

A DECOMMISSIONING PLAN FOR

Elm Creek II Wind

Jackson and Martin Counties, Minnesota

MARCH 21, 2025

PUC DOCKET NO. IP-6728/WS-09-553

EDOCKET ID: 20102-47467-01 (ORIGINAL SITE PERMIT)

PREPARED FOR:



PREPARED BY:

Westwood

Table of Contents

1.0	INTRODUCTION	1
1.1	FACILITY DESCRIPTION	1
1.2	DECOMMISSIONING PLAN REVIEW	2
2.0	DECOMMISSIONING OBJECTIVE	2
3.0	USE OF GENERATION OUTPUT	3
4.0	PROPOSED FUTURE LAND USE	3
5.0	NOTIFICATION	3
6.0	DECOMMISSIONING TASKS AND TIMING	3
6.1	DECOMMISSIONING	5
6.2	RECLAMATION	7
6.3	COMPONENT DISPOSAL	8
7.0	PERMITTING	9
8.0	DECOMMISSIONING SCHEDULE	9
9.0	UPDATES TO DECOMMISSIONING PLAN	10
10.0	DECOMMISSIONING COSTS	10
11.0	FINANCIAL ASSURANCE	11

Appendix A: Site Map

Appendix B: Decommissioning Cost Estiamte

1.0 INTRODUCTION

The Elm Creek II Wind Facility (the “Facility”) is an existing wind power generation project owned and operated by Elm Creek Wind II, LLC, a subsidiary of Avangrid Renewables, LLC (“Elm Creek II Wind” or “Permittee”¹) in Jackson and Martin Counties, Minnesota. Elm Creek II Wind initially received a Large Wind Energy Conversion System (LWECS) Site Permit (the “Site Permit”) from the Minnesota Public Utilities Commission (the “Commission” or “PUC”) on February 25, 2010 (PUC Docket No. IP-6728/WS-09-553). The Facility was constructed and reached commercial operation on December 29, 2010. Elm Creek II Wind is proposing to repower the Facility in 2026 under a Site Permit Amendment per Minnesota Rules Chapter 7854.1300. This Decommissioning Plan (“Plan”) has been updated in compliance with Minnesota Rule 7854.0500, subp. 13 to reflect the repowered Facility. Construction is anticipated to begin in the second quarter of 2026 construction with a commercial operation date in the fourth quarter of 2026.

The table below summarizes the Site Orders for the project:

Site Orders - Docket 09-553	Date	Link
Original Site Order	February 25, 2010	20102-47467-01
Erratum Notice	March 8, 2010	20103-47809-01
Amended Site Order	March 14, 2011	20113-60335-01

Decommissioning Plans previously submitted for this project are summarized below:

Decom Plan – Docket 09-553	Date	Link
Initial Application Filing	May 19, 2009	20095-37644-02
Decommissioning Plan	May 7, 2010	20105-50196-01
Decommissioning Plan Update	September 29, 2021	20219-178348-02
Decommissioning Plan Update	November 19, 2021	202111-180241-02

1.1 FACILITY DESCRIPTION

The Facility within Jackson County is located on approximately 5,000 acres of leased land and includes the permanent facilities of 45 turbines with an 85.2-meter hub height (which were increased from the original height of 80 meters during repower activities using adapters), 9.0 miles

¹ “Permittee” refers to any operator, subsequent owner, or transferee of the Facility.

of access roads, a met tower, an aircraft detection lighting system (ADLS), an O&M Facility, and 12.8 miles of underground and 2.0 miles overhead 34.5-kilovolt (“kV”) collection lines.

The Facility within Martin County is located on approximately 3,000 acres of leased land and includes the permanent facilities of 17 turbines with an 85.2-meter hub height (increased from original height of 80 meters during repower activities), 3.7 miles of access roads, 4.0 miles of underground and 12.6 miles of overhead 34.5-kV collection lines, and a 34.5- to 345-kV Project substation shared with Trimont Wind I LLC and Elm Creek Wind, LLC. A project summary of the repowered Facility is provided below. See Appendix A: Site Map to review the location of project components for Elm Creek II Wind Facility.

- Commercial Operation Date: December 2010 (original), December 31, 2026 (repower)
- Site Permit Expiration: December 31, 2040 (original), December 31, 2056 (repower)
- Project Ownership: Elm Creek Wind II, LLC, a subsidiary of Avangrid Renewables, LLC
- Location: Jackson and Martin Counties, MN
- Turbine Type: 62 Vestas V120-2.2MW with serrated trailing edge technology
- Number of Turbines: 62
- Generation Capacity: 136.4 MW
- Amended Site Permit Boundary: 30,432 acres
- Collection Lines: 16.8 miles of underground and 14.6 miles of aboveground
- Access Roads: 12.7 miles

1.2 DECOMMISSIONING PLAN REVIEW

The initial decommissioning plan (eDocket ID: 20105-50196-01) for the Facility was submitted prior to construction per the Site Permit (III.G.1). As part of the Commission’s investigation into Solar and Wind Decommissioning Plans (Docket Number E999/M-17-123), the Minnesota Department of Commerce Energy Environmental Review and Analysis (EERA) staff proposed a five-year review schedule for decommissioning plans to determine the accuracy of decommissioning costs and make any necessary adjustments to the guaranty. Elm Creek II Wind filed an updated decommissioning plans in September 2021 ([20219-178348-02](#)) and November 2021 ([202111-180241-02](#)).

Elm Creek II Wind has filed this draft Plan as part of the Site Permit Amendment required for the repower. A final Plan will be filed prior to the start of construction in 2026. The next scheduled update to the Plan is anticipated to be in 2031.

2.0 DECOMMISSIONING OBJECTIVE

Upon expiration of the amended Site Permit, or in the event that the Project, or any specific turbine, ceases operation for a period of one year, the Site Permit requires Elm Creek Wind II to remove towers and other project elements and restore the site to its pre-project condition to the

extent possible. The purpose of this Plan is to document the anticipated life of the Project, the probable cost to decommission the Project in current dollars, methods and schedule for updating the costs of decommissioning and restoration, the method of ensuring that funds will be available for decommissioning and restoration, and the anticipated manner in which the Project will be decommissioned, in accordance with the requirements of Minn. Rules part 7854.0500, subp. 13.

