

Exhibit W

Facility Retirement and Site Restoration

**Nolin Hills Wind Power Project
January 2022**



d/b/a Nolin Hills Wind, LLC

Prepared by



Tetra Tech, Inc.

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Acronyms and Abbreviations

Applicant	Nolin Hills Wind, LLC
EFSC or Council	Energy Facility Siting Council
kV	kilovolt
met tower	meteorological data collection tower
MW	megawatt
O&M	operation and maintenance
OAR	Oregon Administrative Rule
ODOE	Oregon Department of Energy
Project	Nolin Hills Wind Power Project

1.0 Introduction

Nolin Hills Wind, LLC (the Applicant) proposes to construct the Nolin Hills Wind Power Project (Project), a wind energy project with a nominal generating capacity of up to approximately 600 megawatts (MW), and up to 373 MW of average energy, in Umatilla County, Oregon. The Project comprises up to 112 wind turbine generators and up to 1,700 acres of solar panels, depending on the turbine model selected as well as final mix of energy generating technologies based on engineering optimization and offtake market trends. The Project will interconnect to the regional grid via either a transmission line leading from the northern Project substation northwest to Cottonwood Substation in Hermiston, or a new 230-kilovolt (kV) transmission line to the proposed Bonneville Power Administration Stanfield Substation, north of the town of Nolin. Other Project components include electrical collection lines, substations, a battery energy storage system, site access roads, one operations and maintenance (O&M) building, meteorological data collection towers (met tower), and temporary construction yards. These facilities are all described in greater detail in Exhibit B.

2.0 Applicable Rules and Standards

Exhibit W contains information pertaining to site restoration. This exhibit was prepared pursuant to the Retirement and Financial Assurance standard in Oregon Administrative Rules (OAR) 345-022-0050 and the submittal requirements in OAR 345-021-0010(1)(w) paragraphs (A) through (E). This exhibit demonstrates that the Project can comply with the approval standard in OAR 345-022-0050:

OAR 345-022-0050 Retirement and Financial Assurance

To issue a site certificate, the Council must find that:

(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.

3.0 Estimated Useful Life of the Project – OAR 345-021-0010(1)(w)(A)

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 must include:

OAR 345-021-0010(1)(w)(A) The estimated useful life of the proposed facility;

For financial and engineering purposes, the Project is estimated to have a useful life of at least 30 years. The Project may be repowered or upgraded during or after that period to extend its lifespan. In the case of a facility upgrade, the Applicant would follow the Energy Facility Siting Council's (EFSC or Council) rules for amending the site certificate as defined in OAR Chapter 345, Division 27.

4.0 Actions to Restore the Site – OAR 345-021-0010(1)(w)(B)

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

Prior to decommissioning the Project, the Applicant will obtain the necessary authorization from the appropriate regulatory agencies and landowners. Decommissioning will consist of the following steps:

- Dismantle turbines, towers, met tower, and pad transformers; remove and sell for use or scrap where possible.
- Dismantle solar and battery components.
- Dismantle the O&M Building and substations.
- Dismantle aboveground electrical equipment (collector lines and poles, transmission lines).
- Remove concrete turbine and met tower foundations to a minimum of 3 feet below grade.
- Remove and reclaim Project roads or leave in place if preferred by landowner.
- Restore surface soils to original condition or as agreed with landowner.

Decommissioning measures will occur in roughly the reverse order as construction. Large aboveground structures such as wind turbines, met towers, and solar and battery components will be dismantled and removed. Metal components such as turbine towers, nacelles, and steel components of solar racking structures will have considerable scrap value and will be separated from non-metal components to be sold for re-use or scrap. Non-metal components will be recycled to the extent practicable or disposed of at authorized sites (see Exhibit V). Solar panels frequently have energy generating value after they are removed from large-scale use, and will be sold or donated for re-use where possible; alternatively, they will be recycled or disposed of at an authorized facility.

Electrical components including substations, collector lines, and transmission lines, along with their support structures, will be dismantled and removed for off-site disposal. The battery systems will be dismantled and disposed of in the same manner as routine fluid replacement or battery disposal. If flow batteries are selected, fluid will be drained and transported to an off-site facility for disposal, and containers will be recycled where possible or disposed of at an approved facility. If lithium-ion batteries are selected, self-contained components will be removed and recycled if possible or

disposed of at an approved facility, and containers will be dismantled and removed for off-site recycling or disposal.

Subsurface features including underground collector lines and concrete structures will be removed to a minimum of 3 feet below ground surface or as agreed with the landowner, to allow continued use of the land for agricultural purposes. Land will be regraded and restored in accordance with the revegetation plan. Portions of underground equipment below 3 feet will be left in place.

Access roads will be reclaimed by regrading and removal of road surfaces, to restore to a condition suitable for agricultural practices in accordance with landowner agreements. If the landowner prefers to retain roads, they will be left in place. Reclamation procedures will be based on site-specific requirements and techniques commonly employed at the time the area is to be reclaimed. As appropriate based on intended use of the land following decommissioning, the land will be reseeded in accordance with the Project’s approved revegetation plan.

5.0 Total Costs, Estimating Methods, and Assumptions – OAR 345-021-0010(1)(w)(C) and (D)

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;

A detailed estimate of the costs to retire the Project is provided in Attachment W-1. The Applicant requests that the Council reconsider its position concerning scrap and salvage values as an offset to retirement costs. The Council previously considered scrap and salvage value at a time when the market for recycling these materials was not mature. That is no longer the case, and it is unlikely that the market value of recycled scrap materials will diminish. Without consideration of scrap value, the estimated retirement cost is \$31,474,000. Attachment W-2 provides an estimate of retirement cost with consideration of scrap value. Including scrap value, the Applicant estimates the net cost of retiring the Project and restoring the site is \$21,530,000 . The Applicant’s dollar estimate was based on the net cost of retiring a facility consisting of 112 General Electric 3.03-MW turbines along with 820,000 solar panels and related facilities. Table W-1 summarizes the estimated retirement costs.

Table W-1. Summary of Retirement Costs

Scenario	General Electric 3.03 MW
Decommissioning Cost Estimate without Scrap Credit	\$31,474,115
Scrap Credit Estimate	\$9,943,992
Adjusted Total	\$21,530,123

OAR 345-021-0010(1)(w)(D) A discussion and justification of the methods and assumptions used to estimate site restoration costs; and

The Applicant's cost estimate includes removal of turbines, towers, pad transformers, met towers, solar arrays, battery energy storage system components, collector substations, O&M Building, and aboveground collector and transmission lines; excavation of foundations and underground collector lines down to a depth of 3 feet; and return of soils to preconstruction grade, including the removal and restoration of roadways for the Project. The Applicant made the following assumptions as part of estimating site restoration costs:

- Labor costs are based on U.S. Department of Labor wage determinations and rates published by RS Means. Rates include base wage, fringe, and payroll tax liability, as well as an estimated 10 hours per week at overtime rates.
- Equipment rates are based on RS Means and historical vendor quotes and include fuel and maintenance. Rental equipment, which is typically more expensive than contractor-owned equipment, is assumed.
- Mobilization and demobilization costs were estimated to reflect the cost of equipment and crew mobilization. Temporary facilities will be placed on site to include office trailer, storage units, portolets, first aid supplies, and utilities.
- Restoration includes labor, equipment, and production rates required for each individual task.
- For purposes of estimating costs, it is assumed that roads will be decompacted and reseeded to match the surrounding area and in such a way that they are no longer usable as a road. At the time of Project retirement, the landowner may elect to leave some roads in place, which would be a reduction to the estimated cost.
- Home Office, Project Management, Overhead, and Fee can vary significantly by contractor. This estimate includes average costs as a percentage of total cost and consists of 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fee. Contractor Contingency in the amount of 3 percent of total cost also is included.
- Miscellaneous costs such as permits, engineering, signage, fencing, traffic control, utility disconnects, etc. are included as incidental costs.
- Scrap value in Attachment W-2 is calculated at a rate of \$216 per ton based on an analysis of low, high, and average scrap values from 2003 to present. These commodity unit rates will be updated annually over the course of the Project lifetime to account for changes in scrap value over time. To assure that the Oregon Department of Energy (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 Project component salvage. This agreement will be a financing statement (Unified Commercial Code filing) that is filed with Umatilla 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 Project. 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.

- In the event that the Project owner is unable to implement and manage the decommissioning process, the Applicant understands that the ODOE would take on this role. An estimate of \$533,000 has been included to address ODOE's costs to manage potential legal processes related to Project decommissioning as well as oversight of contractor performance. This estimate is equivalent to two Full-Time Equivalent employees for a period of 16 months.

The Applicant's proposed cost estimate will be sufficient to fund the restoration of the Project to a useful, nonhazardous condition. Please see Exhibit M for information on the security the Applicant will provide to cover this amount.

ODOE provided comments on the preliminary Application for Site Certificate regarding the Applicant's approach to estimating Project Management, Future Contingency, and Scrap Value costs. In response to these comments, the Applicant prepared a memorandum providing additional detail on the rationale for including each of these items in the manner described here. That memorandum is provided as Attachment W-3.

6.0 Monitoring Plan – OAR 345-021-0010(1)(w)(E)

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.

A monitoring plan will not be necessary at this site because the Project will not produce site contamination by hazardous materials.

7.0 Conclusion

For the reasons set forth in this Exhibit, the Council may find that the site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition as described in OAR 345-022-0050. Please see Exhibit M for evidence that the Applicant has a reasonable likelihood of obtaining a bond or letter of credit in the amount estimated to be required to restore the site.

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Attachment W-1. Estimates of Project Retirement Cost without Scrap Credit

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Estimate Summary

TETRA TECH EC, INC.

Job Code: Nolin Hills Wind Power Project

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	NOLIN HILLS DECOMMISSIONING - WIND & SOLAR - WO/ SCRAP CREDIT	1,939.10	0.00	Detail	U.S. Dollar	31,474,115.16	31,474,115.16
1.1	1.00 Lump Sum	ODOE Management Fee (Pass Through Cost)	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		
UODC	ODOE Management Fee		533,000.00 Each	U.S. Dollar	1.00	533,000.00		
1.2	1.00 Lump Sum	Mob / Demob	5.00	0.20	Detail	U.S. Dollar	907,217.85	907,217.85
1.2.1	1.00 Lump Sum	Equipment Mob	0.00	0.00	Detail	U.S. Dollar	101,500.00	101,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UERNTRLG	Rental Equip Transp-Large		10.00 Each	U.S. Dollar	10,000.00	100,000.00		
UERNTRSM	Rental Equip Transp-Small		10.00 Each	U.S. Dollar	150.00	1,500.00		
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 Trnsp/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	15,703.57	47,110.71
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	600.00	20.00 Each (hourly)	U.S. Dollar	44.04	26,422.35		
L010101	OPERATOR	300.00	10.00 Each (hourly)	U.S. Dollar	51.35	15,403.89		
L080940	TEAMSTER	120.00	4.00 Each (hourly)	U.S. Dollar	44.04	5,284.47		
1.2.4	2.00 Day	Crew Demob & Site Cleanup	2.00	1.00	Detail	U.S. Dollar	15,703.57	31,407.14
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	400.00	20.00 Each (hourly)	U.S. Dollar	44.04	17,614.90		
L010101	OPERATOR	200.00	10.00 Each (hourly)	U.S. Dollar	51.35	10,269.26		
L080940	TEAMSTER	80.00	4.00 Each (hourly)	U.S. Dollar	44.04	3,522.98		
1.2.5	1.00 Lump Sum	Mob-Erection Sub	0.00	0.00	Detail	U.S. Dollar	725,000.00	725,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECTMOB	Sub-Erection Mobilization		1.00 Each	U.S. Dollar	725,000.00	725,000.00		
Notes: ***** Historical pricing from past projects *****								
1.3	12.00 Month	Site Facilities	0.00	0.00	Detail	U.S. Dollar	2,155.00	25,860.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
URCONNEX	Connex Box		24.00 Month	U.S. Dollar	150.00	3,600.00		
UROFFTRL	Office Trailer -12x60		12.00 Month	U.S. Dollar	500.00	6,000.00		
UO1STAI	1st Aid Supplies		12.00 Month	U.S. Dollar	300.00	3,600.00		
UOOFFPHN	Monthly Office Phone		12.00 Month	U.S. Dollar	500.00	6,000.00		
UOOFFSUP	Office Supplies(\$/prs/mo)		12.00 Month	U.S. Dollar	55.00	660.00		
UINT	Internet		12.00 Month	U.S. Dollar	200.00	2,400.00		
URPRTAJH	Port-a-John Unit(s) (4)		12.00 Month	U.S. Dollar	300.00	3,600.00		
1.4	52.00 Week	Field Management	312.00	0.17	Detail	U.S. Dollar	30,245.91	1,572,787.15
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
L90FX02	Field - Proj Superintendent	3,120.00	1.00	Each (hourly)	U.S. Dollar		83.18	259,527.84
RPUTRK05	F-250 4X4 3/4 TON PICKUP	18,720.00	6.00	Each (hourly)	U.S. Dollar		11.07	207,136.80
L90FEL00	Field - Engr. Tech	6,240.00	2.00	Each (hourly)	U.S. Dollar		39.57	246,941.90
L90FX03	Field - SHSO	6,240.00	2.00	Each (hourly)	U.S. Dollar		89.26	557,006.74
L90FEJ00	Field - Asst. Engr.	6,240.00	2.00	Each (hourly)	U.S. Dollar		48.43	302,173.87
1.5	2.00 Each	Substation & Switchyard Removal	32.84	0.06	Detail	U.S. Dollar	168,836.05	337,672.10
1.5.1	2.00 Day	Fence Removal	2.00	1.00	Detail	U.S. Dollar	1,286.19	2,572.37
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	20.00	1.00 Each (hourly)	U.S. Dollar	51.35	1,026.93		
L060100	GENERAL LABORER	20.00	1.00 Each (hourly)	U.S. Dollar	44.04	880.75		
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00 Each (hourly)	U.S. Dollar	33.24	664.70		
1.5.2	2.00 Each	Transformer & Switchyard Equip Removal	7.00	0.29	Detail	U.S. Dollar	129,881.96	259,763.93
1.5.2.1	2.00 Each	Oil Removal & Disposal	4.00	0.50	Detail	U.S. Dollar	104,732.79	209,465.58
1.5.2.1.1	2.00 Each	Oil Removal	4.00	0.50	Detail	U.S. Dollar	1,982.79	3,965.58
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	80.00	2.00 Each (hourly)	U.S. Dollar	44.04	3,522.98		
RPUTRK05	F-250 4X4 3/4 TON PICKUP	40.00	1.00 Each (hourly)	U.S. Dollar	11.07	442.60		
1.5.2.1.2	50,000.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	200,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		200,000.00 Each	U.S. Dollar	1.00	200,000.00		
1.5.2.1.3	4.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		5,500.00 Each	U.S. Dollar	1.00	5,500.00		
1.5.2.2	300.00 Ton	Demo & Prepare For Shipment Offsite	3.00	100.00	Detail	U.S. Dollar	102.66	30,798.35
1.5.2.3	300.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	19,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		19,500.00 Each	U.S. Dollar	1.00	19,500.00		
1.5.3	2.00 Each	Remove Control Building	0.20	10.00	Detail	U.S. Dollar	2,604.41	5,208.82
1.5.3.1	20.00 Ton	Demo & Prepare For Shipment Offsite	0.20	100.00	Detail	U.S. Dollar	195.44	3,908.82
1.5.3.2	20.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	1,300.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,300.00 Each	U.S. Dollar	1.00	1,300.00		
1.5.4	4.00 Day	UG Utility & Ground Removal	4.00	1.00	Detail	U.S. Dollar	1,286.19	5,144.74
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	40.00	1.00 Each (hourly)	U.S. Dollar	51.35	2,053.85		
L060100	GENERAL LABORER	40.00	1.00 Each (hourly)	U.S. Dollar	44.04	1,761.49		
RBACKH09	Deere 710J BACKHOE, 1.62CY	40.00	1.00 Each (hourly)	U.S. Dollar	33.24	1,329.40		
1.5.5	784.00 Cubic Yard	Remove Foundations To Subgrade	10.98	71.43	Detail	U.S. Dollar	34.84	27,312.78
1.5.5.1	784.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	3.14	250.00	Detail	U.S. Dollar	17.29	13,554.73
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		

