



Decommissioning & Site Restoration Plan

March 2023



Old Myers Solar | Myers Corners Road, Wappinger, New York

Prepared For:

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ATTACHMENTS

Attachment A – Decommissioning Estimate



1.0 Background

On behalf of NY Solar 1001 LLC (Lightstar Renewables, LLC) (Operator/Owner), TRC has prepared this preliminary Decommissioning Plan (Plan) for the proposed Old Myers Solar Project (the facility) located on lands west of Myers Corners Road in the Town of Wappinger, Dutchess County, New York. The facility consists of an approximately 2.995-megawatt (MW) direct current (DC) solar power generation facility surrounded by a perimeter metal fence scheduled to start construction in 2023.

The intent of this Plan is to provide a general scope of decommission work as well as a construction cost estimate to act as a mechanism for decommissioning assurance. This Plan outlines the decommission activities required to remove the solar array and associated electrical and interconnection equipment, remediate disturbed soil and vegetation, and return the site to a condition consistent with pre-development conditions that will allow future use.

The decommissioning cost estimate included as **Attachment A**, was prepared under the supervision of a professional engineer licensed in the State of New York. The opinion of probable costs is based on our experience in the design and construction of solar energy facilities and is subject to final engineering design. Costs assume the work will be performed by a contractor experienced in the decommissioning and deconstruction of solar facilities and have been adjusted to account for future inflation.

Typical solar modules (panels) have a useful life of up to 35-years; however, the design and development of the facility will allow for components to be upgraded while only causing minor interruptions (i.e. individual panels can be removed/replaced from installed support racking). Therefore, it is anticipated that the operational life of the array will be longer than that of originally installed equipment. The facility's maximum lease term is 45-years and the Owner/Operator anticipates that the array will be operational for a minimum of 30-years.

1.1 Facility Description

The proposed facility will be constructed on farmland with existing topography that is well suited for solar array development. Project components are planned to consist of the following site features:

- 4,000-linear feet of perimeter chain link fence encompassing approximately 11.1-acres;
- 230 linear of foot gravel access road
- 4,992 photovoltaic (PV) solar modules (i.e., "panels");
- Single-axis tracker racking frames and associated tracking motors;
- One concrete equipment pad supporting a GSU transformer and inverter units;
- 5,250-linear feet of underground medium voltage wiring, additional underground low voltage wiring, and conductors; and
- 300 linear feet of medium voltage overhead generation lead and 6 utility poles.



2.0 Decommissioning Activities

Facility decommissioning will consist of the following major steps and the removal of all structures to a minimum depth of 48-inches below grade:

- Mobilization and Erosion & Sedimentation Control Installation;
- Dismantle and Demolish;
- Disposal and/or Recycle;
- Restoring the site to grades that occurred prior to the start of decommissioning; and
- Site Restoration and Stabilization.

2.1 Dismantle, Demolish, and Disposal or Recycle

A significant portion of the photovoltaic system at the Facility will include recyclable or re-saleable components, which include copper, aluminum, galvanized steel, concrete, electric motors, and PV modules. Due to their resale value, these components will be dismantled and disassembled rather than being demolished and disposed.

Prior to commencing decommissioning, the Owner/Operator will coordinate with the local utility company to determine schedule and procedure for disconnecting facility infrastructure from the point of interconnection. Once disconnection is completed, all facility electrical connections will be disconnected and tested to confirm the system is de-energized prior to starting removal. The contractor will then mobilize to the site and begin to establish erosion and sedimentation controls. Prior to any earth disturbance, the Town of Wappinger Building Department and Town Engineer must be contacted for coordination and any required permitting. Coverage under a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity and preparation of a SWPPP is required.

Prior to any earth disturbance, perimeter erosion and sedimentation controls shall be installed in accordance with Chapter 4 of the current version of *New York State Stormwater Management Design Manual*.

Decommissioning activities shall be undertaken by qualified individuals in accordance with the Decommissioning Plan. All electrical connections to the PV modules will be cut and the module removed from their framework by cutting or dismantling the bolted connections to the supports. Modules will then be removed. The interior materials of the PV modules are silicon-based and are not considered hazardous materials. In the event of a total module fracture during removal, these modules may be permissible for disposal at a licensed landfill. The decommissioning contractor will be responsible for assessing condition of PV modules and managing for proper disposal throughout removal procedure.

The photovoltaic module frame and racking system and all other metal project components, including driven support posts, perimeter fencing, and gates, will be demolished and removed from the site for recycling or disposal. Concrete slabs on grade will be broken onsite and removed completely for crushing and recycling.