3.0 USE OF GENERATION OUTPUT

The Facility does not currently have an existing Power Purchase Agreement (“PPA”) in place and sells electrical output directly into the MISO market. Elm Creek II Wind is pursuing a PPA for the output from the repowered Facility. If a PPA is not achieved in the near term, Elm Creek II Wind will be able to sell energy generated into the MISO market and related products, such as renewable energy credits, to other customers until a long-term PPA is executed.

4.0 PROPOSED FUTURE LAND USE

Prior to the development of the Facility, the land use in the areas affected by the development was primarily agricultural land planted with row crops. The land was developed into the original Elm Creek II Facility in 2010. Since then, it has operated continuously as a wind farm with ongoing agricultural operations in the areas around the Facility components. After affected areas are decommissioned, these areas will be restored to pre-construction conditions of agricultural land to the extent practicable.

5.0 NOTIFICATION

Elm Creek Wind II anticipates operating the Project for 30 years after the repowered commercial operation date which will be reflected on the amended Site Permit. At the end of the anticipated operation, Elm Creek Wind II will be responsible for removing the wind power facilities as described in this Plan; however, Elm Creek Wind II reserves the right to continue to operate the Project, instead of decommissioning, by applying for an extension of required permits. Should Elm Creek Wind II decide to continue operations, a decision may be made on whether to continue operation with existing equipment or to repower the turbines and power system with upgrades based on newer technologies.

After the Facility has reached the end of its operational life, and prior to the start of decommissioning activities, the Permittee will notify the Commission, landowners, affected parties, counties, and other local units of government in writing, of the intended decommissioning activities and schedule.

6.0 DECOMMISSIONING TASKS AND TIMING

The repowered Project turbines will consist of 62 Vestas V120 2.2-MW wind turbine nacelles. The original turbine towers had a hub height of 80 meters; the hub height was increased to 85.2 meters during repower with the installation of an adapter plate. This Plan includes the removal/dis-

position of the wind turbine towers, the wind turbine generators, wind turbine foundations, transformers, underground and overhead collection lines, Project substation, operations & maintenance building, access roads, staging areas, and debris generated by deconstruction crews.

Decommissioning includes several phases and activities such as:

- Application of necessary sediment and erosion controls during and following decommissioning;
- Removal of above-ground components (turbines, transformers, met tower, ADLS tower, operations & maintenance building, unless requested by landowner to be left in place);
- Removal of turbine, transformer, met tower, ADLS tower, and substation foundations to a depth of four (4) feet;
- Removal of the underground collection system and fiber optic cables to a depth of four (4) feet;
- Removal of overhead collection system;
- Removal of access roads (unless the landowners request the roads to remain) and crane paths;
- Restoration of access roads, including decompaction;
- Reclamation, re-grading, and restoration of disturbed areas including topsoil reapplication and decompaction of soils; and
- Repair of public roads and culverts to pre-decommissioning construction conditions.

During decommissioning, participating landowners will be consulted to determine the scope and extent of reclamation work to be completed on their land. Some Facility infrastructure such as the access roads or the O&M facility may be left in place at the landowners' requests. Underground utility lines deeper than four (4) feet below ground will be left in place to minimize land disturbance and associated impacts to future agricultural land use. Any agreement for removal of project infrastructure to a depth of less than four (4) feet, or no removal, will be recorded with the county and will show the locations of all such foundations.

Decommissioning will include the removal and transportation of all turbine components and debris from the Facility site. Decommissioning will also include the removal of cabling, electrical components, access roads, and any other associated facilities in the manner described in the Plan unless otherwise agreed upon by Elm Creek Wind II and the applicable landowner. All dismantling, removal, recycling, and disposal of materials generated during decommissioning will comply with rules, regulations, and prevailing laws at the time decommissioning is initiated and will use approved local or regional disposal or recycling sites as available. Recyclable materials will be recycled to the extent practicable. Non-recyclable materials will be disposed of in accordance with state and federal law.

There are no known hazardous materials in the Facility, except for the oil in the transformers, gearboxes, and hydraulic fluids and grease in some mechanical components. During decommissioning, current regulations for identifying, handling, and disposing of hazardous materials will be followed.

6.1 DECOMMISSIONING

Public Road Modifications and Removal

Temporary turning radius modifications are not expected to be needed for decommissioning as the turbine components will be cut into pieces manageable for hauling to be transported to a recycling facility. Transportation of the turbine components off-site will be accomplished using conventional over-the-road trucks. After all hauling activities are complete the public roads will be restored to the pre-decommissioning condition in coordination with local road authorities.

Crane Path and Crane Pad Preparation and Removal

This cost estimate is based on the felling of all turbines, which eliminates the need for large industrial cranes, and the associated crane paths and crane pads.

Wind Turbine Felling

This cost estimate assumes the technique of “felling” will be used to bring the turbine components to the ground for disassembly and processing for recycling. Felling of turbines eliminates the use of crane paths and crane pads that are otherwise necessary to disassemble the components of a turbine. In addition to the costs associated with preparing crane paths and pads, this method will reduce the total disturbed area that needs to be reclaimed and restored during the decommissioning process, as well as the amount of crop loss. The elimination of the use of large cranes also reduces the number of trucks delivering and removing equipment and reduces the time required for decommissioning. Felling consists of disconnecting electrical connections and draining oil, hydraulic fluid, and any other liquids from the turbine. A long cable is attached to the nacelle, and to a piece of heavy equipment, such as a bulldozer, positioned on the access road. Wedge-shaped areas are then cut out of the tower steel using cutting torches to create a hinge that will direct the turbine to fall on, or next to, the access road when pulled by the dozer. Felled components will then be processed on site to sizes meeting recycling requirements of the scrap metal recycler. The processed components will then be loaded onto trucks and hauled for recycling.

Wind Turbine Removal

Each turbine consists of three (3) steel tower segments, nacelle, rotor and hub assembly, and three blades. The components will be processed on-site, or at an off-site location, into sizes that conform to scrap metal recycling requirements. The materials can then be sold for scrap material value and recycled. The tower sections, in particular, represent a substantial amount of high quality steel materials. The processed scrap materials will be loaded on tractor-trailers and removed from the site to a prearranged receiving location, or directly to a recycling or disposal facility. If the components are resold, the individual components will be loaded onto turbine transport vehicles similar to the vehicles originally used to deliver the turbine parts. This Plan assumes that the carbon fiber turbine blades will be hauled for recycling.

