

Exhibit W

Facility Retirement and Site Restoration

**Bakeoven Solar Project
November 2019**

Prepared for



Avangrid Renewables, LLC

Prepared by



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Table of Contents

1.0	Introduction	1
2.0	Estimated Useful Life of the Project.....	1
3.0	Actions to Restore the Site	1
4.0	Decommission Cost Estimate	2
5.0	Decommissioning Financial Assurance.....	5
6.0	Monitoring Plan	7
7.0	Submittal Requirements and Approval Standards	7
7.1	Submittal Requirements	7
7.2	Approval Standards	7

List of Tables

Table W-1. Submittal Requirements Matrix.....	7
Table W-2. Approval Standard.....	7

List of Attachments

Attachment W-1. Estimated Retirement and Restoration Cost – Summary Outline Without Scrap Value

Attachment W-2. Estimated Retirement and Restoration Cost – Summary Outline With Scrap Value

Attachment W-3. Detailed Assumptions Used in Retirement and Restoration Cost Estimates

Acronyms and Abbreviations

Applicant	Bakeoven Solar, LLC
Council	Energy Facility Siting Council
Facility	Bakeoven Solar Project
FTE	Full-Time Equivalent
OAR	Oregon Administrative Rule
ODOE	Oregon Department of Energy

1.0 Introduction

Bakeoven Solar, LLC (Applicant) proposes to construct and operate a solar energy generation facility and related or supporting facilities in Wasco County, Oregon. This Exhibit W was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(w) and provides the information needed under OAR 345-022-0050 to demonstrate that the site can be restored adequately to a useful, non-hazardous condition.

2.0 Estimated Useful Life of the Project

OAR 345-021-0010(1)(w) Information about site restoration, providing evidence to support a finding by the Council as required by OAR 345-022-0050(1). The applicant shall include:

(A) The estimated useful life of the proposed facility.

For financial evaluation and contractual purposes, the Bakeoven Solar Project (Facility) is assumed to have a useful life of 40 years. Facility components will be designed assuming a 40-year useful life, but may be updated or “repowered” before the end of this period. Based on today’s market for renewable power, it is likely that the Facility will be upgraded with more efficient equipment over time; therefore, the Facility could have a useful life for much longer than 40 years. Substantial changes to the Facility associated with repowering may be approved by the Energy Facility Siting Council (Council) through the procedures outlined in OAR Chapter 345, Division 027.

3.0 Actions to Restore the Site

OAR 345-021-0010(1)(w)(B) Specific actions and tasks to restore the site to a useful, non-hazardous condition.

When the Facility is retired, the Applicant will obtain the necessary authorization from the appropriate regulatory agencies and landowners to proceed with decommissioning of Facility components. The first step in decommissioning will be dismantling solar and battery components, as well as related aboveground equipment (the operations and maintenance building, transmission and overhead collector lines, inverter pads, and the substation).

The solar generation portion of the Facility will be constructed out of solar modules, collector cables, and transformers. Each of the solar modules will be mounted on a steel pole anchored into the ground. Decommissioning efforts will occur in the opposite order of construction. The Facility service roads will be used to allow the deconstruction contractor to separate the solar modules from the pole, and directly load the modules into a truck or roll-off container for off-site disposal or recycling. The contractor will then remove the poles from the ground, and recycle them as scrap

metal. The transformers will be decommissioned and disposed of off-site. Underground electrical collector lines will remain if they are deeper than 3 feet below grade.

The primary elements associated with decommissioning the battery storage system will include draining fluids within the flow batteries, and transporting to an off-site facility for recycling. If lithium-ion batteries are selected, disposal will be accomplished in the same manner as routine battery replacement. Self-contained battery components will be removed and disposed of or recycled by a qualified vendor. Once the self-contained battery components have been removed, the containers and associated components will be disassembled and transported off site via truck for disposal or recycling. In both cases, the footprint of the battery storage system will then be regraded and seeded for final stabilization. Any unsalvageable material will be disposed of at authorized sites (as described in Exhibit V).

The next step in decommissioning will be removal of all concrete pads and foundations to an appropriate depth below the soil surface. The Applicant's lease agreements specify that in the event of Facility retirement, all foundations will be removed to a minimum depth of 3 feet below grade and soils will be restored, per standard industry practice. Portions of underground electrical and communication cable buried below 3 feet will be left in place. These actions will allow agricultural use of the Facility site after decommissioning. Reclamation procedures will be based on site-specific requirements and techniques commonly employed at the time the area is to be reclaimed. Procedures will likely include regrading to restore disturbed areas, followed by reseeded with native plant seed mixes, as directed by the landowner.

One of the final steps in decommissioning will be removal of access roads. Decommissioned roads will be reclaimed to restore the surface grade and soil to a condition useful for agriculture or grazing, depending on the use of surrounding lands. Roads also may be left in place based on landowner preference. It is expected that landowners generally will not want the Applicant to decommission the widened portions of farm roads that pre-existed the Facility, but will want the Applicant to decommission the new access roads built for the Facility. Areas of disturbance will be reseeded to return the solar array area to a useful, nonhazardous condition. The decommissioning will be done consistent with the Revegetation Plan (provided as Attachment P-3 to Exhibit P) required as part of the site certificate.

4.0 Decommission Cost Estimate

OAR 345-021-0010(1)(w)(C) An estimate, in current dollars, of the total and unit costs of restoring the site to a useful, non-hazardous condition.

(D) A discussion and justification of the methods and assumptions used to estimate site restoration costs.

Attachment W-1 provides a detailed Facility retirement and restoration cost estimate. The estimated cost for removal of all improvements to retire and restore the Facility to preconstruction condition is about \$20.1 million in first-quarter 2019 dollars. Attachment W-2 provides the same

estimate with consideration for scrap value, which reduces the total decommissioning cost to about \$15.6 million. Both cost estimates are presented in unit costs on a per megawatt basis for the facility, using standard construction and restoration practices. Attachment W-3 provides detailed assumptions used in preparing the cost estimates.

The Applicant requests that scrap value be considered a discount to the decommissioning bond obligations because scrap metals removed from the Facility can be sold to offset the costs of decommissioning. As documented by the industry-recognized pricing source SteelBenchmarker.com, the value of metal scrap has fluctuated over time, but has overall held value. For example, the price of “#1 heavy melting scrap” steel has increased more than 300 percent over 17 years, from \$70 per ton to a current value of \$298 per ton. In the past 10 years, it has never been below \$150 per ton, and on occasion has reached over \$500 per ton. The value used in this estimate (Attachment W-2) is \$216 per ton, which is well within the range of fluctuation, and scrap value is expected to continue to be at or above the current value. To account for changes in scrap value over time, the Applicant proposes to review and adjust commodity prices as part of annual updates to the decommissioning cost estimate. See Section 5.0 for more information on the legal access to scrap value and steps for implementation of the decommissioning security.

The decommissioning estimates were developed by an experienced cost estimator using professional experience, in collaboration with the Applicant’s engineering staff. The estimate is broken into individual tasks that were each estimated separately to include labor requirements, equipment needs, and duration. Production rates were established using professional experience and published standards that include RS Means (www.rsmeans.com). Labor and equipment rates prevalent to the geographic area of the Facility were obtained based on U.S. Department of Labor wage determinations. After the estimate was completed, typical average markups were applied for contingency, overhead, and fee in accordance with industry standards. Estimating methods and assumptions specific to this estimate are as follows:

- Labor costs were developed by reviewing U.S. Department of Labor wage determinations and rates published by RS Means. An average rate is developed that includes base wage, fringe, and payroll tax liability. The final rate used in the estimate is an average of 40 hours of standard time and 10 hours of overtime per week, assuming a 50-hour work week during construction activities.
- Equipment rates used in the estimate are developed by reviewing rates published by RS Means and historical vendor quotes. Rates include fuel, maintenance, and wear and tear of ground-engaging components. Rates utilized assume the use of rental equipment, which is generally more expensive than contractor-owned equipment.
- Mobilization and demobilization costs reflect the anticipated cost to mobilize equipment, facilities and crew to the Facility, assuming the work is performed by local contractors. This amount does not include the frontloading of costs from other tasks.
- Restoration is estimated on a unit cost basis, priced by task, and follows the progression of work from start to finish, as illustrated in Attachment W-1. Unit costs are developed by

establishing the labor, equipment, and production rate required for each individual task using RS Means and the estimator's experience. Several other miscellaneous costs have been approximated, including permits, engineering, signage, fencing, traffic control, utility disconnects, etc. In the context of the overall estimate, these are incidental costs that are covered in the estimate's contingency.

- Roads will be restored pursuant to the approved retirement plan so that they become a part of the natural surroundings and are no longer recognizable or usable as a road. On private lands, roads will be restored or left in place at the request of the current landowner. The cost for restoration of roads assumes that all roads will be decompacted and reseeded.
- The cost for temporary facilities required during the decommissioning effort has been included in the restoration cost. This includes one office trailer and two Conex storage units, along with portolets, first aid supplies, and utilities.
- Field management during construction activities has been added to the estimate. This includes a Superintendent, a Health and Safety Representative, and two Field Engineers.
- Salvage value was estimated using the industry price tracker SteelBenchmarker.com.
- A contractor's Home Office, Project Management, Overhead, and Fee can vary widely by contractor. As such, averages were developed for the estimate and added as a percentage of total cost. These include 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fee. This fee amounts to nearly \$2.74 million across all tasks.
- The Oregon Department of Energy (ODOE) could incur additional costs in the case where the certificate holder is unable to manage the decommissioning process. ODOE's costs could include the legal processes related to certificate holder insolvency, costs associated with soliciting proposals and executing a contract, and oversight of contractor performance. The Applicant estimated these efforts would require an average of no more than two Full-Time Equivalent (FTE) employees over the duration of the decommissioning process, plus an estimated 6 months for preparation and close-out. The decommissioning process is anticipated to last 10 months, so a reasonable cost for ODOE's time would be based on two FTEs for 16 months. Conservatively estimating the average full cost of one professional state FTE employee, including overhead and benefits, is \$200,000 per year; this amounts to \$533,000 total. This amount is presented in Line Item 1 on each cost estimate and is in addition to the Home Office, Project Management, Overhead, and Fee items described above.

Overall, the cost estimates for decommissioning were prepared with a high degree of confidence using per task cost breakdowns from industry-trusted information sources and based on the detailed design of the Facility (i.e., greater than 50 percent design). On this basis, the Applicant considers the decommissioning estimates to be consistent with "Class 1 Estimates" per the Association for the Advancement of Cost Engineering International Cost Estimate Classification System. Under this classification, the recommended contingency for potential future uncertainties ranges between -10 percent and +15 percent depending on complexity of the project and level of available detail. Due to the low complexity of solar projects and the high level of detailed design

available for the Facility (i.e., the decommissioning costs are determined based on final design) a 3 percent contingency is appropriate for the Facility. This contingency is labeled “contractor contingency” and is applied to each of the separate sections of the cost estimate. The Applicant is aware of other Council projects adding a 10 percent “future developments” contingency to the decommissioning costs to cover potential unknown costs and the potential for inaccuracy in elements of the cost estimate. However, in this case, Attachments W-1 and W-2 present accurate decommissioning cost estimates using best industry practices. Further, Attachment W-3 provides supporting information for each task included in the cost estimates. Therefore, the Applicant believes that a 3 percent contingency is appropriate and sufficient for this estimate.

5.0 Decommissioning Financial Assurance

Using the decommissioning cost estimates (Attachment W-1 or W-2), the Applicant will implement the following steps to provide financial assurances so that the Facility could be restored to a useful, non-hazardous condition. The Applicant proposes a phased approach to decommissioning security, as described below.