Any aboveground utility poles owned by the Owner/Operator will be completely removed and disposed of off-site in accordance with utility best practices. All overhead electrical conductors



will be removed from the PV equipment and terminated as required by the local utility. Underground utilities and conduits between 0 and 48-inches below grade will be located and removed. Underground utilities and conduits installed at depths exceeding 48-inches below grade will be abandoned in-place to minimize disturbance of soils in accordance with New York State Department of Agriculture and Markets guidance. Once equipment is removed from the site, the facility access road build-up will be excavated to a depth that matches into adjacent site grades. Removed aggregate will be hauled offsite and sold as clean fill. Geotextile fabric and geogrid will be disposed at a landfill.

A final site walkthrough will be conducted to remove debris and/or trash generated within the site during the decommissioning process and will include removal and proper disposal of any debris that may have been wind-blown to areas outside the immediate footprint of the facility being removed.

2.2 Site Restoration and Stabilization

Solar facilities are largely pervious vegetated surfaces. Decommissioning and removal of equipment will not result in excessive earth disturbance; however, some restoration and site stabilization will be required upon completion of work. The areas of the facility that are disturbed will consist of the array areas where construction vehicles travel, the corridors of the perimeter fencing, areas where utilities have been installed below grade, and in the vicinity of the proposed access road, any areas used for construction material laydown and storage. The site will be de-compacted by disking, tilling, or chisel-plowing and mixing with suitable sub-grade materials selected to support revegetation and to match the existing soil types. Disturbed areas will be seeded with an appropriate local grass seed mix and topsoil recommended if needed. The site shall be restored such that it may support redevelopment or future agricultural uses.

3.0 Permitting Requirements for Decommissioning

In addition to any decommissioning requirements listed in this Plan and in the conditions of the original project approvals, other permits for decommissioning activities may be required by state or local agencies. The decommissioning contractor shall be responsible for obtaining any required permits or approvals. Anticipated permits include, but may not be limited to, the following:

- Town of Wappinger – Building Permit: Since a building notification will be required to construct the facility, it is assumed that additional building notifications must be obtained for alterations or decommissioning of the permitted facility.
- New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) - General Permit for Stormwater Discharges: Decommissioning activities have the potential to disturb an area greater than 1-acre, therefore coverage under this permit could be required. The project will follow the erosion and sedimentation guidelines found in *New York State Standards and Specifications for Erosion and Sediment Control*.



4.0 Implementation of Decommissioning Plan

The Decommissioning Plan shall be implemented upon the abandonment of the project or discontinuance of operations of the facility.

4.1 Abandonment

Facility abandonment, as defined by Town of Wappinger solar siting regulations, shall mean a period of 12 months where the facility ceases to be used for its intended purpose and where such in operation is not the result of a casualty, equipment problem, permitting matter, natural disaster, interconnection with the local utility, force majeure, or other matter that the Owner/Operator is in good faith attempting to remedy. Following a discontinuance of operations of the facility due to a natural disaster, act of violence, or other event out of the control of the Owner/Operator, Owner/Operator shall demonstrate to the Town that the facility shall be substantially operational and producing electricity within 24 months of the event. If such a demonstration is not made to the Town's satisfaction, the decommissioning shall be initiated in accordance with this Plan 180-days (6 months) after the event.

Upon the discontinuance of operations as defined herein, the Town shall notify the Owner/Operator of the facility to implement the decommissioning plan.

In the event the Owner/Operator fails to perform necessary decommissioning activities and the Town elects to carry out such decommissioning activities in accordance with the terms herewith, the Owner/Operator hereby acknowledges and agrees that it will use its commercially reasonable efforts to ensure the Town has the necessary access rights to carry out such decommissioning, including assigning the Town the right to use the Owner/Operator's easements and access rights to carry out any decommissioning the Town has a right to conduct; *provided, however*, that the Town's rights as granted herein shall be concurrent with and derived from the Owner/ Operator's rights, and shall be subject to the terms of the agreements originally granting the Owner/ Operator such easement or access rights. The Owner/Operator, to the extent permitted, will not allow its access rights or easements to expire until decommissioning of the site has been completed.

5.0 Schedule

Decommissioning, demolition, and dismantling of the facility and site restoration and stabilization has an estimated duration of 12 to 16 weeks but will not take longer than six months from the date of abandonment or discontinuance of operations and should not occur during the winter months or require multiple mobilizations.

6.0 Opinion of Probable Decommissioning Cost

A decommissioning cost estimate was prepared under the direction and supervision of a Professional Engineer licensed in the State of New York and is included as **Attachment A**. Assumptions and references applicable to each line item are listed as they are used.

The unit rates used in preparing the decommissioning estimate are based on published RS Means values adjusted for inflation to an anticipated date of decommissioning (30-years). According to this reference, the labor rates used in developing unit prices are based on the average rates from 30 major US Cities according to union labor agreements and prevailing wages for construction trades. There is some uncertainty with variations in wages over the life of the facility, however,



based on the inclusion of prevailing wage rates in developing the national average we feel these wages are reasonably considered in the decommissioning estimate. The decommissioning estimate also includes a 10% contingency to allow for soft costs (engineering, permitting, construction oversight, legal fees, etc.) in the event the Town needs to act on the surety.