Turbine Foundation Removal and Restoration

Turbine foundations are fabricated of concrete and rebar. Topsoil and aggregate from the area surrounding the foundations will be stripped, segregated, and stockpiled near the work site for

reapplication during restoration. The turbine foundation will be exposed using backhoes, bulldozers, or other earth moving equipment. The pedestal (upper part of the turbine foundation) will be removed to a depth of four (4) feet below the final ground surface. Demolition of mass concrete is generally accomplished using hydraulic hammers mounted on a backhoe or similar equipment (hoe ram), or by the use of expansive chemicals placed in holes drilled in the concrete. Concrete and rebar will be broken into manageable-sized pieces and loaded into dump trucks to be hauled off-site for recycling as aggregate or disposal.

Following the removal of turbines and foundation pedestals to a depth of four (4) feet below the final ground surface, the resulting voids will be backfilled with clean native subsoils and compacted to a density similar to surrounding subsoils (typically approximately 90% of the fill material's standard Proctor density). Topsoil will then be reapplied to the site and graded to blend with the surrounding grade and preserve pre-existing drainage patterns. The soil and topsoil will be de-compacted and restored to a tillable agriculture ready condition similar to the pre-construction condition. If necessary, the site will be temporarily or permanently re-vegetated, depending upon location, time of year, and anticipated post-decommissioning land use. Elm Creek Wind II will restore drainage in the area to pre-deconstruction conditions, to the extent possible, and will be responsible for repairing drain tile damage that was necessary as a result of decommissioning.

Access Road Removal and Restoration

Access roads will be removed or left in place based on the individual landowner's request. An affected landowner may request that one or more access roads, or portions thereof, be retained. If that is the case, then any agreement for no removal shall be recorded with the county and shall show the locations of all such infrastructure. Removal of access roads will entail the removal of the road base aggregate and any other materials used for constructing the roads. During removal, the topsoil adjacent to both sides of the roads will be stripped and stockpiled in a windrow paralleling the road. The road base materials will then be removed by bulldozers and wheeled loaders, or backhoes, and hauled off-site in dump trucks to be recycled or disposed of at an off-site facility. On-site processing may allow much of the aggregate to be re-used to improve public roads. The decommissioning contractor will also likely seek disposal opportunities for clean fill from nearby landowners to reduce hauling and disposal costs. The road aggregate may also be disposed of at a nearby landfill and used as "daily cover" at no cost. If geotextile fabric was utilized under the aggregate base, it will be removed and disposed of in a landfill off-site. The access road removal will proceed from the turbine area to the public roads to limit tracking and provide a stable access during removal. Following removal, topsoil will be reapplied and graded to blend with surrounding contours to promote pre-construction drainage patterns. The soil and topsoil will then be decompact and restored to pre-construction tillable condition.

Underground and Overhead Electrical Collection Lines

The electrical cables and fiber optic cables are typically installed at a minimum depth of 4 feet and contain no material known to be harmful to the environment. The only locations where the cables are less than 4 feet deep are where cables enter pad-mounted transformers and junction boxes.

Accordingly, the majority of underground cables will be left in place, non-functional. Any cable at a depth of less than four (4) feet will be removed.

It is anticipated that approximately 720 feet of cable will be removed from 62 pad-mounted transformer locations and 10 junction box locations. Following cable, junction box, and route marker removals, disturbed areas will be restored by the restoration methods described above for access roads, including the reapplication of topsoil to match the surrounding grade and preserve pre-existing drainage patterns to the extent practicable. Elm Creek Wind II will provide to the landowners an as-built drawing of locations where underground collection cables were left in place at the time of decommissioning. Overhead collection line conductors will be disconnected and removed from the Project and taken to a recycling facility. The poles will be felled within the collection line right-of-way and any hardware, bracing, attachments will be transported along with the poles to a recycling facility. Removed pole locations will then be filled with soil and topsoil, graded to match contours and revegetated.

Substation

The Project substation is located south of 200th Street and west of 20th Avenue in Cedar Township in Martin County. The point of interconnection is at Great River Energy's existing substation located in Cedar Township in Martin County, 400 feet south of the Project substation. The cost for removal of the Project substation is not included in this estimate since it is shared with Trimont Wind I LLC and Elm Creek Wind, LLC.

Operations and Maintenance Facility (O&M)

Decommissioning of the O&M Building includes demolition of the building structure, foundation, rock base parking lot, water well, septic system, and associated vegetated / stormwater treatment facilities. The well will be sealed by a Minnesota Department of Health (MDH) licensed well contractor. All associated materials will be removed from the site using backhoes, bulldozers and hauled off-site in dump trucks. All materials which can be recycled will be brought to appropriate facilities and sold; the remaining materials will be disposed of at an approved landfill facility. Topsoil will be reapplied at the site and graded to match the surrounding grade to maintain existing drainage patterns. The topsoil will be de-compacted and tilled to a condition to be revegetated. If the Landowner wishes to retain the O&M building, it can be left in place and ownership transferred.

6.2 RECLAMATION

In addition to the reclamation activities described above for each decommissioning activity, all unexcavated areas compacted by equipment and activity during the decommissioning will be de-compacted to a depth of 18 inches. All materials and debris associated with the Facility decommissioning will be removed and properly recycled or disposed of at off-site facilities.

As necessary, the topsoil will be stripped and isolated prior to the removal of structures and facilities for reapplication to promote future land use activities. The topsoil will be reapplied following backfill, as necessary, and graded to blend with adjacent contours to maintain pre-construction

drainage patterns. The topsoil reapplied will be free from rocks larger than four inches and will not contain debris from decommissioning. Decompaction of the soil and topsoil will be done to a depth of 18 inches. Reasonable efforts will be made to restore disturbed areas to match existing undisturbed elevations and contours, to the extent feasible. Rutted land will be restored to match the grade of the adjacent area. Additionally, soil conservation practices (terraces, grassed waterways, etc.) that are damaged by deconstruction will be repaired.

During decommissioning, erosion, and sediment control Best Management Practices (BMPs) (silt fence, mulch, hydro-mulch, or erosion control blanket) will be implemented to minimize the potential for sedimentation of surface waters and waters of the state. Because virtually all of the project area is currently used to grow crops, exposed soil is a common condition, and only minor erosion and sediment control are expected.

6.3 COMPONENT DISPOSAL

Project components removed from the Project site will be resold, reused, recycled, or scrapped to the greatest extent possible. Specific disposal or recycling facilities cited in this Plan represent those that are operational at the time the Plan was prepared. The selected disposal and recycling facilities will be reviewed during future updates to the Plan.

