SR Simpson Solar

Decommissioning Plan

Submitted to:

Franklin-Simpson Planning and Zoning

Submitted on behalf of:

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1 INTRODUCTION

1.1 Background

Horus Kentucky 1 LLC (Horus Kentucky), will construct, own and operate a 69.3-megawatt (MW AC) (plant capacity at point of interconnection) solar photovoltaic (PV) power generation facility and associated electrical Collector Substation facility, collectively referred to as SR Simpson Solar ("Project"). The Project is situated on approximately 551 acres of land, with 339 acres being fenced in for the project boundary. The Project site is privately owned land, approximately 3 miles southeast of the City of Franklin in Simpson County. The Project is located near the intersection of Interstate 65 and Highway 31W (Attachment 1).

This Facility Decommissioning Plan ("Decommissioning Plan") is developed for Simpson County and the City of Franklin. The Decommissioning Plan provides for the decommissioning and deconstruction of the facility, and for restoration of the Project site, collectively referred to as "decommissioning". The Decommissioning Plan is to be implemented upon completion of project lifecycle, discontinuance of operations or abandonment (i.e., no electricity has been generated for up to a period of 6 months) of the Project in whole or in part.

The Decommissioning Plan includes the following:

- Removal of solar panel structures and all appurtenant above and belowground equipment located within the site including the Collector Substation (does not include new TVA Switchyard);
- 2. Removal of on-site above and below ground electricity lines within the Project area (does not include existing overhead TVA transmission line);
- 3. Restoration of any disturbed soil and re-vegetation of the site to the preconstruction condition, with native vegetation similar to the vegetation in the surrounding vicinity; and
- 4. Restoration or reclamation of project roads to their pre-construction condition unless the then- existing landowner of the property elects to retain the improved roads for access throughout the site

The Decommissioning Plan shall factor in the following items, some of which are redundant with those above:

- 1. Cost to remove solar panels and support structures, with allowance for salvage value for the support structures;
- 2. Replacement of disturbed soil from removal of support structures;

1.2 Decommissioning Plan Purpose

The purpose of this Decommissioning Plan is to clarify the process to conduct decommissioning activities for the permanent closure of the Project or a portion of the

Project. The facility is intended to operate for at least 40 years. This Decommissioning Plan describes the approach for removal and/or proper abandonment of facilities and equipment associated with the Project and describes anticipated land restoration activities at the end of the term or earlier if all or a portion of the Project is discontinued. Elements of this process may be adjusted based on baseline conditions at the time of decommissioning.

2 **PROJECT COMPONENTS**

The Project's components subject to decommissioning include the equipment summarized below. The decommissioning activities associated with these components are discussed in Section 3.0 of this Decommissioning Plan.

2.1 Site Construction Preparation

Construction facilities will be located off Tyree Chapel Road and Hendricks Road in Simpson County within the Project boundaries. The construction facilities will include the construction entrance/exit, roadway and the parking and staging areas for vehicle and equipment storage and maintenance. A laydown area will be used for pre-assembly of components and materials storage/staging. Space in the construction facility area will also provide construction worker parking.

Approximately five site access points will be built for access to the site via new gates at each access point shown on the Site Plan. The site access driveways and gates will remain in place for the operational phase of the Project.

2.2 PV Equipment Installation

The PV equipment for the Project will consist of approximately 198,000 First Solar S6 PV modules (or modules of a similar quality) mechanically fastened onto a steel mounting system. The steel mounting system will include approximately 20,000 galvanized steel posts that will be driven into the ground. The project site will include a 34.5kV to 161kV Collector Substation with a main power transformer and associated equipment on concrete foundations.

A "light-on-land" philosophy will be used for the grading and installation of the entire Project. Several features of this philosophy are as follows:

- 1. Minimal soil disturbance. Existing vegetation will be preserved where possible, and soil disturbance will be reduced to the extent practicable.
- 2. Preservation of property. Temporary fencing will be used to protect areas not to be disturbed. Existing improvements, properties, utilities, facilities, trees and plants that are not to be removed will be protected from damage.
- 3. Temporary staging areas will be utilized within the solar field during construction, and they will ultimately be built over with solar arrays or interconnection facilities. The areas will be seeded after construction is complete.

