

Attn: Jerry Lein
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

Submittal via email to ndpsc@nd.gov
Case Number: PU-14-105

Re: Sunflower Wind Project – Decommissioning Plan

Dear Mr. Lein,

The North Dakota Administrative Code chapter 69-09-09 requires a decommissioning plan be filed prior to operation and provides that the Commission may require financial assurance after the tenth year of operation to cover the anticipated cost of decommissioning. Please refer to Attachment 1 for the Sunflower Wind Project Decommissioning Plan.

If you have any questions, please give me a call at the number below.

Sincerely,



Aron Anderson
Senior Project Manager
Solas Energy Consulting
aanderson@solasenergyconsulting.com
612-599-4251

CC:

Jerry Lein	Jon Johnson
Todd Hartleben	Deron Lawrence
Sean Garry	Cindy Whitney
Jed Dailey	Ryan Hartleben

Attachment 1 – Sunflower Decommissioning Plan

Aron Anderson, Sr. Project Manager
Solas Energy Consulting
via e-mail: aanderson@solasenergyconsulting.com

October 7, 2016

Subject: Sunflower Wind Project Decommissioning Budget

Dear Aron:

Sewall was requested to develop this Decommissioning Budget for the 52 Vestas V100-2.0MW-80mHH wind turbine generators (WTG) at the Sunflower Wind Project located in Stark and Morton Counties, North Dakota. The budget represents an opinion of probable cost (OPC), in today's dollars, for decommissioning based on the assumption that the WTGs, towers, and other project components will be disassembled and disposed following completion of use of the wind turbines. The budget is also built on the assumption that the cost of decommissioning will be fully or partially offset by the scrap/salvage value of the towers and turbine components. Please note that no site visits or field borings were conducted to verify actual field conditions.

Based on information provided from Solas Energy Consulting (Solas), we have assumed the following: all underground electrical collection lines will be abandoned in place; all project roads will be rehabilitated upon decommissioning completion; and an O&M facility will not be included in the decommissioning as it is located on purchased property.

Information Sources for this Review

This review is based on the civil and electrical site plans and quantity information provided by Solas, discussions with contractors familiar with this type of construction and our own experience with wind projects. Wage rates used in these estimates are based on the 2016 Wage Determinations On Line (<http://www.wdol.gov/>) for the State of North Dakota for Stark and Morton Counties.

Decommissioning Scope

The decommissioning process reflected in this OPC is based on Decommissioning Plans prepared for similar wind projects. In summary, the decommissioning and restoration process in the Plan consists of the following steps:

- Disassembly and removal of above-ground structures
- Removal of below-ground structures to a depth of 48 inches
- Re-grading and seeding

Above-ground structures include the turbines, transformers, overhead transmission lines, and meteorological towers. Below-ground structures include foundations for turbines and the substation. Following removal of all above- and below-ground structures to 48 inches below grade, the individual disturbed areas will be re-graded to be consistent with surrounding areas and reseeded to promote re-vegetation. The cost for disposal for any materials that are not scrapped is considered incidental, unless otherwise noted.

Decommissioning Budget

The decommissioning process has been broken down in two (2) parts: 1) Disassembly & Removal and 2) Scrap/Salvage Value. The Disassembly & Removal section has been divided into six (6) general work items:

1. Project Management (construction administration, incidentals, contingency, etc.)
2. Site Work/Civil
3. Wind Turbine Foundations
4. Wind Turbine Generators and MET Towers
5. Electrical Substation
6. Electrical Transmission System

The Scrap/Salvage Value Section has also been divided into six (6) general work items:

1. Presumed scrap value of WTGs
2. Presumed value of the WTG Internal Transformers
3. Presumed scrap value of MET Towers
4. Presumed scrap value of the Substation
5. Presumed value of the Substation Transformers
6. Presumed scrap value of the Transmission Line Wiring

Quantities and unit prices for these individual work items are presented and discussed in detail in the following paragraphs.