CBS Position Code	Cost Item		Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
	Quantity	Description						
L060100	GENERAL LABORER	31.36	1.00	Each (hourly)	U.S. Dollar	44.04	1,381.01	
L010101	OPERATOR	62.72	2.00	Each (hourly)	U.S. Dollar	51.35	3,220.44	
*REXCAV06C	Excav 100K w/ Hammer	31.36	1.00	Each (hourly)	U.S. Dollar	160.97	5,047.86	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	31.36	1.00	Each (hourly)	U.S. Dollar	124.54	3,905.42	

1.5.5.2	784.00 Cubic Yard	Concrete Transport Offsite	7.84	100.00	Detail	U.S. Dollar	17.55	13,758.06
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	78.40	1.00	Each (hourly)	U.S. Dollar	74.29	5,824.34
L080940	TEAMSTER	78.40	1.00	Each (hourly)	U.S. Dollar	44.04	3,452.52
L010101	OPERATOR	39.20	0.50	Each (hourly)	U.S. Dollar	51.35	2,012.77
RFELWH09	CAT 966F LOADER, 4.25CY	39.20	0.50	Each (hourly)	U.S. Dollar	62.97	2,468.42

1.5.6	2.00 Each	Misc. Material Disposal	0.00	0.00	Detail	U.S. Dollar	1,675.00	3,350.00
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1.5.6.1	2.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
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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

1.5.6.2	20.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	600.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		600.00	Each	U.S. Dollar	1.00	600.00

1.5.7	2.00 Each	Restore Yard	8.67	0.23	Detail	U.S. Dollar	17,159.73	34,319.46
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1.5.7.1	4.00 Acre	Backfill / Regrade	2.00	2.00	Detail	U.S. Dollar	1,624.15	6,496.62
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	44.04	1,761.49
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	51.35	2,053.85
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

1.5.7.2	2,000.00 Cubic Yard	Vegetative Cover	6.67	300.00	Detail	U.S. Dollar	12.38	24,762.84
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1.5.7.2.1	1,000.00 Cubic Yard	Topsoil, Delivered	0.00	0.00	Detail	U.S. Dollar	10.00	10,000.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
IMSOIL	Topsoil		500.00	Cubic Yard	U.S. Dollar	20.00	10,000.00

Notes: *****
 Assume that 50% of the topsoil required for restoration
 is bermed and stockpiled adjacent to the substation

1.5.7.2.2	2,000.00 Cubic Yard	Placement	6.67	300.00	Detail	U.S. Dollar	7.38	14,762.84
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	133.33	2.00	Each (hourly)	U.S. Dollar	51.35	6,846.17
RDOZER08	CAT D6N XL	133.33	2.00	Each (hourly)	U.S. Dollar	59.38	7,916.67

1.5.7.3	4.00 Acre	Re-Seed With Native Vegetation	0.00	0.00	Detail	U.S. Dollar	765.00	3,060.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00	Acre	U.S. Dollar	765.00	3,060.00

1.6	112.00 Each	Construct & Remove Temporary Crane Pads	149.33	0.75	Detail	U.S. Dollar	7,593.04	850,420.82
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Notes: *****
 60' x 40' Temporary Crane Pad

1.6.1	11,200.00 Ton	Crane Pad 4" Stone 8" depth	56.00	200.00	Detail	U.S. Dollar	34.90	390,848.42
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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		
M4"STONE	4" Stone		11,200.00 Ton	U.S. Dollar	15.00	168,000.00		
RDOZER06	CAT D5H XL	560.00	1.00 Each (hourly)	U.S. Dollar	43.56	24,390.80		
RROLLR06	CP-563C 84" SMOOTH DRUM	560.00	1.00 Each (hourly)	U.S. Dollar	51.70	28,949.76		
L010101	OPERATOR	1,120.00	2.00 Each (hourly)	U.S. Dollar	51.35	57,507.86		
USSTONETRK	Sub-Trucking of Stone		11,200.00 Ton	U.S. Dollar	10.00	112,000.00		
1.6.2	8,400.00 Ton	Crane Pad 2" Stone 6" depth	56.00	150.00 Detail	U.S. Dollar	38.20	320,848.42	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USSTONETRK	Sub-Trucking of Stone		8,400.00 Ton	U.S. Dollar	10.00	84,000.00		
L010101	OPERATOR	1,120.00	2.00 Each (hourly)	U.S. Dollar	51.35	57,507.86		
RDOZER06	CAT D5H XL	560.00	1.00 Each (hourly)	U.S. Dollar	43.56	24,390.80		
RROLLR06	CP-563C 84" SMOOTH DRUM	560.00	1.00 Each (hourly)	U.S. Dollar	51.70	28,949.76		
M2"STONE	Material - 2" Stone		8,400.00 Ton	U.S. Dollar	15.00	126,000.00		
1.6.3	112.00 Each	Remove stone after erection	37.33	3.00 Detail	U.S. Dollar	1,238.61	138,723.98	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDOZER06	CAT D5H XL	373.33	1.00 Each (hourly)	U.S. Dollar	43.56	16,260.53		
RFELWH09	CAT 966F LOADER, 4.25CY	373.33	1.00 Each (hourly)	U.S. Dollar	62.97	23,508.80		
L010101	OPERATOR	746.67	2.00 Each (hourly)	U.S. Dollar	51.35	38,338.57		
L060100	GENERAL LABORER	373.33	1.00 Each (hourly)	U.S. Dollar	44.04	16,440.57		
RDUTRK06	CAT D350D, 18CY-24CY	373.33	1.00 Each (hourly)	U.S. Dollar	74.29	27,734.93		
L080940	TEAMSTER	373.33	1.00 Each (hourly)	U.S. Dollar	44.04	16,440.57		
1.7	112.00 Each	WTG Removal	0.00	0.00 Detail	U.S. Dollar	30,000.00	3,360,000.00	
1.7.1	112.00 Each	Remove Top,Nacell, Rotor	0.00	0.00 Detail	U.S. Dollar	20,000.00	2,240,000.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECT1	Sub-Top, Nacelle, Rotor		112.00 Each	U.S. Dollar	20,000.00	2,240,000.00		
1.7.2	112.00 Each	Remove Base & Mid	0.00	0.00 Detail	U.S. Dollar	10,000.00	1,120,000.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECT	Erection Sub - Base/Mid		112.00 Each	U.S. Dollar	10,000.00	1,120,000.00		
1.8	112.00 Each	WTG Sizing & Loadout	134.40	0.83 Detail	U.S. Dollar	31,754.04	3,556,452.87	
1.8.1	112.00 Each	Oil Removal & Disposal	22.40	5.00 Detail	U.S. Dollar	262.13	29,358.83	
1.8.1.1	112.00 Each	Oil Removal	22.40	5.00 Detail	U.S. Dollar	198.28	22,207.25	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	448.00	2.00 Each (hourly)	U.S. Dollar	44.04	19,728.69		
RPUTRK05	F-250 4X4 3/4 TON PICKUP	224.00	1.00 Each (hourly)	U.S. Dollar	11.07	2,478.56		
1.8.1.2	1,456.00 Gallon	Oil Disposal	0.00	0.00 Detail	U.S. Dollar	4.00	5,824.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		5,824.00 Each	U.S. Dollar	1.00	5,824.00		
1.8.1.3	0.97 Each	Trucking - Per Load	0.00	0.00 Detail	U.S. Dollar	1,375.00	1,327.59	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,327.59 Each	U.S. Dollar	1.00	1,327.59		
1.8.2	32,032.00 Ton	Demo & Prepare For Shipment Offsite	112.00	286.00 Detail	U.S. Dollar	32.49	1,040,694.03	
1.8.3	4,256.00 Ton	Blade T&D	0.00	0.00 Detail	U.S. Dollar	95.00	404,320.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		276,640.00 Each	U.S. Dollar	1.00	276,640.00		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		127,680.00	Each		U.S. Dollar	1.00	127,680.00
1.8.4	32,032.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	2,082,080.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		2,082,080.00	Each		U.S. Dollar	1.00	2,082,080.00
1.9	112.00 Each	WTG Foundation Removal	259.82	0.43	Detail	U.S. Dollar	10,026.58	1,122,976.45
1.9.1	2,240.00 Cubic Yard	Remove Cylindrical Pedestal	14.93	150.00	Detail	U.S. Dollar	45.91	102,827.71
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	298.67	2.00	Each (hourly)		U.S. Dollar	44.04	13,152.46
L010101	OPERATOR	448.00	3.00	Each (hourly)		U.S. Dollar	51.35	23,003.14
*REXCAV06C	Excav 100K w/ Hammer	298.67	2.00	Each (hourly)		U.S. Dollar	160.97	48,074.88
*REXCAV06A	Excav 100K w/ Bucket & Grapple	149.33	1.00	Each (hourly)		U.S. Dollar	124.54	18,597.23
1.9.2	16,800.00 Cubic Yard	Remove Top 2' Of Octagonal Base	115.07	146.00	Detail	U.S. Dollar	47.16	792,336.79
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	2,301.37	2.00	Each (hourly)		U.S. Dollar	44.04	101,346.00
L010101	OPERATOR	3,452.05	3.00	Each (hourly)		U.S. Dollar	51.35	177,250.24
*REXCAV06C	Excav 100K w/ Hammer	2,301.37	2.00	Each (hourly)		U.S. Dollar	160.97	370,440.00
*REXCAV06A	Excav 100K w/ Bucket & Grapple	1,150.68	1.00	Each (hourly)		U.S. Dollar	124.54	143,300.55
1.9.3	19,040.00 Cubic Yard	Concrete Transport Offsite	129.82	146.67	Detail	U.S. Dollar	11.96	227,811.96
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	1,298.18	1.00	Each (hourly)		U.S. Dollar	74.29	96,441.93
L080940	TEAMSTER	1,298.18	1.00	Each (hourly)		U.S. Dollar	44.04	57,168.36
L010101	OPERATOR	649.09	0.50	Each (hourly)		U.S. Dollar	51.35	33,328.42
RFELWH09	CAT 966F LOADER, 4.25CY	649.09	0.50	Each (hourly)		U.S. Dollar	62.97	40,873.25
1.10	112.00 Each	Pad Mount Transformer Removal	29.57	3.79	Detail	U.S. Dollar	1,646.12	184,365.69
1.10.1	112.00 Each	Oil Removal & Disposal	22.40	5.00	Detail	U.S. Dollar	981.33	109,908.42
1.10.1.1	112.00 Each	Oil Removal	22.40	5.00	Detail	U.S. Dollar	110.20	12,342.90
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	224.00	1.00	Each (hourly)		U.S. Dollar	44.04	9,864.34
RPUTRK05	F-250 4X4 3/4 TON PICKUP	224.00	1.00	Each (hourly)		U.S. Dollar	11.07	2,478.56
1.10.1.2	22,400.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	89,600.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		89,600.00	Each		U.S. Dollar	1.00	89,600.00
1.10.1.3	5.79 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	7,965.52
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		7,965.52	Each		U.S. Dollar	1.00	7,965.52
1.10.2	112.00 Each	Remove & Loadout Transformer	5.60	20.00	Detail	U.S. Dollar	109.96	12,315.44
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	56.00	1.00	Each (hourly)		U.S. Dollar	124.54	6,973.96
L010101	OPERATOR	56.00	1.00	Each (hourly)		U.S. Dollar	51.35	2,875.39
L060100	GENERAL LABORER	56.00	1.00	Each (hourly)		U.S. Dollar	44.04	2,466.09
1.10.3	896.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	58,240.00
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	
USTRUCKING	Trucking Sub		58,240.00	Each		U.S. Dollar	1.00	58,240.00	
1.10.4	112.00	Each	Remove Foundations To Subgrade	1.57	71.43	Detail	U.S. Dollar	34.84	3,901.83
1.10.4.1	112.00	Cubic Yard	Excavate / Remove Foundation - Various Depth	0.45	250.00	Detail	U.S. Dollar	17.29	1,936.39
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
L060100	GENERAL LABORER	4.48	1.00	Each (hourly)	U.S. Dollar	44.04	197.29		
L010101	OPERATOR	8.96	2.00	Each (hourly)	U.S. Dollar	51.35	460.06		
*REXCAV06C	Excav 100K w/ Hammer	4.48	1.00	Each (hourly)	U.S. Dollar	160.97	721.12		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	4.48	1.00	Each (hourly)	U.S. Dollar	124.54	557.92		
1.10.4.2	112.00	Cubic Yard	Concrete Transport Offsite	1.12	100.00	Detail	U.S. Dollar	17.55	1,965.44
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
RDUTRK06	CAT D350D, 18CY-24CY	11.20	1.00	Each (hourly)	U.S. Dollar	74.29	832.05		
L080940	TEAMSTER	11.20	1.00	Each (hourly)	U.S. Dollar	44.04	493.22		
L010101	OPERATOR	5.60	0.50	Each (hourly)	U.S. Dollar	51.35	287.54		
RFELWH09	CAT 966F LOADER, 4.25CY	5.60	0.50	Each (hourly)	U.S. Dollar	62.97	352.63		
1.11	3.00	Each	MET Tower Removal	2.12	1.42	Detail	U.S. Dollar	3,750.90	11,252.71
1.11.1	3.00	Each	Structure Demo	1.50	2.00	Detail	U.S. Dollar	2,503.99	7,511.96
1.11.2	45.00	Cubic Yard	Remove Foundation	0.31	146.00	Detail	U.S. Dollar	47.16	2,122.33
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
L060100	GENERAL LABORER	6.16	2.00	Each (hourly)	U.S. Dollar	44.04	271.46		
L010101	OPERATOR	9.25	3.00	Each (hourly)	U.S. Dollar	51.35	474.78		
*REXCAV06C	Excav 100K w/ Hammer	6.16	2.00	Each (hourly)	U.S. Dollar	160.97	992.25		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	3.08	1.00	Each (hourly)	U.S. Dollar	124.54	383.84		
1.11.3	45.00	Cubic Yard	Concrete Transport Offsite	0.31	146.67	Detail	U.S. Dollar	11.96	538.42
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
RDUTRK06	CAT D350D, 18CY-24CY	3.07	1.00	Each (hourly)	U.S. Dollar	74.29	227.94		
L080940	TEAMSTER	3.07	1.00	Each (hourly)	U.S. Dollar	44.04	135.11		
L010101	OPERATOR	1.53	0.50	Each (hourly)	U.S. Dollar	51.35	78.77		
RFELWH09	CAT 966F LOADER, 4.25CY	1.53	0.50	Each (hourly)	U.S. Dollar	62.97	96.60		
1.11.4	24.00	Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	45.00	1,080.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
USTRUCKING	Trucking Sub		1,080.00	Each		U.S. Dollar	1.00	1,080.00	
1.12	260.00	MW	Solar Array Removal	749.50	0.35	Detail	U.S. Dollar	42,625.03	11,082,509.00
1.12.1	260.00	MW	Fence Removal	13.06	19.91	Detail	U.S. Dollar	260.18	67,647.36
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost			
L010101	OPERATOR	391.80	3.00	Each (hourly)	U.S. Dollar	51.35	20,117.72		
L060100	GENERAL LABORER	783.61	6.00	Each (hourly)	U.S. Dollar	44.04	34,508.00		
RBACKH09	Deere 710J BACKHOE, 1.62CY	391.80	3.00	Each (hourly)	U.S. Dollar	33.24	13,021.63		
Notes: ***** Assume 26 LF of fence per acre. *****									
1.12.2	260.00	MW	Inverter / Transformer Removal	262.00	0.99	Detail	U.S. Dollar	2,816.88	732,388.50
1.12.2.1	131.00	Each	Disconnect Electrical	131.00	1.00	Detail	U.S. Dollar	1,288.00	168,727.86
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
L010110	ELECTRICIAN		1,310.00	1.00	Each (hourly)	U.S. Dollar	73.70	96,543.91
L060100	GENERAL LABORER		1,310.00	1.00	Each (hourly)	U.S. Dollar	44.04	57,688.80
RPUTRK05	F-250 4X4 3/4 TON PICKUP		1,310.00	1.00	Each (hourly)	U.S. Dollar	11.07	14,495.15
1.12.2.2	131.00 Each	Loadout Inverter & Transformer		131.00	1.00 Detail	U.S. Dollar	2,927.75	383,535.64
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	5,240.00	4.00 Each (hourly)	U.S. Dollar	44.04	230,755.19		
L010101	OPERATOR	1,310.00	1.00 Each (hourly)	U.S. Dollar	51.35	67,263.65		
RHYDCR06	GROVE RT880 73 TON	1,310.00	1.00 Each (hourly)	U.S. Dollar	65.28	85,516.80		
1.12.2.3	131.00 Each	Trucking - Per Load		0.00	0.00 Detail	U.S. Dollar	1,375.00	180,125.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		180,125.00 Each	U.S. Dollar	1.00	180,125.00		
1.12.3	260.00 MW	Remove Foundations To Subgrade		169.93	1.53 Detail	U.S. Dollar	1,313.24	341,441.48
Notes: ***** Assumption: 24x36x1 concrete pad per inverter/ transformer *****								
1.12.3.1	12,521.00 Cubic Yard	Excavate / Remove Foundation		44.72	280.00 Detail	U.S. Dollar	15.44	193,283.93
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	447.18	1.00 Each (hourly)	U.S. Dollar	44.04	19,692.51		
L010101	OPERATOR	894.36	2.00 Each (hourly)	U.S. Dollar	51.35	45,921.93		
*REXCAV06C	Excav 100K w/ Hammer	447.18	1.00 Each (hourly)	U.S. Dollar	160.97	71,980.10		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	447.18	1.00 Each (hourly)	U.S. Dollar	124.54	55,689.38		
1.12.3.2	12,521.00 Cubic Yard	Concrete Transport Offsite		125.21	100.00 Detail	U.S. Dollar	11.83	148,157.55
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	1,252.10	1.00 Each (hourly)	U.S. Dollar	74.29	93,018.51		
L080940	TEAMSTER	1,252.10	1.00 Each (hourly)	U.S. Dollar	44.04	55,139.04		
1.12.4	260.00 MW	Solar Panel Removal		170.17	1.53 Detail	U.S. Dollar	15,508.04	4,032,089.83
1.12.4.1	816,812.00 Each	Solar Panel Removal		170.17	4,800.00 Detail	U.S. Dollar	3.11	2,543,759.83
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	10,210.15	6.00 Each (hourly)	U.S. Dollar	21.65	220,998.70		
L010101	OPERATOR	10,210.15	6.00 Each (hourly)	U.S. Dollar	51.35	524,253.42		
L060100	GENERAL LABORER	40,840.60	24.00 Each (hourly)	U.S. Dollar	44.04	1,798,507.71		
Notes: ***** Assumed production: 20 panels per laborer per hour, Includes packaging and preparing for shipment offsite. *****								
1.12.4.2	726.00 Each	Trucking - Per Load		0.00	0.00 Detail	U.S. Dollar	1,375.00	998,250.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		998,250.00 Each	U.S. Dollar	1.00	998,250.00		
Notes: ***** Assumption: 45,000 lbs per load *****								
1.12.4.3	16,336.00 Ton	Disposal Cost		0.00	0.00 Detail	U.S. Dollar	30.00	490,080.00