4. Site internal roads in the solar field will be constructed by compacting existing soil and placement of compacted gravel (where necessary).

2.3 Roads

Access to the project will be from Tyree Chapel Road and Hendricks Road as shown in the attached layout.

2.4 Vegetation Management

Vegetation will be monitored and controlled throughout the production term in order to provide adequate vegetative cover and reduce erosion. Control methods include mechanical control via typical mowing equipment and/or biological control via managed sheep grazing, as well as appropriate use of herbicide for noxious/invasive weed control.

3 PROJECT DECOMMISSIONING AND RECYCLING

The activities involved in the facility closure will depend on the expected future use of the site. Certain facility equipment may have future uses, such as roads. The currently envisaged plan involves completion of the initial decommissioning in a six-month period with full restoration requiring additional time for plant re-growth and establishment as required.

In general, decommissioning will attempt to maximize the recycling of all facility components. Specific opportunities for recycling (e.g., PV solar modules) are discussed below in the context of various site components. The individual Project components to be decommissioned will be recycled to the maximum extent practicable.

The key Project components to be affected by decommissioning activities are discussed below. The general decommissioning approach will be the same whether a portion of the Project or the entire Project is decommissioned. Horus Kentucky shall provide notice to the Kentucky State Board on Electric Generation and Transmission Siting if the project replaces more than 20 percent of the facility, Horus Kentucky shall remove the debris and replaced components from the Project site and Simpson County, unless they are disposed of at a permitted facility within Simpson County.

Silicon Ranch Corporation, parent corporation of its wholly owned subsidiary Horus Kentucky 1, LLC, will provide a parental guarantee, bond or letter of credit based on the estimated net decommissioning cost (decommissioning cost minus the salvage value) as surety for the benefit of Simpson County Fiscal Court for the removal and appropriate recycling, reuse and/or disposal of the photovoltaic panels, racking systems, inverters, breakers, switches, cabling, power transformers, generation tie-in, and related equipment as described in this Decommissioning Plan. The bond shall be in place at the time of commencement of operation of the Project. The bond amount shall be reviewed every five years at Horus Kentucky's expense to determine and update the cost of removal amount.

3.1 Decommissioning Preparation

The first step in the decommissioning process will be to assess existing site conditions and prepare the site for demolition.

Site decommissioning and equipment removal can take several months. Therefore, access roads, fencing and electrical power will temporarily remain in place for use by the decommissioning and restoration workers until no longer needed. Re-vegetation of disturbed areas can take several years to establish.

Demolition debris will be placed in temporary onsite storage area(s) for no more than 120 days per location with no more than one 120-day extension per location if determined.

3.2 Equipment Removal and Recycling

During decommissioning, Project components will be removed from the site and recycled to the extent practicable. The PV solar panels, tracker and supports will be removed in their entirety from the site using forklifts, dump trucks, and flat-bed and rear-loader garbage trucks. The tracker support posts will be removed by backhoes with attachments. Cranes will be required to remove the inverters and transformers. Miscellaneous PV and Collector Substation equipment on concrete pads will be removed, and concrete pads broken up and removed for disposal. Cable and wiring shall be removed, unless otherwise agreed upon with landowners for buried cables deeper than 3 ft (approximate plow depth).

The First Solar S-6 Plus Modules (or modules of a similar quality) will be de-energized, disconnected and dismantled from the table mounts by sliding the panels off the table once the mounting clamps have been loosened. The panels will then be collected and loaded into standard enclosed trucks and transported to a recycling or disposal facility as appropriate.

The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the on-site equipment being used. The majority will be processed for transportation to an offsite recycling center. Steel, copper, and aluminum will be recycled to the extent practicable.

3.3 Roads

Onsite access roads will remain in place to accomplish decommissioning at the end of the facility's life. At the time of decommissioning, if the landowner(s) determines that certain roads will be beneficial for future use of the property, those roads may remain after decommissioning. Roads that will not be re-used will be restored to preconstruction conditions. The ground surface will be restored and revegetated as described in Section 3.4.

