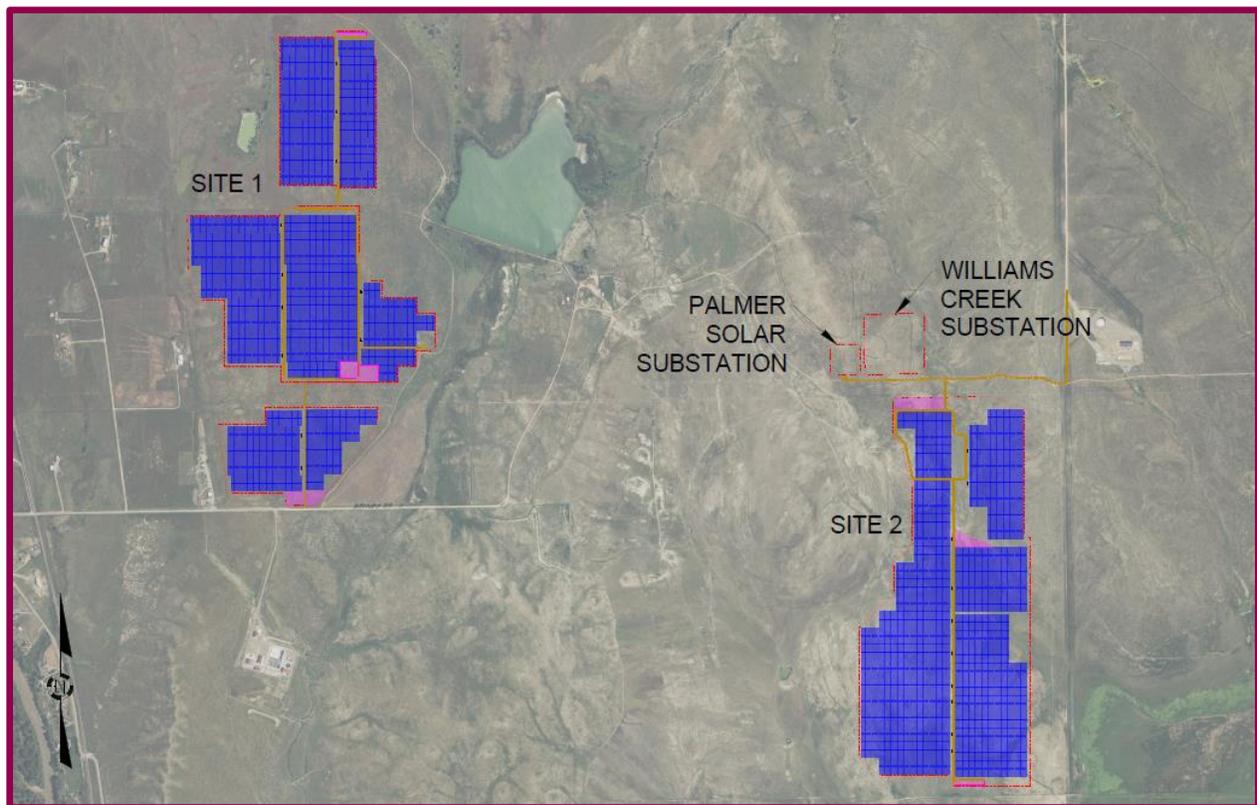




## Decommissioning Plan

### 1. Description of Decommissioning

This report presents a draft Decommissioning Plan for Palmer Solar Project and Williams Creek Substation located in unincorporated El Paso County. The Solar Project consists of two separately fenced areas which feed into the project substation via underground lines or overhead lines. The project substation will be connected to the Williams Creek Substation, which will be owned by Colorado Springs Utilities. For reference please see figure below. The western section of the solar system is called “Site 1” in this document and the eastern section “Site 2”. The access to Site 1 is from the west side of the site off Birdsell Road, which intersects with Old Pueblo Road. Project traffic will exit from Interstate-25 at Exit 122. The access to Site 2 and the substations is from the north off an unnamed El Paso County Road that intersects with Squirrel Creek Road.



This Plan is provided to El Paso County by the Project applicant and owner and operator of the proposed solar facility, Palmer Solar, LLC as part of permitting requirements as well as by Colorado Springs Utilities for the Williams Creek Substation which is set up to connect the Palmer Solar project and other upcoming renewable energy projects to their existing infrastructure.

