# ABANDONMENT & DECOMMISSIONING PLANS

## Ground-Mounted Solar Energy Systems

### **PURPOSE**

Local municipalities as part of their solar energy system code requirements should necessitate having a decommissioning plan in place prior to final approval of the project in order to remove and remediate the project site at the end of solar facilities lifecycle, which is typically 20–25 years.

The decommissioning plan outlines the required steps to remove the system, dispose of or recycle its components, and remediate and re-establish the land to its original state.

Decommissioning plans should also include a decommissioning agreement between all stakeholders, while also including a detailed cost estimate and identify the form of the financial security.

## **Decommissioning Standards**

Solar Energy Systems should file a decommissioning plan as part of the site plan review process. Requiring a financial surety for decommissioning may not be justified for small solar farms, as some farms could be too small to be able to acquire a bond or similar instrument

## COMPONENTS

The Decommissioning Plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site. The following elements are typically outlined in the decommissioning plan requirements:

#### 1. Introduction

- a. Project Overview
- b. Existing Land Use
- c. Definitions & Acronyms

#### 2. Abandonment

- a. Priority Enforcement
- b. Scope of Abandonment
- c. Opportunity to Cure
- d. Decommissioning by the Local

Government

## 3. Decommissioning, Site Restoration and Monitoring

- a. Objectives
- b. Decommissioning Process
- c. Restoration Process
- d. Post-Restoration Monitoring
- e. Final Decommissioning Plan
- f. Certificate of Compliance
- g. Timing, Schedule, and Extensions
- h. Town Access and Reporting
- i. Indemnification

#### 4. Financial Plan

- a. Objective
- b. Timing
- c. Surety
  - i. Surety Amount
  - ii. Surety Obligations

#### 5. Miscellaneous Provisions

- a. Additional Responsibilities
- b. Environmental Issues
- c. Safety Issues
- d. Legal Issues





## Financial Mechanisms

Depending on the local government code requirements, financial security in the form of a surety bond, letter of credit, or cash escrow should be provided and held by a federally insured financial institution.

## **Decommissioning Cost Estimate**

Cost estimates should be prepared by a licensed professional engineer, preferably with solar development experience. Periodic reevaluation of costs should also be built into the decommissioning requirements. It is strongly encouraged that <u>salvage</u> <u>values are not considered as part of the cost</u> estimate.

#### CONSIDERATIONS

- Contingency Value
- Observation, Permitting, and Review Costs
- Hauling Costs
- Removal of all Landscaping and Roadways

## **Decommissioning Agreement**

A Decommissioning Agreement between all stakeholders (e.g. site owner, site operator, local jurisdiction, etc.) in addition to the Decommissioning Plan should be prepared and attached to the Plan.

## Lease Agreement

Land-lease agreements between the solar operator and site property owner, should include a decommissioning clause, which will require coordination with property owner and operator, as they may have differing preferences.

#### **RESOURCES**

The New York State Energy Research and Development Authority (NYSERDA) offers free technical assistance to local governments that want to implement model solar energy local laws, which can be downloaded at https://www.nyserda.ny.gov/solarguidebook

The following local governments provide further examples of decommissioning requirements set-forth in their respective town codes, which are intended further guidance on model language:

Town of Farmington, N.Y., § 165-65.3(H): Abandonment and decommissioning <a href="https://ecode360.com/32697969">https://ecode360.com/32697969</a>
Town of Albion, N.Y., § 105-9: Abandonment and decommissioning <a href="https://ecode360.com/32604095">https://ecode360.com/32604095</a>
Town of Avon, N.Y., § 130-82: Abandonment and decommissioning <a href="https://ecode360.com/35773954">https://ecode360.com/35773954</a>