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		
USDISPOSAL	Disposal Fee's		490,080.00 Each	U.S. Dollar	1.00	490,080.00		
1.12.5	260.00 MW	Solar Rack (Trackers) & Post Removal	134.34	1.94 Detail	U.S. Dollar	22,726.70	5,908,941.83	
1.12.5.1	21,495.00 Each	Solar Rack (Trackers) & Post Removal	134.34	160.00 Detail	U.S. Dollar	250.40	5,382,316.83	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	21,495.00	16.00 Each (hourly)	U.S. Dollar	51.35	1,103,688.72		
L060100	GENERAL LABORER	21,495.00	16.00 Each (hourly)	U.S. Dollar	44.04	946,580.69		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	10,747.50	8.00 Each (hourly)	U.S. Dollar	124.54	1,338,439.91		
*REXCAV06E	Excav 100K w/ Shear	10,747.50	8.00 Each (hourly)	U.S. Dollar	185.50	1,993,607.51		
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.								

1.12.5.2	383.00 Each	Trucking - Per Load	0.00	0.00 Detail	U.S. Dollar	1,375.00	526,625.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		526,625.00 Each	U.S. Dollar	1.00	526,625.00		
Notes: *****								
Assumption: 45,000 lbs per load								

1.13	120.00 MW	DC Storage System Removal	90.91	1.32 Detail	U.S. Dollar	3,610.96	433,314.64	
1.13.1	120.00 MW	Battery Removal & Disposal	79.00	1.52 Detail	U.S. Dollar	2,655.68	318,681.26	
1.13.1.1	79.00 Day	Remove Batteries, Load For Transport	79.00	1.00 Detail	U.S. Dollar	1,977.94	156,257.26	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	3,160.00	4.00 Each (hourly)	U.S. Dollar	44.04	139,157.71		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	790.00	1.00 Each (hourly)	U.S. Dollar	21.65	17,099.55		
1.13.1.2	40.00 Each	Transport Batteries	0.00	0.00 Detail	U.S. Dollar	1,480.60	59,224.00	
1.13.1.2.1	40.00 Each	Roll Off Liners	0.00	0.00 Detail	U.S. Dollar	105.60	4,224.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCLINER	Rolloff Liner		40.00 Each	U.S. Dollar	105.60	4,224.00		
1.13.1.2.2	40.00 Each	Trucking - Per Load	0.00	0.00 Detail	U.S. Dollar	1,375.00	55,000.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		55,000.00 Each	U.S. Dollar	1.00	55,000.00		
1.13.1.3	516.00 Ton	Disposal Fee's	0.00	0.00 Detail	U.S. Dollar	200.00	103,200.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		103,200.00 Each	U.S. Dollar	1.00	103,200.00		
1.13.2	120.00 MW	Structure & Components Removal	11.91	10.08 Detail	U.S. Dollar	955.28	114,633.38	
1.13.2.1	516.00 Ton	Structure Demo	11.91	43.33 Detail	U.S. Dollar	115.57	59,633.38	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.13.2.2	40.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	55,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		55,000.00 Each	U.S. Dollar	1.00	55,000.00		
1.14	1.00 Lump Sum	Transmission Line Removal (OH, 34.5 KV)	27.03	0.04	Detail	U.S. Dollar	183,487.18	183,487.18
1.14.1	1.00 Lump Sum	Transmission Line - Wind	16.85	0.06	Detail	U.S. Dollar	114,361.97	114,361.97
1.14.1.1	9.10 Mile	Conductor Removal	13.65	0.67	Detail	U.S. Dollar	7,589.83	69,067.46
1.14.1.1.1	9.10 Mile	Cut / Lower Cable, Size & Loadout	13.65	0.67	Detail	U.S. Dollar	6,682.69	60,812.46
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	682.50	5.00 Each (hourly)	U.S. Dollar	44.04	30,055.42		
L010101	OPERATOR	136.50	1.00 Each (hourly)	U.S. Dollar	51.35	7,008.77		
*RXMISC14	MAN LIFT GAS 125ft	136.50	1.00 Each (hourly)	U.S. Dollar	53.52	7,305.48		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	136.50	1.00 Each (hourly)	U.S. Dollar	21.65	2,954.54		
*RXMISC19	Material Handler	136.50	1.00 Each (hourly)	U.S. Dollar	98.82	13,488.25		
1.14.1.1.2	127.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	8,255.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		8,255.00 Each	U.S. Dollar	1.00	8,255.00		
Notes: ***** Cable estimated at 14 tons per mile *****								
1.14.1.2	192.00 Each	Remove Wood Poles	3.20	60.00	Detail	U.S. Dollar	235.91	45,294.50
1.14.1.2.1	192.00 Each	Remove Wood Poles	3.20	60.00	Detail	U.S. Dollar	179.66	34,494.50
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	128.00	4.00 Each (hourly)	U.S. Dollar	124.54	15,940.48		
L060100	GENERAL LABORER	256.00	8.00 Each (hourly)	U.S. Dollar	44.04	11,273.54		
L010101	OPERATOR	128.00	4.00 Each (hourly)	U.S. Dollar	51.35	6,572.33		
RPUTRK05	F-250 4X4 3/4 TON PICKUP	64.00	2.00 Each (hourly)	U.S. Dollar	11.07	708.16		
1.14.1.2.2	144.00 Ton	Pole Trucking Cost	0.00	0.00	Detail	U.S. Dollar	75.00	10,800.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		10,800.00 Each	U.S. Dollar	1.00	10,800.00		
Notes: ***** Poles estimated at .75 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls *****								
1.14.2	1.00 Lump Sum	Transmission Line - Solar	10.18	0.10	Detail	U.S. Dollar	69,125.21	69,125.21
1.14.2.1	5.50 Mile	Conductor Removal	8.25	0.67	Detail	U.S. Dollar	7,592.69	41,759.79
1.14.2.1.1	5.50 Mile	Cut / Lower Cable, Size & Loadout	8.25	0.67	Detail	U.S. Dollar	6,682.69	36,754.79
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	412.50	5.00 Each (hourly)	U.S. Dollar	44.04	18,165.37		
L010101	OPERATOR	82.50	1.00 Each (hourly)	U.S. Dollar	51.35	4,236.07		
*RXMISC14	MAN LIFT GAS 125ft	82.50	1.00 Each (hourly)	U.S. Dollar	53.52	4,415.40		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	82.50	1.00	Each (hourly)	U.S. Dollar		21.65	1,785.71
*RXMISC19	Material Handler	82.50	1.00	Each (hourly)	U.S. Dollar		98.82	8,152.24
1.14.2.1.2	77.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	5,005.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		5,005.00	Each	U.S. Dollar	1.00	5,005.00	
Notes: ***** Cable estimated at 14 tons per mile *****								
1.14.2.2	116.00 Each	Remove Wood Poles	1.93	60.00	Detail	U.S. Dollar	235.91	27,365.43
1.14.2.2.1	116.00 Each	Remove Wood Poles	1.93	60.00	Detail	U.S. Dollar	179.66	20,840.43
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	77.33	4.00	Each (hourly)	U.S. Dollar	124.54	9,630.71	
L060100	GENERAL LABORER	154.67	8.00	Each (hourly)	U.S. Dollar	44.04	6,811.09	
L010101	OPERATOR	77.33	4.00	Each (hourly)	U.S. Dollar	51.35	3,970.78	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	38.67	2.00	Each (hourly)	U.S. Dollar	11.07	427.85	
1.14.2.2.2	87.00 Ton	Pole Trucking Cost	0.00	0.00	Detail	U.S. Dollar	75.00	6,525.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		6,525.00	Each	U.S. Dollar	1.00	6,525.00	
Notes: ***** Poles estimated at .75 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls *****								
1.15	1.00 Lump Sum	Transmission Line Removal (OH, 230 KV)	62.10	0.02	Detail	U.S. Dollar	500,707.43	500,707.43
1.15.1	32.00 Mile	Conductor Removal	48.00	0.67	Detail	U.S. Dollar	7,592.69	242,966.02
1.15.1.1	32.00 Mile	Cut / Lower Cable, Size & Loadout	48.00	0.67	Detail	U.S. Dollar	6,682.69	213,846.02
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	2,400.00	5.00	Each (hourly)	U.S. Dollar	44.04	105,689.40	
L010101	OPERATOR	480.00	1.00	Each (hourly)	U.S. Dollar	51.35	24,646.22	
*RXMISC14	MAN LIFT GAS 125ft	480.00	1.00	Each (hourly)	U.S. Dollar	53.52	25,689.60	
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	480.00	1.00	Each (hourly)	U.S. Dollar	21.65	10,389.60	
*RXMISC19	Material Handler	480.00	1.00	Each (hourly)	U.S. Dollar	98.82	47,431.20	
1.15.1.2	448.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	29,120.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		29,120.00	Each	U.S. Dollar	1.00	29,120.00	
Notes: ***** Cable estimated at 14 tons per mile *****								
1.15.2	282.00 Each	Remove Wood Monopoles	14.10	20.00	Detail	U.S. Dollar	913.98	257,741.40
1.15.2.1	282.00 Each	Remove Wood Monopoles	14.10	20.00	Detail	U.S. Dollar	538.98	151,991.40
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	564.00	4.00	Each (hourly)	U.S. Dollar	124.54	70,237.74	
L060100	GENERAL LABORER	1,128.00	8.00	Each (hourly)	U.S. Dollar	44.04	49,674.02	
L010101	OPERATOR	564.00	4.00	Each (hourly)	U.S. Dollar	51.35	28,959.31	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RPUTRK05	F-250 4X4 3/4 TON PICKUP		282.00	2.00	Each (hourly)	U.S. Dollar	11.07	3,120.33
1.15.2.2	1,410.00 Ton	Pole Trucking Cost		0.00	0.00 Detail	U.S. Dollar	75.00	105,750.00