Disassembly & Removal

1. Project Management

1.1 Mobilization

A. Mobilization and demobilization to setup and breakdown the crane and assist crane is estimated to cost a flat fee of:	\$ 182,400.00
B. Mobilization and demobilization of ancillary equipment (i.e. bulldozers, backhoes, etc.) is estimated to be:	\$ 51,900.00
Total estimate for mobilization is:	\$ 234,300.00

1.2 Project Oversight. Oversight of the decommissioning is estimated at: \$ 312,000.00

1.3 Incidentals. A budget of approximately 5% of the decommissioning scope is recommended for project incidentals: \$ 333,400.00

1.4 Contingency. A contingency of approximately 10% of the decommissioning scope is recommended to cover unknowns: \$ 666,700.00

Total opinion of probable costs for **Project Management**: \$ 1,546,400.00

2. Site Work/Civil (Site Reclamation)

2.1 Turbine Site Rehabilitation

Turbine site rehabilitation includes removing gravel from each turbine site and associated driveway once all other decommissioning activities have been completed (note removal of the turbine foundations are addressed in another section). The cost for removing the turbine area and driveway gravel from the site is estimated based on a gravel depth of 8 inches and a typical driveway width of 16 feet. (Note that additional driveway width required for crane usage consists of existing native material at driveway shoulders; gravel removal is not applicable.)

A. Estimated average gravel quantity per site:		125 cy	
Estimated labor & equipment rate:	\$	20.00 /cy	
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Total gravel removal work for 52 turbines sites:		\$	130,000.00

B. We have assumed that the gravel removed from the turbine site areas will not be transported offsite but be used onsite as fill at toes of slopes or at other locations in need of fill as desired by the property owner. Costs to transport the gravel within the project boundaries, in comparison to other decommissioning costs, are assumed to be negligible. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Cost to transport the turbine area and driveway gravel to facilities for disposal are based on an estimated 15 cy per dump truck, trucked to a location within two (2) hours, one-way.

Total estimated labor & equipment cost:	\$	560.00 /dump truck trip	
Total estimate for gravel transportation costs per site:		\$	5,100.00
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Total estimate for gravel transportation for all 52 turbine sites:		\$	265,200.00

C. The decommissioning plan includes restoring each of the turbine sites and associated driveways. We are assuming that all excavated areas will be brought up to grade and sloped to drain with suitable fill material generated from the re-grading of the turbine site or from off-site sources. The estimated quantity also includes adjacent disturbed crane path driveway width. The estimated cost includes seed and mulch.

Approximate disturbed area:		7,080 SF/turbine site	
Estimated cost per 1000 SF (1 MSF):	\$	40.00 /MSF	
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Total estimated restoration cost for all 52 turbine sites:		\$	14,800.00

D. This re-grading and restoration work is estimated to take a dozer and operator approximately eight (8) hours to complete at each turbine site.

Labor & equipment rate:	\$	220.00 /hour	
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Total re-grading and restoration work for all 52 turbine sites:		\$	91,600.00

Total estimate for rehabilitating all 52 turbine sites is: \$ 501,600.00

2.2 Road Maintenance. Approximately 1% of the \$7.5 million estimated for road construction is recommended to address dust control, road maintenance, and post construction road repairs during decommissioning.

\$ 75,000.00

2.3 Road Rehabilitation.

- A. Prior to rehabilitation of existing access roads, temporary access roads need to be constructed at select intersections to accommodate the large transport vehicles needed during decommissioning.

Estimated quantity of installed gravel:		4,200 cy	
Estimated labor & equipment rate:	\$	31.00 /cy	
Total access road gravel installation work:		\$	130,200.00

- B. Once all other decommissioning activities have been completed, the decommissioning plan includes removing site access roads. The cost for removing the road gravel from the site is estimated based on a typical gravel depth of 8 inches and a typical access road width of 16 feet. Note that additional road width required for crane paths consists of existing native material at access road shoulders; gravel removal is not applicable. Assumed depth values were derived from design plans. Note that gravel removal for temporary access roads and PMT roads (both at 6-inch depths) are included in calculations.

Estimated quantity of removed gravel:		40,000 cy	
Estimated labor & equipment rate:	\$	20.00 /cy	
Total access road gravel removal work:		\$	800,000.00

- C. We have assumed that the gravel removed from the site access roads (including that removed from temporary access and PMT roads) will not be transported offsite but be used onsite as fill at toes of slopes or at other locations in need of fill as desired by the property owner. Costs to transport the gravel within the project boundaries, in comparison to other decommissioning costs, are assumed to be negligible. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Cost to transport the site access road gravel to facilities for disposal are based on an estimated 15 cy per dump truck, trucked to a location within two (2) hours, one-way.