7.0 Decommissioning Assurance

7.1 Form of Decommissioning Assurance

Although the Owner/Operator intends to perform the decommissioning required under this Decommissioning Plan, unforeseen circumstances are possible. In the event the Owner/Operator declares bankruptcy, goes out of business, or sells, transfers, or assigns its rights to another entity, the successor to the Owner/Operator's rights shall be required by such sale, transfer or assignment to assume the obligations to decommission the facility in accordance with this Decommissioning Plan and to keep the surety bond described below in full force and effect during the useful life of the facility.

As part of the Decommissioning Plan, Owner/Operator will provide financial security in the form of a surety bond naming the Town of Wappinger ("Town") as Obligee to guarantee that funds are available for the decommissioning of the facility should the Owner/Operator, or its successors, fail to decommission the facility as required under this Decommissioning Plan. In the event the Owner/Operator, or its successors, fail to decommission the facility as required, the Town may thereupon declare the Owner/Operator or its successors to be in default and call on the Surety to complete the decommissioning as required by the surety bond.

Prior to the issuance of a building permit, the Owner/Operator shall enter into a security agreement with the Town, which shall require a surety bond to be issued by a bonding or surety company licensed and authorized to do business in the State of New York.

7.2 Amount of Decommissioning Assurance

The Owner/Operator will provide decommissioning assurance in an amount equal to the decommissioning cost estimate included as **Attachment A**. The amount of the decommissioning assurance shall be determined concurrently with the design and engineering documents that will be submitted for building and electrical permits and shall be equal to the estimated amount, if any, by which the cost of removing the Solar Facilities, exceeds the salvage value of such Solar Facilities. The amount of the initial bond to cover the project shall be the value estimated in **Attachment A**. The initial amount of the surety bond also includes estimated costs, expenses, and disbursements likely to be incurred by the Town in connection with the enforcement, oversight and administration of the decommissioning of the facility should the Owner/Operator fail to decommission facility, including reasonable engineering fees and attorney's fees and costs, related to decommissioning the facility in accordance with this Decommissioning Plan.

In accordance with Town regulations, the amount of the Decommissioning surety shall be reviewed every three (3) years by the Planning Board to ensure the amount remains adequate.



8.0 Use of Decommissioning Assurance

If the Owner/Operator fails to undertake decommissioning activities within 180-days of abandonment, the Town of Wappinger shall have the right to make a claim against the decommissioning assurance. Owner/Operator agrees that in such circumstances the Town of Wappinger shall have such access to the site as may be necessary to allow its qualified contractors to conduct decommissioning activities.

For purposes hereof the “date of discontinued operations” shall be defined as:

- The date of discontinued operations designated by the Owner/Operator in its notice to the Town of Wappinger; or
- In absence of such notice or in the event of abandonment, the last day of a continuous 12-month period in which at least seventy-five percent (75%) of the PV solar modules or “panels” are not producing commercially useful electricity and where such inactivity is not the result of a casualty, equipment problem, permitting matter, natural disaster, interconnection with the local utility, or other matter that the Owner/Operator is in good faith attempting to remedy.

If the Facility discontinues operations, the Town shall be entitled to indemnification from the Owner/Operator for expenses and disbursements incurred by the Town in connection with the enforcement, oversight and administration of the decommissioning of the facility.

9.0 Acknowledgement and Approval

The Town of Wappinger hereby acknowledges receipt of this Decommissioning Plan and affirms that the Decommissioning Plan (assuming the decommissioning assurance [surety bond] is established and is acceptable to the Town of Wappinger and Owner/Operator) satisfies the conditions of the project approval made in connection with its review of the Old Myers Solar Project.

The parties acknowledge that NY Solar 1001 LLC (Lightstar Renewables LLC) may, without the consent of the Town of Wappinger, assign its rights, interests and obligations under this Decommissioning Plan to any corporation, partnership, limited liability company or other business entity provided that such assignee agrees in writing to be bound by the terms of this Decommissioning Plan.

Town of Wappinger

Date: _____

By: _____

Title: _____



ATTACHMENT A: DECOMMISSIONING ESTIMATE



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|---|--|
| <p><u>Legend:</u></p> <p>* = Costs derived from RS Means manual Sitework & Landscape Costs</p> <p>** = Assumes 2.5% annual increase in labor costs and 1.5% annual increase in salvage value</p> <p>ATRI = American Transportation Research Institute</p> | <p><u>References:</u></p> <p>- The decommissioning cost estimate was prepared under the supervision of a professional engineer licensed in the State of New York. The opinion of probable costs is based on our experience in the design and construction of solar energy facilities and is subject to final engineering design. Costs assumes the work will be performed by a contractor experienced in the decommissioning and deconstruction of solar facilities.</p> |
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