The purpose of this Plan is to detail the demolition, removal, and rehabilitation actions to be conducted during decommissioning. The Solar Project is sited on property leased by the applicant; decommissioning activities would occur in coordination with the property owner within 18 months after the use of the facility



(as required by the lease agreement). Decommissioning and reclamation procedures and practices employed by Palmer Solar LLC will meet federal and state requirements. The Williams Creek Substation for Colorado Springs Utility will be constructed on land owned by the City of Colorado Springs and will be owned by the Utilities. Accordingly, Colorado Springs Utilities will demolish the infrastructure in accordance with applicable federal, State of Colorado, and El Paso County regulations.

While this report is designed to address all aspects of decommissioning, it should be considered a preliminary plan. Techniques and regulations for decommissioning will likely change over the life of the project. A final approved decommissioning plan will be put in place with close coordination with El Paso County.



## 2. Project Description

Principal components of the proposed Solar Facility include

- Single axis tracker arrays with photovoltaic modules
- Internal Roadways and staging areas
- Power infrastructure including inverters and transformers and cabling (above ground and underground) with an associated foundation
- Power line within the project boundary to connect Site 1 with the Substation
- Project substation located alongside existing transmission infrastructure
- Perimeter security fencing
- Operations and Maintenance Shed and associated foundation

### **Single axis tracker arrays with photovoltaic modules**

The solar facility and photovoltaic (PV) equipment will be designed for an operational life of 35 years, and will utilize the highest quality materials and components to ensure robust performance. The technology employed will feature solar modules, mounted on single-axis tracking arrays made out of steel. The solar modules utilized to generate power are supported by steel racking and galvanized steel posts, which are embedded into the ground.

### **Internal Roadways and Staging Areas**

To guarantee accessibility within the site internal gravel roads will be constructed. Areas in which equipment can be laid down will also be constructed on a gravel basis. Based on the soil conditions the depth of the gravel roads may vary.

### **Power infrastructure including inverters and transformers and cabling**

The solar modules will be electrically linked in units to inverter/transformer power stations, each on a concrete foundation. which will be connected to central inverters, converting power from Direct Current to Alternating Current. The DC cabling to the inverter as well as the AC cabling between the power stations and to the substation can either be underground or above ground.

### **A power line within the project boundary to connect Site 1 with the Substation**

An overhead line connecting Site 1 with the Substation will be running from the east to the west. The conductors are mounted on embedded wooden poles with an approximate height of 50 feet.

### **Project substation**

The Project substation will be fenced (see perimeter security fencing) and consists of structural steel, breakers, a main step up transformer (which raises the field voltage of 34.5 kV to the interconnection voltage 230 kV), a control building and the associated foundations and cabling. The site will be treated with herbicide and finished rock will be placed to prevent vegetation.

### **Perimeter Security Fencing**

Each site and the substations will be separately fenced with a six feet chain link fence. The posts of this fence are sitting in a concrete foundation. On top of these chain link there will be a one foot tall barbed wire. The total length of the perimeter security fence is approximately 50,000 LF. Access to the sites and substations will be maintained by gates.

### **Operations and Maintenance Shed with associated foundation**

The OM shed is prefabricated and is containing steel piers and steel walls. The shed is sitting on a concrete foundation.



### Williams Creek Substation

Colorado Springs Utilities Substation will be fenced (see perimeter security fencing) and consists of structural steel, breakers, a ring bus, a control building and associated foundations and cabling. The site will be treated with herbicide and finished rock is placed to prevent vegetation.

### **3. Procedure & Decommissioning Activities**

The project is anticipated to last for 35 years while the Williams Creek Substation is expected to have a longer lifespan. Unforeseen circumstances may decrease or extend the life of the project. Once the project is no longer viable, a decommissioning plan will be provided to the County for approval. The plan will outline the phases of the decommissioning, the targeted future condition of the land, and the disposal of material. Material disposal is subject to equipment condition. to the stated preference for disposal of material is to reuse and recycle the majority of Project components.

The goal of the Project's decommissioning actions is to bring the land to pre-construction conditions. Coordination with current landowners on future use will determine other decommissioning actions if an altered condition is desired. All applicable regulations will be addressed and followed during decommissioning planning.

Active restoration will likely be a principal component of decommissioning actions, particularly reseeded. A monitoring plan will ensure decommissioning outcomes meet site goals as well as compliance with applicable regulations.

The procedure below outlines general decommissioning actions. Actions outlined below assume reasonable coordination with El Paso County staff, including (but not limited to) site access and decommissioning review prior, during and following completion of such activities.