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		105,750.00 Each	U.S. Dollar	1.00	105,750.00

Notes: *****
 Wood monopoles estimated at 5 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls

1.16	1.00 Lump Sum	O&M Building Removal	6.48	0.15	Detail	U.S. Dollar	21,164.02	21,164.02
1.16.1	40.00 Ton	Structure Demo	2.00	20.00	Detail	U.S. Dollar	250.40	10,015.94
1.16.2	320.00 Cubic Yard	Remove Foundations To Subgrade	4.48	71.43	Detail	U.S. Dollar	34.84	11,148.07
1.16.2.1	320.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	1.28	250.00	Detail	U.S. Dollar	17.29	5,532.54

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	12.80	1.00 Each (hourly)	U.S. Dollar	44.04	563.68
L010101	OPERATOR	25.60	2.00 Each (hourly)	U.S. Dollar	51.35	1,314.47
*REXCAV06C	Excav 100K w/ Hammer	12.80	1.00 Each (hourly)	U.S. Dollar	160.97	2,060.35
*REXCAV06A	Excav 100K w/ Bucket & Grapple	12.80	1.00 Each (hourly)	U.S. Dollar	124.54	1,594.05

1.16.2.2	320.00 Cubic Yard	Concrete Transport Offsite	3.20	100.00	Detail	U.S. Dollar	17.55	5,615.53
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	32.00	1.00 Each (hourly)	U.S. Dollar	74.29	2,377.28
L080940	TEAMSTER	32.00	1.00 Each (hourly)	U.S. Dollar	44.04	1,409.19
L010101	OPERATOR	16.00	0.50 Each (hourly)	U.S. Dollar	51.35	821.54
RFELWH09	CAT 966F LOADER, 4.25CY	16.00	0.50 Each (hourly)	U.S. Dollar	62.97	1,007.52

1.17	61.00 Mile	Private Access Road Removal (New Roads)	30.50	2.00	Detail	U.S. Dollar	5,676.59	346,272.20
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Notes: *****
 Assume topsoil removed during original construction is available for restoration

1.17.1	43.00 Mile	Private Access Road Removal (New Roads) - Wind	21.50	2.00	Detail	U.S. Dollar	5,676.59	244,093.52
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	860.00	4.00 Each (hourly)	U.S. Dollar	51.35	44,157.82
L060100	GENERAL LABORER	430.00	2.00 Each (hourly)	U.S. Dollar	44.04	18,936.02
L080940	TEAMSTER	860.00	4.00 Each (hourly)	U.S. Dollar	44.04	37,872.04
RDUTRK06	CAT D350D, 18CY-24CY	860.00	4.00 Each (hourly)	U.S. Dollar	74.29	63,889.40
RFELWH09	CAT 966F LOADER, 4.25CY	860.00	4.00 Each (hourly)	U.S. Dollar	62.97	54,154.20
*RDOZER08	CAT D6 LGP Dozer	430.00	2.00 Each (hourly)	U.S. Dollar	58.34	25,084.05

Notes: *****
 Assume topsoil removed during original construction is available for restoration

1.17.2	18.00 Mile	Private Access Road Removal (New Roads) - Solar	9.00	2.00	Detail	U.S. Dollar	5,676.59	102,178.68
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	360.00	4.00 Each (hourly)	U.S. Dollar	51.35	18,484.67
L060100	GENERAL LABORER	180.00	2.00 Each (hourly)	U.S. Dollar	44.04	7,926.71
L080940	TEAMSTER	360.00	4.00 Each (hourly)	U.S. Dollar	44.04	15,853.41

CBS Position Code	Quantity UM	Description	Cost Item		Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY		360.00		4.00	Each (hourly)	U.S. Dollar	74.29	26,744.40	
RFELWH09	CAT 966F LOADER, 4.25CY		360.00		4.00	Each (hourly)	U.S. Dollar	62.97	22,669.20	
*RDOZER08	CAT D6 LGP Dozer		180.00		2.00	Each (hourly)	U.S. Dollar	58.34	10,500.30	

Notes: *****
 Assume topsoil removed during original construction
 is available for restoration

1.18	380.00 Acre	Spot Grade Disturbed Areas - Solar Array	47.50	8.00	Detail	U.S. Dollar	548.41	208,394.47
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer	1,900.00	4.00 Each (hourly)	U.S. Dollar	58.34	110,836.50
L010101	OPERATOR	1,900.00	4.00 Each (hourly)	U.S. Dollar	51.35	97,557.97

Notes: *****
 Assumption: 1896 acres total array area.
 Assume that 20% of the array area disturbed by construction
 will be regraded.

1.19	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	0.00	Detail	U.S. Dollar	516,375.00	516,375.00
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Notes: *****
 Assume topsoil removed during original construction
 is available for restoration

1.19.1	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction - Wind	0.00	0.00	Detail	U.S. Dollar	209,610.00	209,610.00
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1.19.1.1	50.00 Acre	Re-Seed Road Beds	0.00	0.00	Detail	U.S. Dollar	765.00	38,250.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		50.00 Acre	U.S. Dollar	765.00	38,250.00

Notes: *****
 1.45 acres per mile of road

1.19.1.2	224.00 Acre	Re-Seed Turbine Locations	0.00	0.00	Detail	U.S. Dollar	765.00	171,360.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		224.00 Acre	U.S. Dollar	765.00	171,360.00

Notes: *****
 Re-Seed 2 acres per turbine location

1.19.2	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction - Solar	0.00	0.00	Detail	U.S. Dollar	306,765.00	306,765.00
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1.19.2.1	21.00 Acre	Re-Seed Road Beds	0.00	0.00	Detail	U.S. Dollar	765.00	16,065.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		21.00 Acre	U.S. Dollar	765.00	16,065.00

Notes: *****
 1.45 acres per mile of road

1.19.2.2	380.00 Acre	Re-Seed Solar Array Area	0.00	0.00	Detail	U.S. Dollar	765.00	290,700.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		380.00 Acre	U.S. Dollar	765.00	290,700.00

Notes: *****
 Re-Seed 2 acres per turbine location

Cost Item									
CBS Position Code	Quantity	UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.20	1.00	Lump Sum	Home Office, Project Management (5% Of Cost)	0.00	0.00	Detail	U.S. Dollar	1,287,711.50	1,287,711.50
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP5	5% Markup		25,754,230.00	Each	U.S. Dollar	0.05	1,287,711.50		
1.21	1.00	Lump Sum	Contractor Contingency (3% Of Cost)	0.00	0.00	Detail	U.S. Dollar	811,258.23	811,258.23
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USCONTINGENCY	3% Contingency		27,041,941.00	Each	U.S. Dollar	0.03	811,258.23		
1.22	1.00	Lump Sum	Contractor OH & Fee (13% Of Cost)	0.00	0.00	Detail	U.S. Dollar	3,620,915.87	3,620,915.87
Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost		
USMARKUP	13% Markup		27,853,199.00	Each	U.S. Dollar	0.13	3,620,915.87		
Report Total:			1,939.10						31,474,115.16

Category	Total
Labor	8,234,557.53
Rented Equipment	6,307,830.93
Supplies	8,484.00
Materials	304,000.00
Subcontract	16,075,642.70
ODCs	543,600.00

Attachment W-2. Estimate of Project Retirement Costs with Scrap Credit

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Estimate Summary

TETRA TECH EC, INC.

Job Code: Nolin Hills Wind Power Project

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	NOLIN HILLS DECOMMISSIONING - WIND & SOLAR	1,939.10	0.00	Detail	U.S. Dollar	21,530,123.16	21,530,123.16
1.1	1.00 Lump Sum	ODOE Management Fee (Pass Through Cost)	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		
UODC	ODOE Management Fee		533,000.00 Each	U.S. Dollar	1.00	533,000.00		
1.2	1.00 Lump Sum	Mob / Demob	5.00	0.20	Detail	U.S. Dollar	907,217.85	907,217.85
1.2.1	1.00 Lump Sum	Equipment Mob	0.00	0.00	Detail	U.S. Dollar	101,500.00	101,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UERNTRLG	Rental Equip Transp-Large		10.00 Each	U.S. Dollar	10,000.00	100,000.00		
UERNTRSM	Rental Equip Transp-Small		10.00 Each	U.S. Dollar	150.00	1,500.00		
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 Trnsp/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	15,703.57	47,110.71
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	600.00	20.00 Each (hourly)	U.S. Dollar	44.04	26,422.35		
L010101	OPERATOR	300.00	10.00 Each (hourly)	U.S. Dollar	51.35	15,403.89		
L080940	TEAMSTER	120.00	4.00 Each (hourly)	U.S. Dollar	44.04	5,284.47		
1.2.4	2.00 Day	Crew Demob & Site Cleanup	2.00	1.00	Detail	U.S. Dollar	15,703.57	31,407.14
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	400.00	20.00 Each (hourly)	U.S. Dollar	44.04	17,614.90		
L010101	OPERATOR	200.00	10.00 Each (hourly)	U.S. Dollar	51.35	10,269.26		
L080940	TEAMSTER	80.00	4.00 Each (hourly)	U.S. Dollar	44.04	3,522.98		
1.2.5	1.00 Lump Sum	Mob-Erection Sub	0.00	0.00	Detail	U.S. Dollar	725,000.00	725,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECTMOB	Sub-Erection Mobilization		1.00 Each	U.S. Dollar	725,000.00	725,000.00		
Notes: ***** Historical pricing from past projects *****								
1.3	12.00 Month	Site Facilities	0.00	0.00	Detail	U.S. Dollar	2,155.00	25,860.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
URCONNEX	Connex Box		24.00 Month	U.S. Dollar	150.00	3,600.00		
UROFFTRL	Office Trailer -12x60		12.00 Month	U.S. Dollar	500.00	6,000.00		
UO1STAI	1st Aid Supplies		12.00 Month	U.S. Dollar	300.00	3,600.00		
UOOFFPHN	Monthly Office Phone		12.00 Month	U.S. Dollar	500.00	6,000.00		
UOOFFSUP	Office Supplies(\$/prs/mo)		12.00 Month	U.S. Dollar	55.00	660.00		
UINT	Internet		12.00 Month	U.S. Dollar	200.00	2,400.00		
URPRTAJH	Port-a-John Unit(s) (4)		12.00 Month	U.S. Dollar	300.00	3,600.00		
1.4	52.00 Week	Field Management	312.00	0.17	Detail	U.S. Dollar	30,245.91	1,572,787.15
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
L90FX02	Field - Proj Superintendent	3,120.00	1.00	Each (hourly)	U.S. Dollar		83.18	259,527.84
RPUTRK05	F-250 4X4 3/4 TON PICKUP	18,720.00	6.00	Each (hourly)	U.S. Dollar		11.07	207,136.80
L90FEL00	Field - Engr. Tech	6,240.00	2.00	Each (hourly)	U.S. Dollar		39.57	246,941.90
L90FX03	Field - SHSO	6,240.00	2.00	Each (hourly)	U.S. Dollar		89.26	557,006.74
L90FEJ00	Field - Asst. Engr.	6,240.00	2.00	Each (hourly)	U.S. Dollar		48.43	302,173.87
1.5	2.00 Each	Substation & Switchyard Removal	32.84	0.06	Detail	U.S. Dollar	168,836.05	337,672.10
1.5.1	2.00 Day	Fence Removal	2.00	1.00	Detail	U.S. Dollar	1,286.19	2,572.37
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	20.00	1.00	Each (hourly)	U.S. Dollar	51.35	1,026.93	
L060100	GENERAL LABORER	20.00	1.00	Each (hourly)	U.S. Dollar	44.04	880.75	
RBACKH09	Deere 710J BACKHOE, 1.62CY	20.00	1.00	Each (hourly)	U.S. Dollar	33.24	664.70	
1.5.2	2.00 Each	Transformer & Switchyard Equip Removal	7.00	0.29	Detail	U.S. Dollar	129,881.96	259,763.93
1.5.2.1	2.00 Each	Oil Removal & Disposal	4.00	0.50	Detail	U.S. Dollar	104,732.79	209,465.58
1.5.2.1.1	2.00 Each	Oil Removal	4.00	0.50	Detail	U.S. Dollar	1,982.79	3,965.58
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	80.00	2.00	Each (hourly)	U.S. Dollar	44.04	3,522.98	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	40.00	1.00	Each (hourly)	U.S. Dollar	11.07	442.60	
1.5.2.1.2	50,000.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	200,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		200,000.00	Each	U.S. Dollar	1.00	200,000.00	
1.5.2.1.3	4.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	5,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		5,500.00	Each	U.S. Dollar	1.00	5,500.00	
1.5.2.2	300.00 Ton	Demo & Prepare For Shipment Offsite	3.00	100.00	Detail	U.S. Dollar	102.66	30,798.35
1.5.2.3	300.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	19,500.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		19,500.00	Each	U.S. Dollar	1.00	19,500.00	
1.5.3	2.00 Each	Remove Control Building	0.20	10.00	Detail	U.S. Dollar	2,604.41	5,208.82
1.5.3.1	20.00 Ton	Demo & Prepare For Shipment Offsite	0.20	100.00	Detail	U.S. Dollar	195.44	3,908.82
1.5.3.2	20.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	1,300.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,300.00	Each	U.S. Dollar	1.00	1,300.00	
1.5.4	4.00 Day	UG Utility & Ground Removal	4.00	1.00	Detail	U.S. Dollar	1,286.19	5,144.74
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	40.00	1.00	Each (hourly)	U.S. Dollar	51.35	2,053.85	
L060100	GENERAL LABORER	40.00	1.00	Each (hourly)	U.S. Dollar	44.04	1,761.49	
RBACKH09	Deere 710J BACKHOE, 1.62CY	40.00	1.00	Each (hourly)	U.S. Dollar	33.24	1,329.40	
1.5.5	784.00 Cubic Yard	Remove Foundations To Subgrade	10.98	71.43	Detail	U.S. Dollar	34.84	27,312.78
1.5.5.1	784.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	3.14	250.00	Detail	U.S. Dollar	17.29	13,554.73
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		

