## Exhibit X

Facility Retirement and Site Restoration

## Wagon Trail Solar Project

December 2023


Prepared by
Tt TETRA TECH

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Attachment X-1. Estimated Retirement and Restoration Cost

## Acronyms and Abbreviations

| Applicant | Wagon Trail Energy Center, LLC c/o NextEra Energy Resources, LLC |
| :--- | :--- |
| Council | Energy Facility Siting Council |
| Facility | Wagon Trail Solar Project |
| Li-ion | lithium-ion |
| O\&M | operations and maintenance |
| OAR | Oregon Administrative Rule |
| ODOE | Oregon Department of Energy |

### 1.0 Introduction

Wagon Trail Energy Center, LLC c/o NextEra Energy Resources, LLC (Applicant) proposes to construct and operate the Wagon Trail Solar Project (Facility), a solar energy generation facility and related or supporting facilities in Morrow County, Oregon. This Exhibit X was prepared to meet the submittal requirements in Oregon Administrative Rule (OAR) 345-021-0010(1)(x).

### 2.0 Estimated Useful Life of the Project

OAR 345-021-0010(1)(x) 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.

The estimated useful life of the Facility is estimated to be 50 years. This assumes that solar panels and supporting equipment are designed to have a useful life of 35 years or more. Racking and inverter manufacturers estimate a useful life of 10 to 15 years. Lithium-ion (Li-ion) battery systems will require replacement of the batteries every 5 to 10 years.

At the end of that period, the Facility may be decommissioned; its useful life could be extended if equipment continues to function well with routine maintenance; or the Facility could be repowered with newer-generation equipment in the same locations. While retirement of the Facility is possible, the need for electricity generation and transmission, along with supporting facilities, is expected to increase into the foreseeable future. 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)(x)(B) Specific actions and tasks to restore the site to a useful, nonhazardous condition.

The Retirement Plan will include, pursuant to OAR 345-027-0110(5), the following information:
(a) A plan for retirement that provides for completion of retirement without significant delay and that protects public health, safety and the environment.
(b) A description of actions the certificate holder proposes to take to restore the site to a useful, non-hazardous condition, including information on how impacts to fish, wildlife and the environment would be minimized during the retirement process.
(c) A current detailed cost estimate and a plan for ensuring the availability of adequate funds for completion of retirement.
(d) An updated list of the owners of property located within or adjacent to the site of the facility, as described in OAR 345-021-0010(1)(f).

Prior to retiring the Facility, the Applicant will prepare a final Retirement Plan for approval by the Council (per OAR 345-025-0006(9)). The Applicant will coordinate the development of the final Retirement Plan with the appropriate regulatory agencies and landowners. The proposed final Retirement Plan will be submitted to the Oregon Department of Energy (ODOE) at least 90 days prior to Facility retirement (per OAR 345-025-0006(16)). The Retirement Plan will describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-027-0110(5). After Council approval of the Retirement Plan, the Applicant will obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site.

The final Retirement Plan is anticipated to include the following specific actions to decommission the Facility:

- Removal of all facilities. Facilities to be removed will include aboveground solar and battery components, the operations and maintenance ( $O \& M$ ) building, transmission and overhead collector lines, inverter pads, the substation, and perimeter fencing. Underground electrical cable will be removed to its lateral depth; lateral runs are assumed to be a minimum of 3 feet deep, and will be abandoned in place. Facility service roads will be used to allow the deconstruction contractor to separate the solar modules from the poles, and load the modules into a truck or roll-off container for off-site disposal or recycling. Poles will be removed from the ground and recycled as scrap metal. Transformers will be decommissioned and disposed of off-site.
- Decommission battery storage system. Self-contained Li-ion battery components will be removed, transported, and disposed of or recycled by a qualified vendor. Battery containers and associated components will be disassembled and transported off-site via truck for disposal or recycling. Materials which cannot be salvaged will be disposed of at authorized sites (as described in Exhibit W).
- Removal of foundations. Concrete foundations for transformers, inverters, substations, O\&M building, meteorological stations, and battery storage system are assumed to be slab on grade; thus, they will be removed in their entirety. For all foundation areas, the area will be filled with soil or gravel as part of site restoration.
- Site Restoration. All Facility locations and access roads will be restored to a useful condition consistent with site zoning as coordinated with the landowner. This restoration will include restoring the site to a condition suitable for agricultural uses and uses comparable with the surrounding land uses, intended land use, and then-current technologies.
- Revegetation: Vegetation will be restored to the maximum extent practicable, and all areas disturbed by construction shall be landscaped in a manner compatible with the surroundings and proposed use. Disturbed areas may be regraded and reseeded with native
plant seed mixes, consistent with the Draft Reclamation and Revegetation Plan (provided as Attachment P-3 to Exhibit P) which will be developed in consultation with the Morrow County Weed Inspector.
- Removal of access roads. Decommissioned roads will be regraded to restore the surface soil to a useful condition consistent with site zoning. Alternatively, roads may be left in place based on landowner preference. It is expected that improved, pre-existing roads will not be decommissioned, but new access roads built for the Facility will be decommissioned.


### 4.0 Decommission Cost Estimate

### 4.1 Estimate of Cost - OAR 345-021-0010(1)(x)(C)

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

Attachment X-1 provides a detailed Facility retirement and restoration cost estimate for the Facility. The total retirement and restoration cost of retirement and restoration for the solar facility is $\$ 28.342$ million (in October 2021 dollars; see Attachment X-1). The estimated cost for the energy storage facility is $\$ 1.521$ million (included in total cost; see Attachment X-1).

The Applicant's ability to achieve the objectives of the Council's financial assurance rules is described in Exhibit M. Note that decommissioning financial assurances will be in place prior to the start of Facility construction.

### 4.2 Estimating Methods and Assumptions - OAR 345-021-0010(1)(x)(D) <br> OAR 345-021-0010(1)(x)(D) A discussion and justification of the methods and assumptions used to estimate site restoration costs.

The scope of work and individual tasks were established using professional experience, in collaboration with the Applicant's engineering staff and contractors. The Facility retirement 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 ${ }^{1}$. 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 that are industry standards were applied for contingency, overhead, and fee.

Estimating methods and assumptions specific to this estimate are as follows:

- Labor costs were developed by reviewing the U.S. Department of Labor wage determinations and rates published by RS Means. Using this method, an average rate is developed that includes base wage, fringe, and payroll tax liability. The final rate used in the

[^0]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. The rates assume the use of rental equipment, not owned equipment.
- Mobilization and demobilization costs reflect the actual costs to mobilize equipment, facilities, and crew to the Facility site. This amount does not include the front loading of cost from other tasks.
- Restoration is estimated on a unit cost basis, priced by task that follows the progression of work from start to finish, as illustrated in Attachment X-1. Unit costs are developed by including the labor, equipment, and production rate required for each individual task. RS Means and estimator experience are utilized to establish the crew, equipment, and production for each individual task. 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 Council-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 at the request of the current landowner. Road gravel will be used to backfill locations where needed. It is expected that the remaining road gravel will be accepted by local receivers with no additional disposal cost.
- Concrete foundations constructed at grade will be fully removed; other foundations will be removed to a depth of 4 feet below grade. Gravel from removal of roads will be used as backfill.
- Concrete foundation removal will be accomplished using excavators with concrete breakers. Processed concrete will be transported off site under the same assumptions as road gravel.
- Underground electrical cable will be removed to its lateral depth; lateral runs are assumed to be a minimum of 3 feet deep and will be abandoned in place.
- Oil from transformers will be drained prior to removal, and the oil will be disposed of following state and federal regulations. Oil disposal cost is assumed to be $\$ 4$ per gallon in 2021 dollars.
- For estimating purposes, the 230-kilovolt transmission line was assumed to be composed of steel monopoles and cable. Towers were assumed to be recyclable and will be disassembled on-site and shipped off-site. The control building was assumed to have no scrap value.
- Site restoration will include the placement of approximately 5,000 cubic yards of topsoil on disturbed areas, with a final seeding utilizing a mix of native grasses. With the exception of the substation area, it was assumed that topsoil required for restoration is available on site as a result of the original installation.
- The cost for temporary facilities has been included in the restoration cost. These include an office trailer, four Conex storage units, portable toilets, first aid supplies, and utilities.
- Field management during construction activities has been added to the estimate. These include two Superintendents, two Health and Safety Representatives, and two Field Engineers. These positions are critical to the safe and successful execution of work.
- 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, 5 percent Contingency, and 15 percent for Overhead and Fee.
- ODOE could incur additional costs in the case where the Applicant is unable to manage the decommissioning process. Additional contingencies are included in the restoration costs for ODOE incurred costs, including a 1 percent Performance Bond, 10 percent Administrative and Project Management fee, and 10 percent Future Development contingency.