- Metal components will be processed to size, sorted, and hauled to a recycling facility (Pooley's Scrap Iron & Metal, Fairmont, MN, approximately 34 miles from the Project site) to be processed as scrap. This includes:
 - Steel components, including the steel turbine components, chain-link fencing, steel transmission poles, steel transmission cables, structural steel from the substation and switchyard, steel from the O&M Facility, and smaller components from recycled equipment.
 - Underground and overhead collection, transmission, and grounding cables, typically composed of aluminum and copper.
 - Copper windings from transformers and the copper ground grid from the substation.
- Other electrical equipment may be assessed for its condition and either sold for reuse or scrapped from its components.
- Fluids, such as transformer oils, will be drained and shipped off-site to an approved recycling facility.
- Concrete will be hauled to Valley Demo & Recycling, LLC in New Ulm, MN, approximately 63 miles from the site. Concrete will be crushed and rebar or other metals will be separated out for recycling. The remaining concrete can be processed into aggregate for reuse as a building material again in the future.
- If possible, clean gravel removed from the site may be re-used to improve public roads or used by local landowners to improve driveways or be used as clean fill. For the purposes of this cost estimate, it's assumed that the gravel will be hauled to Valley Demo & Recycling, LLC in New Ulm, MN, where it will be accepted at no charge.

Project components that are not recyclable may include items composed of mixed materials, certain plastic components, materials that have been contaminated, and certain general municipal wastes. For the purposes of this Plan, it is assumed that the materials that cannot be disposed of as construction and demolition debris at Valley Demo & Recycling, LLC will be hauled to Cottonwood County Sanitary Landfill located in Windom, MN, approximately 22 miles from the site.

7.0 PERMITTING

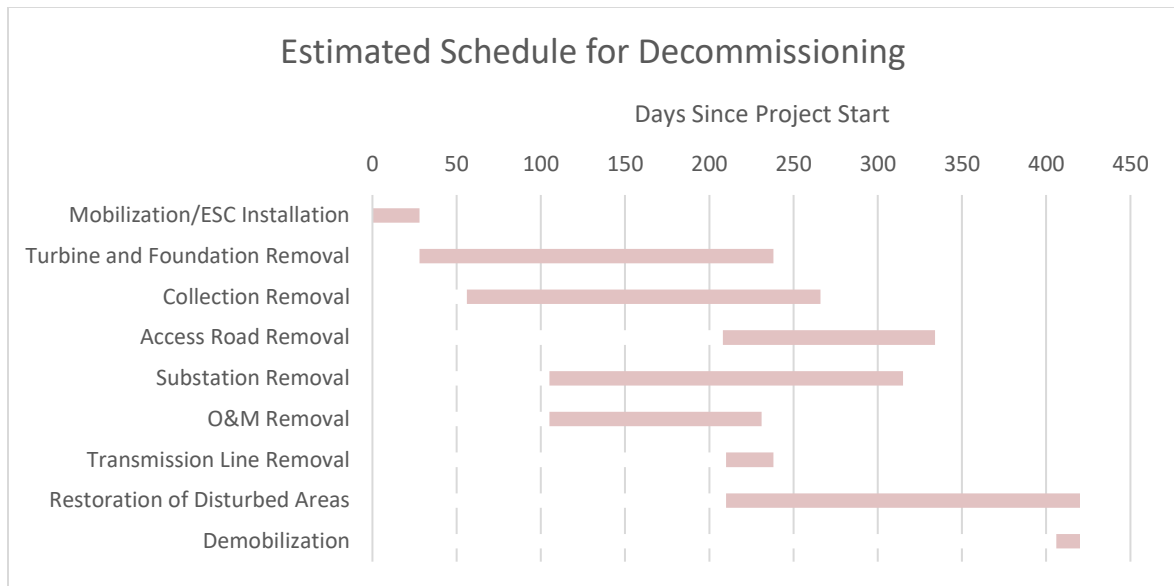
All decommissioning and restoration activities will comply with federal, state, and local permit requirements. The following permits may be required for construction of the project.

Permit/Regulatory Program	Documentation/Notes
NPDES/SDS Construction Stormwater General Permit	Required for projects that disturb >1 acre of soil. A Stormwater Pollution Prevention Plan (SWPPP) must be prepared prior to receiving permit authorization.
United States Army Corps of Engineering (USACE)/Minnesota Department of Natural Resources (DNR)/Local Government Unity (LGU) for Minnesota Wetland Conservation Act (WCA)	Wetlands and waters permits may be required depending on potential impacts to surface waters and wetlands.
United States Environmental Protection Agency (USEPA)	A Spill Pollution, Control, and Countermeasure (SPCC) Plan will be required if aboveground oil storage at the Project exceeds 1,320 gallons.
Minnesota Pollution Control Agency (MPCA)/Jackson and Martin County Health Departments	Subsurface Sewage Treatment System Abandonment Documentation, required to be submitted within 90 days of removal of a septic system.
Minnesota Department of Health (MDH)	Well Disclosure Certificate required if number and status of wells within the facility changes since filing of last Certificate.

8.0 DECOMMISSIONING SCHEDULE

It is anticipated that the decommissioning activities for the Project are likely to be completed in a 60-week period. The estimated costs for decommissioning are tied to assumptions about the amount of equipment mobilized, the crew sizes, weather and climate conditions, and the productivity of the equipment and crews. Because relatively fewer utility-scale wind farms have been fully decommissioned to date, and most that have been decommissioned have been repowered, there is limited historical data for durations available for some of the activities that can be applied directly.

An example sequence and schedule for decommissioning activities is shown below. This schedule is subject to change based on evolving construction processes, market conditions, labor availability, field and weather conditions, and other unforeseen circumstances.



9.0 UPDATES TO DECOMMISSIONING PLAN

The Decommissioning Plan will be reassessed, revised, and filed with the Commission and Jackson and Martin County Boards every five years, as shown in the table in Section 11.0. It will also be revised and refiled any time there is a change in ownership or there are permit amendments. Each revised plan will reflect advancements in construction techniques, reclamation equipment, and decommissioning standards and updated information on permits. The decommissioning cost estimate will also be reassessed and revised to reflect any identified changes in the costs. The amount of the Financial Assurance will be adjusted accordingly to offset any increases or decreases in decommissioning costs and salvage values determined during each plan reassessment.