- **During Construction.** Prior to construction, the Applicant will provide a decommissioning bond for the full amount, not including scrap value. The amount will be scaled to the actual Facility size based on final design using the unit costs in Attachment W-1. Once the Facility has begun commercial operations, the bond will be reduced to \$1.00.
- **During Operations.** In year 20 of operation, or in the last year of the Facility’s Power Purchase Agreement, whichever is later, the certificate holder will provide a decommissioning bond for the full amount discounted for scrap value using the unit rates in Attachment W-2 and scaled to the actual Facility design. The bond will remain in effect for remainder of the Facility’s life, and be updated annually to adjust for inflation and scrap value. The Applicant will provide an Officer’s Certificate affirming the length of the Power Purchase Agreement or other acceptable proof of contracted agreement.
- **Access to Scrap Value.** To assure that ODOE has the first interest in the scrap value over other creditors, the Applicant proposes to enter into a security agreement with ODOE granting ODOE a security interest in Facility component salvage. This agreement will be a financing statement (Unified Commercial Code filing) that is filed with Wasco County and Secretary of State. This filing will offer ODOE legal rights to the scrap value to fund the decommissioning should the certificate holder be unable to restore the Facility. Because some financial partners may object to this term, the filing would contain a clause allowing it to be replaced with alternate decommissioning security for the full amount of decommissioning without salvage value.
- **Phasing.** Each phase of the Facility will hold separate financial assurances for decommissioning that particular portion of the Facility.

- **Shared Facilities.** Relating and supporting facilities that are shared with other projects may not be decommissioned at the same time of the Facility. For example, if the Imperial Wind Project (located in Wasco County, southeast of the Facility) shares the transmission line, then the obligation to decommission the transmission line would be transferred to that project. The certificate holder shall provide a shared facilities agreement or other real estate rights at the time of decommissioning to demonstrate that the remaining components will be used for another project.

Solar panel and equipment manufacturers design and engineer their facilities to have a used and useful life for more than 35 years. Tier 1 solar panel manufacturers warranty the production and degradation of their modules for 25 to 30 years. Likewise, the racking and inverter manufacturers estimate longer useful life than modules. A phased approach to the decommissioning bond considers the real-world economics of utility scale energy projects, as the level of investment in an energy project of this type is typically on the order of \$100 million or more. This investment usually is made in partnership with one or more equity investors in the project. Equity investors in energy projects hire independent evaluators to perform due diligence on projects prior to investing. Industry independent evaluators typically state the used and useful life of energy projects, such as the Facility, will have a used and useful life of 35 years or more.

Assuming projects have a 35-year useful life, if a project owner were to become insolvent during the lifetime of the energy facility, the project's equity investors would step in to be sure that the facility would remain operational. The industry's financial and real estate agreements are set up so that equity investors in a project can take over the project should the project owner go into default.

If a project owner goes into default, the project's banks and investors would then file for bankruptcy protection and find a new buyer to own and operate the project. A recent example of this was the SunEdison bankruptcy case. At the time of their bankruptcy in 2016, SunEdison had an entire portfolio of development and operating assets. When SunEdison declared Chapter 11 bankruptcy, these assets were repackaged and sold to other energy developers, such as Terra Nova, NRG Energy, and the Middle Eastern-backed firm Greenko Energy. Because of the way in which these deals are structured, it is not realistic that a multi-million dollar energy generation project would ever need to be decommissioned in the first 20 years of a project, or during the term of the Power Purchase Agreement, as there is both a contractual obligation to deliver energy and a revenue stream. On this basis, a phased approach to financial security for decommissioning is reasonable, because the risk of Facility abandonment within the first 20 years of operations is near zero.

6.0 Monitoring Plan

OAR 345-021-0010(1)(w)(E) For facilities that might produce site contamination by hazardous materials, a proposed monitoring plan, such as periodic environmental site assessment and reporting, or an explanation why a monitoring plan is unnecessary.

The Facility is not expected to cause site contamination by hazardous materials, and therefore no monitoring plan is required or proposed.

7.0 Submittal Requirements and Approval Standards

7.1 Submittal Requirements

Table W-1. Submittal Requirements Matrix

Requirement	Location
OAR 345-021-0010(1)(w) Information about site restoration, providing evidence to support a finding by the Council as required by OAR 345-022-0050(1). The applicant shall include:	-
(A) The estimated useful life of the proposed facility.	Section 2.0
(B) Specific actions and tasks to restore the site to a useful, non-hazardous condition.	Section 3.0
(C) An estimate, in current dollars, of the total and unit costs of restoring the site to a useful, non-hazardous condition.	Section 4.0
(D) A discussion and justification of the methods and assumptions used to estimate site restoration costs.	Section 4.0
(E) For facilities that might produce site contamination by hazardous materials, a proposed monitoring plan, such as periodic environmental site assessment and reporting, or an explanation why a monitoring plan is unnecessary.	Section 6.0

7.2 Approval Standards

Table W-2. Approval Standard

Requirement	Location
OAR 345-022-0050 Retirement and Financial Assurances	-
To issue a site certificate, the Council must find that:	Sections 2.0 though 6.0
(1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.	
(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition.	Exhibit M

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Attachment W-1. Estimated Retirement and Restoration Cost – Summary Outline Without Scrap Value

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CBS Outline Report
TETRA TECH EC, INC.

Job Code: Bakeoven Solar
Description: Decommissioning Estimate

From Cost Item :	To Cost Item :					
Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
1	BAKEOVEN SOLAR RETIREMENT					
1.1	ODOE Management	1.00	Lump Sum	533,000.00	533,000.00	
1.2	Mob / Demob - Fixed Cost Per Retirement Phase	1.00	Lump Sum	148,327.98	148,327.98	
1.2.1	Equipment Mob	1.00	Lump Sum	61,200.00	61,200.00	
1.2.2	Site Facilities	1.00	Lump Sum	2,200.00	2,200.00	
1.2.3	Crew Mob & Site Setup	3.00	Day	12,065.72	36,197.15	
1.2.4	Crew Demob & Site Cleanup	2.00	Day	12,065.72	24,131.44	
1.2.5	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	3,711.87	3,711.87	
1.2.6	Contractor Contingency (3% Of Cost)	1.00	Lump Sum	3,823.20	3,823.20	
1.2.7	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	17,064.32	17,064.32	
1.3	Substation & T- Line Retirement - Fixed Cost During Final Retirement Phase	1.00	Lump Sum	1,678,733.41	1,678,733.41	
1.3.1	Substation Retirement	1.00	Lump Sum	272,508.50	272,508.50	
1.3.1.1	Fence Removal	1.00	Day	1,202.19	1,202.19	
1.3.1.2	Transformer Removal	2.00	Each	94,339.33	188,678.65	
1.3.1.2.1	Oil Removal & Disposal	2.00	Each	58,135.75	116,271.49	
1.3.1.2.1.1	Oil Removal	2.00	Each	760.75	1,521.49	
1.3.1.2.1.2	Oil Disposal	28,000.00	Gallon	4.00	112,000.00	
1.3.1.2.1.3	Trucking - Per Load	2.00	Each	1,375.00	2,750.00	
1.3.1.2.2	Dismantle & Loadout Transformer	2.00	Each	33,503.58	67,007.16	
1.3.1.2.2.1	Dismantle, Cut & Size	2.00	Each	28,003.58	56,007.16	
1.3.1.2.2.2	Trucking - Per Load	8.00	Each	1,375.00	11,000.00	
1.3.1.2.3	Disposal Cost	180.00	Ton	30.00	5,400.00	
1.3.1.3	Remove Control Building	1.00	Each	2,432.59	2,432.59	
1.3.1.3.1	Demo	1.00	Each	1,057.59	1,057.59	
1.3.1.3.2	Trucking - Per Load	1.00	Each	1,375.00	1,375.00	
1.3.1.4	UG Utility & Ground Removal	2.00	Day	1,202.19	2,404.37	
1.3.1.5	Remove Foundations To Subgrade	500.00	Cubic Yard	27.02	13,512.25	
1.3.1.5.1	Excavate / Remove Foundation - Various Depth	500.00	Cubic Yard	15.05	7,525.53	
1.3.1.5.2	Concrete Transport Offsite	500.00	Cubic Yard	11.97	5,986.72	
1.3.1.6	Misc. Material Disposal	1.00	Lump Sum	1,675.00	1,675.00	
1.3.1.6.1	Trucking - Per Load	1.00	Each	1,375.00	1,375.00	
1.3.1.6.2	Disposal Cost	10.00	Ton	30.00	300.00	
1.3.1.7	Restore Yard	1.00	Lump Sum	62,603.46	62,603.46	
1.3.1.7.1	Backfill / Regrade	4.00	Acre	1,540.15	6,160.62	
1.3.1.7.2	Vegetative Cover	2,000.00	Cubic Yard	27.22	54,442.84	
1.3.1.7.2.1	Topsoil, Delivered	2,000.00	Cubic Yard	20.00	40,000.00	
1.3.1.7.2.2	Placement	2,000.00	Cubic Yard	7.22	14,442.84	
1.3.1.7.3	Re-Seed With Native Vegetation	4.00	Acre	500.00	2,000.00	
1.3.2	Transmission Line Retirement	1.00	Lump Sum	1,127,816.49	1,127,816.49	
1.3.2.1	Conductor Removal	11.00	Mile	33,955.77	373,513.43	
1.3.2.1.1	Cut / Lower Cable, Size & Loadout	11.00	Mile	30,005.77	330,063.43	
1.3.2.1.2	Trucking - Per Load	22.00	Each	1,375.00	30,250.00	
1.3.2.1.3	Disposal Cost	440.00	Ton	30.00	13,200.00	
1.3.2.2	Structure Removal	83.00	Each	4,467.54	370,806.12	
1.3.2.2.1	Cut / Lower Structure	83.00	Each	1,727.63	143,393.00	

