastes (listed in **Table 1**) will be generated. Most of the materials used in a Solar Facility are reusable or recyclable and some equipment may have manufacturer take-back and recycling requirements. Any remaining materials will be removed and disposed of off-site at an appropriate facility. The Project Company will establish policies and procedures to maximize recycling and reuse and will work with manufacturers, qualified local subcontractors, and waste firms to segregate material to be disposed of or recycled.

The Project Company will be responsible for the logistics of collecting and recycling the PV modules and will make commercially reasonable efforts to minimize the potential for modules to be discarded in the municipal waste stream. Currently, some manufacturers and new companies are looking for ways to recycle and/or reuse solar modules when they have reached the end of their lifespan. Due to a recent increase in the use of solar energy technology, a large number of panels from a variety of projects will be nearing the end of their lifespan in 15 - 25 years. It is anticipated there will be more recycling options available for solar modules at that time. The Project Company shall determine the method of disposing of the components of the Solar Facility using industry standards at the time of decommissioning. Project Company may sell all such materials for reuse, salvage or scrap in addition to other available disposal options.

Project Company will have no responsibility for any of the components, equipment or materials described herein that are owned by the utility, as opposed to Project Company. All such property of the utility will be the responsibility of the utility.

**Table 1: Management of Excess Materials and Waste** 

Material / Waste	Means of Managing Excess Materials and Waste
PV panels	If there is no possibility for reuse, the panels will either be returned to the manufacturer for appropriate disposal or will be transported to a recycling facility where the glass, metal and semiconductor materials will be separated and recycled, or otherwise to an appropriate disposal facility.
Metal array mounting racks and steel supports	These materials will be disposed off-site at an appropriate disposal facility.
Transformers and substation components	The small amount of oil from the transformers will be removed on-site to reduce the potential for spills and will be transported to an appropriate facility for disposal. The substation transformer and step-up transformers in the inverter units will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Inverters, fans, fixtures	The metal components of the inverters, fans and fixtures will be disposed of or recycled, where possible. Remaining components will be disposed of in accordance with the standards of the day.
Gravel (or other granular)	It is possible that the Town may accept uncontaminated material without processing for use on local roads, however, for the purpose of this report it is assumed that the material will be removed from the project location by truck to a location where the aggregate can be processed for salvage. It will then be reused as fill for construction. It is not expected that any such material will be contaminated.
Geotextile fabric	It is assumed that during excavation of the aggregate, a large portion of the geotextile will be "picked up" and sorted out of the aggregate at the aggregate reprocessing site. Geotextile fabric that is remaining or large pieces that can be readily removed from the excavated aggregate will be disposed of off-site at an appropriate disposal facility.
Concrete inverter / transformer Foundations	Concrete foundations will be broken down and transported by certified and licensed contractor to a recycling or appropriate disposal facility.
Cables and wiring	The electrical line that connects the substation to the point of common coupling will be disconnected and disposed of at an approved facility. Support poles, if made of untreated wood, will be chipped for reuse or otherwise disposed of at an appropriate disposal facility. Associated electronic equipment (isolation switches, fuses, metering) will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Fencing	Fencing will be removed and recycled at a metal recycling facility or otherwise disposed of at an appropriate disposal facility.
Debris	Any remaining debris on the site will be separated into recyclables/residual wastes and will be transported from the site and managed as appropriate.

#### 3.5 <u>Decommissioning Notification</u>

Prior to commencement of decommissioning activities, the Project Company shall notify the Town and the Landowner. Federal, state, and local authorities will be notified as required by permit or otherwise by law to discuss the potential approvals required to engage in decommissioning activities.

#### 3.6 Approvals

Well-planned and well-managed renewable energy facilities are not expected to pose environmental risks at the time of decommissioning. Decommissioning of a Solar Facility will follow standards of the day. The Project Company, or Landowner if they become the owner of the Solar Facility, shall obtain all required federal, state, and local permits prior to decommissioning. All Decommissioning Activities shall be conducted in accordance with all applicable laws at the time of such activities.

#### 4. Costs of Decommissioning

A New York State Licensed Professional Engineer prepared an itemized cost estimate to decommission a 6.252 MW DC Solar Facility, based on guidance from NYSERDA and estimates from the Massachusetts solar market, a mature solar market with experience decommissioning projects. The cost estimate is provided under separate cover. The salvage values of valuable recyclable materials (aluminum, steel, copper, etc) are not factored into the decommissioning cost estimate. The scrap value will be determined on current market rates at the time of salvage. In the future, when the decommissioning and restoration cost is reevaluated, the decommissioning amount may be reduced by the amount of the estimated salvage value of the Solar Energy System, with the Town's approval. The decommissioning estimate does not take into consideration inflationary rise since the costs will be re-evaluated every three years, as stated below in Section 5.

#### 5. <u>Decommissioning Surety</u>

Financial surety for the purpose of decommissioning activities in accordance with this plan will be provided through a bond, letter of credit, or an escrow payment, as approved by the Planning Board, and to be established prior to the issuance of the building permit. The amount of financial surety will be calculated at a minimum of 125% of the approved estimated cost of decommissioning and restoration. At least once every three years after issuance of the building permit, the Project Company shall provide updated certified cost estimate for decommissioning, removal, restoration, and if the resulting 125% cost requirement shows that the existing financial surety is insufficient, then the Project Company shall update such surety or see to its replacement or supplementation on an amount to equal such updated minimum 125% cost number. This three-year update will account for increases in the cost of decommissioning. A decommissioning cost estimate is provided under separate cover.

#### 6. Municipal Filing

A copy of this Plan shall be filed by the Project Company in the office of the County Clerk in the register of deeds and indexed by the Landowner's name prior to the final inspection of the Solar Facility by the Town.

### 7. Modifications

No modifications, waivers, or changes shall be made to the terms and conditions of this Agreement except as may be mutually agreed upon in writing by both the Town and the Project Company, such agreement shall not be unreasonably withheld.

# 8. <u>Assignment</u>

In the event Project Company transfers the Solar Facility to any third party, including any affiliate of the Project Company, Project Company's rights and obligations under this Plan shall be assigned in their entirety to such third party, who shall be considered the "Project Company" after the date of such assignment. The Project Company shall notify the Town of its intent to assign this Plan to the third party. The assignment will be subject to the Town's approval which shall not to be unreasonably withheld.

#### 9. <u>Miscellaneous</u>

Town and Project Company each binds itself and all their respective successors and assigns with respect to all covenants of this Plan. This Plan represents the entire agreement between the Town and the Project Company with respect to the decommissioning of the Solar Facility. This Plan may be executed in multiple counterparts, each of which shall be considered an original and all of which taken together shall constitute one and the same instrument. Copies of the executed signature page of this Agreement transmitted in PDF format shall be considered delivery of the original.