10.0 DECOMMISSIONING COSTS

A detailed cost estimate is included as Appendix B and was prepared (1) in current dollars; (2) with the salvage value of equipment or materials calculated separately. The estimate includes: (i) an analysis of the physical activities necessary to implement the approved reclamation plan, with physical construction and demolition costs based on applicable Minnesota Department of Transportation unit bid prices and RS Means material and labor cost indices; (ii) the level of effort or number of crews required to perform each of the activities; and (iii) an amount to cover contingencies above the calculated cost. The estimate is shown on a total cost and a per-turbine basis. The decommissioning plan and cost estimate will be revised periodically.

Cost and quantities for the Facility are based on as-built data provided by the client, and turbine component weights that were not readily available were estimated based on similar models.

The wind turbine components will be separated and recycled as scrap. The estimate uses a current structural steel scrap price of \$300 per ton, in the Midwest, based on prices posted on scrapmonster.com, November 2024. The posted prices are three months old. Scrap metal prices are very

volatile. Electrical transformers have significant value for aluminum or copper used in the windings and the steel used in other parts of the transformer. Newer transformers can be resold. Older transformers are recycled as scrap. Few companies accept used transformers for resale or recycling so finding pricing is difficult. For this estimate we used pricing posted scrapmonster.com of \$0.41 per pound for used transformers.

Spot prices for insulated copper wire (85% recovery) are \$1.57 per pound, scrap electrical motors are \$0.43 per pound, and E.C. aluminum wire is \$1.104 per pound. The posted spot prices were discounted by twenty-five percent (25%) to reflect the difficulty of realizing spot prices from local recyclers.

As noted in Section 9.0, this Plan and cost estimate will be updated every five years. An engineering evaluation of the current construction techniques and equipment used for decommissioning will be performed and the cost estimate will be revised to reflect any changes in productivity resulting from new techniques and equipment. Current unit prices from industry-recognized sources, such as RS Means, will be used to compute the revised costs. The markets for scrap materials – steel, copper, aluminum, transformer oil, etc. – will be investigated, and the salvage value of materials will be recomputed.

The total cost of the decommissioning of the Elm Creek Wind II Project is approximately \$12,190,910 (\$196,700 per turbine) including a ten percent (10%) contingency on the demolition costs. The salvage/scrap value of the turbines, transformers, and other materials is approximately \$3,971,000, or \$64,100 per turbine. Including salvage values the net cost is approximately \$8,220,000, or \$132,600 per turbine.

11.0 FINANCIAL ASSURANCE

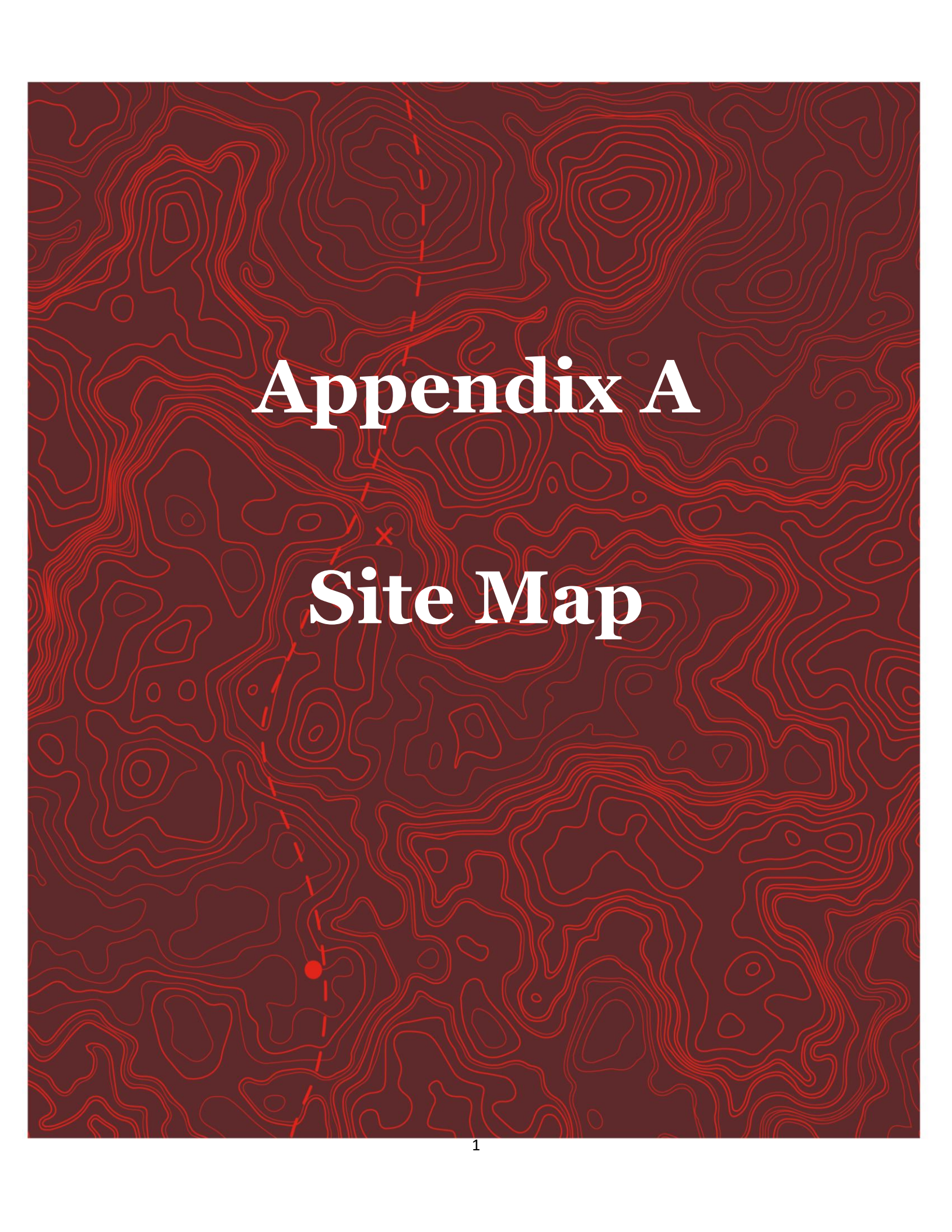
Elm Creek Wind II anticipates operating the repowered Project for 30 years until the Site Permit expires. Elm Creek Wind II reserves the right to continue to operate the Project, instead of decommissioning, by applying for an extension of required permits. Should Elm Creek Wind II decide to continue operations, a decision may be made on whether to continue operation with existing equipment or to repower the turbines and power system with upgrades based on newer technologies. Elm Creek Wind II will be responsible for all costs to decommission the Project and associated facilities. Based on the detailed decommissioning estimate (Appendix B), the anticipated net cost for decommissioning the Project is estimated at \$8,220,000. This would be approximately \$132,600 per turbine.

