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Dolores Canyon Solar Decommissioning Plan

Addendum to Site Specific Development Plan and Land Development Agreement Application Dolores County, Colorado June 25, 2021

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1.0 OVERVIEW

The purpose of this Plan is to detail the dismantling, removal, and site reclamation activities to be conducted during the decommissioning of the Dolores Canyon Solar project ("Project"). Decommissioning activities would occur in coordination with property owners within 12 months after the end of use of the facility (as required by Project lease agreements). Decommissioning and reclamation procedures and practices employed by Dolores Canyon Solar LLC ("Company") will follow local, state, and federal requirements at that time.

The Project, located in Dolores County northeast of Cahone, will consist of nine separate solar array areas, which feed electricity into the Project substation via underground cables. The Project substation will be connected via overhead transmission lines to the Cahone Substation, owned by Tri-State Generation and Transmission Association ("Tri-State"). The Project can be accessed from US Highway 491 via County Road M to County Road 15, or for larger vehicles, via County Road T to County Road 15, and from there, various other area county-owned rights-of-way to the Project entrances.

While this plan is designed to address the aspects of decommissioning, the techniques and regulations for decommissioning will potentially change over the life of the Project. Accordingly, the details of this plan may need to be updated based upon then-current standards and regulations.



2.0 PROJECT DESCRIPTION

Solar Facility and Substation Description. Principal components of the proposed solar facility include:

- Single-axis tracker arrays with photovoltaic ("PV") modules
- Internal roadways and staging areas
- Power infrastructure including inverters, transformers, and cabling (above ground and underground) with the associated foundations
- Project Substation
- Perimeter security fencing
- Operations and maintenance shed and associated foundation

Single axis tracker arrays with PV modules

The solar facility will be designed for an operational life of 35 years and will use the industry standard materials and components to ensure robust performance. The technology employed will feature solar modules, mounted on single-axis steel tracking arrays. The single-axis tracking system includes galvanized steel racking components and posts, which are embedded into the ground.

Internal roadways and staging areas

To provide accessibility within the site, gravel roads and material lay down areas will be constructed. Site roads will be engineered to a width of between 16 and 20 feet to support two-way traffic for initial material delivery and long-term operations and maintenance site access.

Power infrastructure including inverters, transformers, and cabling

The DC collection system collects power from the arrays of PV solar modules using cables secured to the racking system. These cables combine at the DC Combiner Box (DCB) located near each tracker array and continue from the DCB to the nearest Power Station via underground cables. Each Power Station consists of an Inverter, Medium-Voltage Transformer (MVT) and Motor Power Transformer (MPT) mounted on a likely steel skid supported by steel piles. Within the power station, the inverter converts the DC power to AC and the MVT steps it up to 34.5kV. The AC collection system employs a series of underground cables to combine the outputs from multiple Power Stations into circuits that terminate on the medium-voltage risers in the Project Substation. In some cases, medium-voltage sectionalizing cabinets are employed to connect multiple cables into a longer run.

Project Substation

The Project substation will be surrounded by an eight-foot chain link fence topped with barbed wire (see "Perimeter security fencing," below) and consist of structural steel, breakers, a main step-up transformer (which raises the collection system voltage of 34.5kV to the interconnection voltage of 115 kV), a control building with its associated concrete foundation, and cabling. The site will be treated with herbicide and finished rock will be placed to prevent growth of vegetation.

Perimeter security fencing

The nine solar array areas and the Project substation will be separately fenced with an estimated six-foot high chain link fence. The posts at the corners of this fencing treatment will sit on concrete foundations. Access to the fenced areas will be maintained by locked gates.

Operations and maintenance shed with associated foundation

The operations and maintenance shed will be a prefabricated steel structure, covered with steel siding. The shed will sit on a concrete foundation.

3.0 PROCEDURE & ACTIVITIES

The anticipated commercial operations date ("COD") for the Project is June 01, 2023. Rhetorically, were the Project to necessitate decommissioning around that time, current operative law would mandate air and water quality permits subject to Colorado Department of Public Health & Environment ("CDPHE") oversight, as well as nuisance provisions in Dolores County's Land Use Regulations. However, the Project is projected to remain in operation for 35 years, with the option to maintain production by replacing degraded materials after this operational span. At the end of the Project's term, phased decommissioning activities will be carried out to dismantle and remove project equipment and restore the land to its prior agricultural appearance. Material disposal is subject to equipment condition. The stated preference for disposal of material is to reuse and recycle as much of the Project components as feasible at the time of decommissioning.