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
1.3.2.2.2 Cut / Size Structure & Loadout	83.00	Each	1,840.40	152,753.12	
1.3.2.2.3 Trucking - Per Load	38.00	Each	1,375.00	52,250.00	
1.3.2.2.4 Disposal Cost	747.00	Ton	30.00	22,410.00	
1.3.2.3 Remove Foundations To Subgrade	83.00	Each	4,620.45	383,496.95	
1.3.2.3.1 Excavate / Remove Foundation - Various Depth	83.00	Each	4,594.67	381,357.69	
1.3.2.3.2 Concrete Transport Offsite	134.00	Cubic Yard	15.96	2,139.25	
1.3.3 Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	42,009.72	42,009.72	
1.3.4 Contractor Contingency (3% Of Cost)	1.00	Lump Sum	43,270.05	43,270.05	
1.3.5 Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	193,128.65	193,128.65	
1.4 Solar Array Retirement	303.00	MW	57,061.85	17,289,739.83	
1.4.1 Site Facilities	303.00	MW	71.12	21,550.00	
1.4.2 Field Management	303.00	MW	2,884.72	874,069.25	
1.4.3 Solar Array Retirement	303.00	MW	41,933.16	12,705,746.06	
1.4.3.1 Fence Removal	303.00	MW	238.48	72,260.10	
1.4.3.2 Inverter / Transformer Removal	303.00	MW	2,899.37	878,509.69	
1.4.3.2.1 Disconnect Electrical	152.00	Each	1,050.92	159,739.23	
1.4.3.2.2 Loadout Inverter & Transformer	152.00	Each	2,663.75	404,890.46	
1.4.3.2.3 Trucking - Per Load	152.00	Each	1,375.00	209,000.00	
1.4.3.2.4 Disposal Cost	3,496.00	Ton	30.00	104,880.00	
1.4.3.3 Remove Foundations To Subgrade	303.00	MW	1,301.46	394,341.45	
1.4.3.3.1 Excavate / Remove Foundation	14,592.00	Cubic Yard	15.05	219,625.16	
1.4.3.3.2 Concrete Transport Offsite	14,592.00	Cubic Yard	11.97	174,716.29	
1.4.3.4 Solar Panel Removal	303.00	MW	14,471.03	4,384,721.14	
1.4.3.4.1 Solar Panel Removal	951,900.00	Each	2.78	2,650,331.14	
1.4.3.4.2 Trucking - Per Load	846.00	Each	1,375.00	1,163,250.00	
1.4.3.4.3 Disposal Cost	19,038.00	Ton	30.00	571,140.00	
1.4.3.5 Solar Rack (Trackers) & Post Removal	303.00	MW	23,022.82	6,975,913.68	
1.4.3.5.1 Solar Rack (Trackers) & Post Removal	25,050.00	Each	242.00	6,062,063.68	
1.4.3.5.2 Trucking - Per Load	446.00	Each	1,375.00	613,250.00	
1.4.3.5.3 Disposal Cost	10,020.00	Ton	30.00	300,600.00	
1.4.4 Site Restoration - Partial Site Seeding	303.00	MW	2,709.47	820,969.36	
1.4.4.1 Decompact Roads	180,000.00	Linear Feet	2.68	482,765.85	
1.4.4.2 Spot Grade Disturbed Areas	294.00	Acre	536.41	157,703.51	
1.4.4.3 Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	361.00	Acre	500.00	180,500.00	
1.4.5 Home Office, Project Management (5% Of Cost)	303.00	MW	1,427.95	432,670.02	
1.4.6 Contractor Contingency (3% Of Cost)	303.00	MW	1,470.79	445,650.12	
1.4.7 Contractor OH & Fee (13% Of Cost)	303.00	MW	6,564.64	1,989,085.02	
1.5 DC Storage System Retirement	100.00	MW	4,269.28	426,928.23	
1.5.1 DC Storage System Retirement	100.00	MW	3,561.25	356,124.55	
1.5.1.1 Battery Removal & Disposal	100.00	MW	2,499.64	249,963.84	
1.5.1.1.1 Remove Batteries, Load For Transport	66.00	Day	1,737.94	114,704.04	
1.5.1.1.2 Transport Batteries	33.00	Each	1,480.60	48,859.80	
1.5.1.1.2.1 Roll Off Liners	33.00	Each	105.60	3,484.80	
1.5.1.1.2.2 Trucking - Per Load	33.00	Each	1,375.00	45,375.00	
1.5.1.1.3 Disposal Fee's	432.00	Ton	200.00	86,400.00	
1.5.1.2 Structure & Components Removal	100.00	MW	1,061.61	106,160.71	
1.5.1.2.1 Structure Demo	429.00	Ton	111.69	47,915.71	
1.5.1.2.2 Trucking - Per Load	33.00	Each	1,375.00	45,375.00	
1.5.1.2.3 Disposal Cost	429.00	Ton	30.00	12,870.00	
1.5.2 Home Office, Project Management (5% Of Cost)	100.00	MW	106.84	10,683.75	

Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
1.5.3	Contractor Contingency (3% Of Cost)	100.00	MW	110.04	11,004.24	
1.5.4	Contractor OH & Fee (13% Of Cost)	100.00	MW	491.16	49,115.69	
Total: BAKEOVEN SOLAR RETIREMENT					20,076,729.46	
Grand Total:					20,076,729.46	

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Attachment W-2. Estimated Retirement and Restoration Cost – Summary Outline With Scrap Value

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CBS Outline Report
TETRA TECH EC, INC.

Job Code: Bakeoven Solar
Description: Decommissioning Estimate

From Cost Item :	To Cost Item :					
Code	Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
2	BAKEOVEN SOLAR RETIREMENT W/ SCRAP CREDIT					
2.1	ODOE Management	1.00	Lump Sum	533,000.00	533,000.00	
2.2	Mob / Demob - Fixed Cost Per Retirement Phase	1.00	Lump Sum	148,327.98	148,327.98	
2.2.1	Equipment Mob	1.00	Lump Sum	61,200.00	61,200.00	
2.2.2	Site Facilities	1.00	Lump Sum	2,200.00	2,200.00	
2.2.3	Crew Mob & Site Setup	3.00	Day	12,065.72	36,197.15	
2.2.4	Crew Demob & Site Cleanup	2.00	Day	12,065.72	24,131.44	
2.2.5	Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	3,711.87	3,711.87	
2.2.6	Contractor Contingency (3% Of Cost)	1.00	Lump Sum	3,823.20	3,823.20	
2.2.7	Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	17,064.32	17,064.32	
2.3	Substation & T- Line Retirement - Fixed Cost During Final Retirement Phase	1.00	Lump Sum	1,275,592.79	1,275,592.79	
2.3.1	Substation Retirement	1.00	Lump Sum	228,228.50	228,228.50	
2.3.1.1	Fence Removal	1.00	Day	1,202.19	1,202.19	
2.3.1.2	Transformer Removal	2.00	Each	72,199.33	144,398.65	
2.3.1.2.1	Oil Removal & Disposal	2.00	Each	58,135.75	116,271.49	
2.3.1.2.1.1	Oil Removal	2.00	Each	760.75	1,521.49	
2.3.1.2.1.2	Oil Disposal	28,000.00	Gallon	4.00	112,000.00	
2.3.1.2.1.3	Trucking - Per Load	2.00	Each	1,375.00	2,750.00	
2.3.1.2.2	Dismantle & Loadout Transformer	2.00	Each	33,503.58	67,007.16	
2.3.1.2.2.1	Dismantle, Cut & Size	2.00	Each	28,003.58	56,007.16	
2.3.1.2.2.2	Trucking - Per Load	8.00	Each	1,375.00	11,000.00	
2.3.1.2.3	Scrap Credit - Substation	180.00	Ton	(216.00)	(38,880.00)	
2.3.1.3	Remove Control Building	1.00	Each	2,432.59	2,432.59	
2.3.1.3.1	Demo	1.00	Each	1,057.59	1,057.59	
2.3.1.3.2	Trucking - Per Load	1.00	Each	1,375.00	1,375.00	
2.3.1.4	UG Utility & Ground Removal	2.00	Day	1,202.19	2,404.37	
2.3.1.5	Remove Foundations To Subgrade	500.00	Cubic Yard	27.02	13,512.25	
2.3.1.5.1	Excavate / Remove Foundation - Various Depth	500.00	Cubic Yard	15.05	7,525.53	
2.3.1.5.2	Concrete Transport Offsite	500.00	Cubic Yard	11.97	5,986.72	
2.3.1.6	Misc. Material Disposal	1.00	Lump Sum	1,675.00	1,675.00	
2.3.1.6.1	Trucking - Per Load	1.00	Each	1,375.00	1,375.00	
2.3.1.6.2	Disposal Cost	10.00	Ton	30.00	300.00	
2.3.1.7	Restore Yard	1.00	Lump Sum	62,603.46	62,603.46	
2.3.1.7.1	Backfill / Regrade	4.00	Acre	1,540.15	6,160.62	
2.3.1.7.2	Vegetative Cover	2,000.00	Cubic Yard	27.22	54,442.84	
2.3.1.7.2.1	Topsoil, Delivered	2,000.00	Cubic Yard	20.00	40,000.00	
2.3.1.7.2.2	Placement	2,000.00	Cubic Yard	7.22	14,442.84	
2.3.1.7.3	Re-Seed With Native Vegetation	4.00	Acre	500.00	2,000.00	
2.3.2	Transmission Line Retirement	1.00	Lump Sum	835,814.49	835,814.49	
2.3.2.1	Conductor Removal	11.00	Mile	24,115.77	265,273.43	
2.3.2.1.1	Cut / Lower Cable, Size & Loadout	11.00	Mile	30,005.77	330,063.43	
2.3.2.1.2	Trucking - Per Load	22.00	Each	1,375.00	30,250.00	
2.3.2.1.3	Scrap Credit - T Line	440.00	Ton	(216.00)	(95,040.00)	
2.3.2.2	Structure Removal	83.00	Each	2,253.54	187,044.12	

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
2.3.2.2.1 Cut / Lower Structure	83.00	Each	1,727.63	143,393.00	
2.3.2.2.2 Cut / Size Structure & Loadout	83.00	Each	1,840.40	152,753.12	
2.3.2.2.3 Trucking - Per Load	38.00	Each	1,375.00	52,250.00	
2.3.2.2.4 Scrap Credit	747.00	Ton	(216.00)	(161,352.00)	
2.3.2.3 Remove Foundations To Subgrade	83.00	Each	4,620.45	383,496.95	
2.3.2.3.1 Excavate / Remove Foundation - Various Depth	83.00	Each	4,594.67	381,357.69	
2.3.2.3.2 Concrete Transport Offsite	134.00	Cubic Yard	15.96	2,139.25	
2.3.3 Home Office, Project Management (5% Of Cost)	1.00	Lump Sum	31,921.29	31,921.29	
2.3.4 Contractor Contingency (3% Of Cost)	1.00	Lump Sum	32,878.92	32,878.92	
2.3.5 Contractor OH & Fee (13% Of Cost)	1.00	Lump Sum	146,749.59	146,749.59	
2.4 Solar Array Retirement	303.00	MW	43,906.77	13,303,750.17	
2.4.1 Site Facilities	303.00	MW	71.12	21,550.00	
2.4.2 Field Management	303.00	MW	2,884.72	874,069.25	
2.4.3 Solar Array Retirement	303.00	MW	30,959.77	9,380,810.06	
2.4.3.1 Fence Removal	303.00	MW	238.48	72,260.10	
2.4.3.2 Inverter / Transformer Removal	303.00	MW	61.04	18,493.69	
2.4.3.2.1 Disconnect Electrical	152.00	Each	1,050.92	159,739.23	
2.4.3.2.2 Loadout Inverter & Transformer	152.00	Each	2,663.75	404,890.46	
2.4.3.2.3 Trucking - Per Load	152.00	Each	1,375.00	209,000.00	
2.4.3.2.4 Scrap Credit	3,496.00	Ton	(216.00)	(755,136.00)	
2.4.3.3 Remove Foundations To Subgrade	303.00	MW	1,301.46	394,341.45	
2.4.3.3.1 Excavate / Remove Foundation	14,592.00	Cubic Yard	15.05	219,625.16	
2.4.3.3.2 Concrete Transport Offsite	14,592.00	Cubic Yard	11.97	174,716.29	
2.4.3.4 Solar Panel Removal	303.00	MW	14,471.03	4,384,721.14	
2.4.3.4.1 Solar Panel Removal	951,900.00	Each	2.78	2,650,331.14	
2.4.3.4.2 Trucking - Per Load	846.00	Each	1,375.00	1,163,250.00	
2.4.3.4.3 Disposal Cost	19,038.00	Ton	30.00	571,140.00	
2.4.3.5 Solar Rack (Trackers) & Post Removal	303.00	MW	14,887.77	4,510,993.68	
2.4.3.5.1 Solar Rack (Trackers) & Post Removal	25,050.00	Each	242.00	6,062,063.68	
2.4.3.5.2 Trucking - Per Load	446.00	Each	1,375.00	613,250.00	
2.4.3.5.3 Scrap Credit	10,020.00	Ton	(216.00)	(2,164,320.00)	
2.4.4 Site Restoration - Partial Site Seeding	303.00	MW	2,709.47	820,969.36	
2.4.4.1 Decomact Roads	180,000.00	Linear Feet	2.68	482,765.85	
2.4.4.2 Spot Grade Disturbed Areas	294.00	Acre	536.41	157,703.51	
2.4.4.3 Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	361.00	Acre	500.00	180,500.00	
2.4.5 Home Office, Project Management (5% Of Cost)	303.00	MW	1,098.75	332,921.97	
2.4.6 Contractor Contingency (3% Of Cost)	303.00	MW	1,131.71	342,909.63	
2.4.7 Contractor OH & Fee (13% Of Cost)	303.00	MW	5,051.22	1,530,519.90	
2.5 DC Storage System Retirement	100.00	MW	3,004.12	300,412.28	
2.5.1 DC Storage System Retirement	100.00	MW	2,505.91	250,590.55	
2.5.1.1 Battery Removal & Disposal	100.00	MW	2,499.64	249,963.84	
2.5.1.1.1 Remove Batteries, Load For Transport	66.00	Day	1,737.94	114,704.04	
2.5.1.1.2 Transport Batteries	33.00	Each	1,480.60	48,859.80	
2.5.1.1.2.1 Roll Off Liners	33.00	Each	105.60	3,484.80	
2.5.1.1.2.2 Trucking - Per Load	33.00	Each	1,375.00	45,375.00	
2.5.1.1.3 Disposal Fee's	432.00	Ton	200.00	86,400.00	
2.5.1.2 Structure & Components Removal	100.00	MW	6.27	626.71	
2.5.1.2.1 Structure Demo	429.00	Ton	111.69	47,915.71	
2.5.1.2.2 Trucking - Per Load	33.00	Each	1,375.00	45,375.00	
2.5.1.2.3 Scrap Credit	429.00	Ton	(216.00)	(92,664.00)	