### 5.0 Decommissioning Financial Assurance

Using the decommissioning cost estimates (Attachment X-1), financial assurances will be made so that the Facility is restored to a useful, non-hazardous condition (per OAR 345-025-0006(7)). Note that decommissioning financial assurances will be in place prior to the start of Facility construction. A phased approach to decommissioning security will be implemented, 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 $\mathrm{X}-1$. The bond will be an amount satisfactory to the Council to restore the site to a useful, non-hazardous conditions and will be maintained in effect at all times until the Facility has been retired (per OAR 345-025-0006(8)). The Applicant understands that the Council may specify different amounts for the bond during construction and operation of the Facility.

## During Operations

- Phasing. Each phase of the Facility will hold separate financial assurances for decommissioning that portion of the Facility.
- Shared Facilities. Supporting facilities that are shared with other projects may not be decommissioned at the same time as the Facility. For example, if the Wheatridge Renewable

Energy Facilities ${ }^{2}$ (located in Morrow County, adjacent to the Facility) share the 0\&M building, then the obligation to decommission the O\&M building would be transferred to those facilities. The Applicant shall provide a shared facilities agreement or other real estate rights at the time of decommissioning to demonstrate remaining components will be used for other facilities.

The Applicant asserts that a phased approach to the decommissioning bond could be made in partnership with one or more equity investors in a project in compliance with OAR 345-022-0050. Independent evaluators may perform due diligence for equity investors. Once a project has begun commercial operations, the bond will be reduced to $\$ 1.00$. In the event that the project owner becomes insolvent during the lifetime of the Facility, the project's equity investors would ensure the project would remain operational. An Officer's Certificate could be provided by the Applicant affirming the length of the Power Purchase Agreement or other acceptable proof of contracted agreement could be provided in lieu of the bond amount (greater than \$1.00).

### 6.0 Monitoring Plan

OAR 345-021-0010(1)(x)(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 7a monitoring plan is unnecessary.

In the event that the Applicant elects to retire the Facility, the site could be restored to a useful, non-hazardous condition consistent with site zoning, including Exclusive Farm Use zoning (per OAR 345-025-0006(9)). The Facility will be retired according to the final Retirement Plan approved by the Council (see Section 3.0). The Facility is not expected to cause site contamination with hazardous materials, and no contamination monitoring plan is proposed. The existing facilities could be removed without significant risk of contamination.

Hazardous materials associated with the Facility would largely be limited to internal battery components, which would be removed by an authorized vendor prior to removing the equipment. Note, used Li-ion batteries are not considered hazardous waste by the U.S. Environmental Protection Agency. The Facility will not have any underground storage tanks or on-site bulk storage of hazardous materials. Small quantities of lubricants, vehicle fuel, and herbicides might be transported over and across the site during operation, and leaks, spills and improper handling of these materials could occur. Given the small amounts of such materials used at the Facility site, soil contamination is highly unlikely, and therefore a monitoring plan is unnecessary.