Total estimated labor & equipment cost:	\$	560.00 /dump truck trip	
Total estimate for gravel transportation costs for access roads:		\$	1,494,000.00

- D. Road rehabilitation includes restoring the access road areas. Additionally, we have assumed the crane path areas, disturbed during decommissioning, will be restored as well. Note that restoration for temporary access roads and PMT roads are included in calculations. The estimated cost includes native seed mix and mulch.

Approximate disturbed area:		4,900 MSF	
Estimated cost per 1000 SF (1 MSF):	\$	40.00 /MSF	
Total estimated restoring material cost for access roads:		\$	196,000.00

Total estimate for road rehabilitation is: \$ 2,620,200.00

The total opinion of probable costs for **Site Work/Civil:** \$ **3,196,800.00**

3. Wind Turbine Foundations

3.1 Removal of WTG foundation to 4 FT below grade. Removal of the turbine foundations is assumed to require a hydraulic excavator equipped with hydraulic ram (hoe-ram), an additional excavator with bucket for loading, and various dozers and loaders.

Total estimated labor & equipment cost:	\$	6,600.00 /site	
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Total estimate for WTG foundation removal labor for all 52 turbine sites:	\$		343,200.00

3.2 Transportation of rubble and disposal. Concrete demolition rubble generated at each turbine site is estimated to be approximately 60 cubic yards (based on a removal depth of 4 feet below grade). As it is assumed the steel rebar will be separated from the concrete debris, the rubble essentially becomes an inert material. Therefore, we have assumed that the concrete rubble generated will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. Costs to transport the foundation rubble within the project boundaries, in comparison to other decommissioning costs, are assumed to be negligible. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on an estimated requirement of four (4) dump truck trips for each turbine site and transported to a location within 2 hours (one-way) at an equipment and labor rate of \$140/hr.

Total estimated labor & equipment cost:	\$	560.00 /dump truck trip	
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Total estimate for WTG foundation transportation costs for all 52 turbine sites:	\$		116,500.00

The total opinion of probable costs for removal of WTG Foundations: **\$ 459,700.00**

4. Wind Turbine Generators and MET Towers

4.1 Disassembly of turbine generators:

A. Disassembly costs for the WTGs are based on the assumption that it will take a 10-man crew 20 hours to disassemble each tower and turbine, which is roughly equivalent to the labor effort required for tower and turbine assembly.

Estimated labor rate:	\$	12.00 /man-hour	
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Total estimate for WTG disassembly for all 52 turbines:	\$		124,800.00

B. Based on an assumption that the two cranes (erector and assist cranes) can disassemble two (2) turbines a week, the crane rental is estimated to be 26 weeks. Two (2) weeks are added for wind day delays.

Estimated rental costs for two cranes:	\$	38,400.00 /week	
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Total estimate for WTG disassembly equipment for all 52 turbines:	\$		1,075,200.00

C. Additionally, once the towers and turbines are on the ground, they will need to be cut up into manageable sized pieces in preparation for transportation to scrap, recycle, or disposal facilities. We are assuming it will take a 5-man crew 20 hours to do this work per turbine.

Estimated labor rate:	\$	10.00 /man-hour	
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Total estimate for WTG dismantling for all 52 turbines:	\$		52,000.00

The total estimate for WTG disassembly is: **\$ 1,252,000.00**

4.2 Transportation of turbine components to disposal/reclamation site. Cost to transport the tower and turbine components to facilities for scrap, recycling or disposal are based on an estimated requirement of 10 transport vehicles per turbine site (note: transport of new turbine and tower components to a site generally requires 12 to 14 transport vehicles).

Total estimated labor & equipment cost:	\$	1,500.00 /transport trip	
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Total estimate for turbine component transport for all 52 turbine sites:	\$		780,000.00

4.3 Nacelle housing, blade, and other component disposal. Disposal of the nacelle housing, blades, and other non-scrappable components are based on an estimated 67,300 lbs/turbine. Disposal fees are generally based on weight (in tons).