Code Description	Forecast (T/O) Quantity	Unit of Measure	Unit Cost	Total Cost (Forecast)	User Defined 1
2.5.2 Home Office, Project Management (5% Of Cost)	100.00	MW	75.18	7,517.73	
2.5.3 Contractor Contingency (3% Of Cost)	100.00	MW	77.43	7,743.24	
2.5.4 Contractor OH & Fee (13% Of Cost)	100.00	MW	345.61	34,560.76	
Total: BAKEOVEN SOLAR RETIREMENT W/ SCRAP CREDIT				15,561,083.23	
Grand Total:				15,561,083.23	

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Attachment W-3. Detailed Assumptions Used in Retirement and Restoration Cost Estimates

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WITH SCRAP VALUE

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Estimate Summary

TETRA TECH EC, INC.

Job Code: Bakeoven Solar

Description: Decommissioning Estimate

Cost Item									
CBS Position Code	Quantity	UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
2	1.00	Lump Sum	BAKEOVEN SOLAR RETIREMENT W/ SCRAP CREDIT	1,756.27	0.00	Detail	U.S. Dollar	15,561,083.23	15,561,083.23
2.1	1.00	Lump Sum	ODOE Management	0.00	0.00	Detail	U.S. Dollar	533,000.00	533,000.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
UODCODEOE	ODOE Management		533,000.00	Each	U.S. Dollar	1.00	533,000.00		
2.2	1.00	Lump Sum	Mob / Demob - Fixed Cost Per Retirement Phase	5.00	0.20	Detail	U.S. Dollar	148,327.98	148,327.98
2.2.1	1.00	Lump Sum	Equipment Mob	0.00	0.00	Detail	U.S. Dollar	61,200.00	61,200.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
UERNTRLG	Rental Equip Transp-Large		6.00	Each	U.S. Dollar	10,000.00	60,000.00		
UERNTRSM	Rental Equip Transp-Small		8.00	Each	U.S. Dollar	150.00	1,200.00		
2.2.2	1.00	Lump Sum	Site Facilities	0.00	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
UOCONMOB	Connex Box Mob		2.00	Each	U.S. Dollar	300.00	600.00		
UOTRLTRN	Trailer Trnsp/Setup/Trdwn		2.00	Each	U.S. Dollar	800.00	1,600.00		
2.2.3	3.00	Day	Crew Mob & Site Setup	3.00	1.00	Detail	U.S. Dollar	12,065.72	36,197.15
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	720.00	24.00	Each (hourly)	U.S. Dollar	38.04	27,386.82		
L010101	OPERATOR	180.00	6.00	Each (hourly)	U.S. Dollar	48.95	8,810.33		
2.2.4	2.00	Day	Crew Demob & Site Cleanup	2.00	1.00	Detail	U.S. Dollar	12,065.72	24,131.44
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	480.00	24.00	Each (hourly)	U.S. Dollar	38.04	18,257.88		
L010101	OPERATOR	120.00	6.00	Each (hourly)	U.S. Dollar	48.95	5,873.56		
2.2.5	1.00	Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	3,711.87	3,711.87
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		123,729.00	Each	U.S. Dollar	0.03	3,711.87		
2.2.6	1.00	Lump Sum	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	3,823.20	3,823.20
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		127,440.00	Each	U.S. Dollar	0.03	3,823.20		
2.2.7	1.00	Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	17,064.32	17,064.32
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		131,264.00	Each	U.S. Dollar	0.13	17,064.32		
2.3	1.00	Lump Sum	Substation & T- Line Retirement - Fixed Cost During Final Retirement Phase	264.74	0.00	Detail	U.S. Dollar	1,275,592.79	1,275,592.79
2.3.1	1.00	Lump Sum	Substation Retirement	30.95	0.03	Detail	U.S. Dollar	228,228.50	228,228.50
2.3.1.1	1.00	Day	Fence Removal	1.00	1.00	Detail	U.S. Dollar	1,202.19	1,202.19
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	10.00	1.00	Each (hourly)	U.S. Dollar	48.95	489.46		
L060100	GENERAL LABORER	10.00	1.00	Each (hourly)	U.S. Dollar	38.04	380.37		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RBACKH09	Deere 710J BACKHOE, 1.62CY	10.00	1.00	Each (hourly)	U.S. Dollar		33.24	332.35
2.3.1.2	2.00 Each	Transformer Removal	12.00	0.17	Detail	U.S. Dollar	72,199.33	144,398.65
2.3.1.2.1	2.00 Each	Oil Removal & Disposal	2.00	1.00	Detail	U.S. Dollar	58,135.75	116,271.49
2.3.1.2.1.1	2.00 Each	Oil Removal	2.00	1.00	Detail	U.S. Dollar	760.75	1,521.49
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	38.04	1,521.49	
2.3.1.2.1.2	28,000.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	112,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		112,000.00	Each	U.S. Dollar	1.00	112,000.00	
2.3.1.2.1.3	2.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		2,750.00	Each	U.S. Dollar	1.00	2,750.00	
2.3.1.2.2	2.00 Each	Dismantle & Loadout Transformer	10.00	0.20	Detail	U.S. Dollar	33,503.58	67,007.16
2.3.1.2.2.1	2.00 Each	Dismantle, Cut & Size	10.00	0.20	Detail	U.S. Dollar	28,003.58	56,007.16
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	400.00	4.00	Each (hourly)	U.S. Dollar	38.04	15,214.90	
L010101	OPERATOR	200.00	2.00	Each (hourly)	U.S. Dollar	48.95	9,789.26	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	100.00	1.00	Each (hourly)	U.S. Dollar	124.54	12,453.50	
*REXCAV06E	Excav 100K w/ Shear	100.00	1.00	Each (hourly)	U.S. Dollar	185.50	18,549.50	
2.3.1.2.2.2	8.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	11,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		11,000.00	Each	U.S. Dollar	1.00	11,000.00	
2.3.1.2.3	180.00 Ton	Scrap Credit - Substation	0.00	0.00	Detail	U.S. Dollar	(216.00)	(38,880.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		180.00	Ton	U.S. Dollar	(216.00)	(38,880.00)	
2.3.1.3	1.00 Each	Remove Control Building	0.50	2.00	Detail	U.S. Dollar	2,432.59	2,432.59
2.3.1.3.1	1.00 Each	Demo	0.50	2.00	Detail	U.S. Dollar	1,057.59	1,057.59
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	5.00	1.00	Each (hourly)	U.S. Dollar	38.04	190.19	
L010101	OPERATOR	5.00	1.00	Each (hourly)	U.S. Dollar	48.95	244.73	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.00	1.00	Each (hourly)	U.S. Dollar	124.54	622.68	
2.3.1.3.2	1.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,375.00	Each	U.S. Dollar	1.00	1,375.00	
2.3.1.4	2.00 Day	UG Utility & Ground Removal	2.00	1.00	Detail	U.S. Dollar	1,202.19	2,404.37
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		

Cost Item									
CBS Position Code	Quantity	UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L010101	OPERATOR	20.00		1.00	Each (hourly)	U.S. Dollar		48.95	978.93
L060100	GENERAL LABORER	20.00		1.00	Each (hourly)	U.S. Dollar		38.04	760.75
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00		1.00	Each (hourly)	U.S. Dollar		33.24	664.70
2.3.1.5	500.00 Cubic Yard		Remove Foundations To Subgrade	6.79	73.68	Detail	U.S. Dollar	27.02	13,512.25
2.3.1.5.1	500.00 Cubic Yard		Excavate / Remove Foundation - Various Depth	1.79	280.00	Detail	U.S. Dollar	15.05	7,525.53
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	17.86	1.00	Each (hourly)	U.S. Dollar	38.04	679.24		
L010101	OPERATOR	35.71	2.00	Each (hourly)	U.S. Dollar	48.95	1,748.08		
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00	Each (hourly)	U.S. Dollar	160.97	2,874.38		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00	Each (hourly)	U.S. Dollar	124.54	2,223.84		
2.3.1.5.2	500.00 Cubic Yard		Concrete Transport Offsite	5.00	100.00	Detail	U.S. Dollar	11.97	5,986.72
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00	Each (hourly)	U.S. Dollar	74.29	3,714.50		
L080940	TEAMSTER	50.00	1.00	Each (hourly)	U.S. Dollar	45.44	2,272.22		
2.3.1.6	1.00 Lump Sum		Misc. Material Disposal	0.00	0.00	Detail	U.S. Dollar	1,675.00	1,675.00
2.3.1.6.1	1.00 Each		Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,375.00	Each	U.S. Dollar	1.00	1,375.00		
2.3.1.6.2	10.00 Ton		Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	300.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		300.00	Each	U.S. Dollar	1.00	300.00		
2.3.1.7	1.00 Lump Sum		Restore Yard	8.67	0.12	Detail	U.S. Dollar	62,603.46	62,603.46
2.3.1.7.1	4.00 Acre		Backfill / Regrade	2.00	2.00	Detail	U.S. Dollar	1,540.15	6,160.62
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	38.04	1,521.49		
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	48.95	1,957.85		
REXCAV06B	Gradall - Excavator	20.00	1.00	Each (hourly)	U.S. Dollar	75.73	1,514.57		
*RDOZER08	CAT D6 LGP Dozer	20.00	1.00	Each (hourly)	U.S. Dollar	58.34	1,166.70		
2.3.1.7.2	2,000.00 Cubic Yard		Vegetative Cover	6.67	300.00	Detail	U.S. Dollar	27.22	54,442.84
2.3.1.7.2.1	2,000.00 Cubic Yard		Topsoil, Delivered	0.00	0.00	Detail	U.S. Dollar	20.00	40,000.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
IMSOIL	Topsoil		2,000.00	Cubic Yard	U.S. Dollar	20.00	40,000.00		
2.3.1.7.2.2	2,000.00 Cubic Yard		Placement	6.67	300.00	Detail	U.S. Dollar	7.22	14,442.84
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	133.33	2.00	Each (hourly)	U.S. Dollar	48.95	6,526.17		
RDOZER08	CAT D6N XL	133.33	2.00	Each (hourly)	U.S. Dollar	59.38	7,916.67		
2.3.1.7.3	4.00 Acre		Re-Seed With Native Vegetation	0.00	0.00	Detail	U.S. Dollar	500.00	2,000.00