CBS Position Code	Cost Item		Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
	Quantity	Description						
L060100	GENERAL LABORER	31.36	1.00	Each (hourly)	U.S. Dollar	44.04	1,381.01	
L010101	OPERATOR	62.72	2.00	Each (hourly)	U.S. Dollar	51.35	3,220.44	
*REXCAV06C	Excav 100K w/ Hammer	31.36	1.00	Each (hourly)	U.S. Dollar	160.97	5,047.86	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	31.36	1.00	Each (hourly)	U.S. Dollar	124.54	3,905.42	

1.5.5.2	784.00 Cubic Yard	Concrete Transport Offsite	7.84	100.00	Detail	U.S. Dollar	17.55	13,758.06
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	78.40	1.00	Each (hourly)	U.S. Dollar	74.29	5,824.34
L080940	TEAMSTER	78.40	1.00	Each (hourly)	U.S. Dollar	44.04	3,452.52
L010101	OPERATOR	39.20	0.50	Each (hourly)	U.S. Dollar	51.35	2,012.77
RFELWH09	CAT 966F LOADER, 4.25CY	39.20	0.50	Each (hourly)	U.S. Dollar	62.97	2,468.42

1.5.6	2.00 Each	Misc. Material Disposal	0.00	0.00	Detail	U.S. Dollar	1,675.00	3,350.00
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1.5.6.1	2.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	2,750.00
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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

1.5.6.2	20.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	600.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		600.00	Each	U.S. Dollar	1.00	600.00

1.5.7	2.00 Each	Restore Yard	8.67	0.23	Detail	U.S. Dollar	17,159.73	34,319.46
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1.5.7.1	4.00 Acre	Backfill / Regrade	2.00	2.00	Detail	U.S. Dollar	1,624.15	6,496.62
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	40.00	2.00	Each (hourly)	U.S. Dollar	44.04	1,761.49
L010101	OPERATOR	40.00	2.00	Each (hourly)	U.S. Dollar	51.35	2,053.85
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

1.5.7.2	2,000.00 Cubic Yard	Vegetative Cover	6.67	300.00	Detail	U.S. Dollar	12.38	24,762.84
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1.5.7.2.1	1,000.00 Cubic Yard	Topsoil, Delivered	0.00	0.00	Detail	U.S. Dollar	10.00	10,000.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
IMSOIL	Topsoil		500.00	Cubic Yard	U.S. Dollar	20.00	10,000.00

Notes: *****
 Assume that 50% of the topsoil required for restoration
 is bermed and stockpiled adjacent to the substation

1.5.7.2.2	2,000.00 Cubic Yard	Placement	6.67	300.00	Detail	U.S. Dollar	7.38	14,762.84
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	133.33	2.00	Each (hourly)	U.S. Dollar	51.35	6,846.17
RDOZER08	CAT D6N XL	133.33	2.00	Each (hourly)	U.S. Dollar	59.38	7,916.67

1.5.7.3	4.00 Acre	Re-Seed With Native Vegetation	0.00	0.00	Detail	U.S. Dollar	765.00	3,060.00
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Resource Code	Description	Hours	Quantity	UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		4.00	Acre	U.S. Dollar	765.00	3,060.00

1.6	112.00 Each	Construct & Remove Temporary Crane Pads	149.33	0.75	Detail	U.S. Dollar	7,593.04	850,420.82
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Notes: *****
 60' x 40' Temporary Crane Pad

1.6.1	11,200.00 Ton	Crane Pad 4" Stone 8" depth	56.00	200.00	Detail	U.S. Dollar	34.90	390,848.42
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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		
M4"STONE	4" Stone		11,200.00	Ton	U.S. Dollar	15.00	168,000.00	
RDOZER06	CAT D5H XL	560.00	1.00	Each (hourly)	U.S. Dollar	43.56	24,390.80	
RROLLR06	CP-563C 84" SMOOTH DRUM	560.00	1.00	Each (hourly)	U.S. Dollar	51.70	28,949.76	
L010101	OPERATOR	1,120.00	2.00	Each (hourly)	U.S. Dollar	51.35	57,507.86	
USSTONETRK	Sub-Trucking of Stone		11,200.00	Ton	U.S. Dollar	10.00	112,000.00	
1.6.2	8,400.00 Ton	Crane Pad 2" Stone 6" depth	56.00	150.00	Detail	U.S. Dollar	38.20	320,848.42
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USSTONETRK	Sub-Trucking of Stone		8,400.00	Ton	U.S. Dollar	10.00	84,000.00	
L010101	OPERATOR	1,120.00	2.00	Each (hourly)	U.S. Dollar	51.35	57,507.86	
RDOZER06	CAT D5H XL	560.00	1.00	Each (hourly)	U.S. Dollar	43.56	24,390.80	
RROLLR06	CP-563C 84" SMOOTH DRUM	560.00	1.00	Each (hourly)	U.S. Dollar	51.70	28,949.76	
M2"STONE	Material - 2" Stone		8,400.00	Ton	U.S. Dollar	15.00	126,000.00	
1.6.3	112.00 Each	Remove stone after erection	37.33	3.00	Detail	U.S. Dollar	1,238.61	138,723.98
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDOZER06	CAT D5H XL	373.33	1.00	Each (hourly)	U.S. Dollar	43.56	16,260.53	
RFELWH09	CAT 966F LOADER, 4.25CY	373.33	1.00	Each (hourly)	U.S. Dollar	62.97	23,508.80	
L010101	OPERATOR	746.67	2.00	Each (hourly)	U.S. Dollar	51.35	38,338.57	
L060100	GENERAL LABORER	373.33	1.00	Each (hourly)	U.S. Dollar	44.04	16,440.57	
RDUTRK06	CAT D350D, 18CY-24CY	373.33	1.00	Each (hourly)	U.S. Dollar	74.29	27,734.93	
L080940	TEAMSTER	373.33	1.00	Each (hourly)	U.S. Dollar	44.04	16,440.57	
1.7	112.00 Each	WTG Removal	0.00	0.00	Detail	U.S. Dollar	30,000.00	3,360,000.00
1.7.1	112.00 Each	Remove Top,Nacell, Rotor	0.00	0.00	Detail	U.S. Dollar	20,000.00	2,240,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECT1	Sub-Top, Nacelle, Rotor		112.00	Each	U.S. Dollar	20,000.00	2,240,000.00	
1.7.2	112.00 Each	Remove Base & Mid	0.00	0.00	Detail	U.S. Dollar	10,000.00	1,120,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USERECT	Erection Sub - Base/Mid		112.00	Each	U.S. Dollar	10,000.00	1,120,000.00	
1.8	112.00 Each	WTG Sizing & Loadout	134.40	0.83	Detail	U.S. Dollar	31,754.04	3,556,452.87
1.8.1	112.00 Each	Oil Removal & Disposal	22.40	5.00	Detail	U.S. Dollar	262.13	29,358.83
1.8.1.1	112.00 Each	Oil Removal	22.40	5.00	Detail	U.S. Dollar	198.28	22,207.25
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	448.00	2.00	Each (hourly)	U.S. Dollar	44.04	19,728.69	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	224.00	1.00	Each (hourly)	U.S. Dollar	11.07	2,478.56	
1.8.1.2	1,456.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	5,824.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		5,824.00	Each	U.S. Dollar	1.00	5,824.00	
1.8.1.3	0.97 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	1,327.59
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,327.59	Each	U.S. Dollar	1.00	1,327.59	
1.8.2	32,032.00 Ton	Demo & Prepare For Shipment Offsite	112.00	286.00	Detail	U.S. Dollar	32.49	1,040,694.03
1.8.3	4,256.00 Ton	Blade T&D	0.00	0.00	Detail	U.S. Dollar	95.00	404,320.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		276,640.00	Each	U.S. Dollar	1.00	276,640.00	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		127,680.00	Each		U.S. Dollar	1.00	127,680.00
1.8.4	32,032.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	2,082,080.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		2,082,080.00	Each		U.S. Dollar	1.00	2,082,080.00
1.9	112.00 Each	WTG Foundation Removal	259.82	0.43	Detail	U.S. Dollar	10,026.58	1,122,976.45
1.9.1	2,240.00 Cubic Yard	Remove Cylindrical Pedestal	14.93	150.00	Detail	U.S. Dollar	45.91	102,827.71
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	298.67	2.00	Each (hourly)		U.S. Dollar	44.04	13,152.46
L010101	OPERATOR	448.00	3.00	Each (hourly)		U.S. Dollar	51.35	23,003.14
*REXCAV06C	Excav 100K w/ Hammer	298.67	2.00	Each (hourly)		U.S. Dollar	160.97	48,074.88
*REXCAV06A	Excav 100K w/ Bucket & Grapple	149.33	1.00	Each (hourly)		U.S. Dollar	124.54	18,597.23
1.9.2	16,800.00 Cubic Yard	Remove Top 2' Of Octagonal Base	115.07	146.00	Detail	U.S. Dollar	47.16	792,336.79
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	2,301.37	2.00	Each (hourly)		U.S. Dollar	44.04	101,346.00
L010101	OPERATOR	3,452.05	3.00	Each (hourly)		U.S. Dollar	51.35	177,250.24
*REXCAV06C	Excav 100K w/ Hammer	2,301.37	2.00	Each (hourly)		U.S. Dollar	160.97	370,440.00
*REXCAV06A	Excav 100K w/ Bucket & Grapple	1,150.68	1.00	Each (hourly)		U.S. Dollar	124.54	143,300.55
1.9.3	19,040.00 Cubic Yard	Concrete Transport Offsite	129.82	146.67	Detail	U.S. Dollar	11.96	227,811.96
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	1,298.18	1.00	Each (hourly)		U.S. Dollar	74.29	96,441.93
L080940	TEAMSTER	1,298.18	1.00	Each (hourly)		U.S. Dollar	44.04	57,168.36
L010101	OPERATOR	649.09	0.50	Each (hourly)		U.S. Dollar	51.35	33,328.42
RFELWH09	CAT 966F LOADER, 4.25CY	649.09	0.50	Each (hourly)		U.S. Dollar	62.97	40,873.25
1.10	112.00 Each	Pad Mount Transformer Removal	29.57	3.79	Detail	U.S. Dollar	1,646.12	184,365.69
1.10.1	112.00 Each	Oil Removal & Disposal	22.40	5.00	Detail	U.S. Dollar	981.33	109,908.42
1.10.1.1	112.00 Each	Oil Removal	22.40	5.00	Detail	U.S. Dollar	110.20	12,342.90
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
L060100	GENERAL LABORER	224.00	1.00	Each (hourly)		U.S. Dollar	44.04	9,864.34
RPUTRK05	F-250 4X4 3/4 TON PICKUP	224.00	1.00	Each (hourly)		U.S. Dollar	11.07	2,478.56
1.10.1.2	22,400.00 Gallon	Oil Disposal	0.00	0.00	Detail	U.S. Dollar	4.00	89,600.00
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USDISPOSAL	Disposal Fee's		89,600.00	Each		U.S. Dollar	1.00	89,600.00
1.10.1.3	5.79 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	7,965.52
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
USTRUCKING	Trucking Sub		7,965.52	Each		U.S. Dollar	1.00	7,965.52
1.10.2	112.00 Each	Remove & Loadout Transformer	5.60	20.00	Detail	U.S. Dollar	109.96	12,315.44
Resource Code	Description	Hours	Quantity UM		Currency		Unit Cost	Total Cost
*REXCAV06A	Excav 100K w/ Bucket & Grapple	56.00	1.00	Each (hourly)		U.S. Dollar	124.54	6,973.96
L010101	OPERATOR	56.00	1.00	Each (hourly)		U.S. Dollar	51.35	2,875.39
L060100	GENERAL LABORER	56.00	1.00	Each (hourly)		U.S. Dollar	44.04	2,466.09
1.10.3	896.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	58,240.00
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
USTRUCKING	Trucking Sub		58,240.00	Each		U.S. Dollar	1.00	58,240.00
1.10.4	112.00	Remove Foundations To Subgrade	1.57	71.43	Detail	U.S. Dollar	34.84	3,901.83
1.10.4.1	112.00	Excavate / Remove Foundation - Various Depth	0.45	250.00	Detail	U.S. Dollar	17.29	1,936.39
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	4.48	1.00 Each (hourly)	U.S. Dollar	44.04	197.29		
L010101	OPERATOR	8.96	2.00 Each (hourly)	U.S. Dollar	51.35	460.06		
*REXCAV06C	Excav 100K w/ Hammer	4.48	1.00 Each (hourly)	U.S. Dollar	160.97	721.12		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	4.48	1.00 Each (hourly)	U.S. Dollar	124.54	557.92		
1.10.4.2	112.00	Concrete Transport Offsite	1.12	100.00	Detail	U.S. Dollar	17.55	1,965.44
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	11.20	1.00 Each (hourly)	U.S. Dollar	74.29	832.05		
L080940	TEAMSTER	11.20	1.00 Each (hourly)	U.S. Dollar	44.04	493.22		
L010101	OPERATOR	5.60	0.50 Each (hourly)	U.S. Dollar	51.35	287.54		
RFELWH09	CAT 966F LOADER, 4.25CY	5.60	0.50 Each (hourly)	U.S. Dollar	62.97	352.63		
1.11	3.00	MET Tower Removal	2.12	1.42	Detail	U.S. Dollar	3,750.90	11,252.71
1.11.1	3.00	Structure Demo	1.50	2.00	Detail	U.S. Dollar	2,503.99	7,511.96
1.11.2	45.00	Remove Foundation	0.31	146.00	Detail	U.S. Dollar	47.16	2,122.33
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	6.16	2.00 Each (hourly)	U.S. Dollar	44.04	271.46		
L010101	OPERATOR	9.25	3.00 Each (hourly)	U.S. Dollar	51.35	474.78		
*REXCAV06C	Excav 100K w/ Hammer	6.16	2.00 Each (hourly)	U.S. Dollar	160.97	992.25		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	3.08	1.00 Each (hourly)	U.S. Dollar	124.54	383.84		
1.11.3	45.00	Concrete Transport Offsite	0.31	146.67	Detail	U.S. Dollar	11.96	538.42
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	3.07	1.00 Each (hourly)	U.S. Dollar	74.29	227.94		
L080940	TEAMSTER	3.07	1.00 Each (hourly)	U.S. Dollar	44.04	135.11		
L010101	OPERATOR	1.53	0.50 Each (hourly)	U.S. Dollar	51.35	78.77		
RFELWH09	CAT 966F LOADER, 4.25CY	1.53	0.50 Each (hourly)	U.S. Dollar	62.97	96.60		
1.11.4	24.00	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	45.00	1,080.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		1,080.00	Each		U.S. Dollar	1.00	1,080.00
1.12	260.00	Solar Array Removal	749.50	0.35	Detail	U.S. Dollar	42,625.03	11,082,509.00
1.12.1	260.00	Fence Removal	13.06	19.91	Detail	U.S. Dollar	260.18	67,647.36
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	391.80	3.00 Each (hourly)	U.S. Dollar	51.35	20,117.72		
L060100	GENERAL LABORER	783.61	6.00 Each (hourly)	U.S. Dollar	44.04	34,508.00		
RBACKH09	Deere 710J BACKHOE, 1.62CY	391.80	3.00 Each (hourly)	U.S. Dollar	33.24	13,021.63		
Notes: ***** Assume 26 LF of fence per acre. *****								
1.12.2	260.00	Inverter / Transformer Removal	262.00	0.99	Detail	U.S. Dollar	2,816.88	732,388.50
1.12.2.1	131.00	Disconnect Electrical	131.00	1.00	Detail	U.S. Dollar	1,288.00	168,727.86
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
L010110	ELECTRICIAN	1,310.00	1.00	Each (hourly)	U.S. Dollar		73.70	96,543.91
L060100	GENERAL LABORER	1,310.00	1.00	Each (hourly)	U.S. Dollar		44.04	57,688.80
RPUTRK05	F-250 4X4 3/4 TON PICKUP	1,310.00	1.00	Each (hourly)	U.S. Dollar		11.07	14,495.15
1.12.2.2	131.00 Each	Loadout Inverter & Transformer	131.00	1.00	Detail	U.S. Dollar	2,927.75	383,535.64
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	5,240.00	4.00	Each (hourly)	U.S. Dollar	44.04	230,755.19	
L010101	OPERATOR	1,310.00	1.00	Each (hourly)	U.S. Dollar	51.35	67,263.65	
RHYDCR06	GROVE RT880 73 TON	1,310.00	1.00	Each (hourly)	U.S. Dollar	65.28	85,516.80	
1.12.2.3	131.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	180,125.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		180,125.00	Each	U.S. Dollar	1.00	180,125.00	
1.12.3	260.00 MW	Remove Foundations To Subgrade	169.93	1.53	Detail	U.S. Dollar	1,313.24	341,441.48
Notes: ***** Assumption: 24x36x1 concrete pad per inverter/ transformer *****								
1.12.3.1	12,521.00 Cubic Yard	Excavate / Remove Foundation	44.72	280.00	Detail	U.S. Dollar	15.44	193,283.93
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	447.18	1.00	Each (hourly)	U.S. Dollar	44.04	19,692.51	
L010101	OPERATOR	894.36	2.00	Each (hourly)	U.S. Dollar	51.35	45,921.93	
*REXCAV06C	Excav 100K w/ Hammer	447.18	1.00	Each (hourly)	U.S. Dollar	160.97	71,980.10	
*REXCAV06A	Excav 100K w/ Bucket & Grapple	447.18	1.00	Each (hourly)	U.S. Dollar	124.54	55,689.38	
1.12.3.2	12,521.00 Cubic Yard	Concrete Transport Offsite	125.21	100.00	Detail	U.S. Dollar	11.83	148,157.55
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RDUTRK06	CAT D350D, 18CY-24CY	1,252.10	1.00	Each (hourly)	U.S. Dollar	74.29	93,018.51	
L080940	TEAMSTER	1,252.10	1.00	Each (hourly)	U.S. Dollar	44.04	55,139.04	
1.12.4	260.00 MW	Solar Panel Removal	170.17	1.53	Detail	U.S. Dollar	15,508.04	4,032,089.83
1.12.4.1	816,812.00 Each	Solar Panel Removal	170.17	4,800.00	Detail	U.S. Dollar	3.11	2,543,759.83
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	10,210.15	6.00	Each (hourly)	U.S. Dollar	21.65	220,998.70	
L010101	OPERATOR	10,210.15	6.00	Each (hourly)	U.S. Dollar	51.35	524,253.42	
L060100	GENERAL LABORER	40,840.60	24.00	Each (hourly)	U.S. Dollar	44.04	1,798,507.71	
Notes: ***** Assumed production: 20 panels per laborer per hour, Includes packaging and preparing for shipment offsite. *****								
1.12.4.2	726.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	998,250.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		998,250.00	Each	U.S. Dollar	1.00	998,250.00	
Notes: ***** Assumption: 45,000 lbs per load *****								
1.12.4.3	16,336.00 Ton	Disposal Cost	0.00	0.00	Detail	U.S. Dollar	30.00	490,080.00