Total estimated weight of blades and nacelle:		34 tons	
Disposal fee (based on Dickinson area landfill rates):	\$	35.00 /ton	
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Total estimate for nacelle housing and blade disposal for all 52 turbine sites:	\$		61,900.00

4.4 MET Tower disassembly/removal:

A. Disassembly costs for the MET towers are based on the assumption that it will take a 5-man crew 16 hours to disassemble each MET tower.

Estimated labor rate:	\$	12.00 /man-hour	
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Total estimate for MET disassembly labor cost for two (2) towers:	\$		2,000.00

B. Additionally, equipment rental is estimated at approximately 16 hours for each MET tower to assist with the disassembly, partially remove foundations, and reclaim the site.

Total estimated labor & equip. rate:	\$	220.00 /hour	
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Total estimate for MET disassembly equipment cost for two (2) towers:	\$		7,100.00

Total estimate for MET tower disassembly/removal for two (2) towers is: \$ 9,100.00

4.5 Transportation of MET tower components to disposal/reclamation site.

A. Cost to transport the MET tower components to facilities for scrap, recycling or disposal are based on an estimated requirement of one (1) truck trip for each MET tower.

Total estimated labor & equip. cost:	\$	960.00 /trip	
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Total estimate for MET component trucking cost for two (2) towers:	\$		2,000.00

- B. Removal of the MET foundations to 4 FT below grade is assumed to require a hydraulic excavator equipped with hydraulic ram (hoe-ram), an additional excavator with bucket for loading, and various dozers and loaders.

Estimated rubble per site:		3 CY
Labor & equipment cost:	\$	110.00 /CY
Total estimated labor & equipment cost:	\$	330.00 /site
Total estimate for foundation removal for two (2) MET sites:		\$ 700.00

- C. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on three (3) cubic yards of rubble per site for an estimated one (1) dump truck trip for two (2) MET tower sites and transported to a location within 2 hours (one-way) at an equipment and labor rate of \$140/hr.

Total estimated labor & equip. cost:	\$	560.00 /dump truck trip
Total estimate for MET foundation transportation cost for two (2) towers:		\$ 600.00

Total estimate for MET tower disposal for two (2) towers is: \$ 3,300.00

The total opinion of probable costs for **WTGs and MET Tower removal:** \$ **2,106,300.00**

5. Electrical Substation

This section gives a general description of the assumptions made for the demolition costs of this item.

5.1 Disassembly of substation and associated components.

- A. Disassembly costs for the substation is based on the assumption that the labor effort required will be a 5-man crew working for approximately three (3) weeks.

Estimated labor rate:	\$	52.00 /man-hour
Total estimate for substation disassembly:		\$ 31,200.00

- B. The disassembly will require a variety of construction equipment; in lieu of specific equipment rates, our opinion of probable cost includes a weekly rental equipment allowance for the assumed three (3) weeks.

Estimated equipment rental rate:	\$	34,600.00 /week
Total estimate for substation disassembly:		\$ 103,800.00

Total for disassembly of substation and associated components: \$ 135,000.00

5.2 Transport substation components to disposal/reclamation site. Costs to transport the substation components to facilities for scrap, recycling or disposal are based on an estimated one (1) truck trip per day for three (3) weeks totaling 15 truck trips from the substation site.

Estimated labor & equipment costs:	\$	1,100.00 /truck trip	
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Total for transport of substation components to disposal/reclamation site:	\$		16,500.00

5.3 Removal and transportation/disposal of substation foundations and gravel.

A. Removal of the substation foundations to a depth of four (4) feet below grade will require various forms of hydraulic equipment and various dozers and loaders. Estimated foundation rubble volume is based on the assumed foundation dimensions of these facilities.

Estimated foundation rubble volume:		155 cubic yards	
Estimated labor & equipment costs:	\$	110.00 /cubic yard	
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Total estimate for substation foundation removal:	\$		17,100.00

B. We have assumed that the concrete rubble generated from the foundations (while separating rebar as necessary) will not be transported offsite but be used onsite as fill at toes of slopes, for road base or topping material, or at other locations in need of fill as desired by the property owner. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Costs to transport the foundation rubble to disposal are based on 155 cubic yards of rubble, and 15 cubic yards per dump truck trip.