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00 Acre		U.S. Dollar		500.00	2,000.00
2.3.2	1.00 Lump Sum	Transmission Line Retirement	233.79	0.00	Detail	U.S. Dollar	835,814.49	835,814.49
2.3.2.1	11.00 Mile	Conductor Removal	66.00	0.17	Detail	U.S. Dollar	24,115.77	265,273.43
2.3.2.1.1	11.00 Mile	Cut / Lower Cable, Size & Loadout	66.00	0.17	Detail	U.S. Dollar	30,005.77	330,063.43
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	3,960.00	6.00 Each (hourly)		U.S. Dollar		38.04	150,627.51
L010101	OPERATOR	1,320.00	2.00 Each (hourly)		U.S. Dollar		48.95	64,609.12
*RXMISC14	MAN LIFT GAS 125ft	660.00	1.00 Each (hourly)		U.S. Dollar		53.52	35,323.20
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	660.00	1.00 Each (hourly)		U.S. Dollar		21.65	14,285.70
*RXMISC19	Material Handler	660.00	1.00 Each (hourly)		U.S. Dollar		98.82	65,217.90
2.3.2.1.2	22.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	30,250.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		30,250.00 Each		U.S. Dollar		1.00	30,250.00
Notes: ***** Total weight for cable, 40 ton per mile Assume 20 ton per load for trucking *****								
2.3.2.1.3	440.00 Ton	Scrap Credit - T Line	0.00	0.00	Detail	U.S. Dollar	(216.00)	(95,040.00)
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap		440.00 Ton		U.S. Dollar		(216.00)	(95,040.00)
2.3.2.2	83.00 Each	Structure Removal	83.00	1.00	Detail	U.S. Dollar	2,253.54	187,044.12
2.3.2.2.1	83.00 Each	Cut / Lower Structure	41.50	2.00	Detail	U.S. Dollar	1,727.63	143,393.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	1,660.00	4.00 Each (hourly)		U.S. Dollar		38.04	63,141.84
L010101	OPERATOR	415.00	1.00 Each (hourly)		U.S. Dollar		48.95	20,312.71
*RXMISC14	MAN LIFT GAS 125ft	415.00	1.00 Each (hourly)		U.S. Dollar		53.52	22,210.80
*RXMISC23	GROVE RT 200 TON	415.00	1.00 Each (hourly)		U.S. Dollar		90.91	37,727.65
2.3.2.2.2	83.00 Each	Cut / Size Structure & Loadout	41.50	2.00	Detail	U.S. Dollar	1,840.40	152,753.12
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	2,490.00	6.00 Each (hourly)		U.S. Dollar		38.04	94,712.75
L010101	OPERATOR	415.00	1.00 Each (hourly)		U.S. Dollar		48.95	20,312.71
*RXMISC23	GROVE RT 200 TON	415.00	1.00 Each (hourly)		U.S. Dollar		90.91	37,727.65
2.3.2.2.3	38.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	52,250.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		52,250.00 Each		U.S. Dollar		1.00	52,250.00
Notes: ***** Total weight for structures, 747 ton Assume 20 ton per load for trucking *****								
2.3.2.2.4	747.00 Ton	Scrap Credit	0.00	0.00	Detail	U.S. Dollar	(216.00)	(161,352.00)

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		747.00 Ton	U.S. Dollar	(216.00)	(161,352.00)		
2.3.2.3	83.00 Each	Remove Foundations To Subgrade	84.79	0.98 Detail	U.S. Dollar	4,620.45	383,496.95	
2.3.2.3.1	83.00 Each	Excavate / Remove Foundation - Various Depth	83.00	1.00 Detail	U.S. Dollar	4,594.67	381,357.69	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	1,660.00	2.00 Each (hourly)	U.S. Dollar	38.04	63,141.84		
L010101	OPERATOR	1,660.00	2.00 Each (hourly)	U.S. Dollar	48.95	81,250.86		
*REXCAV06C	Excav 100K w/ Hammer	830.00	1.00 Each (hourly)	U.S. Dollar	160.97	133,600.95		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	830.00	1.00 Each (hourly)	U.S. Dollar	124.54	103,364.05		
2.3.2.3.2	134.00 Cubic Yard	Concrete Transport Offsite	1.79	75.00 Detail	U.S. Dollar	15.96	2,139.25	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	17.87	1.00 Each (hourly)	U.S. Dollar	74.29	1,327.31		
L080940	TEAMSTER	17.87	1.00 Each (hourly)	U.S. Dollar	45.44	811.94		
2.3.3	1.00 Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	0.00 Detail	U.S. Dollar	31,921.29	31,921.29	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		1,064,043.00 Each	U.S. Dollar	0.03	31,921.29		
2.3.4	1.00 Lump Sum	Contractor Contingency (3% Of Cost)	0.00	0.00 Detail	U.S. Dollar	32,878.92	32,878.92	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		1,095,964.00 Each	U.S. Dollar	0.03	32,878.92		
2.3.5	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	0.00 Detail	U.S. Dollar	146,749.59	146,749.59	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		1,128,843.00 Each	U.S. Dollar	0.13	146,749.59		
2.4	303.00 MW	Solar Array Retirement	1,410.63	0.21 Detail	U.S. Dollar	43,906.77	13,303,750.17	
2.4.1	303.00 MW	Site Facilities	0.00	0.00 Detail	U.S. Dollar	71.12	21,550.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
URCONNEX	Connex Box		20.00 Month	U.S. Dollar	150.00	3,000.00		
UROFFTRL	Office Trailer -12x60		10.00 Month	U.S. Dollar	500.00	5,000.00		
UO1STAIID	1st Aid Supplies		10.00 Month	U.S. Dollar	300.00	3,000.00		
UOOFFPHN	Monthly Office Phone		10.00 Month	U.S. Dollar	500.00	5,000.00		
UOOFFSUP	Office Supplies(\$/prs/mo)		10.00 Month	U.S. Dollar	55.00	550.00		
UINT	Internet		10.00 Month	U.S. Dollar	200.00	2,000.00		
URPRTAJH	Port-a-John Unit(s) (4)		10.00 Month	U.S. Dollar	300.00	3,000.00		
2.4.2	303.00 MW	Field Management	240.00	1.26 Detail	U.S. Dollar	2,884.72	874,069.25	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L90FX02	Field - Proj Superintendent	2,400.00	1.00 Each (hourly)	U.S. Dollar	83.18	199,636.80		
RPUTRK05	F-250 4X4 3/4 TON PICKUP	12,000.00	5.00 Each (hourly)	U.S. Dollar	11.07	132,780.00		
L90FEL00	Field - Engr. Tech	2,400.00	1.00 Each (hourly)	U.S. Dollar	39.57	94,977.65		
L90FX03	Field - SHSO	2,400.00	1.00 Each (hourly)	U.S. Dollar	89.26	214,233.36		
L90FEJ00	Field - Asst. Engr.	4,800.00	2.00 Each (hourly)	U.S. Dollar	48.43	232,441.44		
2.4.3	303.00 MW	Solar Array Retirement	872.13	0.35 Detail	U.S. Dollar	30,959.77	9,380,810.06	
2.4.3.1	303.00 MW	Fence Removal	15.22	19.91 Detail	U.S. Dollar	238.48	72,260.10	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		

CBS Position Code	Quantity UM	Description	Cost Item		Cost		Unit Cost	Total Cost
			Days	UM/Day	Source	Currency		
L010101	OPERATOR		456.60	3.00	Each (hourly)	U.S. Dollar	48.95	22,349.04
L060100	GENERAL LABORER		913.21	6.00	Each (hourly)	U.S. Dollar	38.04	34,735.86
RBACKH09	Deere 710J BACKHOE, 1.62CY		456.60	3.00	Each (hourly)	U.S. Dollar	33.24	15,175.21

Notes: *****
 Assume 26 LF of fence per acre.
 26 LF x 3000 Acre = 78,000 LF

2.4.3.2	303.00 MW	Inverter / Transformer Removal		304.00	1.00	Detail	U.S. Dollar	61.04	18,493.69
2.4.3.2.1	152.00 Each	Disconnect Electrical		152.00	1.00	Detail	U.S. Dollar	1,050.92	159,739.23

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
L010110	ELECTRICIAN	1,520.00	1.00 Each (hourly)	U.S. Dollar	55.99	85,103.81			
L060100	GENERAL LABORER	1,520.00	1.00 Each (hourly)	U.S. Dollar	38.04	57,816.62			
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,520.00	1.00 Each (hourly)	U.S. Dollar	11.07	16,818.80			
2.4.3.2.2	152.00 Each	Loadout Inverter & Transformer		152.00	1.00	Detail	U.S. Dollar	2,663.75	404,890.46

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
L060100	GENERAL LABORER	6,080.00	4.00 Each (hourly)	U.S. Dollar	38.04	231,266.48			
L010101	OPERATOR	1,520.00	1.00 Each (hourly)	U.S. Dollar	48.95	74,398.38			
RHYDCR06	GROVE RT880 73 TON	1,520.00	1.00 Each (hourly)	U.S. Dollar	65.28	99,225.60			
2.4.3.2.3	152.00 Each	Trucking - Per Load		0.00	0.00	Detail	U.S. Dollar	1,375.00	209,000.00

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USTRUCKING	Trucking Sub		209,000.00 Each	U.S. Dollar	1.00	209,000.00			
2.4.3.2.4	3,496.00 Ton	Scrap Credit		0.00	0.00	Detail	U.S. Dollar	(216.00)	(755,136.00)

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
UODCFERROUS	Ferrous Metal Scrap		3,496.00 Ton	U.S. Dollar	(216.00)	(755,136.00)			
2.4.3.3	303.00 MW	Remove Foundations To Subgrade		198.03	1.53	Detail	U.S. Dollar	1,301.46	394,341.45

Notes: *****
 Assumption: 24x36x1 concrete pad per inverter/
 transformer

2.4.3.3.1	14,592.00 Cubic Yard	Excavate / Remove Foundation		52.11	280.00	Detail	U.S. Dollar	15.05	219,625.16
L060100	GENERAL LABORER	521.14	1.00 Each (hourly)	U.S. Dollar	38.04	19,822.84			
L010101	OPERATOR	1,042.29	2.00 Each (hourly)	U.S. Dollar	48.95	51,016.03			
*REXCAV06C	Excav 100K w/ Hammer	521.14	1.00 Each (hourly)	U.S. Dollar	160.97	83,885.76			
*REXCAV06A	Excav 100K w/ Bucket & Grapple	521.14	1.00 Each (hourly)	U.S. Dollar	124.54	64,900.53			
2.4.3.3.2	14,592.00 Cubic Yard	Concrete Transport Offsite		145.92	100.00	Detail	U.S. Dollar	11.97	174,716.29

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	1,459.20	1.00 Each (hourly)	U.S. Dollar	74.29	108,403.97
L080940	TEAMSTER	1,459.20	1.00 Each (hourly)	U.S. Dollar	45.44	66,312.32

2.4.3.4	303.00 MW	Solar Panel Removal		198.31	1.53	Detail	U.S. Dollar	14,471.03	4,384,721.14
2.4.3.4.1	951,900.00 Each	Solar Panel Removal		198.31	4,800.00	Detail	U.S. Dollar	2.78	2,650,331.14