3.4 Site Restoration

Once removal of Project equipment is complete, the site will be restored to preconstruction conditions or as directed by applicable local, State or Federal regulations, and re-vegetated.

3.4.1 Evaluation of Restoration Requirements

Revegetation of disturbed areas can take several years to accomplish. The restoration will be enhanced by the operational vegetation management plan outlined in Section 2.4 above.

3.4.2 Restoration Plan

Decommissioning shall be completed with the appropriate dust suppression and erosion control methods utilized as appropriate and in accordance with local, State or Federal regulations. Based on the site conditions, a biologist will develop a restoration plan acceptable to the County at the time of decommissioning. The restoration plan will include de-compaction as appropriate and re-vegetation requirements to restore the site to preconstruction conditions. Any land that is to be returned to farming will not be re-vegetated, but instead will be cultivated. Any additional soil treatments will be indicated in the restoration plan. Because of the limited disturbance to soils and site contours by the construction of the Project, it is expected that restoration will largely involve reseeding. De-compaction, as required, may involve disking or similar method. Reseeding will be accomplished by broadcast, possibly using manually operated cyclone-type bucket spreaders, mechanical seed spreaders, blowers, hydroseeders, rubber-tired all-terrain vehicles equipped with mechanical broadcast spreaders, or other similar or more effective measures. Seed in the spreader hoppers will be mixed to discourage separation of the component seed types. Where broadcast seeding is employed, seeded areas may be raked or harrowed to cover the seed.

Re-vegetation will be monitored to evaluate the recovery status of rehabilitated areas, identify the need for additional re-vegetation, and to make a final determination regarding re-vegetation success. Seeding efforts will be monitored during the first growing season after seeding to assess initial vegetation establishment, distribution, soil stability, and erosion control. Monitoring will occur annually during each successive growing season and cease when rehabilitation meets the criteria for success.

3.4.3 Monitoring

All rehabilitated areas will be visually inspected to 1) detect areas that require attention, such as areas in which erosion is occurring or invasive or other weeds and 2) identify areas that may require additional measures. Additional measures will be implemented, as necessary, to ensure vegetation growth/establishment. Temporary fencing, when necessary, will be installed to avoid adverse effects to rehabilitation efforts, such as vehicular use of these areas during growth establishment.

Following each growing season, the re-vegetated areas will be visually inspected to identify areas that may require additional measures. Monitoring will qualitatively assess the effectiveness of temporary and permanent erosion control structures in stabilizing disturbed areas and controlling runoff. Site areas requiring remedial work will be identified and any additional erosion control work will be performed. It is anticipated that any active erosion problems will be apparent during the first year or two following re-vegetation or after the first major storm or runoff event. It is anticipated that the monitoring process will continue for at least three growing seasons.

3.4.4 Criteria for Restoration Success

Success criteria for site restoration will be established prior to commencement of decommissioning activities as part of the restoration plan, based on the documented preconstruction conditions, experience gained with re-vegetation during operation and the condition of the site at the time of decommissioning. After a re-vegetated area meets success criteria, re-vegetation will be considered complete and re-vegetation monitoring will cease in that area.

3.4.5 Reporting and Schedule

Acceptable levels of re-vegetation success and the schedule for achieving them could vary based on various factors such as soil and rainfall conditions. It is expected that successful re-vegetation will be accomplished within three years of initiation of re-vegetation activities.

3.4.6 <u>Fence</u>

Following removal of all Project-related equipment, the chain link fence, posts and gates surrounding the project site can be removed and recycled or reused.

4 FUTURE LAND USE

The activities involved in the facility closure will depend on the expected future use of the site. Certain facility equipment may be utilized for future uses. Therefore, the extent of site closure activities will be determined at the time of the closure. Future uses of the lands occupied by the Project will be contingent on the County land use plans and regulations applicable to the site at the time such future use is proposed to be established.

5 DECOMMISSIONING COST ESTIMATE

It is anticipated that there will be costs and credits (salvage) associated with the decommissioning of the Project. These current estimates of costs and credits for the Project presented in this plan are based on preliminary design quantities and are to be updated for the as-built conditions in 5 years based as previously indicated. The table below shows the summary of the estimated present day net decommissioning costs for the Project.