Elm Creek Wind II has been in operation since December 31, 2010, and anticipates establishing financial surety to ensure decommission funds are available at the time of decommissioning. The form of such financial surety (e.g. Letter of Credit, Parent Guarantee, or Surety Bond), will be a financial instrument mutually agreed upon by the Commission and Elm Creek II Wind (the “Financial Assurance”). Once a form is mutually agreed upon, Elm Creek II Wind will have 90 days to post the Financial Assurance.

Below is a schedule of the proposed Financial Assurance Elm Creek Wind II based on the current understanding of the repowered Facility.

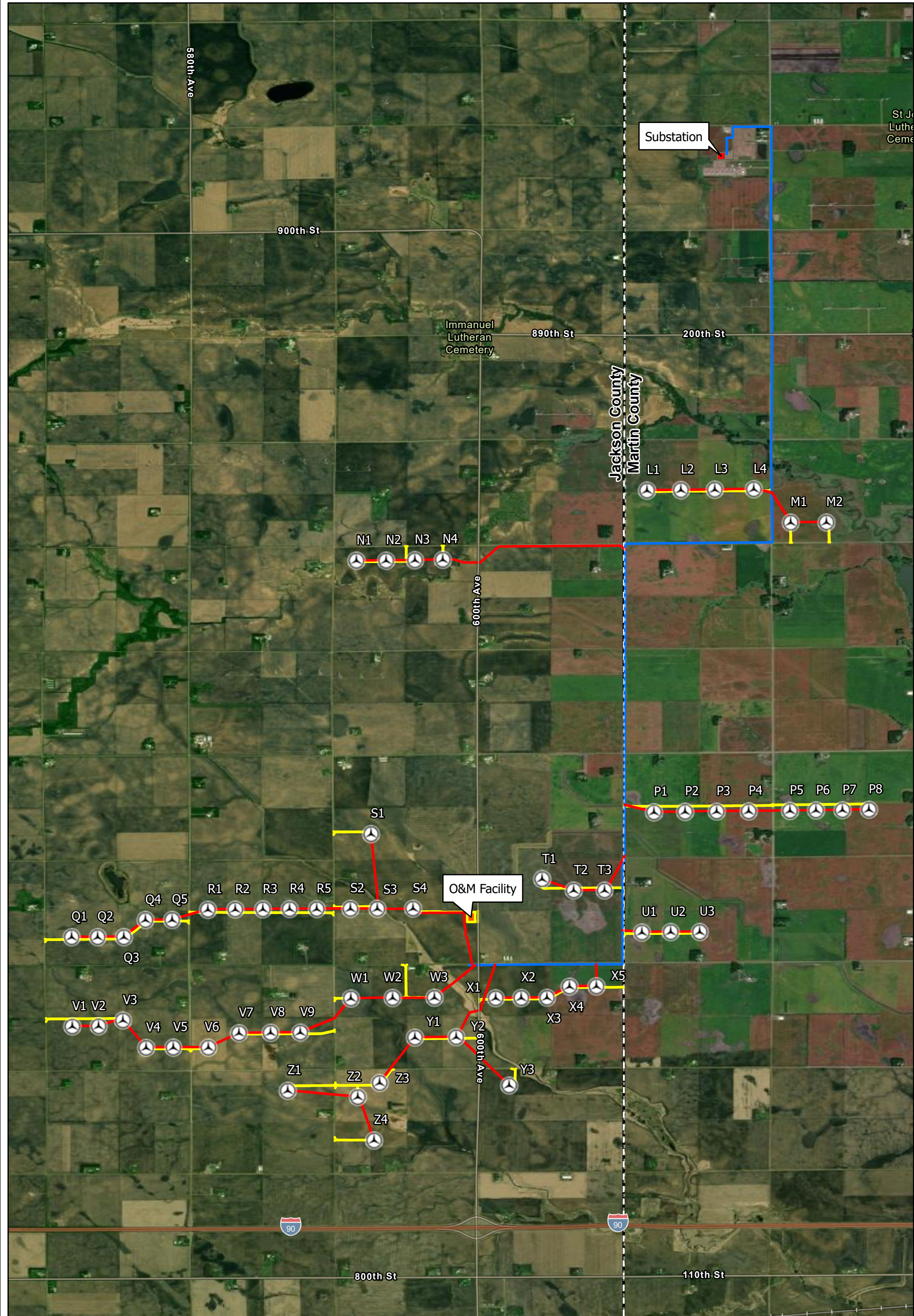
Active dates for Financial Assurance	Calculation of Financial Assurance	Amount of Financial Assurance
2026-2031	50% of Total Demolition Minus Salvage Value based on final 2026 Plan	50% x \$8,220,000= \$4,110,000
2032-2036	50% of Total Demolition Minus Salvage Value based on final 2032 Plan	TBD
2037-2041	75% of Total Demolition Minus Salvage Value based on final 2026 Plan, which will reflect updated turbine components	TBD
2042-2046	100% of Total Demolition Minus Salvage Value based on 2042 decommissioning plan	TBD
2047-2051	100% of Total Demolition Minus Salvage Value based on 2047 decommissioning plan	TBD
2052-2056	100% of Total Demolition Minus Salvage Value based on 2052 decommissioning plan	TBD

If decommissioning of the Project or individual turbines is undertaken, Elm Creek II Wind will, upon satisfactory completion, provide supporting documentation to the MN PUC with a request for the release of a corresponding amount of the Financial Assurance. Elm Creek II Wind commits that if it does not complete decommissioning as specified in this Plan, then the MN PUC may take action as necessary to complete decommissioning, including drawing on the Financial Assurance.

The background of the page is a dark red topographic map. It features intricate, light red contour lines that create a complex, wavy pattern across the entire surface. A dashed red line runs vertically through the center-left portion of the map. Near the top of this dashed line is a small 'x' mark. Further down, towards the bottom left, is a solid red dot.

Appendix A

Site Map



Data Source(s): Westwood (2021); ESRI (2021); .