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	11,898.75	6.00	Each (hourly)	U.S. Dollar		21.65	257,548.44
L010101	OPERATOR	11,898.75	6.00	Each (hourly)	U.S. Dollar		48.95	582,399.79
L060100	GENERAL LABORER	47,595.00	24.00	Each (hourly)	U.S. Dollar		38.04	1,810,382.91
Notes: ***** Assumed production: 20 panels per laborer per hour, Includes packaging and preparing for shipment offsite. *****								
2.4.3.4.2	846.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,163,250.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,163,250.00	Each	U.S. Dollar		1.00	1,163,250.00
Notes: ***** Assumption: 45,000 lbs per load *****								
2.4.3.4.3	19,038.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	571,140.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		571,140.00	Each	U.S. Dollar		1.00	571,140.00
Notes: ***** Assumption: 951,900 modules x 40 lbs each *****								
2.4.3.5	303.00 MW	Solar Rack (Trackers) & Post Removal	156.56	1.94	Detail	U.S. Dollar	14,887.77	4,510,993.68
2.4.3.5.1	25,050.00 Each	Solar Rack (Trackers) & Post Removal	156.56	160.00	Detail	U.S. Dollar	242.00	6,062,063.68
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L010101	OPERATOR	25,050.00	16.00	Each (hourly)	U.S. Dollar		48.95	1,226,104.82
L060100	GENERAL LABORER	25,050.00	16.00	Each (hourly)	U.S. Dollar		38.04	952,833.11
*REXCAV06A	Excav 100K w/ Bucket & Grapple	12,525.00	8.00	Each (hourly)	U.S. Dollar		124.54	1,559,800.88
*REXCAV06E	Excav 100K w/ Shear	12,525.00	8.00	Each (hourly)	U.S. Dollar		185.50	2,323,324.88
Notes: ***** Assumed production: .5 hour per rack per crew. Crew to include 1 excavator w/shear, 1 excavator w/grapple, 2 operators and 2 laborers. Includes post removal and sizing of steel for sale as scrap, and loadout to haul trucks. 6 piles & 38 modules per rack. *****								
2.4.3.5.2	446.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	613,250.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		613,250.00	Each	U.S. Dollar		1.00	613,250.00
Notes: ***** Assumption: 45,000 lbs per load *****								
2.4.3.5.3	10,020.00 Ton	Scrap Credit	0.00	0.00	Detail	U.S. Dollar	(216.00)	(2,164,320.00)
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
UODCFERROUS	Ferrous Metal Scrap		10,020.00	Ton	U.S. Dollar		(216.00)	(2,164,320.00)
Notes: ***** Assume 800 Lbs per rack w/ 6 piles *****								
2.4.4	303.00 MW	Site Restoration - Partial Site Seeding	298.50	1.02	Detail	U.S. Dollar	2,709.47	820,969.36

Cost Item									
CBS Position Code	Quantity	UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
2.4.4.1	180,000.00	Linear Feet	Decompact Roads	225.00	800.00	Detail	U.S. Dollar	2.68	482,765.85
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
*RDOZER08	CAT D6 LGP Dozer	4,500.00	2.00	Each (hourly)	U.S. Dollar	58.34	262,507.50		
L010101	OPERATOR	4,500.00	2.00	Each (hourly)	U.S. Dollar	48.95	220,258.35		
Notes: *****									
Assume 60 LF of road per acre. 60 LF x 3000 Acre = 180,000 LF									
Decompaction to include discing and regrading									

2.4.4.2	294.00	Acre	Spot Grade Disturbed Areas	73.50	4.00	Detail	U.S. Dollar	536.41	157,703.51
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
*RDOZER08	CAT D6 LGP Dozer	1,470.00	2.00	Each (hourly)	U.S. Dollar	58.34	85,752.45		
L010101	OPERATOR	1,470.00	2.00	Each (hourly)	U.S. Dollar	48.95	71,951.06		
Notes: *****									
Assumption: 3000 acres total property area.									
67 acres of roads, and 2933 acres of remaining area.									
Assume that 10% of the remaining area disturbed by construction will be regraded.									

2.4.4.3	361.00	Acre	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	0.00	Detail	U.S. Dollar	500.00	180,500.00
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USLANDSCAPE	Landscape Sub		361.00	Acre	U.S. Dollar	500.00	180,500.00		
Notes: *****									
Assumption: 3000 acres total property area.									
67 acres of roads, and 2933 acres of remaining area.									
Assume that 67 acres of road area to be reseeded, and 10% of the remaining area disturbed by construction will be reseeded.									
361 acres total to be reseeded.									

2.4.5	303.00	MW	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	1,098.75	332,921.97
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		11,097,399.00	Each	U.S. Dollar	0.03	332,921.97		
2.4.6	303.00	MW	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	1,131.71	342,909.63
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		11,430,321.00	Each	U.S. Dollar	0.03	342,909.63		
2.4.7	303.00	MW	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	5,051.22	1,530,519.90
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		11,773,230.00	Each	U.S. Dollar	0.13	1,530,519.90		
2.5	100.00	MW	DC Storage System Retirement	75.90	1.32	Detail	U.S. Dollar	3,004.12	300,412.28
2.5.1	100.00	MW	DC Storage System Retirement	75.90	1.32	Detail	U.S. Dollar	2,505.91	250,590.55
2.5.1.1	100.00	MW	Battery Removal & Disposal	66.00	1.52	Detail	U.S. Dollar	2,499.64	249,963.84
2.5.1.1.1	66.00	Day	Remove Batteries, Load For Transport	66.00	1.00	Detail	U.S. Dollar	1,737.94	114,704.04
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	2,640.00	4.00	Each (hourly)	U.S. Dollar	38.04	100,418.34		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	660.00	1.00	Each (hourly)	U.S. Dollar	21.65	14,285.70		
2.5.1.1.2	33.00	Each	Transport Batteries	0.00	0.00	Detail	U.S. Dollar	1,480.60	48,859.80

Cost Item									
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost	
2.5.1.1.2.1	33.00 Each	Roll Off Liners	0.00	0.00	Detail	U.S. Dollar	105.60	3,484.80	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
UODCLINER	Rolloff Liner		33.00 Each	U.S. Dollar	105.60	3,484.80			
2.5.1.1.2.2	33.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	45,375.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USTRUCKING	Trucking Sub		45,375.00 Each	U.S. Dollar	1.00	45,375.00			
2.5.1.1.3	432.00 Ton	Disposal Fee's	0.00	0.00	Detail	U.S. Dollar	200.00	86,400.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USDISPOSAL	Disposal Fee's		86,400.00 Each	U.S. Dollar	1.00	86,400.00			
2.5.1.2	100.00 MW	Structure & Components Removal	9.90	10.10	Detail	U.S. Dollar	6.27	626.71	
2.5.1.2.1	429.00 Ton	Structure Demo	9.90	43.33	Detail	U.S. Dollar	111.69	47,915.71	
2.5.1.2.2	33.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	45,375.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USTRUCKING	Trucking Sub		45,375.00 Each	U.S. Dollar	1.00	45,375.00			
2.5.1.2.3	429.00 Ton	Scrap Credit	0.00	0.00	Detail	U.S. Dollar	(216.00)	(92,664.00)	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
UODCFERROUS	Ferrous Metal Scrap		429.00 Ton	U.S. Dollar	(216.00)	(92,664.00)			
2.5.2	100.00 MW	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	75.18	7,517.73	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USMARKUP5	3% Markup		250,591.00 Each	U.S. Dollar	0.03	7,517.73			
2.5.3	100.00 MW	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	77.43	7,743.24	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USMARKUP5	3% Markup		258,108.00 Each	U.S. Dollar	0.03	7,743.24			
2.5.4	100.00 MW	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	345.61	34,560.76	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USMARKUP	13% Markup		265,852.00 Each	U.S. Dollar	0.13	34,560.76			
Report Total:			1,756.27				15,561,083.23		

Category	Total
Labor	7,029,206.74
Rented Equipment	5,568,921.27
Supplies	7,034.80
Materials	40,000.00
Subcontract	5,681,112.42
ODCs	542,200.00
Other Costs	(3,307,392.00)

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WITHOUT SCRAP VALUE

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Estimate Summary
TETRA TECH EC, INC.