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		
USDISPOSAL	Disposal Fee's		490,080.00 Each	U.S. Dollar	1.00	490,080.00		
1.12.5	260.00 MW	Solar Rack (Trackers) & Post Removal	134.34	1.94 Detail	U.S. Dollar	22,726.70	5,908,941.83	
1.12.5.1	21,495.00 Each	Solar Rack (Trackers) & Post Removal	134.34	160.00 Detail	U.S. Dollar	250.40	5,382,316.83	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L010101	OPERATOR	21,495.00	16.00 Each (hourly)	U.S. Dollar	51.35	1,103,688.72		
L060100	GENERAL LABORER	21,495.00	16.00 Each (hourly)	U.S. Dollar	44.04	946,580.69		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	10,747.50	8.00 Each (hourly)	U.S. Dollar	124.54	1,338,439.91		
*REXCAV06E	Excav 100K w/ Shear	10,747.50	8.00 Each (hourly)	U.S. Dollar	185.50	1,993,607.51		
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.								

1.12.5.2	383.00 Each	Trucking - Per Load	0.00	0.00 Detail	U.S. Dollar	1,375.00	526,625.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		526,625.00 Each	U.S. Dollar	1.00	526,625.00		
Notes: *****								
Assumption: 45,000 lbs per load								

1.13	120.00 MW	DC Storage System Removal	90.91	1.32 Detail	U.S. Dollar	3,610.96	433,314.64	
1.13.1	120.00 MW	Battery Removal & Disposal	79.00	1.52 Detail	U.S. Dollar	2,655.68	318,681.26	
1.13.1.1	79.00 Day	Remove Batteries, Load For Transport	79.00	1.00 Detail	U.S. Dollar	1,977.94	156,257.26	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	3,160.00	4.00 Each (hourly)	U.S. Dollar	44.04	139,157.71		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	790.00	1.00 Each (hourly)	U.S. Dollar	21.65	17,099.55		
1.13.1.2	40.00 Each	Transport Batteries	0.00	0.00 Detail	U.S. Dollar	1,480.60	59,224.00	
1.13.1.2.1	40.00 Each	Roll Off Liners	0.00	0.00 Detail	U.S. Dollar	105.60	4,224.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCLINER	Rolloff Liner		40.00 Each	U.S. Dollar	105.60	4,224.00		
1.13.1.2.2	40.00 Each	Trucking - Per Load	0.00	0.00 Detail	U.S. Dollar	1,375.00	55,000.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		55,000.00 Each	U.S. Dollar	1.00	55,000.00		
1.13.1.3	516.00 Ton	Disposal Fee's	0.00	0.00 Detail	U.S. Dollar	200.00	103,200.00	
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USDISPOSAL	Disposal Fee's		103,200.00 Each	U.S. Dollar	1.00	103,200.00		
1.13.2	120.00 MW	Structure & Components Removal	11.91	10.08 Detail	U.S. Dollar	955.28	114,633.38	
1.13.2.1	516.00 Ton	Structure Demo	11.91	43.33 Detail	U.S. Dollar	115.57	59,633.38	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.13.2.2	40.00 Each	Trucking - Per Load	0.00	0.00	Detail	U.S. Dollar	1,375.00	55,000.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		55,000.00 Each	U.S. Dollar	1.00	55,000.00		
1.14	1.00 Lump Sum	Transmission Line Removal (OH, 34.5 KV)	27.03	0.04	Detail	U.S. Dollar	183,487.18	183,487.18
1.14.1	1.00 Lump Sum	Transmission Line - Wind	16.85	0.06	Detail	U.S. Dollar	114,361.97	114,361.97
1.14.1.1	9.10 Mile	Conductor Removal	13.65	0.67	Detail	U.S. Dollar	7,589.83	69,067.46
1.14.1.1.1	9.10 Mile	Cut / Lower Cable, Size & Loadout	13.65	0.67	Detail	U.S. Dollar	6,682.69	60,812.46
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	682.50	5.00 Each (hourly)	U.S. Dollar	44.04	30,055.42		
L010101	OPERATOR	136.50	1.00 Each (hourly)	U.S. Dollar	51.35	7,008.77		
*RXMISC14	MAN LIFT GAS 125ft	136.50	1.00 Each (hourly)	U.S. Dollar	53.52	7,305.48		
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	136.50	1.00 Each (hourly)	U.S. Dollar	21.65	2,954.54		
*RXMISC19	Material Handler	136.50	1.00 Each (hourly)	U.S. Dollar	98.82	13,488.25		
1.14.1.1.2	127.00 Ton	Scrap Trucking Cost	0.00	0.00	Detail	U.S. Dollar	65.00	8,255.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		8,255.00 Each	U.S. Dollar	1.00	8,255.00		
Notes: ***** Cable estimated at 14 tons per mile *****								
1.14.1.2	192.00 Each	Remove Wood Poles	3.20	60.00	Detail	U.S. Dollar	235.91	45,294.50
1.14.1.2.1	192.00 Each	Remove Wood Poles	3.20	60.00	Detail	U.S. Dollar	179.66	34,494.50
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	128.00	4.00 Each (hourly)	U.S. Dollar	124.54	15,940.48		
L060100	GENERAL LABORER	256.00	8.00 Each (hourly)	U.S. Dollar	44.04	11,273.54		
L010101	OPERATOR	128.00	4.00 Each (hourly)	U.S. Dollar	51.35	6,572.33		
RPUTRK05	F-250 4X4 3/4 TON PICKUP	64.00	2.00 Each (hourly)	U.S. Dollar	11.07	708.16		
1.14.1.2.2	144.00 Ton	Pole Trucking Cost	0.00	0.00	Detail	U.S. Dollar	75.00	10,800.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		10,800.00 Each	U.S. Dollar	1.00	10,800.00		
Notes: ***** Poles estimated at .75 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls *****								
1.14.2	1.00 Lump Sum	Transmission Line - Solar	10.18	0.10	Detail	U.S. Dollar	69,125.21	69,125.21
1.14.2.1	5.50 Mile	Conductor Removal	8.25	0.67	Detail	U.S. Dollar	7,592.69	41,759.79
1.14.2.1.1	5.50 Mile	Cut / Lower Cable, Size & Loadout	8.25	0.67	Detail	U.S. Dollar	6,682.69	36,754.79
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	412.50	5.00 Each (hourly)	U.S. Dollar	44.04	18,165.37		
L010101	OPERATOR	82.50	1.00 Each (hourly)	U.S. Dollar	51.35	4,236.07		
*RXMISC14	MAN LIFT GAS 125ft	82.50	1.00 Each (hourly)	U.S. Dollar	53.52	4,415.40		

