



Operations and Maintenance Plan

Glastonbury Solar One

Date:

November 2023

Prepared By:

Glastonbury Solar One, LLC





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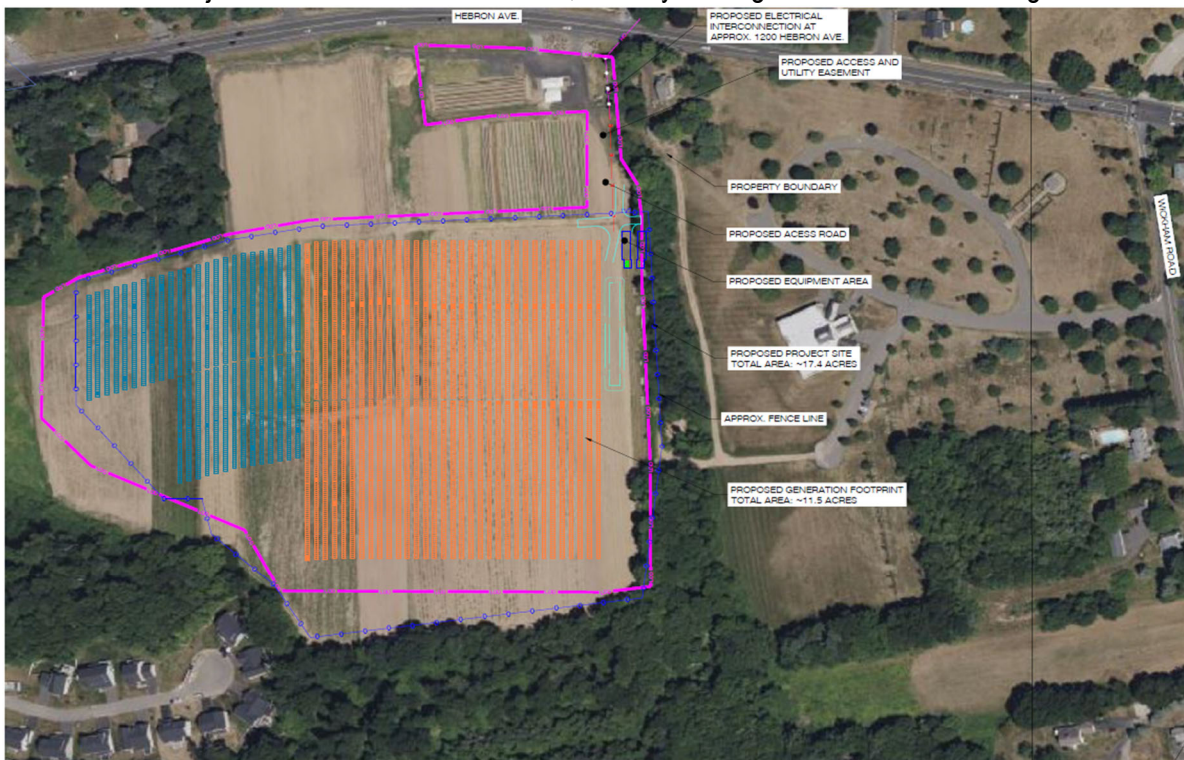
Operations and Maintenance Plan

1. Introduction

Glastonbury Solar One, LLC (“Owner”) is responsible for maintaining and servicing the photovoltaic (PV) electric system as well as the related facilities during the operational phase of the project. Related facilities include fencing, lighting, grass, roads, storm water devices, etc. This O&M Plan describes the project components, commissioning procedures, monitoring system, Maintenance provisions and emergency response

2. Project Description

The proposed Project is a 3.0 MW AC ground mounted solar array located in Glastonbury, CT that will consist of solar modules, inverters, switchgear, transformers, and electrical systems interconnected to the utility grid along Hebron Avenue. The Project also includes access roads, security fencing and stormwater management areas.



SYSTEM SPECIFICATIONS		
DC SYSTEM SIZE	3,556.80 kW	
AC SYSTEM SIZE	3,000.00 kW	
MODULE QUANTITY	6,840	
MODULE POWER	520 W	
TILT	50/52	
AZIMUTH	182	
NOTES		
No.	Revised/Issue	Date
 150 TRIMBALL STREET, 4TH FLOOR HARTFORD, CT 06103		
Project Name: GLASTONBURY SOLAR ONE 17 WICKHAM ROAD GLASTONBURY, CT 41.716198, -72.565397		
Client: GLASTONBURY SOLAR ONE	Drawn: [blank]	Scale: CP-1
Date: 09/30/2023		

GLASTONBURY SOLAR ONE - SITE PLAN
SCALE: 1" = 80'





3. Contact Information

Table 1. Project Contact Information

Owner	Glastonbury Solar One, LLC 124 LaSalle Road, 2 nd Floor West Hartford, CT 06107 (860)288-7215 development@verogy.com
O&M Service Provider	VCP EPC, LLC 124 LaSalle Road, 2 nd Floor West Hartford, CT 06107 (860)288-7215 sdenino@verogy.com

4. Commissioning

Prior to the project reaching operation, the following inspections and tests will be performed by the O&M provider. The results will be included in the projects commissioning report.