Legend

-  Existing Wind Turbine
  Substation
-  Underground Collector Line
  O&M Facility
-  Overhead Collector Line
  County Boundary
-  Access Road

Westwood

Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com

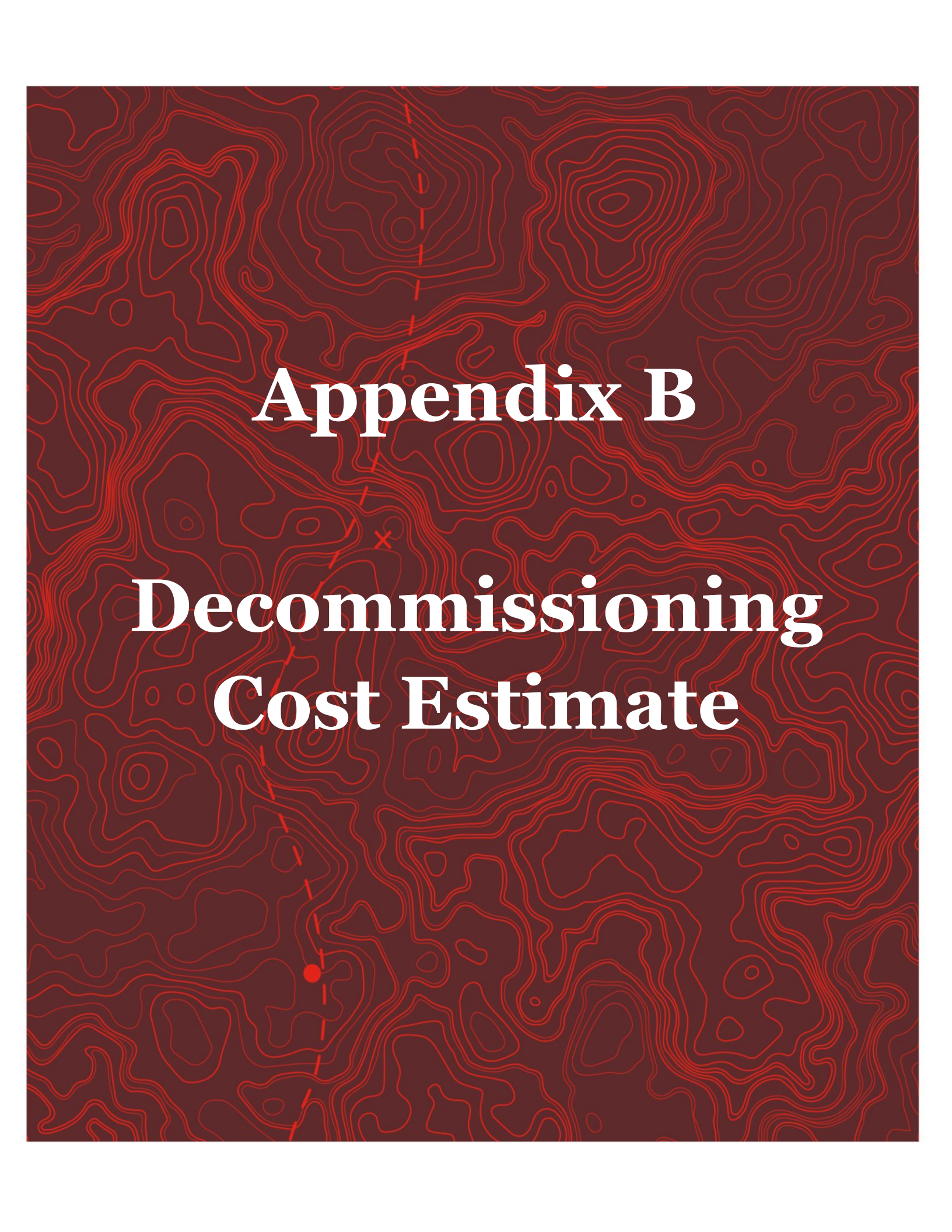
Westwood Professional Services, Inc.

Elm Creek II Wind Project

Jackson & Martin Counties, MN

Site Map

November 3, 2021



Appendix B

Decommissioning Cost Estimate

Elm Creek II Wind Repower Project

Decommissioning Cost Estimate

Elm Creek II Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Number of Turbines	62	Each		
Mobilization/Demobilization	1	Lump Sum	\$538,000.00	\$538,000
Permitting				
County Permits	2	Lump Sum	\$2,000.00	\$4,000
State Permits (SWPPP, SPCC)	1	Lump Sum	\$20,000.00	\$20,000
Subtotal Permits				\$24,000
Wind Turbine Generators				
Disconnect Turbine Wiring	62	Each	\$3,060.80	\$189,770
Fell Turbine	62	Each	\$2,629.01	\$162,999
Process to Size and Load Turbine Components	14,582	Tons	\$172.76	\$2,519,186
Haul Turbine Components Offsite for Recycling (except blades)	14,582	Tons	\$9.76	\$142,320
Haul Turbine Components For Disposal (except blades)	3,212	Tons	\$17.66	\$56,724
Turbine Components Disposal (except blades)	3,212	Tons	\$81.00	\$260,172
Haul Fiberglass Blades For Recycling (Fairfax, IA)	2,727	Tons	\$58.57	\$159,720
Fiberglass Blades Recycling	2,727	Tons	\$550.00	\$1,499,850
Excavate Around Turbine Foundation	62	Each	\$31.28	\$1,939
Remove Turbine Foundation to a Depth of 4 feet and Load	2,604	Cubic Yards	\$263.68	\$686,623
Backfill Excavation Area from Turbine Foundation Removal	62	Each	\$216.69	\$13,435
Haul Concrete (Turbine Foundation)	5,274	Tons	\$17.66	\$93,139
Disposal of Concrete from Turbine Foundation	5,286	Tons	\$81.00	\$428,166
Remove and Load Transformer	62	Each	\$583.74	\$36,192
Freight Transformer to Recycler	62	Each	\$200.79	\$12,449
Remove Transformer Pad	116	Cubic Yards	\$175.08	\$20,309
Transformer Disposal (Including Oil) - All material can be recycled	62	Each	\$0.00	\$0
Haul Concrete (Transformer Pad)	234	Tons	\$17.66	\$4,132
Disposal of Concrete from Transformer Pad	234	Tons	\$81.00	\$18,954
Decompact Wind Turbine Generator Site	62	Each	\$76.78	\$4,760
Grade Wind Turbine Generator Site	62	Each	\$1,098.05	\$68,079
Erosion and Sediment Control at Turbine/Transformer Site	62	Each	\$574.50	\$35,619
Revegetation at Turbine/Transformer Sites	62	Each	\$4,500.00	\$279,000
Subtotal Wind Turbine Generators				\$6,693,538
Met and ADLS Tower (Free Standing)				2
Disconnect Tower Wiring	2	Each	\$765.20	\$1,530
Dismantel, Disassemble, and Load Tower Components	2	Each	\$4,374.19	\$8,748
Freight Tower Components Offsite for Recycling	8.0	Tons	\$9.76	\$78
Excavate Around Tower Foundations	2	Each	\$9.38	\$19
Remove Tower Foundations to a depth of 4 feet and Load	1.6	Cubic Yards	\$263.68	\$422
Haul Concrete (Tower Foundation)	3.2	Tons	\$17.66	\$57
Disposal of Concrete from Towers	3.2	Tons	\$81.00	\$259
Grade Tower Sites	2	Each	\$374.47	\$749
Erosion and Sediment Control	2	Each	\$766.00	\$1,532
Till to Farmable Condition	0.23	Acre	\$227.82	\$52
Subtotal Met and ADLS Towers (Free Standing)				\$13,447