The goal of the Project Decommissioning Plan is to return the land, as close as practicable, to its former state. At the time of decommissioning, coordination with landowners on future use will determine other decommissioning actions if an altered condition is desired. Applicable regulations and laws will be followed during the decommissioning phase.

Active restoration will likely be a principal component of decommissioning actions, e.g. reseeding. Although premature at this time, a site monitoring plan will be prepared to track outcomes in relation to landscape restoration goals to best verify decommissioning site goals as well as compliance with applicable laws and regulations present at that time.

The procedure below outlines a general Decommissioning Plan. Actions assume reasonable coordination with Dolores County staff including, but not limited to, site access and decommissioning review prior, during, and following completion of such activities. Coordination with Dolores County and other relevant stakeholders will begin at least 1 month prior to commencement of the decommissioning activities. At that time, a revised Decommissioning Plan will be delivered to the County for review. This will outline landowner requests, preconstruction site conditions and the resultant intended post-decommissioning site conditions.

3.1 Phase 1: Initiation and Mobilization

During the Project's decommissioning initiation and mobilization phase:

- Construction trailers, equipment sheds and any necessary air, water runoff, or noise mitigation material will be implemented on site.
- Laborers, site managers, site safety managers, and other necessary personnel will be brought to the site.
- All site personnel will be trained on safe work practices.
- All necessary permits will be obtained.
- Following County review, the Decommissioning Plan will assist the development of a detailed site monitoring plan.

3.2 Phase 2: Electrical Disconnection

The goal of this phase is to effectively isolate the Project from the electrical grid and eliminate all power production down to individual solar panels. A typical sequence of process:

- Coordinate disconnection with the serving utility (at this time, Tri-State)
- Cease generation
 - o Open medium AC voltage
 - Open DC voltage to the individual solar panel
- The DC field will continue to produce voltage during daylight hours; technical steps for decommissioning the DC field are safely performed at night
- Once isolated, the individual panels can be handled during the day, using established safety best practices; Company will follow best safety practices ensuring isolation and checking for voltage on any wire or equipment that has been energized at any point during Project lifespan before work begins

3.3 Phase 3: Removal - Electrical

While preforming removal of electrical equipment at the site, added caution will be taken to ensure no modules will be cracked. In the event there are broken modules at the site, it will be the responsibility of the site safety manager to ensure proper disposal. Electrical removal will be carried out as follows:

Modules: Modules are to be removed from racking, stacked, and loaded into transportation trucks.

Power Stations: Power Station buildings will be deconstructed by hand and with the use of a crane for the inverter/transformer skid (subject to an approved lift plan, if necessary).

Cable: All necessary cable will be removed. Any cable not removed from the site will be done so both with landowner permission and below a typical plow depth of three feet.

Project Substation: Unless instructed otherwise, the deenergized substation will be removed. The control building as well as the main transformer will be brought to a recycling facility. Oil (either mineral or biodegradable) will be captured separately for disposal. Materials will be lifted by crane (subject to an approved lift plan, if necessary). The gen-tie, risers, and all cable will be removed and loaded for transportation.

3.4 Phase 4: Removal - Structural

The removal process of structural materials can begin once the electrical material has been removed for that portion of the site. It will be up to the site manager to decide if the structural phase begins after electrical equipment is removed from a tracking block, power station, fenced area, or otherwise. Structural removal will be carried out as follows:

Racking: In the deconstruction of a tracking block, first the module racks and torque tubes will be removed and loaded onto trucks for transportation. Then, posts will be removed, either completely or cut below a standard plow depth of three feet, contingent upon agreements with the landowner. Posts will subsequently also be loaded onto transportation trucks.

O&M Shed: The Project's steel O&M shed will be deconstructed, and subsequent materials will be loaded onto transportation trucks.

Project Substation: The structural steel from the project substation will be collected and loaded for transportation. The footings will be removed up to 3' in depth below the surface, contingent upon agreements with the landowner.

3.5 Phase 5: Removal - Civil

This phase focuses of the removal of on-site civil engineering features. If the landowner requests that any civil feature remain in place beyond the lifetime of the project, that feature will not be deconstructed during the

decommissioning process (pending review of a revised decommissioning plan by the County at that time). The civil features removal will be carried out as follows:

Foundations: All substation, power station, O&M shed, and other equipment with concrete foundations will be broken up and loaded into transportation trucks.

Reclamation: After the decommissioning work, the site will be restored to support the future use as outlined in the Decommissioning Plan. Native vegetation and reseeding will occur as necessary to the restored site. Once the site decommissioning efforts have been properly completed, any open permits will be closed. In the unlikely scenario that contamination is discovered on site, the soil will be tested and disposed of in accordance with applicable laws and regulations at that time.