[^1]
### 7.0 Submittal Requirements and Approval Standards

### 7.1 Submittal Requirements

Table X-1. Submittal Requirements Matrix

| Requirement | Location |
| :--- | :---: |
| OAR 345-021-0010(1)(x) Information about site restoration, providing evidence to support a <br> 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, <br> non-hazardous condition. | Section 4.1 |
| (D) A discussion and justification of the methods and assumptions used to estimate site <br> restoration costs. | Section 4.2 |
| (E) For facilities that might produce site contamination by hazardous materials, a proposed <br> monitoring plan, such as periodic environmental site assessment and reporting, or an <br> explanation why a monitoring plan is unnecessary. | Section 6.0 |

### 7.2 Approval Standards

Table X-2. Approval Standard

| Requirement | Location |
| :---: | :---: |
| OAR 345-022-0050 Retirement and Financial Assurances |  |
| To issue a site certificate, the Council must find that: | - |
| (1) The site, taking into account mitigation, can be restored adequately to a useful, nonhazardous condition following permanent cessation of construction or operation of the facility. | Sections 2.0 though 6.0 |
| (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 X-1. Estimated Retirement and Restoration Cost

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## Estimate Summary

TETRA TECH EC, INC.
Job Code: Wagon Trail Solar
Description: Decommissioning Estimate




| Cost Item |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CBS <br> Position Code | Quantity UM | Description | UM/Day | Cost Source | Currency | Unit Cost | Total Cost |
| Resource Code | Description | Hours | Quantity UM |  |  | Unit Cost | Total Cost |
| L060100 | GENERAL LABORER | 400.00 | 4.00 Each (hourly) |  |  | 45.44 | 18,177.72 |
| L010101 | OPERATOR | 100.00 | 1.00 Each (hourly) |  |  | 56.75 | 5,675.34 |
| *RXMISC14 | MAN LIFT GAS 125 ft | 100.00 | 1.00 Each (hourly) |  |  | 53.52 | 5,352.00 |
| *RXMISC23 | GROVE RT 200 TON | 100.00 | 1.00 Each (hourly) |  |  | 90.91 | 9,091.00 |
| 1.3.2.1.2 | 20.00 Each | Cut / Size Structure \& Loadout | 2.00 | Detail | U.S. Dollar | 2,101.65 | 42,032.92 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| L060100 | GENERAL LABORER | 600.00 | 6.00 Each (hourly) | U.S. Dollar |  | 45.44 | 27,266.58 |
| L010101 | OPERATOR | 100.00 | 1.00 Each (hourly) | U.S. Dollar |  | 56.75 | 5,675.34 |
| *RXMISC23 | GROVE RT 200 TON | 100.00 | 1.00 Each (hourly) | U.S. Dollar |  | 90.91 | 9,091.00 |
| 1.3.2.1.3 | 14.00 Each | Trucking - Per Load | 0.00 | Detail | U.S. Dollar | 1,375.00 | 19,250.00 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| USTRUCKING | Trucking Sub |  | 19,250.00 Each | U.S. Dollar |  | 1.00 | 19,250.00 |
| Notes: | 9 ton per steel structure and | nd cable span |  |  |  |  |  |


| 1.3 .2 .2 | 20.00 Each | Remove Foundations To Subgrade | 0.98 | Detail | U.S. Dollar | $4,925.29$ |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 20.00 Each | Excavate / Remove Foundation - Various <br> Depth | 1.00 | Detail | U.S. Dollar | $4,898.95$ | $97,979.06$ |


| Resource Code | Description | Hours | Quantity UM | Currency | Unit Cost | Total Cost |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| L060100 | GENERAL LABORER | 400.00 | 2.00 Each (hourly) | U.S. Dollar | 45.44 |  |
| L010101 | OPERATOR | 400.00 | 2.00 Each (hourly) | U.S. Dollar | $18,177.72$ |  |
| *REXCAV06C | Excav 100K w/ Hammer | 200.00 | 1.00 Each (hourly) | U.S. Dollar | 56.75 | $22,701.34$ |
| *REXCAV06A | Excav 100K w/ Bucket \& Grapple | 200.00 | 1.00 Each (hourly) | U.S. Dollar | 160.97 | $32,193.00$ |
|  | 33.00 Cubic Yard | Concrete Transport Offsite | 75.00 | Detail | U.S. Dollar | 124.54 |
| 1.3 .24 .907 .00 |  |  |  |  |  |  |