5.1 Decommissioning Cost

The estimated decommissioning costs are associated with construction costs of a contractor decommissioning the site. This includes but is not limited to activities listed in Section 3. Decommissioning costs consisting of labor, equipment, and materials are based on labor activities from RSMeans, a construction cost estimating database. Labor activities most closely associated with each step in the decommissioning process were selected to build up the decommissioning cost estimate. Further breakdown of the material quantities and costs can be found in Attachment 2.

5.2 Net Salvage Value

The estimated Net Salvage Value is associated with the salvage value or recycling/disposal costs of significant project materials and equipment. Salvage values are based on an estimated salvage recovery rate of raw material and current estimated unit value. Further details regarding these values can be found in the Attachment A. It should be noted that salvage values and recycling markets can fluctuate greatly, and as noted will be updated every 5 years for current market conditions.

Decommissioning Net Cost Summary Table:

Total Decommissioning Cost	\$5,660,800
Total (Salvage Value) or Cost	(\$3,055,300)
OVERALL TOTAL	\$2,605,500

ATTACHMENT 1 SITE LOCATION MAP AND PROPOSED LAYOUT



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NOT FOR CONSTRUCTION



SITE LOCATION SIMPSON COUNTY, KY 36.666761°,- 86.537175°



LEGEND

FENCE LINE
PROPOSED ROAD
EXISTING ROAD
EXISTING OVERHEAD ELECTRICAL
SETBACK / WATERS
SINKHOLES
BUILDABLE AREA
EXCLUSION AREA
WETLANDS, 25 FT SETBACK (TYP)
SITE ENTRANCE AND GATE
SITE ACCESS
SLOPE >12%
TRANSMISSION STRUCTURE SHADE
RAILROAD
SHADE SETBACK
EXISTING BUFFER
EXISTING WOODLAND
PROPOSED BUFFER
EXCLUSION AREA
WETLAND STREAM
OVERHEAD ELECTRIC LINES
VISUAL RECEPTOR
POLLINATOR FIELD

REV. NO	DESCRIPTION	DATE

SHEET TITLE:



DRAWING NO.

L100



HORUS SOLAR PREFERRED PLANT LIST

 NO PRUNN BROKEN C PRUNE AT BARK COL SHARP PR
REMOVE A PROTECTI TRANSIEN
RUBBER H (BLACK) 2" X 2" CED
GUY CABLI
3" MULCH

PLANTING MIXTURE AS SPECIFIED — FINISHED GRADE

NO PRUNNING - EXCEPT FOR BROKEN OR DEAD BRANCHES.

PRUNE AT NODE OR BRANCH

REMOVE ALL TAGS, RIBBONS,

TRANSIENT TRUNK GUARDS

PROTECTIVE TAPE, AND

BARK COLLAR WITH CLEAN

SHARP PRUNERS

RUBBER HOSE

- 2" X 2" CEDAR STAKE

- GUY CABLE

- TOPSOIL

UNDISTURBED SUBGRADE

VARIES ON SIZE OF TREE

- TOP OF THE CONTAINER SHALL BE FLUSH WITH THE SURROUNDING
- REMOVE THE CONTAINER COMPLETELY. MAKE 4 TO 8(DEPENDING ON THE SIZE OF THE ROOT BALL) - 1" DEEP CUTS THE LENGTH OF THE ROOTBALL.LOOSEN POT BOUND ROOTS, AND SPREAD ON SCARIFIED
- SCARIFIED SUB-GRADE REMOVE ALL - LARGE ROCKS AND CONSTRUCTION DEBRIS FROM PLANTING PIT
- PLANTING MIX AS SPECIFIED
- UNDISTURBED SUBGRADE
- PLANTING BASE IS TO BE UNDISTURBED SOIL TO SUPPORT



NO PRUNNING - EXCEPT FOR BROKEN OR DEAD BRANCHES. PRUNE AT NODE OR BRANCH BARK COLLAR WITH CLEAN SHARP PRUNERS

REMOVE ALL TAGS, RIBBONS, PROTECTIVE TAPE, AND TRANSIENT TRUNK GUARDS

REMOVE ALL TWINE, WIRE, ROPE AND BURLAP FROM TOP 1/3 OF ROOT BALL. (REMOVE ALL NON-ORGANIC TWINE, BURLAP FROM ENTIRE ROOT BALL)

