

Decommissioning/Reclamation Plan

For a USR Permit
Dove Solar LLC

Case Number: USR22-0003
Archdiocese of Denver (Parcel ID No. 105916100039)

Prepared for:
TOWN OF JOHNSTOWN
PO BOX 609
JOHNSTOWN CO 80534

Prepared by:
SunShare, LLC
Denver, Colorado



Date Prepared: November 2022

1.0 Overview

As a condition of approval for the Site-Specific Development Plan and Use by Special Review Permit, Johnstown required that SunShare prepare a *Decommissioning/Reclamation Plan* for the solar facility, that is to be reviewed and approved by the Johnstown Review Committee. The intent of this *Decommissioning/Reclamation Plan* is to provide a comprehensive plan for removal of the solar facility after its useful life and/or the termination of power generation operations; and to return the subject property to conditions that existed prior to the solar facility's construction.

The solar power generation facility has an estimated useful life of 30 years or more, with an opportunity for a life of 50 years or more with equipment replacement and repowering. At the end of the useful life of the facility, SunShare will cease power generation, decommission the facility, and remove the components of the facility from the subject property. The site will be reclaimed and returned to the agricultural use that existed prior to the facility being constructed.

This *Decommissioning/Reclamation Plan* is subject to refinement should future best practices or alternate methods be developed by the solar industry, during the life of this facility. SunShare will follow solar industry standards and best management practices (BMPs) that exist at the time of decommissioning and reclamation of the site.

1.1 Procedures for Decommissioning the Solar Facility After Useful Life & Termination of Power Generation

The solar facility consists of numerous recyclable materials, including glass, semiconductor material, steel, aluminum, copper, and plastics. When the facility reaches the end of its operational life, the component parts can be dismantled, and for the most part, salvaged or recycled at properly licensed facilities.

Some site features, such as internal roads, driveways, drainage features/improvements, and electrical interconnections may remain on the site, depending upon the anticipated future use of the property. All such improvements, that are scheduled to remain after the decommissioning of the site, will be approved by the JRC.

The following steps will be followed in the decommissioning of the solar facility:

- Approximately one year prior to the planned decommissioning of the facility, SunShare will schedule a pre-closure meeting with the JRC to discuss the process for the site decommissioning and restoration. The final decommissioning details will be developed through consultation with the JRC and other departments and agencies that have jurisdiction over activities in the decommissioning process. Any required permits will be obtained prior to implementation of the *Decommissioning/Reclamation Plan*.
- Appropriate temporary (construction-related) erosion and sedimentation control BMPs will be applied during the decommissioning phase of the project. The BMPs will be inspected on a regular basis to ensure proper functionality.
- Effectively, the decommissioning of the solar facility proceeds in reverse order of the installation:
 1. A site-specific health and safety plan shall be developed, prior to beginning decommissioning activities, which incorporates the specific sequence and procedures to be followed.
 2. Coordination with local departments and agencies to develop route plans and obtain necessary permits for the transportation of materials and equipment to and from the site.
 3. The solar facility shall be disconnected from the utility grid. This process will be coordinated with Xcel Energy.
 4. PV modules shall be disconnected, collected and transported to a properly licensed recycling facility.
 5. Above ground and underground electrical interconnection and distribution cabling shall be removed and salvaged or recycled off-site at an approved recycling facility.
 6. The aluminum racking that supports the PV modules shall be removed and salvaged or recycled off-site at an approved recycling facility.

7. PV module support steel and support posts shall be removed and salvaged or recycled off-site at an approved recycling facility.
8. Electrical and electronic devices, including transformers, semiconductors materials, inverters, and batteries, shall be removed and salvaged or recycled off-site at an approved recycling facility.
9. Concrete foundations shall be removed and will be recycled off-site at an approved concrete recycling facility.
10. Fencing shall be removed and will be recycled off-site at an approved recycling facility.
11. The site will be restored to its original condition, including any necessary sculpting of soils to match existing natural contours and the re-seeding of native grasses. Any soil that had been re-located for construction purposes will be redistributed on the site or used for landscaping purposes. Soils will be compacted for those areas where foundations or piers have been removed.

1.2 Equipment to be Used for the Decommissioning of the Solar Facility

The decommissioning of the solar facility will be undertaken using traditional heavy construction equipment, including front-end loaders, bull dozers, cranes, excavators (track-mounted and rubber-tired), water tankers, trucks, and pick-ups. Semi-trucks will be used to transport materials to off-site salvage or recycle centers.

1.3 Dust Mitigation During the Decommissioning Phase

Water tankers will be used to help control dust while the decommissioning activities are occurring on the site. During the decommissioning of the facility, SunShare will exercise BMPs to limit fugitive dust from being airborne and traveling beyond the property lines. Dust control efforts will be monitored by the site foreman on a regular basis to ensure fugitive dust is adequately controlled. Water spray will be applied, as needed, to unpaved areas during periods of dry weather. Care will be taken not to over-apply water and create mud. Vehicle tracking devices will be installed at truck exit drives, per the requirements of the Town. Vehicles

operating on the site during the decommissioning phase will limit their speed to 15 mph or less, to minimize dust emissions.

1.4 Decommissioning/Reclamation Cost Estimates

Decommissioning/reclamation cost estimates, which shall be updated every five (5) years from the establishment and submittal of the Security, shall include all costs associated with the dismantlement, recycling, and safe disposal of facility components and site reclamation activities, including the following elements:

Decommissioning:

Fencing	\$3000.00
Structures	\$60,000.00
Modules	\$30,000.00
Electrical	\$20,000.00
Site Restoration	\$25,000.00
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Total	\$138,000.00

Clarifications – Inclusions and Exclusions

1. Based on project drawings provided.
2. Includes the specified appropriate project management and mobilization to adhere to the project schedule.
3. Breakouts provided for accounting purposes only.
4. All work is to be done in a single phase.
5. Includes recycling of steel, aluminum, modules and copper.
6. Includes restoration of the site back to like conditions before the solar array was installed.

Scope specifically includes:

1. Electrical permit fees included.
2. Removal and disposal of game fence.
3. Removal of racking support structure and foundations.
4. Module removal, package and recycle.
5. Removal of electrical distribution equipment, transformers and electrical equipment pads.
6. Removal of electrical DC string wiring and AC underground.
7. Site restoration.
8. Safety and protection as required.

9. Waste disposal fees and containers.
10. Temporary Restrooms and site facilities for workers.

Specifically excludes:

1. Payment and Performance Bond.
2. All utility specific tie in work to disconnect the site outside of property.
3. Engineering, fees, errors, omissions additional design intent not clearly delivered or identified on the referenced drawings.
4. Import or export of soils.