| Resource Code | Description | Hours | Quantity UM | Currency | Unit Cost | Total Cost |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| L060100 | GENERAL LABORER | 2.00 | 1.00 Each (hourly) | U.S. Dollar | 45.44 |  |
| L010101 | OPERATOR | 4.00 | 2.00 Each (hourly) | U.S. Dollar | 90.89 |  |
| *REXCAV06C | Excav 100K w/ Hammer | 2.00 | 1.00 Each (hourly) | U.S. Dollar | 56.75 | 160.97 |
| *REXCAV06A | Excav 100K w/ Bucket \& Grapple | 2.00 | 1.00 Each (hourly) | U.S. Dollar | 124.54 |  |
| 1.4 .2 .2 | 50.00 Cubic Yard | Concrete Transport Offsite |  | 100.00 | Detail | U.S. Dollar |




| Cost Item |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CBS <br> Position Code | Quantity UM | Description | UM/Day | Cost Source | Currency | Unit Cost | Total Cost |
| RHYDCR06 | GROVE RT880 | 1,420.00 | 1.00 Each (hourly) | U.S. |  | 65.28 | 92,697.60 |
| 1.7.2.3 | 142.00 Each | Trucking - Per Load | 0.00 | Detail | U.S. Dollar | 1,375.00 | 195,250.00 |
| Resource Code | Description | Hours | Quantity UM |  |  | Unit Cost | Total Cost |
| USTRUCKING | Trucking Sub |  | 195,250.00 Each | U.S. |  | 1.00 | 195,250.00 |
| 1.7.3 | 142.00 Each | Remove Foundations To Subgrade | 2.30 | Detail | U.S. Dollar | 891.09 | 126,535.31 |
| Notes: <br> Assumption: 24×36x1 concrete pad per inverter/ transformer $\qquad$ |  |  |  |  |  |  |  |


| 1.7.3.1 | 4,544.00 Cubic Yard | Excavate / Remove Foundation | 280.00 | Detail | U.S. Dollar | 15.87 | 72,128.05 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| L060100 | GENERAL LABOR | 162.29 | 1.00 Each (hourly) | U.S. Dollar |  | 45.44 | 7,374.96 |
| L010101 | OPERATOR | 324.57 | 2.00 Each (hourly) | U.S. Dollar |  | 56.75 | 18,420.52 |
| *REXCAV06C | Excav 100K w/ He | 162.29 | 1.00 Each (hourly) | U.S. Dollar |  | 160.97 | 26,122.32 |
| *REXCAV06A | Excav 100K w/ B | \& Grapple 162.29 | 1.00 Each (hourly) | U.S. Dollar |  | 124.54 | 20,210.25 |
| 1.7.3.2 | 4,544.00 Cubic Yard | Concrete Transport Offsite | 100.00 | Detail | U.S. Dollar | 11.97 | 54,407.27 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| RDUTRK06 | CAT D350D, 18C | 454.40 | 1.00 Each (hourly) | U.S. Dollar |  | 74.29 | 33,757.38 |
| L080940 | TEAMSTER | 454.40 | 1.00 Each (hourly) | U.S. Dollar |  | 45.44 | 20,649.89 |
| 1.7.4 | 965,007.00 Each | Solar Panel Removal \& Disposal | 5,600.00 | Detail | U.S. Dollar | 5.84 | 5,639,622.20 |
| 1.7.4.1 | 965,007.00 Each | Solar Panel Removal | 5,600.00 | Detail | U.S. Dollar | 3.11 | 3,003,292.20 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| RLIFTS05 | JCB 508C, 8,000I | KKLFT 10,339.36 | 6.00 Each (hourly) | U.S. Dollar |  | 21.65 | 223,795.46 |
| L010101 | OPERATOR | 10,339.36 | 6.00 Each (hourly) | U.S. Dollar |  | 56.75 | 586,793.36 |
| L060100 | GENERAL LABOR | 48,250.35 | 28.00 Each (hourly) | U.S. Dollar |  | 45.44 | 2,192,703.38 |