1. Creation of a phased decommissioning plan including a restoration plan showing the measures to achieve reasonable, pre-construction site conditions (e.g. some roads)
2. Coordination with El Paso County and other relevant authorities on approval of actions and plans at least 6 months prior to any decommissioning work.
3. Implementation of safe work practices, including a health and safety plan, a storm water management plan (if needed) and obtain permits (if needed)
4. Incorporation of the requirements of the decommissioning plan and safe work practices into the subcontracts and monitor that the requirements are being followed during execution.
5. Employment of best practices for demolition to efficiently undertake demolition activities, thereby minimizing the environmental safety exposures;
6. Removal of solar panels and above ground cabling and inverters & transformers & substation transformers
7. Removal of all footings, structural steel at the substations and foundations of Site 1, Site 2 and the substations (including breaking concrete into gravel) to a depth of three (3) feet below the surface of the ground and shall be covered with soil
8. Removal of underground cabling if needed
9. Removal of internal roadways, gravel at the substations & OM shed with its foundation



10. Removal of site security fencing
11. Regrading and reestablishment of soils, if needed, to ensure that clean closure can be achieved;
12. Reseeding areas with native seed mix where needed
13. Recycle materials, unrecyclable remainders will be disposed in appropriate facilities for treatment/disposal
14. Closeout permits if needed

Within the next 30-25 years decommissioning techniques will improve and therefore the described activities might change.

Palmer Solar LLC has the obligation to decommission the Solar Project in the lease contract. A security deposit has been provided to the landowner for all responsibilities by tenant, including decommissioning activities for infrastructure on the property.

The stated goal of decommissioning is to reuse and recycle as much of the material as possible. Under the assumption the material cannot be reused, a material procedure is developed below:

#### **Single axis tracker arrays with photovoltaic modules**

The PV solar panels will be dismantled and collected. The modules will either be recycled or disposed according to regulations. The steel of the posts and supporting structure will be collected and recycled.

#### **Internal Roadways and Staging Areas:**

Internal roads will remain in place until the end of the decommissioning process to ensure accessibility to the site. If the landowner requests that certain roads remain in place, these roads will stay in place (pending approval of a final decommissioning plan by the County). The material for all other roads and staging areas will be removed and brought off site for potential reuse.

#### **Power infrastructure including inverters and transformers and cabling**

Inverters and transformers will be remounted and brought to a recycling center. Biodegradable oil from the transformers will be released and captured (and separately disposed). Materials will be lifted by a crane (subject to an approved lift plan). The concrete foundations will be crushed into pieces and the material, along with the crushed conduits, will be hauled off to an offsite pit. Cabling will be delivered to a recycling center where aluminum and copper can be reused.

#### **A power line within the project boundary to connect Site 1 with the Substation**

Overhead cabling will be delivered to a recycling center for recycling of aluminum. The wooden piles will be brought to an appropriate disposal facility.

#### **A project substation and Williams Creek Substation**

The deenergized substations will be dismantled. The control buildings as well as the main transformers will be brought to a recycling facility. Prior to, oil (either mineral or biodegradable) will be captured and separately disposed). Materials will be lifted by crane (subject to an approved lift plan), Cabling will be delivered to a recycling center for recycling of aluminum and copper. The structural steel will be collected and recycled with a third-party. Concrete foundations will be crushed into pieces and the material, along with the crushed conduits, will be hauled off to an offsite pit. The gravel will be recollected and brought off site for potential reuse.

#### **Perimeter Security Fencing**



The posts (without the concrete foundation) and the mesh of the chain link fence will be collected and recycled off site. If recycling is not feasible, it will be disposed according to regulations. The concrete foundations will be crushed into pieces and hauled off to an offsite pit.

#### **Operation and Maintenance Shed**

The steel shed will be dismantled and brought to a recycling facility. The concrete foundation will be crushed into pieces and hauled to an offsite pit.

#### **4. Site Restoration**

After decommissioning work, the site will be restored to meet the future use as outlined in the decommissioning plan. Since there is a possibility improvement were achieved (e.g. drainage), these improvements may stay in place and will be outlined in the decommissioning plan. Due to the extent of decommissioning work, disturbed areas will be graded to meet a topography for future use, sufficient native vegetation cover will be achieved, and a functional drainage system will result. Once the site revegetates to levels of 70% or greater prior to pre-decommissioning efforts, the Stormwater Permit will be closed out. In areas where the soil is compacted in a way that would prevent revegetation, measures will be applied to ensure a successful revegetation. If any contamination is discovered on site (which is considered unlikely), the soil will be tested and disposed according to applicable regulations.