Estimated labor & equipment costs:	\$	560.00 /dump truck trip	
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Total estimate for substation foundation transportation:	\$		6,200.00

C. The plan includes removing the gravel from the substation site once all other decommissioning activities have been completed. The cost for removing the gravel from the site is estimated based on a gravel depth of 12 inches for the substation yard area and 6 inches for the driveway areas.

Estimated total gravel quantity for substation:		2,855 cy	
Estimated labor & equipment rate:	\$	20.00 /cy	
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Total substation gravel removal work:	\$		58,000.00

D. We have assumed that the gravel removed from the substation will not be transported offsite but be used onsite as fill at toes of slopes or at other locations in need of fill as desired by the property owner. Costs to transport the gravel within the project boundaries, in comparison to other decommissioning costs, are assumed to be negligible. However, in the unlikely event the material cannot be used on-site, the material will be transported for offsite use. Cost to transport the gravel to facilities for disposal are based on an estimated 15 cy per dump truck, trucked to a location within two (2) hours, one-way.

Total estimated labor & equipment cost:	\$	560.00 /dump truck trip	
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Total estimate for road transportation costs:	\$		107,000.00

Total for removal and transportation/disposal of substation foundations and gravel: \$ 188,300.00

5.4 Re-grading of substation site:

- A. For the restoration of the substation site, we are assuming that all excavated areas will be brought up to grade and sloped to drain with suitable fill material generated from the re-grading of the site or from off-site sources; associated driveways will also be restored. The estimated cost includes seed and mulch.

Approximate disturbed area:		83,525 SF/substation site
Estimated cost per 1000 SF (1 MSF):	\$	40.00 /MSF
Total estimated re-grading material cost for substation:		\$ 3,400.00

- B. This re-grading and restoration work is estimated to take a dozer and operator approximately 5 days to complete.

Labor & equipment rate:	\$	220.00 /hour
Total re-grading and restoration work for substation:		\$ 8,800.00

Total estimate for re-grading substation site is: \$ 12,200.00

Total opinion of probable costs for Electrical Project Substation removal: \$ 352,000.00

6. Electrical Transmission System

6.1 Disassembly of overhead Transmission lines and associated components:

- A. Disassembly and spooling costs for the overhead Transmission lines and associated components are based on the assumption that the labor effort required will be a 3-man crew working four (4) hours per 1,000 feet of overhead wire.

Estimated total system length of lines:		310 feet
Estimated labor rate:	\$	52.00 /man-hour
Total estimate for overhead Transmission lines disassembly:		\$ 1,300.00

- B. Equipment rates are estimated at the following rate for approximately 1 day.

Estimated equipment rates:	\$	1,800.00 /day
Total estimate for overhead Transmission lines disassembly:		\$ 1,800.00

- C. Wood pole removal and filling of remaining hole is based on the following approximate quantities:

Amount of wood poles:		1 each
Removal labor and equipment costs:	\$	170.00 /pole
Total estimate for Transmission Line wood pole removal:		\$ 200.00

Total for disassembly of overhead Transmission lines: \$ 3,300.00

6.2 Transportation of Transmission lines and associated components

- A. The cost to transport the Transmission line and associated components to facilities for scrap, recycling or disposal is based on the number of spools required per collector line sizes and lengths for the project, and a capacity of eight (8) spools per truck.

Estimated spools of collector line:		2 each	
Estimated labor & equipment cost:	\$	1,500.00	/truck trip
Total estimate for Transmission lines transportation:		\$	1,500.00

- B. Wood pole removal will be transported at a rate of 30 poles per logging truck. It is assumed that poles will be sold or given away.

Amount of poles:		1 each	
Estimated labor & equipment costs:	\$	1,100.00	/truck trip
Total estimate for overhead Transmission line pole removal:		\$	1,100.00

Total for transportation of Transmission line and associated components: \$ 2,600.00

Total opinion of probable costs for **Electrical Transmission System removal:** \$ 5,900.00

Disassembly and Removal Summary

The total opinion of probable disassembly and removal costs from summing the items above: \$ 7,667,100.00

Scrap / Salvage Value

For the purposes of this decommissioning plan, we have assumed that transformers would be sold for reuse and all other scrapable metal materials from the project decommissioning would be sold as scrap to a recycling yard in the Hebron, North Dakota area. The presumed scrap / salvage values are based on the following conservative estimates:

- 1. Presumed scrap value of WTGs.** In estimating the scrap value of the WTGs, the following component weight estimates were used (all weights are in pounds). No scrap value was assumed for the blades or nacelle shell.