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

| 1.7.4.2 | 1,286.00 Each | Trucking - Per Load |  | 0.00 | Detail | U.S. Dollar | 1,375.00 | 1,768,250.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Resource Code | Description |  | Hours | Quantity UM |  |  | Unit Cost | Total Cost |
| USTRUCKING | Trucking Sub |  |  | 1,768,250.00 Each |  |  | 1.00 | 1,768,250.00 |
| Notes: ************************************* |  |  |  |  |  |  |  |  |
| Assumption: 45,000 lbs per load |  |  |  |  |  |  |  |  |
| 1.7.4.3 | 28,936.00 Ton | Disposal Cost |  | 0.00 | Detail | U.S. Dollar | 30.00 | 868,080.00 |
| Resource Code | Description |  | Hours | Quantity UM |  |  | Unit Cost | Total Cost |
| USDISPOSAL | Disposal Fee's |  |  | 868,080.00 Each |  |  | 1.00 | 868,080.00 |
| Notes: |  |  |  |  |  |  |  | Assumption: 965,007 modules x 59.97 lbs each |


| 1.7.5 | 1.00 Lump Sum | Solar Rack (Trackers) \& Post Removal | 0.01 | Detail U.S. Dollar | 6,234,272.27 | 6,234,272.27 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.7.5.1 | 17,871.00 Each | Solar Rack (Trackers) \& Post Removal | 160.00 | Detail U.S. Dollar | 257.21 | 4,596,647.27 |
| Resource Code | Description | Hours | Quantity UM | Currency | Unit Cost | Total Cost |
| L010101 | OPERATOR | 17,871.00 | 16.00 Each (hourly) | U.S. Dollar | 56.75 | 1,014,239.12 |
| L060100 | GENERAL LABO | 17,871.00 | 16.00 Each (hourly) | U.S. Dollar | 45.44 | 812,135.09 |
| *REXCAV06A | Excav 100K w/ Buck | \& Grapple $\quad 8,935.50$ | 8.00 Each (hourly) | U.S. Dollar | 124.54 | 1,112,782.49 |
| *REXCAV06E | Excav 100K w/ Sh | 8,935.50 | 8.00 Each (hourly) | U.S. Dollar | 185.50 | 1,657,490.57 |
| 2/9/2023 2:18 PM | Copyright ©020 InEight Inc. All Rights Reserved. |  |  |  | 7 of 9 |  |