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RLIFTS05	JCB 508C, 8,000lbs FRKLFT		82.50	1.00	Each (hourly)	U.S. Dollar	21.65	1,785.71
*RXMISC19	Material Handler		82.50	1.00	Each (hourly)	U.S. Dollar	98.82	8,152.24
1.14.2.1.2	77.00 Ton	Scrap Trucking Cost		0.00	0.00 Detail	U.S. Dollar	65.00	5,005.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		5,005.00	Each	U.S. Dollar	1.00	5,005.00	
Notes: ***** Cable estimated at 14 tons per mile *****								
1.14.2.2	116.00 Each	Remove Wood Poles		1.93	60.00 Detail	U.S. Dollar	235.91	27,365.43
1.14.2.2.1	116.00 Each	Remove Wood Poles		1.93	60.00 Detail	U.S. Dollar	179.66	20,840.43
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	77.33	4.00	Each (hourly)	U.S. Dollar	124.54	9,630.71	
L060100	GENERAL LABORER	154.67	8.00	Each (hourly)	U.S. Dollar	44.04	6,811.09	
L010101	OPERATOR	77.33	4.00	Each (hourly)	U.S. Dollar	51.35	3,970.78	
RPUTRK05	F-250 4X4 3/4 TON PICKUP	38.67	2.00	Each (hourly)	U.S. Dollar	11.07	427.85	
1.14.2.2.2	87.00 Ton	Pole Trucking Cost		0.00	0.00 Detail	U.S. Dollar	75.00	6,525.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		6,525.00	Each	U.S. Dollar	1.00	6,525.00	
Notes: ***** Poles estimated at .75 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls *****								
1.15	1.00 Lump Sum	Transmission Line Removal (OH, 230 KV)		62.10	0.02 Detail	U.S. Dollar	500,707.43	500,707.43
1.15.1	32.00 Mile	Conductor Removal		48.00	0.67 Detail	U.S. Dollar	7,592.69	242,966.02
1.15.1.1	32.00 Mile	Cut / Lower Cable, Size & Loadout		48.00	0.67 Detail	U.S. Dollar	6,682.69	213,846.02
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
L060100	GENERAL LABORER	2,400.00	5.00	Each (hourly)	U.S. Dollar	44.04	105,689.40	
L010101	OPERATOR	480.00	1.00	Each (hourly)	U.S. Dollar	51.35	24,646.22	
*RXMISC14	MAN LIFT GAS 125ft	480.00	1.00	Each (hourly)	U.S. Dollar	53.52	25,689.60	
RLIFTS05	JCB 508C, 8,000lbs FRKLFT	480.00	1.00	Each (hourly)	U.S. Dollar	21.65	10,389.60	
*RXMISC19	Material Handler	480.00	1.00	Each (hourly)	U.S. Dollar	98.82	47,431.20	
1.15.1.2	448.00 Ton	Scrap Trucking Cost		0.00	0.00 Detail	U.S. Dollar	65.00	29,120.00
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
USTRUCKING	Trucking Sub		29,120.00	Each	U.S. Dollar	1.00	29,120.00	
Notes: ***** Cable estimated at 14 tons per mile *****								
1.15.2	282.00 Each	Remove Wood Monopoles		14.10	20.00 Detail	U.S. Dollar	913.98	257,741.40
1.15.2.1	282.00 Each	Remove Wood Monopoles		14.10	20.00 Detail	U.S. Dollar	538.98	151,991.40
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
*REXCAV06A	Excav 100K w/ Bucket & Grapple	564.00	4.00	Each (hourly)	U.S. Dollar	124.54	70,237.74	
L060100	GENERAL LABORER	1,128.00	8.00	Each (hourly)	U.S. Dollar	44.04	49,674.02	
L010101	OPERATOR	564.00	4.00	Each (hourly)	U.S. Dollar	51.35	28,959.31	

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RPUTRK05	F-250 4X4 3/4 TON PICKUP		282.00	2.00	Each (hourly)	U.S. Dollar	11.07	3,120.33
1.15.2.2	1,410.00 Ton	Pole Trucking Cost		0.00	0.00 Detail	U.S. Dollar	75.00	105,750.00

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USTRUCKING	Trucking Sub		105,750.00 Each	U.S. Dollar	1.00	105,750.00

Notes: *****
 Wood monopoles estimated at 5 tons per pole. Disposal cost has been excluded, as the poles are valued for fencing and retaining walls

1.16	1.00 Lump Sum	O&M Building Removal	6.48	0.15	Detail	U.S. Dollar	21,164.02	21,164.02
1.16.1	40.00 Ton	Structure Demo	2.00	20.00	Detail	U.S. Dollar	250.40	10,015.94
1.16.2	320.00 Cubic Yard	Remove Foundations To Subgrade	4.48	71.43	Detail	U.S. Dollar	34.84	11,148.07
1.16.2.1	320.00 Cubic Yard	Excavate / Remove Foundation - Various Depth	1.28	250.00	Detail	U.S. Dollar	17.29	5,532.54

Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L060100	GENERAL LABORER	12.80	1.00 Each (hourly)	U.S. Dollar	44.04	563.68
L010101	OPERATOR	25.60	2.00 Each (hourly)	U.S. Dollar	51.35	1,314.47
*REXCAV06C	Excav 100K w/ Hammer	12.80	1.00 Each (hourly)	U.S. Dollar	160.97	2,060.35
*REXCAV06A	Excav 100K w/ Bucket & Grapple	12.80	1.00 Each (hourly)	U.S. Dollar	124.54	1,594.05

1.16.2.2	320.00 Cubic Yard	Concrete Transport Offsite	3.20	100.00	Detail	U.S. Dollar	17.55	5,615.53
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	32.00	1.00 Each (hourly)	U.S. Dollar	74.29	2,377.28
L080940	TEAMSTER	32.00	1.00 Each (hourly)	U.S. Dollar	44.04	1,409.19
L010101	OPERATOR	16.00	0.50 Each (hourly)	U.S. Dollar	51.35	821.54
RFELWH09	CAT 966F LOADER, 4.25CY	16.00	0.50 Each (hourly)	U.S. Dollar	62.97	1,007.52

1.17	61.00 Mile	Private Access Road Removal (New Roads)	30.50	2.00	Detail	U.S. Dollar	5,676.59	346,272.20
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Notes: *****
 Assume topsoil removed during original construction is available for restoration

1.17.1	43.00 Mile	Private Access Road Removal (New Roads) - Wind	21.50	2.00	Detail	U.S. Dollar	5,676.59	244,093.52
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	860.00	4.00 Each (hourly)	U.S. Dollar	51.35	44,157.82
L060100	GENERAL LABORER	430.00	2.00 Each (hourly)	U.S. Dollar	44.04	18,936.02
L080940	TEAMSTER	860.00	4.00 Each (hourly)	U.S. Dollar	44.04	37,872.04
RDUTRK06	CAT D350D, 18CY-24CY	860.00	4.00 Each (hourly)	U.S. Dollar	74.29	63,889.40
RFELWH09	CAT 966F LOADER, 4.25CY	860.00	4.00 Each (hourly)	U.S. Dollar	62.97	54,154.20
*RDOZER08	CAT D6 LGP Dozer	430.00	2.00 Each (hourly)	U.S. Dollar	58.34	25,084.05

Notes: *****
 Assume topsoil removed during original construction is available for restoration

1.17.2	18.00 Mile	Private Access Road Removal (New Roads) - Solar	9.00	2.00	Detail	U.S. Dollar	5,676.59	102,178.68
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
L010101	OPERATOR	360.00	4.00 Each (hourly)	U.S. Dollar	51.35	18,484.67
L060100	GENERAL LABORER	180.00	2.00 Each (hourly)	U.S. Dollar	44.04	7,926.71
L080940	TEAMSTER	360.00	4.00 Each (hourly)	U.S. Dollar	44.04	15,853.41

CBS Position Code	Quantity UM	Description	Cost Item		Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
RDUTRK06	CAT D350D, 18CY-24CY	360.00	4.00	Each (hourly)	U.S. Dollar	74.29	26,744.40			
RFELWH09	CAT 966F LOADER, 4.25CY	360.00	4.00	Each (hourly)	U.S. Dollar	62.97	22,669.20			
*RDOZER08	CAT D6 LGP Dozer	180.00	2.00	Each (hourly)	U.S. Dollar	58.34	10,500.30			

Notes: *****
Assume topsoil removed during original construction
is available for restoration

1.18	380.00 Acre	Spot Grade Disturbed Areas - Solar Array	47.50	8.00 Detail	U.S. Dollar	548.41	208,394.47
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
*RDOZER08	CAT D6 LGP Dozer	1,900.00	4.00 Each (hourly)	U.S. Dollar	58.34	110,836.50
L010101	OPERATOR	1,900.00	4.00 Each (hourly)	U.S. Dollar	51.35	97,557.97

Notes: *****
Assumption: 1896 acres total array area.
Assume that 20% of the array area disturbed by construction
will be regraded.

1.19	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction	0.00	0.00 Detail	U.S. Dollar	516,375.00	516,375.00
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Notes: *****
Assume topsoil removed during original construction
is available for restoration

1.19.1	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction - Wind	0.00	0.00 Detail	U.S. Dollar	209,610.00	209,610.00
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1.19.1.1	50.00 Acre	Re-Seed Road Beds	0.00	0.00 Detail	U.S. Dollar	765.00	38,250.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		50.00 Acre	U.S. Dollar	765.00	38,250.00

Notes: *****
1.45 acres per mile of road

1.19.1.2	224.00 Acre	Re-Seed Turbine Locations	0.00	0.00 Detail	U.S. Dollar	765.00	171,360.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		224.00 Acre	U.S. Dollar	765.00	171,360.00

Notes: *****
Re-Seed 2 acres per turbine location

1.19.2	1.00 Lump Sum	Re-Seed With Native Vegetation - Roads & Areas Disturbed By Construction - Solar	0.00	0.00 Detail	U.S. Dollar	306,765.00	306,765.00
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1.19.2.1	21.00 Acre	Re-Seed Road Beds	0.00	0.00 Detail	U.S. Dollar	765.00	16,065.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		21.00 Acre	U.S. Dollar	765.00	16,065.00

Notes: *****
1.45 acres per mile of road

1.19.2.2	380.00 Acre	Re-Seed Solar Array Area	0.00	0.00 Detail	U.S. Dollar	765.00	290,700.00
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Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost
USLANDSCAPE	Landscape Sub		380.00 Acre	U.S. Dollar	765.00	290,700.00

Notes: *****
Re-Seed 2 acres per turbine location

Cost Item								
CBS Position Code	Quantity UM	Description	Days	UM/Day	Cost Source	Currency	Unit Cost	Total Cost
1.20	1.00 Lump Sum	Scrap Metals Credit	0.00	0.00	Detail	U.S. Dollar	(9,943,992.00)	(9,943,992.00)
1.20.1	1.00 Lump Sum	Scrap Metals Credit - Wind	0.00	0.00	Detail	U.S. Dollar	(7,145,064.00)	(7,145,064.00)
1.20.1.1	32,032.00 Ton	Scrap Metals Credit - WTG	0.00	0.00	Detail	U.S. Dollar	(216.00)	(6,918,912.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		32,032.00 Ton	U.S. Dollar	(216.00)	(6,918,912.00)		
1.20.1.2	896.00 Ton	Scrap Metals Credit - Pad Mount Transformer	0.00	0.00	Detail	U.S. Dollar	(216.00)	(193,536.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		896.00 Ton	U.S. Dollar	(216.00)	(193,536.00)		
1.20.1.3	24.00 Ton	Scrap Metals Credit - MET Tower	0.00	0.00	Detail	U.S. Dollar	(216.00)	(5,184.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		24.00 Ton	U.S. Dollar	(216.00)	(5,184.00)		
1.20.1.4	127.00 Ton	Scrap Metals Credit - T Line	0.00	0.00	Detail	U.S. Dollar	(216.00)	(27,432.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		127.00 Ton	U.S. Dollar	(216.00)	(27,432.00)		
1.20.2	1.00 Lump Sum	Scrap Metals Credit - Solar	0.00	0.00	Detail	U.S. Dollar	(2,521,800.00)	(2,521,800.00)
1.20.2.1	77.00 Ton	Scrap Metals Credit - T Line	0.00	0.00	Detail	U.S. Dollar	(216.00)	(16,632.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		77.00 Ton	U.S. Dollar	(216.00)	(16,632.00)		
1.20.2.2	8,598.00 Ton	Scrap Credit - Solar Rack	0.00	0.00	Detail	U.S. Dollar	(216.00)	(1,857,168.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		8,598.00 Ton	U.S. Dollar	(216.00)	(1,857,168.00)		
Notes: ***** Assume 800 Lbs per rack w/ 6 piles *****								
1.20.2.3	3,000.00 Ton	Scrap Credit - Inverters / Transformers	0.00	0.00	Detail	U.S. Dollar	(216.00)	(648,000.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		3,000.00 Ton	U.S. Dollar	(216.00)	(648,000.00)		
1.20.3	1.00 Lump Sum	Scrap Metals Credit - Shared Facilities	0.00	0.00	Detail	U.S. Dollar	(277,128.00)	(277,128.00)
1.20.3.1	300.00 Ton	Scrap Metals Credit - Transformer & Switchyard	0.00	0.00	Detail	U.S. Dollar	(216.00)	(64,800.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		300.00 Ton	U.S. Dollar	(216.00)	(64,800.00)		
1.20.3.2	20.00 Ton	Scrap Metals Credit - Control Building	0.00	0.00	Detail	U.S. Dollar	(216.00)	(4,320.00)
Resource Code	Description	Hours	Quantity UM	Currency	Unit Cost	Total Cost		
UODCFERROUS	Ferrous Metal Scrap		20.00 Ton	U.S. Dollar	(216.00)	(4,320.00)		
1.20.3.3	448.00 Ton	Scrap Metals Credit - T Line	0.00	0.00	Detail	U.S. Dollar	(216.00)	(96,768.00)
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
UODCFERROUS	Ferrous Metal Scrap		448.00	Ton		U.S. Dollar	(216.00)	(96,768.00)
1.20.3.4	515.00	Scrap Credit - Battery System Structures	0.00		0.00	Detail U.S. Dollar	(216.00)	(111,240.00)
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
UODCFERROUS	Ferrous Metal Scrap		515.00	Ton		U.S. Dollar	(216.00)	(111,240.00)
1.21	1.00	Lump Sum Home Office, Project Management (5% Of Cost)	0.00		0.00	Detail U.S. Dollar	1,287,711.50	1,287,711.50
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USMARKUP5	5% Markup		25,754,230.00	Each		U.S. Dollar	0.05	1,287,711.50
1.22	1.00	Lump Sum Contractor Contingency (3% Of Cost)	0.00		0.00	Detail U.S. Dollar	811,258.23	811,258.23
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USCONTINGENCY	3% Contingency		27,041,941.00	Each		U.S. Dollar	0.03	811,258.23
1.23	1.00	Lump Sum Contractor OH & Fee (13% Of Cost)	0.00		0.00	Detail U.S. Dollar	3,620,915.87	3,620,915.87
Resource Code	Description	Hours	Quantity UM		Currency	Unit Cost	Total Cost	
USMARKUP	13% Markup		27,853,199.00	Each		U.S. Dollar	0.13	3,620,915.87
Report Total:			1,939.10					21,530,123.16

Category	Total
Labor	8,234,557.53
Rented Equipment	6,307,830.93
Supplies	8,484.00
Materials	304,000.00
Subcontract	16,075,642.70
ODCs	543,600.00
Scrap Credit	(9,943,992.00)

Attachment W-3. Memorandum to ODOE

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MEMO

To: Katie Clifford, Oregon Department of Energy

From: Capital Power / Tetra Tech

Date: Friday, August 28, 2020

Subject: Response to Request for Additional Information (RAI) W-2

The following is our response to RAI W-2.