Base section	108,270	Hub & nose cone	41,090
Mid section	113,560	Nacelle	138,250
Top section	76,950		

Total estimated weight for each WTG: 478,120 lbs

Current prices for #1 steel scrap in the Hebron, North Dakota area:

#1 steel \$ 49.00 /ton

[(478,120 lbs / 2,000 lbs per ton) x \$49 per ton x 52 Turbines = approx. \$609,200]

Total opinion of **presumed scrap value for all 52 WTGs:** \$ 609,200.00

- 2. Presumed value of the internal transformers.** The cost of an internal transformer is assumed to be 85% of the cost of an equivalent external pad mounted transformer. Based on an estimated cost of \$48,000 for external transformers, this equates to about \$40,000. Based on our research, typical transformers have a life expectancy of 50 years. Therefore, at 20 years a transformer could have a value of approximately 50% of its original cost. However, to be conservative, we have estimated the value of the internal transformers at 10% of the original transformer cost:

Estimated original cost for internal transformers: \$ 40,000.00 each

Estimated value (10%): \$ 4,000.00 each

Total opinion of **presumed value for all 52 internal transformers:** \$ 208,000.00

- 3. Presumed scrap value of the MET towers.** In estimating the scrap value of the MET towers, the following component weight and steel scrap values were used:

MET tower component weight: 11,180 lbs

Average steel scrap value: \$ 49.00 /ton

Total opinion of **presumed scrap value of two (2) MET towers:** \$ 600.00

4. **Presumed scrap value of Project Substation.** Based on our research, typical substation components have a life expectancy of 50 years. Therefore, at 20 years the substation could have a value of approximately 50% of its original cost. However, to be very conservative, we have estimated the substation scrap value at 2% of the total original cost:

Original substation construction estimate, less the transformers:	\$	3,615,000.00
Estimated substation scrap value (2%):	\$	72,300.00

Total opinion of **presumed scrap value of the Project Substation:** \$ 72,300.00

5. **Presumed value of Project Substation Transformer(s).** Based on our research, typical transformers have a life expectancy of 50 years. Therefore, at 20 years a transformer(s) could have a value of approximately 50% of its original cost. However, to be conservative, we have estimated the value of the substation transformer(s) at 10% of the original transformer cost:

Original substation transformer(s) cost:	\$	1,772,000.00
Estimated value (10%):	\$	177,200.00

Total opinion of **presumed value of the Project Substation Transformer(s):** \$ 177,200.00

6. **Electrical Transmission wiring scrap value.** Quantities of overhead wire and wire sizes and lengths are based on electrical drawings prepared by Ultieg and information provided by Solas and used as a basis for estimated scrapable metal amounts. Overhead wiring consists of aluminum (steel reinforced) conductors.

Estimated linear feet of wiring:	930 ft
Estimated weight of scrapable aluminum:	0.5 tons

Current price for aluminum scrap at Hebron, North Dakota area:	\$	240.00 /ton
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Total opinion of **presumed scrap value of the overhead Transmission wiring:** \$ 120.00

Scrap / Salvage Value Summary

The total opinion of probable scrap / salvage value from summing the items above: \$ 1,067,420.00

Decommissioning Summary

Disassembly & Removal

	Subtotal	Total
1 Project Management	\$ 1,546,400.00	
2 Site Work/Civil (site reclamation)	\$ 3,196,800.00	
3 Wind Turbine Foundations	\$ 459,700.00	
4 Wind Turbine Generators and MET Towers	\$ 2,106,300.00	
5 Electrical Substation	\$ 352,000.00	
6 Electrical Transmission System	\$ 5,900.00	
	\$ 7,667,100.00	\$ 7,667,100.00