Job Code: Bakeoven Solar
Description: Decommissioning Estimate

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1	1.00 Lump Sum	BAKEOVEN SOLAR RETIREMENT	1,756.27	0.00	Detail	U.S. Dollar	20,076,729.46	20,076,729.46
1.1	1.00 Lump Sum	ODOE Management	0.00	0.00	Detail	U.S. Dollar	533,000.00	533,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCODOE	ODOE Management		533,000.00 Each	U.S. Dollar	1.00	533,000.00		
1.2	1.00 Lump Sum	Mob / Demob - Fixed Cost Per Retirement Phase	5.00	0.20	Detail	U.S. Dollar	148,327.98	148,327.98
1.2.1	1.00 Lump Sum	Equipment Mob	0.00	0.00	Detail	U.S. Dollar	61,200.00	61,200.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UERNTRLG	Rental Equip Transp-Large		6.00 Each	U.S. Dollar	10,000.00	60,000.00		
UERNTRSM	Rental Equip Transp-Small		8.00 Each	U.S. Dollar	150.00	1,200.00		
1.2.2	1.00 Lump Sum	Site Facilities	0.00	0.00	Detail	U.S. Dollar	2,200.00	2,200.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UOCONMOB	Connex Box Mob		2.00 Each	U.S. Dollar	300.00	600.00		
UOTRLTRN	Trailer Trmsp/Setup/Trdwn		2.00 Each	U.S. Dollar	800.00	1,600.00		
1.2.3	3.00 Day	Crew Mob & Site Setup	3.00	1.00	Detail	U.S. Dollar	12,065.72	36,197.15
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	720.00	24.00 Each (hourly)	U.S. Dollar	38.04	27,386.82		
L010101	OPERATOR	180.00	6.00 Each (hourly)	U.S. Dollar	48.95	8,810.33		
1.2.4	2.00 Day	Crew Demob & Site Cleanup	2.00	1.00	Detail	U.S. Dollar	12,065.72	24,131.44
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	480.00	24.00 Each (hourly)	U.S. Dollar	38.04	18,257.88		
L010101	OPERATOR	120.00	6.00 Each (hourly)	U.S. Dollar	48.95	5,873.56		
1.2.5	1.00 Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	3,711.87	3,711.87
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		123,729.00 Each	U.S. Dollar	0.03	3,711.87		
1.2.6	1.00 Lump Sum	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	3,823.20	3,823.20
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		127,440.00 Each	U.S. Dollar	0.03	3,823.20		
1.2.7	1.00 Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	17,064.32	17,064.32
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		131,264.00 Each	U.S. Dollar	0.13	17,064.32		
1.3	1.00 Lump Sum	Substation & T-Line Retirement - Fixed Cost During Final Retirement Phase	264.74	0.00	Detail	U.S. Dollar	1,678,733.41	1,678,733.41
1.3.1	1.00 Lump Sum	Substation Retirement	30.95	0.03	Detail	U.S. Dollar	272,508.50	272,508.50
1.3.1.1	1.00 Day	Fence Removal	1.00	1.00	Detail	U.S. Dollar	1,202.19	1,202.19
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	10.00	1.00 Each (hourly)	U.S. Dollar	48.95	489.46		
L060100	GENERAL LABORER	10.00	1.00 Each (hourly)	U.S. Dollar	38.04	380.37		
RBACKH09	Deere 710J BACKHOE, 1.62CY	10.00	1.00 Each (hourly)	U.S. Dollar	33.24	332.35		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.3.1.2	2.00 Each	Transformer Removal	12.00	0.17	Detail	U.S. Dollar	94,339.33	188,678.65
1.3.1.2.1	2.00 Each	Oil Removal & Disposal	2.00	1.00	Detail	U.S. Dollar	58,135.75	116,271.49
1.3.1.2.1.1	2.00 Each	Oil Removal	2.00	1.00	Detail	U.S. Dollar	760.75	1,521.49
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	40.00	2.00 Each (hourly)	U.S. Dollar	38.04	1,521.49		
1.3.1.2.1.2	28,000.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	112,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		112,000.00 Each	U.S. Dollar	1.00	112,000.00		
1.3.1.2.1.3	2.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		2,750.00 Each	U.S. Dollar	1.00	2,750.00		
1.3.1.2.2	2.00 Each	Dismantle & Loadout Transformer	10.00	0.20	Detail	U.S. Dollar	33,503.58	67,007.16
1.3.1.2.2.1	2.00 Each	Dismantle, Cut & Size	10.00	0.20	Detail	U.S. Dollar	28,003.58	56,007.16
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	400.00	4.00 Each (hourly)	U.S. Dollar	38.04	15,214.90		
L010101	OPERATOR	200.00	2.00 Each (hourly)	U.S. Dollar	48.95	9,789.26		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	100.00	1.00 Each (hourly)	U.S. Dollar	124.54	12,453.50		
*REXCAV06E	Excav 100K w/ Shear	100.00	1.00 Each (hourly)	U.S. Dollar	185.50	18,549.50		
1.3.1.2.2.2	8.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	11,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		11,000.00 Each	U.S. Dollar	1.00	11,000.00		
1.3.1.2.3	180.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	5,400.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		5,400.00 Each	U.S. Dollar	1.00	5,400.00		
1.3.1.3	1.00 Each	Remove Control Building	0.50	2.00	Detail	U.S. Dollar	2,432.59	2,432.59
1.3.1.3.1	1.00 Each	Demo	0.50	2.00	Detail	U.S. Dollar	1,057.59	1,057.59
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	5.00	1.00 Each (hourly)	U.S. Dollar	38.04	190.19		
L010101	OPERATOR	5.00	1.00 Each (hourly)	U.S. Dollar	48.95	244.73		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	5.00	1.00 Each (hourly)	U.S. Dollar	124.54	622.68		
1.3.1.3.2	1.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,375.00 Each	U.S. Dollar	1.00	1,375.00		
1.3.1.4	2.00 Day	UG Utility & Ground Removal	2.00	1.00	Detail	U.S. Dollar	1,202.19	2,404.37
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	20.00	1.00 Each (hourly)	U.S. Dollar	48.95	978.93		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	20.00	1.00	Each (hourly)	U.S. Dollar		38.04	760.75
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00	Each (hourly)	U.S. Dollar		33.24	664.70
1.3.1.5	500.00 Cubic Yard	Remove Foundations To Subgrade	6.79	73.68	Detail	U.S. Dollar	27.02	13,512.25
1.3.1.5.1	500.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	1.79	280.00	Detail	U.S. Dollar	15.05	7,525.53
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	17.86	1.00	Each (hourly)	U.S. Dollar	38.04	679.24	
L010101	OPERATOR	35.71	2.00	Each (hourly)	U.S. Dollar	48.95	1,748.08	
*REXCAV06C	Excav 100K w/ Hammer	17.86	1.00	Each (hourly)	U.S. Dollar	160.97	2,874.38	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	17.86	1.00	Each (hourly)	U.S. Dollar	124.54	2,223.84	
1.3.1.5.2	500.00 Cubic Yard	Concrete Transport Offsite	5.00	100.00	Detail	U.S. Dollar	11.97	5,986.72
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	50.00	1.00	Each (hourly)	U.S. Dollar	74.29	3,714.50	
L080940	TEAMSTER	50.00	1.00	Each (hourly)	U.S. Dollar	45.44	2,272.22	
1.3.1.6	1.00 Lump Sum	Misc. Material Disposal	0.00	0.00	Detail	U.S. Dollar	1,675.00	1,675.00
1.3.1.6.1	1.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,375.00	Each	U.S. Dollar	1.00	1,375.00	
1.3.1.6.2	10.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	300.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		300.00	Each	U.S. Dollar	1.00	300.00	
1.3.1.7	1.00 Lump Sum	Restore Yard	8.67	0.12	Detail	U.S. Dollar	62,603.46	62,603.46
1.3.1.7.1	4.00 Acre	Backfill / Regrade	2.00	2.00	Detail	U.S. Dollar	1,540.15	6,160.62
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	38.04	1,521.49	
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	48.95	1,957.85	
REXCAV06B	Gradall - Excavator	20.00	1.00	Each (hourly)	U.S. Dollar	75.73	1,514.57	
*RDOZER08	CAT D6 LGP Dozer	20.00	1.00	Each (hourly)	U.S. Dollar	58.34	1,166.70	
1.3.1.7.2	2,000.00 Cubic Yard	Vegetative Cover	6.67	300.00	Detail	U.S. Dollar	27.22	54,442.84
1.3.1.7.2.1	2,000.00 Cubic Yard	Topsoil, Delivered	0.00	0.00	Detail	U.S. Dollar	20.00	40,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
IMSOIL	Topsoil		2,000.00	Cubic Yard	U.S. Dollar	20.00	40,000.00	
1.3.1.7.2.2	2,000.00 Cubic Yard	Placement	6.67	300.00	Detail	U.S. Dollar	7.22	14,442.84
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	133.33	2.00	Each (hourly)	U.S. Dollar	48.95	6,526.17	
RDOZER08	CAT D6N XL	133.33	2.00	Each (hourly)	U.S. Dollar	59.38	7,916.67	
1.3.1.7.3	4.00 Acre	Re-Seed With Native Vegetation	0.00	0.00	Detail	U.S. Dollar	500.00	2,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00	Acre		U.S. Dollar	500.00	2,000.00
1.3.2	1.00 Lump Sum	Transmission Line Retirement	233.79		0.00 Detail	U.S. Dollar	1,127,816.49	1,127,816.49
1.3.2.1	11.00 Mile	Conductor Removal	66.00		0.17 Detail	U.S. Dollar	33,955.77	373,513.43
1.3.2.1.1	11.00 Mile	Cut / Lower Cable, Size & Loadout	66.00		0.17 Detail	U.S. Dollar	30,005.77	330,063.43
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	3,960.00	6.00	Each (hourly)	U.S. Dollar	38.04	150,627.51	
L010101	OPERATOR	1,320.00	2.00	Each (hourly)	U.S. Dollar	48.95	64,609.12	
*RXMISC14	MAN LIFT GAS 125ft	660.00	1.00	Each (hourly)	U.S. Dollar	53.52	35,323.20	
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	660.00	1.00	Each (hourly)	U.S. Dollar	21.65	14,285.70	
*RXMISC19	Material Handler	660.00	1.00	Each (hourly)	U.S. Dollar	98.82	65,217.90	
1.3.2.1.2	22.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	30,250.00
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		30,250.00	Each	U.S. Dollar	1.00	30,250.00	
Notes: ***** Total weight for cable, 40 ton per mile Assume 20 ton per load for trucking *****								
1.3.2.1.3	440.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	13,200.00
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USDISPOSAL	Disposal Fee's		13,200.00	Each	U.S. Dollar	1.00	13,200.00	
1.3.2.2	83.00 Each	Structure Removal	83.00	1.00	Detail	U.S. Dollar	4,467.54	370,806.12
1.3.2.2.1	83.00 Each	Cut / Lower Structure	41.50	2.00	Detail	U.S. Dollar	1,727.63	143,393.00
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	1,660.00	4.00	Each (hourly)	U.S. Dollar	38.04	63,141.84	
L010101	OPERATOR	415.00	1.00	Each (hourly)	U.S. Dollar	48.95	20,312.71	
*RXMISC14	MAN LIFT GAS 125ft	415.00	1.00	Each (hourly)	U.S. Dollar	53.52	22,210.80	
*RXMISC23	GROVE RT 200 TON	415.00	1.00	Each (hourly)	U.S. Dollar	90.91	37,727.65	
1.3.2.2.2	83.00 Each	Cut / Size Structure & Loadout	41.50	2.00	Detail	U.S. Dollar	1,840.40	152,753.12
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
L060100	GENERAL LABORER	2,490.00	6.00	Each (hourly)	U.S. Dollar	38.04	94,712.75	
L010101	OPERATOR	415.00	1.00	Each (hourly)	U.S. Dollar	48.95	20,312.71	
*RXMISC23	GROVE RT 200 TON	415.00	1.00	Each (hourly)	U.S. Dollar	90.91	37,727.65	
1.3.2.2.3	38.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	52,250.00
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USTRUCKING	Trucking Sub		52,250.00	Each	U.S. Dollar	1.00	52,250.00	
Notes: ***** Total weight for structures, 747 ton Assume 20 ton per load for trucking *****								
1.3.2.2.4	747.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	22,410.00
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		22,410.00	Each		U.S. Dollar	1.00	22,410.00
1.3.2.3	83.00	Each Remove Foundations To Subgrade	84.79	0.98	Detail	U.S. Dollar	4,620.45	383,496.95
1.3.2.3.1	83.00	Each Excavate / Remove Foundation - Various Depth	83.00	1.00	Detail	U.S. Dollar	4,594.67	381,357.69
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	1,660.00	2.00	Each (hourly)	U.S. Dollar	38.04	63,141.84	
L010101	OPERATOR	1,660.00	2.00	Each (hourly)	U.S. Dollar	48.95	81,250.86	
*REXCAV06C	Excav 100K w/ Hammer	830.00	1.00	Each (hourly)	U.S. Dollar	160.97	133,600.95	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	830.00	1.00	Each (hourly)	U.S. Dollar	124.54	103,364.05	
1.3.2.3.2	134.00	Cubic Yard Concrete Transport Offsite	1.79	75.00	Detail	U.S. Dollar	15.96	2,139.25
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	17.87	1.00	Each (hourly)	U.S. Dollar	74.29	1,327.31	
L080940	TEAMSTER	17.87	1.00	Each (hourly)	U.S. Dollar	45.44	811.94	
1.3.3	1.00	Lump Sum Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	42,009.72	42,009.72
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		1,400,324.00	Each	U.S. Dollar	0.03	42,009.72	
1.3.4	1.00	Lump Sum Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	43,270.05	43,270.05
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		1,442,335.00	Each	U.S. Dollar	0.03	43,270.05	
1.3.5	1.00	Lump Sum Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	193,128.65	193,128.65
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		1,485,605.00	Each	U.S. Dollar	0.13	193,128.65	
1.4	303.00	MW Solar Array Retirement	1,410.63	0.21	Detail	U.S. Dollar	57,061.85	17,289,739.83
1.4.1	303.00	MW Site Facilities	0.00	0.00	Detail	U.S. Dollar	71.12	21,550.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
URCONNEX	Connex Box		20.00	Month	U.S. Dollar	150.00	3,000.00	
UROFFTRL	Office Trailer -12x60		10.00	Month	U.S. Dollar	500.00	5,000.00	
UO1STAI	1st Aid Supplies		10.00	Month	U.S. Dollar	300.00	3,000.00	
UOOFFPHN	Monthly Office Phone		10.00	Month	U.S. Dollar	500.00	5,000.00	
UOOFFSUP	Office Supplies(\$/prs/mo)		10.00	Month	U.S. Dollar	55.00	550.00	
UINT	Internet		10.00	Month	U.S. Dollar	200.00	2,000.00	
URPRTAJH	Port-a-John Unit(s) (4)		10.00	Month	U.S. Dollar	300.00	3,000.00	
1.4.2	303.00	MW Field Management	240.00	1.26	Detail	U.S. Dollar	2,884.72	874,069.25
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L90FX02	Field - Proj Superintendent	2,400.00	1.00	Each (hourly)	U.S. Dollar	83.18	199,636.80	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	12,000.00	5.00	Each (hourly)	U.S. Dollar	11.07	132,780.00	
L90FEL00	Field - Engr. Tech	2,400.00	1.00	Each (hourly)	U.S. Dollar	39.57	94,977.65	
L90FX03	Field - SHSO	2,400.00	1.00	Each (hourly)	U.S. Dollar	89.26	214,233.36	
L90FEJ00	Field - Asst. Engr.	4,800.00	2.00	Each (hourly)	U.S. Dollar	48.43	232,441.44	
1.4.3	303.00	MW Solar Array Retirement	872.13	0.35	Detail	U.S. Dollar	41,933.16	12,705,746.06
1.4.3.1	303.00	MW Fence Removal	15.22	19.91	Detail	U.S. Dollar	238.48	72,260.10
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	456.60	3.00	Each (hourly)	U.S. Dollar	48.95	22,349.04	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	913.21	6.00	Each (hourly)	U.S. Dollar		38.04	34,735.86
RBACKH09	Deere 710J BACKHOE, 1.62CY	456.60	3.00	Each (hourly)	U.S. Dollar		33.24	15,175.21

