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## **Exhibit Q – Operations & Maintenance Plan**

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# TOBACCO VALLEY SOLAR

## Operations and Maintenance Plan

June 2017

DWW Solar II, LLC

## Table of Contents

- 1. Introduction ..... 3
  - 1.1. Project Contact Information ..... 3
- 2. Project Description ..... 3
- 3. Maintenance and Monitoring ..... 3
  - 3.1. Site Access and Lighting ..... 3
  - 3.2. Equipment and Grounds Maintenance ..... 4
  - 3.3. Monitoring ..... 4
  - 3.4. Environmental Compliance ..... 5
  - 3.5. Long Term Stormwater Management Plan ..... 5
- 4. Emergency Response ..... 6

## Tables

- Table 1. Project Contact Information
- Table 2. Scheduled Maintenance Activities
- Table 3. Town of Simsbury Emergency Contacts

Revision No.	Date	Comments
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## 1. Introduction

As the owner of the Tobacco Valley Solar project (Project), DWW Solar II, LLC (DWW Solar) is responsible for maintaining and servicing the solar electric system and related ancillary facilities (roads, fence, etc.) during the operation and maintenance (O&M) phase of the Project. This O&M Plan describes the Project components, maintenance and monitoring procedures, and emergency response measures, requirements of the Project.

### 1.1. Project Contact Information

DWW Solar will engage qualified firms for the construction and operation of the Project. Table 1 provides Project contact information.

**Table 1. Project Contact Information**

Owner	DWW Solar II, LLC Attn: Aileen Kenney, VP Permitting and Environmental Affairs 56 Exchange Terrace, Suite 300 Providence, Rhode Island 02903 (401) 648-0607 akenney@dwwind.com
O&M Service Provider	TBD

## 2. Project Description

Once constructed, the Project will consist of the ground-mounted solar panel array, inverters, transformers, switchgear, electrical cable collection system, and interconnection with the existing Eversource North Simsbury Substation at Dorset Crossing. The Project also includes access roads, security and aesthetic fencing, and stormwater management areas.

The area within the security fence is a Secure Facility, accessible by authorized personnel only. Access to these locations should be arranged by contacting the Owner or O&M Service Provider identified in Table 1.

## 3. Maintenance and Monitoring

DWW Solar will obtain the services of a dedicated O&M service provider for maintenance and monitoring of the Project. Operations at the site will be minimal.

### 3.1. Site Access and Lighting

The solar array, inverters, and transformers will be enclosed by a 7-foot fence with a gate at both entrances off of Hoskins Road, and the entrance gate accessed via a gravel road off of County Road. The gate will have a universal key lock (e.g. Knox lock) for emergency service providers. Additionally, a bar gate will limit vehicle access onto the entrance off County Road to discourage unauthorized individuals from driving in along this road. The 20-foot wide access road around the perimeter of the solar array and the row spacing will provide sufficient access throughout the site for emergency responders.

Signs along the perimeter chain link fence would be limited to a sign displaying the installation name, address and emergency contact information, and trespassing/warning/danger signs to ensure the safety of individuals who may come in contact with the installation. Any posted signs will not exceed four (4) square feet in area. The facility will be lit in accordance with electrical safety and building codes and to minimize Project visibility.

### 3.2. Equipment and Grounds Maintenance

All Project equipment will be inspected and maintained as directed by the manufacturer's requirements. Grounds maintenance activities will be scheduled to ensure site access and function of the stormwater management areas (see summary of scheduled maintenance activities in Table 2). The O&M service provider will establish notification procedures for arrival/departure of inspection and maintenance personnel with the Town of Simsbury emergency response personnel, as applicable. Specific maintenance requirements for stormwater management areas are included in the Long Term Stormwater Management Plan in Section 3.5.

**Table 2. Scheduled Maintenance Activities**

<b>Task</b>	<b>Frequency</b>
On-site visual inspection	1 x per year or per manufacturer requirements
Mechanical and electrical inspection	1 x per year
Panel cleaning	1 x per year
Grass cutting and weeding	1 x per year between April and October
Snow removal	As needed between October and April
Perimeter fence inspection	1 x per year
Stormwater management area inspection	In accordance with Section 3.5

No harmful chemicals will be used during the cleaning of the solar panels. Cleaning will be done with water and a soft-bristled broom, if needed. Note that the solar panel system does not need to be turned off during cleaning. Snow will be plowed off the access roads to the electrical equipment pads following snow events.

### 3.3. Monitoring

The O&M service provider will provide continuous 24/7 remote monitoring of the system performance, including a live telephone support line for corrective action and a single point of contact for system maintenance and repair related issues.

### 3.4. Environmental Compliance

The O&M service provider will be contractually obligated to comply with this O&M Plan, as well as the conditions of all permits and regulatory approvals.

### 3.5. Long Term Stormwater Management Plan

The Project does not contain any structural stormwater management facilities. The O&M service provider shall inspect all on-site vegetated areas at least once per year, removing any accumulated sediment and debris. Although not a structural component of the drainage system, the maintenance of vegetated areas will affect the functioning of the long term stormwater management. This includes the health/density of vegetative cover and activities such as the application and disposal of lawn and garden care products, disposal of leaves, and yard trimmings.

Any bare areas shall be re-seeded immediately and appropriate erosion control measures shall be installed when native soil is exposed or when erosion channels are forming. Alternative mixtures of grass species shall be planted in the event of unsuccessful establishment. Vegetated areas shall be mowed once per year to prevent the establishment of woody species.

## 4. Emergency Response

DWW Solar and the O&M services provider will coordinate with the Town of Simsbury police and volunteer fire departments regarding access to the facility and emergency shutoff switches. Annual emergency response training will be conducted with the Town of Simsbury emergency service providers. Table 3 provides an emergency contact list for the Town of Simsbury.

Each of the entrance gates will have a universal key lock (e.g. Knox lock) for emergency responders. Emergency shut-off switches will also be locked with universal locks and will be clearly labeled and lit at night. Communication with emergency service providers is available in the area via cell phone coverage.

**Table 3. Town of Simsbury Emergency Contacts**

Table 3. Town of Simsbury Emergency Contacts	
<b>Emergencies</b>	<b>Dial 911</b>
<b>Simsbury Police Department</b>	Peter N. Ingvertsen, Chief of Police 933 Hopmeadow Street Lower Level Simsbury, CT 06070 Routine phone calls: (860) 658-3100 Emergency: 911
<b>Simsbury Fire District</b>	Kevin Kowalski, Deputy Chief Main Fire Station 871 Hopmeadow Street Simsbury, CT 06070 Business Phone: (860) 658-3243 Emergency: 911