Disassembly & Removal Total \$ 7,667,100.00

Scrap/Salvage Value

	Subtotal	Total
1 Presumed scrap value of WTGs	\$ 609,200.00	
2 Presumed value of the WTG Internal Transformers	\$ 208,000.00	
3 Presumed scrap value of MET Towers	\$ 600.00	
4 Presumed scrap value of the Substation	\$ 72,300.00	
5 Presumed value of the Substation Transformers	\$ 177,200.00	
6 Presumed scrap value of the Transmission Line Wiring	\$ 120.00	
	\$ 1,067,420.00	\$ 1,067,420.00

Scrap/Salvage Value Total \$ 1,067,420.00

The total opinion of probable Disassembly & Removal costs is: \$ 7,667,100.00

The total opinion of probable Scrap/Salvage Value is: \$ 1,067,420.00

The net estimated opinion of probable cost for decommissioning is: **\$ 6,599,680.00**

Decommissioning Summary - Stark County

As requested, additional summary sheets have been prepared to show the approximate cost of decommissioning within each Stark and Morton Counties; it is assumed that decommissioning in these counties will occur simultaneously.

Disassembly & Removal	Subtotal	Total
1 Project Management	\$ 272,000.00	
2 Site Work/Civil (site reclamation)	\$ 538,200.00	
3 Wind Turbine Foundations	\$ 88,400.00	
4 Wind Turbine Generators and MET Towers	\$ 408,900.00	
5 Electrical Substation	\$0.00	
6 Electrical Transmission System	\$0.00	
	\$ 1,307,500.00	
 Disassembly & Removal Total		 \$ 1,307,500.00
Scrap/Salvage Value	Subtotal	Total
1 Presumed scrap value of WTGs	\$ 117,200.00	
2 Presumed value of the WTG Internal Transformers	\$ 40,000.00	
3 Presumed scrap value of MET Towers	\$ 300.00	
4 Presumed scrap value of the Substation	\$0.00	
5 Presumed value of the Substation Transformers	\$0.00	
6 Presumed scrap value of the Transmission Line Wiring	\$0.00	
	\$ 157,500.00	
 Scrap/Salvage Value Total		 \$ 157,500.00
The total opinion of probable Disassembly & Removal costs is:	\$ 1,307,500.00	
The total opinion of probable Scrap/Salvage Value is:	\$ 157,500.00	
The net estimated opinion of probable cost for decommissioning in Stark County is:		\$ 1,150,000.00

Decommissioning Summary - Morton County

As requested, additional summary sheets have been prepared to show the approximate cost of decommissioning within each Stark and Morton Counties; it is assumed that decommissioning in these counties will occur simultaneously.

Disassembly & Removal	Subtotal	Total
1 Project Management	\$ 1,274,400.00	
2 Site Work/Civil (site reclamation)	\$ 2,658,600.00	
3 Wind Turbine Foundations	\$ 371,300.00	
4 Wind Turbine Generators and MET Towers	\$ 1,697,400.00	
5 Electrical Substation	\$ 352,000.00	
6 Electrical Transmission System	\$ 5,900.00	
	\$ 6,359,600.00	

Disassembly & Removal Total \$ 6,359,600.00

Scrap/Salvage Value	Subtotal	Total
1 Presumed scrap value of WTGs	\$ 492,000.00	
2 Presumed value of the WTG Internal Transformers	\$ 168,000.00	
3 Presumed scrap value of MET Towers	\$ 300.00	
4 Presumed scrap value of the Substation	\$ 72,300.00	
5 Presumed value of the Substation Transformers	\$ 177,200.00	
6 Presumed scrap value of the Transmission Line Wiring	\$ 120.00	
	\$ 909,920.00	

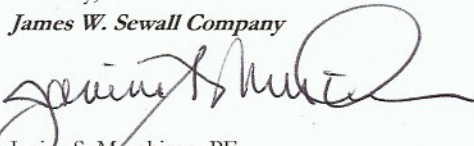
Scrap/Salvage Value Total \$ 909,920.00

The total opinion of probable Disassembly & Removal costs is: \$ 6,359,600.00
 The total opinion of probable Scrap/Salvage Value is: \$ 909,920.00

The net estimated opinion of probable cost for decommissioning in Morton County is: \$ 5,449,680.00

Please do not hesitate to contact us with any questions regarding the information contained in this report. We appreciate the opportunity to work with you on this project.

Sincerely,
James W. Sewall Company



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 Project Manager
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