Notes: *****
 Assume 26 LF of fence per acre.
 26 LF x 3000 Acre = 78,000 LF

1.4.3.2	303.00 MW	Inverter / Transformer Removal	304.00	1.00	Detail	U.S. Dollar	2,899.37	878,509.69
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1.4.3.2.1	152.00 Each	Disconnect Electrical	152.00	1.00	Detail	U.S. Dollar	1,050.92	159,739.23
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010110	ELECTRICIAN	1,520.00	1.00 Each (hourly)	U.S. Dollar	55.99	85,103.81
L060100	GENERAL LABORER	1,520.00	1.00 Each (hourly)	U.S. Dollar	38.04	57,816.62
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,520.00	1.00 Each (hourly)	U.S. Dollar	11.07	16,818.80

1.4.3.2.2	152.00 Each	Loadout Inverter & Transformer	152.00	1.00	Detail	U.S. Dollar	2,663.75	404,890.46
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	6,080.00	4.00 Each (hourly)	U.S. Dollar	38.04	231,266.48
L010101	OPERATOR	1,520.00	1.00 Each (hourly)	U.S. Dollar	48.95	74,398.38
RHYDCR06	GROVE RT880 73 TON	1,520.00	1.00 Each (hourly)	U.S. Dollar	65.28	99,225.60

1.4.3.2.3	152.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	209,000.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		209,000.00 Each	U.S. Dollar	1.00	209,000.00

1.4.3.2.4	3,496.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	104,880.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		104,880.00 Each	U.S. Dollar	1.00	104,880.00

1.4.3.3	303.00 MW	Remove Foundations To Subgrade	198.03	1.53	Detail	U.S. Dollar	1,301.46	394,341.45
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Notes: *****
 Assumption: 24x36x1 concrete pad per inverter/
 transformer

1.4.3.3.1	14,592.00 Cubic Yard	Excavate / Remove Foundation	52.11	280.00	Detail	U.S. Dollar	15.05	219,625.16
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	521.14	1.00 Each (hourly)	U.S. Dollar	38.04	19,822.84
L010101	OPERATOR	1,042.29	2.00 Each (hourly)	U.S. Dollar	48.95	51,016.03
*REXCAV06C	Excav 100K w/ Hammer	521.14	1.00 Each (hourly)	U.S. Dollar	160.97	83,885.76
*REXCAV06A	Excav 100K w/ Bucket & Grapple	521.14	1.00 Each (hourly)	U.S. Dollar	124.54	64,900.53

1.4.3.3.2	14,592.00 Cubic Yard	Concrete Transport Offsite	145.92	100.00	Detail	U.S. Dollar	11.97	174,716.29
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	1,459.20	1.00 Each (hourly)	U.S. Dollar	74.29	108,403.97
L080940	TEAMSTER	1,459.20	1.00 Each (hourly)	U.S. Dollar	45.44	66,312.32

1.4.3.4	303.00 MW	Solar Panel Removal	198.31	1.53	Detail	U.S. Dollar	14,471.03	4,384,721.14
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1.4.3.4.1	951,900.00 Each	Solar Panel Removal	198.31	4,800.00	Detail	U.S. Dollar	2.78	2,650,331.14
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
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Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	11,898.75	6.00	Each (hourly)	U.S. Dollar		21.65	257,548.44
L010101	OPERATOR	11,898.75	6.00	Each (hourly)	U.S. Dollar		48.95	582,399.79
L060100	GENERAL LABORER	47,595.00	24.00	Each (hourly)	U.S. Dollar		38.04	1,810,382.91

Notes: *****
 Assumed production: 20 panels per laborer per hour,
 Includes packaging and preparing for shipment offsite.

1.4.3.4.2	846.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,163,250.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		1,163,250.00 Each	U.S. Dollar	1.00	1,163,250.00

Notes: *****
 Assumption: 45,000 lbs per load

1.4.3.4.3	19,038.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	571,140.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		571,140.00 Each	U.S. Dollar	1.00	571,140.00

Notes: *****
 Assumption: 951,900 modules x 40 lbs each

1.4.3.5	303.00 MW	Solar Rack (Trackers) & Post Removal	156.56	1.94	Detail	U.S. Dollar	23,022.82	6,975,913.68
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1.4.3.5.1	25,050.00 Each	Solar Rack (Trackers) & Post Removal	156.56	160.00	Detail	U.S. Dollar	242.00	6,062,063.68
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	25,050.00	16.00 Each (hourly)	U.S. Dollar	48.95	1,226,104.82
L060100	GENERAL LABORER	25,050.00	16.00 Each (hourly)	U.S. Dollar	38.04	952,833.11
*REXCAV06A	Excav 100K w/ Bucket & Grapple	12,525.00	8.00 Each (hourly)	U.S. Dollar	124.54	1,559,800.88
*REXCAV06E	Excav 100K w/ Shear	12,525.00	8.00 Each (hourly)	U.S. Dollar	185.50	2,323,324.88

Notes: *****
 Assumed production: .5 hour per rack per crew. Crew to include
 1 excavator w/shear, 1 excavator w/grapple, 2 operators and 2
 laborers. Includes post removal and sizing of steel for sale as scrap,
 and loadout to haul trucks.
 6 piles & 38 modules per rack.

1.4.3.5.2	446.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	613,250.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		613,250.00 Each	U.S. Dollar	1.00	613,250.00

Notes: *****
 Assumption: 45,000 lbs per load

1.4.3.5.3	10,020.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	300,600.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		300,600.00 Each	U.S. Dollar	1.00	300,600.00

1.4.4	303.00 MW	Site Restoration - Partial Site Seeding	298.50	1.02	Detail	U.S. Dollar	2,709.47	820,969.36
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1.4.4.1	180,000.00 Linear Feet	Decompact Roads	225.00	800.00	Detail	U.S. Dollar	2.68	482,765.85
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer	4,500.00	2.00 Each (hourly)	U.S. Dollar	58.34	262,507.50

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
L010101	OPERATOR		4,500.00	2.00	Each (hourly)	U.S. Dollar	48.95	220,258.35

Notes: *****
 Assume 60 LF of road per acre. 60 LF x 3000 Acre = 180,000 LF
 Decompaction to include discing and regrading

1.4.4.2	294.00 Acre	Spot Grade Disturbed Areas	73.50	4.00	Detail	U.S. Dollar	536.41	157,703.51
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer	1,470.00	2.00 Each (hourly)	U.S. Dollar	58.34	85,752.45
L010101	OPERATOR	1,470.00	2.00 Each (hourly)	U.S. Dollar	48.95	71,951.06

Notes: *****
 Assumption: 3000 acres total property area.
 67 acres of roads, and 2933 acres of remaining area.
 Assume that 10% of the remaining area disturbed by construction will be regraded.

1.4.4.3	361.00 Acre	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	0.00	Detail	U.S. Dollar	500.00	180,500.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		361.00 Acre	U.S. Dollar	500.00	180,500.00

Notes: *****
 Assumption: 3000 acres total property area.
 67 acres of roads, and 2933 acres of remaining area.
 Assume that 67 acres of road area to be reseeded, and 10% of the remaining area disturbed by construction will be reseeded.
 361 acres total to be reseeded.

1.4.5	303.00 MW	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	1,427.95	432,670.02
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USMARKUP5	3% Markup		14,422,334.00 Each	U.S. Dollar	0.03	432,670.02

1.4.6	303.00 MW	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	1,470.79	445,650.12
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USMARKUP5	3% Markup		14,855,004.00 Each	U.S. Dollar	0.03	445,650.12

1.4.7	303.00 MW	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	6,564.64	1,989,085.02
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USMARKUP	13% Markup		15,300,654.00 Each	U.S. Dollar	0.13	1,989,085.02

1.5	100.00 MW	DC Storage System Retirement	75.90	1.32	Detail	U.S. Dollar	4,269.28	426,928.23
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1.5.1	100.00 MW	DC Storage System Retirement	75.90	1.32	Detail	U.S. Dollar	3,561.25	356,124.55
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1.5.1.1	100.00 MW	Battery Removal & Disposal	66.00	1.52	Detail	U.S. Dollar	2,499.64	249,963.84
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1.5.1.1.1	66.00 Day	Remove Batteries, Load For Transport	66.00	1.00	Detail	U.S. Dollar	1,737.94	114,704.04
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	2,640.00	4.00 Each (hourly)	U.S. Dollar	38.04	100,418.34
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	660.00	1.00 Each (hourly)	U.S. Dollar	21.65	14,285.70

1.5.1.1.2	33.00 Each	Transport Batteries	0.00	0.00	Detail	U.S. Dollar	1,480.60	48,859.80
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1.5.1.1.2.1	33.00 Each	Roll Off Liners	0.00	0.00	Detail	U.S. Dollar	105.60	3,484.80
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
UODCLINER	Rolloff Liner		33.00 Each	U.S. Dollar	105.60	3,484.80

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.5.1.1.2.2	33.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	45,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		45,375.00 Each	U.S. Dollar	1.00	45,375.00		
1.5.1.1.3	432.00 Ton	Disposal Fee's	0.00	0.00	Detail	U.S. Dollar	200.00	86,400.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		86,400.00 Each	U.S. Dollar	1.00	86,400.00		
1.5.1.2	100.00 MW	Structure & Components Removal	9.90	10.10	Detail	U.S. Dollar	1,061.61	106,160.71
1.5.1.2.1	429.00 Ton	Structure Demo	9.90	43.33	Detail	U.S. Dollar	111.69	47,915.71
1.5.1.2.2	33.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	45,375.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		45,375.00 Each	U.S. Dollar	1.00	45,375.00		
1.5.1.2.3	429.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	12,870.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		12,870.00 Each	U.S. Dollar	1.00	12,870.00		
1.5.2	100.00 MW	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	106.84	10,683.75
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		356,125.00 Each	U.S. Dollar	0.03	10,683.75		
1.5.3	100.00 MW	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	110.04	11,004.24
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP5	3% Markup		366,808.00 Each	U.S. Dollar	0.03	11,004.24		
1.5.4	100.00 MW	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	491.16	49,115.69
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		377,813.00 Each	U.S. Dollar	0.13	49,115.69		
Report Total:			1,756.27				20,076,729.46	

Category	Total
Labor	7,029,206.74
Rented Equipment	5,568,921.27
Supplies	7,034.80
Materials	40,000.00
Subcontract	6,889,366.65
ODCs	542,200.00

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