- 3" MULCH PLANTING MIX AS SPECIFIED EARTH SAUCER TO THE LIMITS OF CANOPY - FINISHED GRADE

- TOP SOIL

SCARIFIED SUB-GRADE REMOVE ALL LARGE ROCKS AND CONSTRUCTION DEBRIS FROM PLANTING PIT PLANTING BASE SOIL TO SUPPORT

ROOTBALL WITH NO SETTLEMENT - SUB-SOIL

- NOTES: 1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF
- PLANT. 2. REMOVE ALL ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK BELOW GRADE.
- 3. STAKING IS NOT REQUIRED UNLESS PROPER VERTICAL ALIGNMENT OF PLANT CANNOT BE MAINTAIN DUE TO WINDY CONDITIONS, OR IF

PLANTING ON A STEEP SLOPE STAKING MAY BE REQUIRED. SEE

DETAIL.

MULTI-STEM AND/OR UNDERSTORY PLANTING 3

NO PRUNNING - EXCEPT FOR BROKEN OR DEAD BRANCHES. PRUNE AT NODE OR BRANCH BARK COLLAR WITH CLEAN SHARP PRUNERS

REMOVE ALL TAGS, RIBBONS, & PROTECTIVE TAPE.

REMOVE ALL TWINE, WIRE, ROPE AND BURLAP FROM TOP 1/3 OF ROOT BALL. (REMOVE ALL NON-ORGANIC TWINE, BURLAP FROM ENTIRE ROOT BALL)

/--- 3" MULCH ✓ FORM SAUCER

✓ FINISHED GRADE TOPSOIL PLANTING MIX AS SPECIFIED

UNDISTURBED SUBGRADE

-6" MIN

B&B SHRUB PLANTING 6

ROOT BALL

VARIES

6" MIN.



