

New York State Community Solar Array

Operations and Maintenance Plan Winter 2021

Prepared for:

The Town of Canandaigua

Prepared By:

Aura Power Solar USA, LLC 412 Bauer Pl Mineola, NY 11501



Overview

Aura Power Solar USA, LLC ("Aura Power") has prepared this Operation and Maintenance Plan ("O&M Plan") for its proposed solar array located at 2890 County Road 10, Canandaigua, NY ("Project Site"). At the Project Site, Aura Power intends to construct a 4 MW solar photovoltaic facility ("Solar Array"), which will remain in operation for the duration of Aura Power's lease with Mr. John Aikey ("Property Owner"). The land and personal property designated in the Project Site and Solar Array, respectively, will henceforth be known as the Project ("Project").

On or about the time of construction and completion of the Solar Array, Aura Power will enter into an Operation and Maintenance Contract ("O&M Contract") with an operations and maintenance provider(s) ("O&M Contractor"). This contract will include the scope of required and essential responsibilities and services that are to be provided in order to ensure proper functioning and maintenance of the Solar Array, as well as detailing the critical functions needed to maintain the vegetation and other aspects of the Project Site. At Aura Power's discretion, some functions and services described within the O&M Contract may be removed from the responsibility of the O&M Contractor, and instead be performed by the Property Owner, or any person of familial relation to the Property Owner.

General Requirements

- Any and all work performed at the Project, be it preventative or corrective, will be completed during normal business hours. This will be Monday through Friday, between 8:00 AM and 5:00 PM Eastern Time.
- Measures will be taken to limit any noise or visual disturbances whilst work is being done at the Project.
- No pesticides will be used to maintain and manage any vegetation at the Project. In the rare event that the use of pesticides become necessary to manage the vegetation, Aura Power will contact the Code Enforcer with information and details regarding the proposed pesticides. Further steps will be discussed with the Code Enforces to ensure proper protocol is followed in the event that pesticides become necessary.
- Aura Power, or its selected O&M Contractor, will provide preventative vegetation maintenance site reports and updates to the Town of Canandaigua Code Enforcer.
- In the event that there is damage to any ground cover or vegetation, Aura Power will work to repair such damage when the next appropriate season to do so is. In very rare cases, corrective maintenance may require specialized skill outside the scope of Aura Power. In that event, a specialist would be contracted so the proper care and maintenance can be serviced.

Solar Array Maintenance

Solar maintenance will consist only of scheduled service visits except where unexpected events require additional site visits. Further detail is provided below.



Scheduled Service Visits

| Type of Service | Frequency | Additional Information |
|---|---------------|--|
| System Testing | Annually | - |
| Verification of Data Acquisition Systems | Annually | - |
| Module Cleaning | Annually | - |
| Field Inspection | Monthly | Including visual, electrical, and mechanical elements |
| Data Acquisition System Maintenance | As Needed | - |
| Scheduled Maintenance and Testing | As Needed | Frequency indicated on manufacturer's equipment warranties |
| General Inspection | Semi-Annually | - |

Unscheduled Service Visits

This type of maintenance would occur during two infrequent types of events. The first being an emergent type situation located at the Project, and the second a non-emergent disturbance to the Project.

In the event of the first situation, Aura Power and the O&M Contractor intend to act quickly, efficiently, and effectively. Aura Power and the O&M Contractor will contact the proper department in the Town of Canandaigua to inform them of the emergency, before dispatching a representative from the O&M Contractor's team to the Project, as well.

In the event of the second situation, Aura Power and the O&M Contractor will schedule a corrective maintenance visit to correct any such disturbance. This scheduled visit will be during business hours.

Preventative/Corrective Maintenance Plan

- Aura Power will engage in an O&M Contract with the O&M Contractor. The O&M Contractor will be required to uphold all representations and scopes of services detailed in the O&M Contract.
- The O&M Contractor will be required to complete all services details. These actions will include, but are not limited to, the following:
- Inspection and testing of any and all equipment.
- Ad hoc cleaning of any and all equipment, including the modules.



- Routine maintenance of any and all equipment, as necessary for the proper performance and function of the machinery and in accordance with both the user's manuals and warranties of this equipment provided by its manufacturer.
- Routine field tests to uncover any failures or potential failures that arise during the lifetime of the Project. All deficiencies noted will be repaired in accordance with O&M Contract that is in place.
- Compliance with all permits required for the operation and maintenance of the Project.
- Maintaining all access roads, including any required snow removal.
- Providing a monthly report, including, but not limited to, the following information:
 - Energy estimates
 - Energy production
 - Weather information
 - Any and all preventive services performed
 - Any and all corrective services performed
 - Any material failures covered by warranties, including an:
 - Action plan; and
 - Estimated timeframe to remedy the failure
- Any events, naturally occurring or otherwise, that would disturb the ordinary and expected functioning of the Project.
- Record of any and all tests, reviews, and observations of all systems within the Project.

Vegetation Maintenance

Vegetation Screening

Vegetation Screening of the Solar Array will be provided by Aura Power, or the O&M Contractor. This screening will provided once full permission from both the utility and the Town of Canandaigua is granted. At or before the time this permission is granted, Aura Power, potentially along with a third party specialist, will determine the proper of vegetation species required to provide screening at the Project. The determination of this species will rely on both location and seasonal weather patterns.

Screening vegetation will be planted and installed in accordance with permissions granted by the Town of Canandaigua. The initial maintenance and required care for vegetation intended for screening will differ from the routine maintenance provided throughout the majority of the lifetime of the Project.

Initial maintenance will include, but is not limited to, the following:

- Monthly visual inspections
- Readjustment and repair of either seedlings or saplings, as required
- Corrective maintenance to restore any disturbance due to seasonal changes
- Fertilization of soil to encourage successful growth



 Removal of rotted, dead, or any other type of woody debris, and replacement of the debris with similar sized saplings

Following the initial maintenance period, which is not expected to last longer than two years after planting, the routine maintenance period will commence. The initial maintenance period may take longer than this two year period, and will be reevaluated at that point. Once it is determined that routine maintenance may commence, the actions below will begin:

- Semiannual visual inspections of the screening vegetation
- Provide any required trimming to minimize any shading on the Solar Array

General Vegetation

General vegetation at the Project will also need to be maintained, trimmed, and/or cut back from time to time. Shading inspections will be conducted semiannually, and, if it is determined at that time, trims or cuts will be made to minimize shading on the Solar Array. In regards to ground cover, mowing will be done as needed. Aura Power has also considered utilizing sheep and/or other animals to graze and maintain the vegetation, but at the time of this O&M plan, has made no decision in either direction.