Site Fences: The posts (without the concrete foundation) and the mesh of the chain link fence will be collected and loaded for transportation. The footings and concrete foundations will be removed up to 3' in depth below the surface, as agreed upon by the landowner. The concrete foundations will be crushed into pieces and hauled to an offsite pit.

3.6 Phase 6: Transportation and Site Vacation

Transportation coordination will coincide with the disposal plan set forth by the site manager. Over the Project's life, it is predicted that the solar facility component's recycling industry and market will improve; as such the manner in which disposal takes place is subject to change. To date, it is suggested that transportation will occur to facilities including but not limited to steel and solar module recycling facilities, landfills, gravel and concrete recycling facilities, and potentially a solar panel buyback program. Trucks will be routed to the appropriate disposal facilities, carrying the corresponding destination materials.

4.0 DISPOSAL

All Project material will be disposed of in accordance with the standards and best practices at time of decommissioning. Over the course of the Project's life it is predicted that solar decommissioning standards may change, and recycling abilities may increase. Owing this, the proposed processes are subject to change. At present, it is suggested that disposal practices will occur as follows:

- All recyclable material, including but not limited to steel, aluminum, copper, and gravel, will be transported to the appropriate recycling facility.
- Modules will be disposed of in accordance with industry standards, or subject to a buy-back program if applicable by the module manufacturer.
- Oil (either mineral or biodegradable) from transformers will be captured and disposed of separately in accordance with waste standards in place at the time of decommissioning.

- Concrete foundations will be crushed into pieces and the material, along with the conduits, will be hauled off to an offsite formal disposal pit.
- Any cracked module or other material that could reasonably be considered hazardous will be the responsibility of the site safety manager and the site manager to coordinate proper disposal destination.

5.0 FINANCIAL RATIONALE

The following table contains an estimate of all costs associated with the decommissioning processes of the Project:

DECOMMISSIONING COST SUMMARY			
Category		Cost	
Site/Contractor			
Management	\$	434,142.16	
Structural Removal	\$	3,877,773.51	
Electrical Removal	\$	1,756,517.96	
Civil Restoration	\$	1,005,181.33	
Transportation	\$	750,000.00	
Recycling	\$	(50,000.00)	
Total	\$	7,773,614.97	

The Company asserts that present agreements between Company and Project landowners as well as between Company and Tri-State negate a need for further financial sureties between Company and Dolores County during the first 15 years from the commissioning date of the Project.

The Company is sufficiently incentivized through the requirements of the Power Purchase Agreement ("PPA") with Tri-State to operate and maintain the Project through the term of the PPA, such that Dolores County can be assured that decommissioning will not occur before the term of the PPA expires and thus not require posting of the proposed decommissioning security until a PPA (or other firm revenue agreement) expires.

The PPA requires the Project to produce at least 85% of the estimated generation and sell all energy to Tri-State for an initial term of 15 years. If the Project fails to meet the generation requirement, Tri-State is entitled to draw from \$11mm in financial security posted by the Company and maintained throughout the term of the PPA.

Unless the Company executes a new PPA with similar or greater financial security requirements prior to the expiration of the current PPA or extends the current PPA, then the Company will post new financial security in favor of Dolores County at least 30 days prior to expiration or termination of the PPA. The amount of new financial security to be posted will equate to half of the estimated cost to decommission the Project in the form of a letter of credit, surety bond, or other mutually agreeable financial instrument. In today's dollars, this security would amount to approximately \$3.88mm. The security will be increased over time to the full amount

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of the decommissioning estimate by the expected date of decommissioning on a schedule agreed upon by the Company and Dolores County. The new financial security will be maintained in place until the Company decommissions the Project in accordance with its Lease Agreements and this Decommissioning Plan.

Proposed Decommissioning Financial Security by Operating Year*

Decommissioning Estimate: \$7,733,615

% of		
	Decommissioning	Financial Security
	Cost in Financial	Posted to
Operating Year	Security	Dolores County
16	50.0%	\$3,866,807
20	62.5%	\$4,833,509
25	75.0%	\$5,800,211
30	87.5%	\$6,766,913
34	100.0%	\$7,733,615

*The financial security is proposed to be posted if the Company does not have a firm revenue agreement in place

*Any detail not covered in this initial Decommissioning Plan will be included in the revised plan to be submitted to Dolores County staff 1 month prior to commencement of decommissioning activities.