Code				
	Botanical Name	Common Name	Size	Location
	Acer rubrum	Red Maple	2 1/2" Cal.	
	Acer saccharum	Sugar Maple	2 1/2" Cal.	
	Aesculus glabra	Ohio Buckeye	2 1/2" Cal.	
	Aesculus flava	Yellow Buckeye	2 1/2" Cal.	
	Aesculus pavia	Red Buckeye	2 1/2" Cal.	
	Betula lenta	Yellow Birch	2 1/2" Cal.	
	Betula nigra	River Birch	2 1/2" Cal.	
	Carpinus caroliniana	American Hornbean	2 1/2" Cal.	
	Carva illinoinesis	Pecan	2 1/2" Cal.	
	Carva glabra	Pignut	2 1/2" Cal.	
	Carva laciniosa	Shellbark Hickory	2 1/2" Cal.	
	Carva ovata	Shadbark Hickory	2 1/2" Cal.	
	Cladrastis kentukea	Yellowwood	2 1/2" Cal	
	Diospyros virginiana	Perismmon	2 1/2" Cal	
	Eagus grandiolia	American Beech	2 1/2 Cal.	
	Gleditsia tricanthos	Honeylocust	2 1/2" Cal	
	Gymnododus dioisus	Kontucky Coffootroo	2 1/2 Cal.	
	luglans nigra	Renderky Coneenee	2 1/2 Cal.	
	Jugians nigra		2 1/2 Cal.	
	Liquidambar stylicitare	Sweetguni	2 1/2 Cal.	
	Magnalia aguminata	Cucumbertree Magnelie	2 1/2 Cal.	
	Magnolia acuminata	Dislast Magnelia	2 1/2 Cal.	
		Limbrolla Magnolia	2 1/2 Cal.	
	Nagnolla tripetala			
	Ostrya virginiana		2 1/2 Cal.	
	Platanus occidentalis	Sycamore	2 1/2" Cal.	
	Populus deltoides	Eastern Cottonwood	2 1/2" Cal.	
	Quercus alba		2 1/2" Cal.	
	Quercus coccinea		2 1/2" Cal.	
	Quercus Imbricaria	Sningle Uak	2 1/2" Cal.	
	Quercus michauxii	Swamp Chestnut Oak	2 1/2" Cal.	
	Quercus muehlenbergii	LUNINKAPIN Uak	2 1/2" Cal.	
	Quercus macrocarpa	Bur Oak	2 1/2" Cal.	
	Quercus pagoda	Cherrybark Oak	2 1/2" Cal.	
	Quercus palustris	Pin Oak	2 1/2" Cal.	
	Quercus phellos	Willow Oak	2 1/2" Cal.	
	Qurcus prinus	Chestnut Oak	2 1/2" Cal.	
	Quercus rubra	Northern Red Oak	2 1/2" Cal.	
	Quercus stellata	Post Oak	2 1/2" Cal.	
	Quercus velutina	Black Oak	2 1/2" Cal.	
	Rofinia pseudoacacia	Black Locust	2 1/2" Cal.	
	Sassafras albidum	Sassafras	2 1/2" Cal.	
	Tilian americana	American Linden	2 1/2" Cal.	
VERGRE	EN TREES			
	Abies frasieri	Fraser Fir	8'-10' HT.	
	llex opaca	American Holly	8'-10' HT.	
	Juniperus virginiana	Eastern Red Cedar	8'-10' HT.	
	Pinus palustris	Longleaf Pine	8'-10' HT.	
	Picea rubens	Red Spruce	8'-10' HT.	
	Pinus strobus	Eastern White Pine	8'-10' HT.	
	Pinus taeda	Loblolly Pine	8'-10' HT.	
	Pinus virginiana	Virginia Pine	8'-10' HT.	
	Taxodium distichum	Bald Cypress	8'-10' HT.	
ORNAME	NTAL			
	Amelanchier canadensis	Shadblow Serviceberry	1 1/2" cal. 8" HT.	
	Cercis canadensis	Eastern Redbud	1 1/2" cal. 8" HT.	
	Chionanthus virginicus	Fringetree	1 1/2" cal. 8" HT.	
	Cornus alternifolia	Pagoda Dogwood	, 1 1/2" cal. 8" HT.	
	Cornus floridus	Flowering Dogwood	1 1/2" cal. 8" HT.	
	Crataegus crusgalli	Cockspur Hawthorne	1 1/2" cal. 8" HT.	
	Lagerstremia indica	Crane Myrtle	1 1/2" cal. 8" HT	
	Nyssa sylvatica	Blackgum	1 1/2" cal. 8" HT	
		Black Cherry	1 1/2" cal. 8" HT	
		Diduk Cherry		
SHRUBS	Aronia arbuifolio	Red Chokebarry	large Chrub	
SHRUBS	Aronia arbuifolia	Red Chokeberry	Large Shrub	
SHRUBS	Aronia arbuifolia Asiminia triloba	Red Chokeberry Pawpaw	Large Shrub Large Shrub	
SHRUBS	Aronia arbuifolia Asiminia triloba Ceanothus americana	Red Chokeberry Pawpaw NJ Tea Buttophych	Large Shrub Large Shrub Small Shrub	Wet Soils
SHRUBS	Aronia arbuifolia Asiminia triloba Ceanothus americana Cephalantha occidentailis	Red Chokeberry Pawpaw NJ Tea Buttonbush	Large Shrub Large Shrub Small Shrub Large Shrub	Wet Soils
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ATTACHMENT 2 DECOMMISSIONING COST ESTIMATE

Decommissioning Cost Estimate - Summary

Project Information	
Project Name	SR Simpson Solar
Owner	Horus Kentucky 1 LLC
Project Location	Simpson County, KY
PV Array Size (MW DC)	90.97
PV Array Size (MW AC) at POI	69.3
Site Size (developed acres)	339
Panel Type	Thinfilm, monofacial (or equivalent)
Racking Type	Single Axis, Independent Row

Decommissioning Net Cost Estimate Summary

OVERALL TOTAL	\$2,605,500
Salvage Value or Cost*	(\$3,055,300)
Decommissioning Cost	\$5,660,800