- Full visual Inspection
- Mechanical inspection including torque verification of critical connections
- String Testing (IV curve test)
- Full System Production Evaluation
- Thermal Scanning





5. Monitoring

The O&M provider will utilize a continuous 24/7 remote monitoring system to provide alarm and performance data of the system. The monitoring system will include full site and inverter level production and alarms as well as site weather and irradiance data. The O&M provider will analyze performance data to make sure that the system is performing as designed and will be responsible for dispatching crews for system maintenance and repair related issues. The O&M provider will be contractually obligated to comply with this O&M Plan, as well as the conditions of all permits or regulatory approvals.

6. Maintenance

O&M services are outlined below. (The frequency of these services is outlined in Table 2)

6.1. Site Access

The solar array and all associated equipment shall be located behind a fence with gates as depicted on the construction drawings or as directed by permitting authorities. Access to that facility shall be granted to authorized personnel only. Access to that facility shall be arranged with the Owner or O&M provider as identified in table 1. Provisions will be in place for Emergency personnel to access the site via a universal key box (i.e. Knox Box) that will have that appropriate key(s) to access the facility.

6.2. Equipment Maintenance

The O&M provider and/or its authorized subcontractors will inspect and maintain electrical and PV equipment in accordance with the manufacturer's requirements to maintain proper operation and warranty status.

The O&M provider will also perform the following inspections. The results from these inspections/tests will be provided in an O&M inspection report.

- The operation of all safety devices will be reviewed and corrected to maintain proper function.
- Full visual Inspection of all equipment, subassemblies, wiring, connectors, etc.
- Thermal Scanning of electronic equipment, wiring terminations, connectors, etc.
- Mechanical inspection including torque verification of critical connections
- String Testing (IV curve test)
- Air filter elements





6.3. Site Maintenance

The O&M provider and/or its authorized subcontractors will visit the site monthly to assess site conditions and perform maintenance as needed. Signage and egress functionality will be inspected at this time and repaired, if necessary.

6.3.1. Grass Management

The primary means of vegetation management will come in the form of the Livestock Grazing Program to be deployed by Glastonbury Solar One, LLC in partnership with Hillview Farm of Connecticut. In Summary, the sheep grazing program will be used to control vegetation at the project site to achieve the following:

- Prevent panel shading from vegetation
- Control and remove invasive and unpalatable plant species
- Avoid the growth of brush and woody species under the solar panels
- Maintain a diverse forage population to support optimal sheep nutrition
- Encourage forage population to support optimal sheep nutrition
- Optimize sequestered soil carbon through increasing top-soil amount and root matter
- Control erosion

6.3.2. Panel Cleaning

Panel Cleaning is rarely necessary in the Northeast, but if the panels are to experience enough soiling to adversely affect production the panels will be cleaned using water and soft bristle brooms. No chemicals will be used.

6.3.3. Snow Maintenance

The O&M provider and/or its authorized subcontractors will clear snow from the access roads to all the electrical equipment pads as necessary. As required, snow will be plowed or removed in a manner to maintain emergency turnarounds. The Owner does not intend on removing snow from panels.





6.4. Long-Term Stormwater Maintenance Plan

The O&M team will provide maintenance in accordance with the approved stormwater maintenance plan produced by the engineer of record.

Table 2. Scheduled Maintenance Activity

Task	Frequency
Visual Array & Equipment Inspection	1x per year or per equipment manufacturer requirements
Mechanical and Electrical Inspections	1x per year or per equipment manufacturer requirements
Panel Cleaning	As Needed
Mowing and Trimming / Co-use Sheep Grazing	In accordance with livestock grazing Plan. Mowing and trimming as needed.
Snow Removal	As needed
Perimeter Fence Inspection	1x per year
Stormwater Management System Inspection	1x per year or per engineer's stormwater management plan





7. Emergency Response

The Owner will coordinate with the Town of Glastonbury police and fire departments regarding access to the facility and emergency shutoff switches. Table 3 provides an emergency contact list for the Town of Glastonbury. Each of the entrance gates will have a universal key lock (e.g. Knox lock) for emergency responders.

Table 3. Town of Glastonbury Emergency Contacts

Table 3. Town of Glastonbury Emergency Contacts	
Emergencies	Dial 911
Glastonbury Police Station	Marshall Porter, Chief of Police 2018 Main Street Glastonbury, CT 06033 Emergency Calls: 911 Routine Calls: (860)633-8301
Glastonbury Fire Department	Michael Makuch, Fire Marshall 2825 Main Street Glastonbury, CT 06033 Emergency Calls: 911 Routine Calls: (860)652-7555