| Cost Item |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CBS <br> Position Code | Quantity UM | Description | UM/Day | Cost Source | Currency | Unit Cost | Total Cost |
| Notes: ************************************************* |  |  |  |  |  |  |  |
|  | umed production: .5 hour per xcavator w/shear, 1 excavato rers. Includes post removal loadout to haul trucks. | ack per crew. Crew to include /grapple, 2 operators and 2 d sizing of steel for sale as scrap, $\qquad$ |  |  |  |  |  |
| 1.7.5.2 | 1,191.00 Each | Trucking - Per Load | 0.00 | Detail | U.S. Dollar | 1,375.00 | 1,637,625.00 |
| Resource Code | Description | Hours | Quantity UM |  |  | Unit Cost | Total Cost |
| USTRUCKING | Trucking Sub |  | 1,637,625.00 Each | U.S. |  | 1.00 | 1,637,625.00 |
| Notes: ${ }^{* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ~}$ |  |  |  |  |  |  |  |
| Assumption: 45,000 lbs per load |  |  |  |  |  |  |  |
| 1.8 | 1.00 Lump Sum | Site Restoration - Partial Site Seeding | 0.01 | Detail | U.S. Dollar | 945,308.60 | 945,308.60 |
| 1.8.1 | 248,160.00 Linear Feet | Decompact Roads | 5,000.00 | Detail | U.S. Dollar | 0.92 | 228,482.60 |
| Resource Code | Description | Hours | Quantity UM | Cur |  | Unit Cost | Total Cost |
| *RDOZER08 | CAT D6 LGP Dozer | 1,985.28 | 4.00 Each (hourly) | U.S. |  | 58.34 | 115,811.31 |
| L010101 | OPERATOR | 1,985.28 | 4.00 Each (hourly) | U.S. |  | 56.75 | 112,671.29 |
| Notes: ****************************************************** |  |  |  |  |  |  |  |
| Decompaction to include discing and regrading |  |  |  |  |  |  |  |
| 1.8.2 | 910.00 Acre | Spot Grade Disturbed Areas | 16.00 | Detail | U.S. Dollar | 287.72 | 261,826.00 |
| Resource Code | Description | Hours | Quantity UM | Cur |  | Unit Cost | Total Cost |
| *RDOZER08 | CAT D6 LGP Dozer | 2,275.00 | 4.00 Each (hourly) | U.S. |  | 58.34 | 132,712.13 |
| L010101 | OPERATOR | 2,275.00 | 4.00 Each (hourly) | U.S. |  | 56.75 | 129,113.87 |
| Notes: ************************************************** |  |  |  |  |  |  |  |
|  | umtion: 3,638 acres total prop ume that $25 \%$ of the area di be regraded. | rty area. bed by construction $\qquad$ |  |  |  |  |  |
| 1.8.3 | 910.00 Acre | Re-Seed With Native Vegetation - Roads \& Areas Disturbed By Construction | 0.00 | Detail | U.S. Dollar | 500.00 | 455,000.00 |
| Resource Code | Description | Hours | Quantity UM | Cur |  | Unit Cost | Total Cost |
| USLANDSCAPE | Landscape Sub |  | 910.00 Acre | U.S. |  | 500.00 | 455,000.00 |
|  |  |  |  |  |  |  |  |

Assumtion: 3,638 acres total property area.
Assume that $25 \%$ of the area distrubed by construction
will be re-seeded.
******************************************************

| 1.9 | 1.00 Lump Sum | Contractor Markups | 0.00 | Detail | U.S. Dollar | 4,810,089.80 | 4,810,089.80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.9.1 | 1.00 Lump Sum | Home Office, Project Management (5\% Of Cost) | 0.00 | Detail | U.S. Dollar | 897,823.55 | 897,823.55 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| USMARKUP5 | 5\% Markup |  | 6,471.00 Each | U.S. Dollar |  | 0.05 | 897,823.55 |
| 1.9.2 | 1.00 Lump Sum | Contractor Contingency (5\% Of Cost) | 0.00 | Detail | U.S. Dollar | 942,714.75 | 942,714.75 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| USMARKUP5 | 5\% Markup |  | 4,295.00 Each | U.S. Dollar |  | 0.05 | 942,714.75 |
| 1.9.3 | 1.00 Lump Sum | Contractor OH \& Fee (15\% Of Cost) | 0.00 | Detail | U.S. Dollar | 2,969,551.50 | 2,969,551.50 |
| Resource Code | Description | Hours | Quantity UM | Currency |  | Unit Cost | Total Cost |
| USMARKUP | 15\% Markup | 19,7 | 7,010.00 Each | U.S. Dollar |  | 0.15 | 2,969,551.50 |
| 1.10 | 1.00 Lump Sum | ODOE Applied Contingencies | 0.00 | Detail | U.S. Dollar | 4,780,977.81 | 4,780,977.81 |

CBS
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[^0]:    ${ }^{1}$ www.rsmeans.com

[^1]:    ${ }^{2}$ Wheatridge Renewable Energy Facility I, II, III, and East