Decommissioning Cost Estimate - Detailed Breakdown

Decommissioning Costs

Decommissioning Activity Item	Estimated Quantity	Unit	Total Cost (\$)	Notes
Mobilization / Demobilization / Management	1	LS	\$244,100	Single mobilization and establishment of necessary services, labor & material.
PV Module Removal	197,766	Module	\$1,817,000	First Solar Series 6 Plus Module
Racking/Tracker Removal	5,548	Ton	\$850,000	Tracker removal including tracker, motor and racking
Steel Pile Removal	362,135	LF	\$1,110,000	Driven steel piles, various sizes
Wire and Cable Removal	Varies	LS	\$424,000	Removal of various above ground medium voltage and low voltage wire and cabling
Central Inverter Removal	93	each	\$409,000	93 Central Inverter + Step Up Transformer Skids
Misc. Electrical Equipment Removal	Varies	LS	\$85,000	Combiner Boxes, Control/Comm Equipment, Met Stations
Road and Aggregate Removal	356	CY	\$145,000	PV Facility 16' wide substation access roads
Chain Link Fence Removal	39,459	LF	\$149,000	8' total height; 1' Barbed Parapet (3-Wire), 10' post spacing, includes gates
Rough Grade Site (as required by disturbance)	10	Acre	\$20,000	Return to smooth contours as needed; not all acres will need to be graded.
Site restoration / Seeding	150	Acre	\$132,000	Seeding of disturbed areas during decommissioning; Native seed mix/species.
O&M Building	1	LS	\$4,000	Distmantle and remove concrete foundation
Material Hauling	13,044	CY	\$203,000	Assume average 20 mile haul distance.
Substation Removal	1	LS	\$66,400	120'x150' Collection Switchgear and Equipment Area (structure, wire and aggregate removal)
Gen-Tie Line Removal	1	LS	\$2,300	Assume single span interconnect steel pole overhead line to utility switchyard
Total Decommissioning Cost			CE 660 900	

Total Decommissioning Cost



Salvage Values

Material or Equipment Item	Potential Salvage Quantity	Unit	Total (Value) or Cost (\$)	Notes
PV Module Recycling	16,192,566	Lbs	\$0	No cost or salvage value assigned at this time for modules
PV Central Inverters + Transformers	136,000	Lbs	(\$975,600)	93 Central Inverters + Transformer skid salvage
Miscellaneous PV Electrical Equipment	1	Tons	(\$13,800)	Combiner Boxes, Control/Comm Equipment, Met Stations
Fence and Fence Posts	252	Tons	(\$60,100)	7' Galvanized Steel Chain Link with Barb Wire
Steel piles	1,465	Tons	(\$713,800)	Pile weights and lengths vary - steel scrap tonnage estimated on full removal
Tracking Assembly/Motor/Racking	2,204	Each	(\$866,100)	Aluminum, Steel and Motor Scrap
Wire and Cable	Varies	LS	(\$190,000)	Mix of primarily Alumnum and Copper wire scrap
Aggregate Recovery	8,562	CY	(\$118,900)	PV Facility 16' wide interior access roads
Substation	1	LS	(\$115,500)	Misc. Equipment, wire, aggregate and support structures.
Gen-Tie Line	1	LS	(\$1,500)	Assume single span interconnect steel pole overhead line to utility switchyard
Net (Salvage Value) or Cost			(\$3,055,300)	

Total Decommissioning Cost	\$5,660,800
Total (Salvage Value) or Cost	(\$3,055,300)
OVERALL TOTAL	\$2.605.500

NOTES:

1. Labor costs based on RSMeans and additional industry data.

2. Equipment and construction quantities are based on preliminary design information available to date, final values subject to change.

3. Weights and dimensions based on available engineering information, cutsheets, or publicly available cutsheets/information.

4. Decommissioning costs are in 2022 dollars and salvage/recycling values per current available market recycling rates.

5. Cost estimates and salvage values are for budgetary purposes only and do not represent guaranteed costs.

6. Costs do no include any decommissioning work within the utility substation (point of interconnection).

7. No biological, environmental monitoring or testing is included or anticipated per current requirements.

8. Solar PV panels are under a 30 year performance guarantee and may be resold on secondary market depending on the age of the panels.