RAI W-2:

While the Department understands the Applicant's proposal regarding compliance with the Retirement and Financial Assurance standard, and the Department will fairly portray the applicant's proposal in the Draft Proposed Order, please note that the Department intends to make the same (or similar) recommendations in the Draft Proposed Order regarding scrap value, the Department's management fees, and contingency amounts as the Department did in the Bakeoven Solar Project Proposed Order. The Department has received clear direction from EFSC in this regard.

Response:

The Applicant feels strongly that the Department is overestimating management costs as a high percentage of the cost of retiring the facility in addition to management costs already factored into the estimate and that scrap value should be incorporated into the retirement cost estimate. Specific to recommendations described in the Final Order for the Bakeoven Solar Project (Bakeoven),¹ the Applicant offers the following supplemental input.

Department Project Management Cost

In Bakeoven (p. 134), the Council found that the Applicant's "project management contingency" included in Exhibit W was not supported by evidence. The Applicant for Nolin Hills asserts that its estimate for the costs to the Department for project management is based on an assumed level of effort based on construction and cost estimation experience. We would respectfully ask that, if the Department disagrees with the estimated level of effort or cost of labor for its own employees to manage and oversee the contractor who executes decommissioning activities and to handle any associated legal issues, it provide an

¹ EFSC (Energy Facility Siting Council), 2020, In the Matter of the Application for Site Certificate for the Bakeoven Solar Project: Final Order on Application for Site Certificate. April 24.

alternative estimate rather than defaulting to 10 percent. For this project, 10 percent of the total estimated cost amounts to between \$1.4 million and \$1.6 million (for the two project layouts provided), or the equivalent of six full-time employees (FTEs) for one year. The Applicant notes that the historical precedent of using a 10 percent project management estimate implicitly included both Department and contractor management costs. The precedent was based on the 2005 Facility Retirement Cost Estimating Guide, which is no longer in use. The Guide included a 10 percent markup for administration and project management, which was not broken up by ODOE costs vs. contractor costs and implicitly included both. Since the Department no longer relies on the 2005 Guide, the Applicant's retirement cost estimate in Exhibit W breaks out these two costs separately and estimates both based on best practice and best available information.

In the Bakeoven example cited in the RAI, the Department elected to ignore the applicant's (i.e., Avangrid's) estimate based on best available information and instead arbitrarily apply an additional 10 percent on top of the total dollar amount of the applicant's estimate, which included contractor management costs; this resulted in a significant exceedance of precedent for this cost. More specifically, if the 2005 Guide were still in force, Administration and Project Management for Nolin Hills would have been estimated at 10 percent of the total cost, in this case \$1,275,854. The estimated total of contractor and applicant project management cost in the cost estimate provided with Exhibit W is consistent with this amount (\$655,577 for contractor management costs, plus \$533,000 for Department management costs, for a total of \$1,188,577). If the Department applies a 10 percent ODOE management cost on top of the total Applicant estimated cost as it did with Bakeoven, the total estimated project management cost would be 15 percent of total cost instead of the precedent of 10 percent. As a result, the current approach is neither consistent with historical Department estimates nor based on information or evidence. The Applicant requests that, if the Department disagrees with the Applicant's estimate of two FTEs for 16 months, the Department provide a more realistic, evidence-based approach to estimating Department project management costs.

Future Development Contingency

The Final Order on the Bakeoven Solar Project states that the AACE International (AACEI) Classification System guidance used in development of this cost estimate is "not intended to account for future uncertainties related to environmental standards, legal requirements, or changes in cost of labor and equipment in 30 to 50 years, which are the underlying factors considered in the Council's application of a future development contingency."² The Applicant concurs that the Classification System guidance is not intended to account for changes in the cost of labor and equipment over time; those changes are accounted for by the annual adjustment of the bond or letter of credit based on the U.S. Gross Domestic Product Implicit Price Deflator, which is typically a condition added to all site certificates and one we would expect will be included here. Uncertainties related to environmental standards or legal requirements are in fact included in scope change, which is covered by the estimated contingency. Renewable energy facility decommissioning is low complexity demolition work, and the contingency added for scope change is intended to include potential changes related to environmental standards or legal requirements. It is important to note that the AACEI Classification System is intended for highly complex process industry construction, not low complexity demolition work, so we feel that using a contingency rate acceptable for

² Bakeoven Final Order, p. 136.

highly complex work is taking a conservative approach. Because of the low complexity of decommissioning for renewable energy projects, the risk of such changes causing significant impact to the estimated cost of decommissioning is low. Therefore, the Department's decision in the case of Bakeoven to increase the applicant's future development contingency from 3 percent to 10 percent is not justified by evidence or best practice in estimating costs. The Applicant requests that the Department retain the 3 percent future development contingency for the Nolin Hills Project or provide more robust evidence for an alternate approach.

Consideration of Scrap Value

1) Other states in the U.S. have issued rules or guidelines that accept scrap value (in some form) as a reasonable deduction to financial assurance amounts for decommissioning of wind facilities.

The Bakeoven Final Order describes a review of regulatory requirements applicable to industrial facility decommissioning completed by Golder that found no state or provincial-level permitting programs for mining and waste disposal landfill sites that supported use of the value of scrap metal to reduce a decommissioning bond requirement.

The review by Golder appears to have formed a major basis for the Council's decision not to alter its previous position of not accepting salvage material value to reduce the retirement bond amount, as evidenced in the following quotation:

Based on the above-summarized review by Golder, and as provided in Attachment B of this order, the Council determined that the underlying risk to the State of accepting salvage material value to reduce the retirement bond amount has not changed since the 2007 Council review and policy decision.³

The Applicant believes that the Council did not have complete information before it. While it appears that Golder's review may have been limited to certain industries and/or geographies, it missed the fact that several states in the U.S. do have rules in place related to wind facility decommissioning that allow for scrap value to be deducted (in some form) from the amount of financial assurance. An initial review of select states uncovered no less than five states that have rules or guidelines that consider or accept scrap value to reduce the amount of financial assurance related to retirement and decommissioning. These findings are summarized below:

- **Oklahoma:** For wind energy facilities that reach commercial generation on or after December 31, 2016, the amount of the evidence of financial security is set at 125 percent of the estimate of the total cost of decommissioning, minus the salvage value of the equipment.⁴ The evidence of financial security must be submitted by the fifth year of operation. Oklahoma has over 8,000 megawatts (MW) of installed wind energy generating capacity, with an additional 1,000 MW currently under construction.
- **Montana:** In determining the amount of a decommissioning bond for a wind facility, the department shall provide the owner with a preliminary bond determination, consult with

³ Bakeoven Final Order, page 141.

⁴ 17 OK Stat §160.15 (<http://www.oklegislature.gov/osstatuestitle.html>)

the owner, and **consider**: (a) the character and nature of the site where the facility is located; and (b) the current market salvage value of the facility, as set forth in the decommissioning plan⁵. Montana's current regulations were implemented in 2020. Montana currently has over 800 MW of wind energy generating capacity and expects significant additional wind generation in the future.

- **North Dakota**: In determining the amount of a decommissioning bond, a decommissioning cost estimate, excluding salvage value of the turbines and equipment, is requested.⁶ North Dakota has extensive experience with wind farms, with more than 3,000 MW of operating wind energy generating capacity and expressed interest from wind developers in more than 7,000 MW of additional wind generation⁷, demonstrating their experience and interest in a reasonable and reliable approach to assuring decommissioning costs will be covered appropriately.
- **Texas**: A wind developer's amount of financial assurance must be equal to at least the estimated amount of the cost of removal and restoration that exceeds the salvage value, less any portion of the value of the wind power facility that is pledged to secure the outstanding debt.⁸ With 29,405 MW of installed wind capacity and an additional 7,000 MW of wind capacity under construction or in advanced development⁹, Texas has demonstrated experience and interest in assuring reasonable and reliable decommissioning of project facilities.
- **Pennsylvania**: Pennsylvania has issued a Model Ordinance for local governments to refer to when dealing with wind development. These guidelines prescribe that a wind facility is required to post and maintain Decommissioning Funds in an amount equal to Net Decommissioning Costs. Net Decommissioning Costs are defined as the cost of decommissioning net the salvage value of the equipment. Estimates of the total decommissioning costs and net costs are to be submitted to the municipality after the first year of operation and every fifth year thereafter. At no point can Decommissioning Funds be less than 25 percent of total Decommissioning Costs.¹⁰ Pennsylvania currently has over 1,300 MW of wind power generation capacity.¹¹

⁵ 17-86-106 Administrative Rules of Montana (<http://mtrules.org/gateway/ShowRuleFile.asp?RID=39693>)

⁶ North Dakota Century Code 69-09-09 Wind Facility Decommissioning (<https://www.legis.nd.gov/information/acdata/pdf/69-09-09.pdf>)

⁷ Bismarck State College National Energy Center of Excellence. 2019. Spotlight on North Dakota Energy: 2019 Annual Report. Available online at: https://www.energynd.com/wp-content/uploads/2020/04/Spotlight_On_Energy_2019_Web.pdf

⁸ Texas Utilities Code, Title 6 Chapter 301 Wind Power Facility Agreements (<https://statutes.capitol.texas.gov/Docs/UT/pdf/UT.301.pdf>)

⁹ AWEA (American Wind Energy Association). "Wind Energy in Texas." Available online at: <https://www.awea.org/Awea/media/Resources/StateFactSheets/Texas.pdf>

¹⁰ Pennsylvania DEP (Department of Environmental Protection). Model Ordinance for Wind Energy Facilities in Pennsylvania. Available online at: http://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/GrantsLoansTaxCredits/Model_Wind_Ordinance_Final_3_21_06.pdf

¹¹ Pennsylvania DEP. Wind Energy. Available online at: <https://www.dep.pa.gov/Business/Energy/Wind/Pages/default.aspx#:~:text=There%20are%20currently%20over%201300,power%20nearly%20350%2C000%20Pennsylvania%20homes.>

- **Bureau of Land Management (BLM) Lands:** BLM has completed programmatic Environmental Impact Statements and issued leases and rights-of-way under the Federal Land Policy and Management Act for solar and wind projects. BLM’s wind guidelines do not explicitly discuss how to estimate decommissioning costs. However, the solar energy program guidelines describe preparation of a Reclamation Cost Estimate, which is defined under right-of-way regulations at 43 Code of Federal Regulations 2801.5 as the “estimate of costs to restore the land to a condition that will support pre-disturbance land uses.” BLM’s guidance document goes on to state that the estimate “must also include the BLM cost to administer any reclamation contract and may also consider other factors, such as salvage value of materials, when determining the bond amount.”¹²

These examples demonstrate there is significant precedent among numerous state and federal agencies for including scrap value when calculating decommissioning costs and bonding requirements.

2) Not allowing for consideration of scrap value assigns an excessive risk premium to the unlikely and largely mitigatable event of bankruptcy.

As shown in Exhibit W, without consideration of scrap value, retirement cost estimates for the project range from \$14.7 million to \$16.0 million dollars. These costs are nearly halved when scrap value is deducted, falling in the range of \$8.46 million to \$8.95 million dollars. The Applicant estimates, based on current debt ratings, that the additional cost for the delta, an incremental \$8 million dollars in letter of credit, would be approximately \$136,000 per annum, adjusted annually for the life of the project as typically required by site certificate conditions. Costs of this magnitude have a significant impact on project economics. Wind development is a competitive industry and, if such premiums are not reasonably mitigated, it could impede future development.

The Applicant believes that doubling the required bond amount is an excessive risk premium to pay to cover the unlikely event of bankruptcy. The Applicant believes there are certain realities related to the business of power generation, and wind generation more specifically, that significantly limit the risk of bankruptcy. These realities are well described by Avangrid in Bakeoven, and the SunEdison bankruptcy case¹³ is illustrative of the low risk that bankruptcy poses for forcing decommissioning of such projects. Any potential fluctuation in scrap value could be easily dealt with through annual updates. The Applicant believes that any remaining uncertainty related to bankruptcy and how the State would rank relative to other creditors can be reasonably mitigated through readily available legal and commercial instruments, such as the proposal in Bakeoven for the developer to enter into an agreement with the Department (on behalf of the Council) to grant the Department a security interest in facility equipment salvage. The Applicant would be prepared to enter into a similar agreement for Nolin Hills.

3) The Applicant agrees that the Department’s approach for determining the amount of financial assurance necessary for facility decommissioning needs to be evaluated and

¹² BLM Solar Energy Program. 2017. Performance and Reclamation Bond. Available online at: <https://blmsolar.anl.gov/program/authorization-policies/bond/>

¹³ See Bakeoven Final Order, p. 139.

addressed in rulemaking; however, the Applicant believes that the Council has the ability under today's rules to grant the request above related to allowing the deduction of scrap value.

The Applicant supports a rulemaking consultation related to updating rules related to retirement cost estimates. Such a process should not delay or defer issues that can be solved today, like the use of scrap value.