Electrical Collection (Remove at Junction Boxes)				31.4
Removal of Underground Collector System Cables (34.5 kV)	72	Each	\$460.00	\$33,120
Removal of Overhead Collector Line Cables	77,134	Feet	\$9.09	\$701,152
Haul Underground Collector System Cables (34.5 kV)	1.7	Tons	\$9.76	\$17
Disposal of Removed Cables (See Salvage Value)	1.3	Tons	\$0.00	\$0
Loadout Overhead Cables	129	Tons	\$42.55	\$5,489
Haul Overhead Cables	129	Tons	\$9.76	\$1,259
Disposal of Overhead Cables (See Salvage Value)	129	Tons	\$0.00	\$0
Remove and Load Steel Transmission Poles	225	Each	\$865.69	\$194,780
Haul Steel Poles for Recycling	225	Each	\$39.93	\$8,984
Haul Hardware, Bracing, and Attachments for Disposal	225	Each	\$18.06	\$4,064
Transmission Pole Component Disposal	225	Each	\$81.00	\$18,225
Topsoil and Revegetation at Removed Pole	225	Each	\$120.00	\$27,000
Removal of Junction Box	10	Each	\$115.00	\$1,150
Erosion and Sediment Control at Junction Box Location	10	Each	\$115.00	\$1,150
Revegetation at Junction Box Location	10	Each	\$138.00	\$1,380
Subtotal Electrical Collection				\$997,770
Access Roads				67,056
Remove and Load Gravel Surfacing from Access Roads	24,836	Cubic Yards	\$3.27	\$81,214
Haul Gravel Removed from Access Roads	40,234	Tons	\$17.66	\$710,532
Disposal of Gravel Removed from Access Roads (Use as "Daily Cover")	40,234	Tons	\$0.00	\$0
Remove and Load Culvert from Beneath Access Roads	26	Each	\$515.20	\$13,395
Haul Culvert Removed from Access Roads	13	Tons	\$17.66	\$230
Disposal of Culverts	13	Tons	\$11.50	\$150
Remove Low Water Crossing from Access Roads	20	Each	\$3,910.00	\$78,200
Decompact Access Road Corridor	67,056	Linear Feet	\$0.12	\$8,047
Grade Access Road Corridor	67,056	Linear Feet	\$1.76	\$118,019
Erosion and Sediment Control Along Access Roads	10,058	Linear Feet	\$3.83	\$38,524
Revegetation on Access Roads	36.9	Acres	\$13,068.00	\$482,209
Subtotal Access Roads				\$1,530,519
Substation is shared with Trimont Wind I LLC and Elm Creek Wind, LLC and therefore not included in this estimate				
O&M Building				1
Demolish O&M Building and Foundation	1	Lump Sum	\$5,750.00	\$5,750
Demolish O&M Site Improvements (fences, etc)	1	Lump Sum	\$3,450.00	\$3,450
Haul Concrete (O&M Building Foundation)	248	Cubic Yards	\$20.70	\$5,134
Crush Concrete (O&M Building Foundation)	248	Cubic Yards	\$19.55	\$4,848
Disposal of Crushed Concrete from O&M Building Foundation	248	Cubic Yards	\$11.50	\$2,852
Cap and Abandon Well	1	Lump Sum	\$1,150.00	\$1,150
Remove & Restore Septic and Drainfield area	1	Lump Sum	\$3,450.00	\$3,450
Disposal of O&M Building Demolition and Removed Site Improvements	1	Lump Sum	\$2,875.00	\$2,875
Remove and Load Gravel Surfacing of O&M Site	3,747	Cubic Yards	\$3.27	\$12,253
Haul Gravel Removed from O&M Site	3,747	Cubic Yards	\$18.08	\$67,746
Disposal of Gravel from O&M Site	3,747	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Lump Sum	\$936.47	\$936
Grade O&M Building Site	1	Lump Sum	\$13,392.73	\$13,393
Erosion and Sediment Control at O&M Building Site	1	Lump Sum	\$6,645.05	\$6,645
Topsoil and Revegetation at O&M Building Site	4.2	Acres	\$13,068.00	\$54,886
Subtotal O&M Building				\$185,367

Public Roads Restoration	25.0	Miles	\$44,000.00	\$1,100,000
Total Direct Costs				\$11,082,640
Contingency (10%)				\$1,108,264
Total Demolition Costs				\$12,190,904
Cost Per Turbine				\$196,627
Total Cost				\$12,190,910
Salvage/Recycle				
Turbine Towers (Structural Steel)	10,406	Tons	\$225.00	\$2,341,350
Turbine Nacelles (Structural Steel)	3,627	Tons	\$225.00	\$816,075
Met Towers (Structural Steel)	8.0	Tons	\$225.00	\$900
Steel Towers (Structural Steel)	900	Tons	\$225.00	\$202,500
Turbine Generators	1,097,250	Pounds	\$0.32	\$351,120
Aluminum Electrical Conductor (Supported)	2,624	Pounds	\$0.32	\$840
Aluminum and Steel Conductor (Suspended-Aluminum Weight)	106,245	Pounds	\$0.78	\$82,871
Aluminum and Steel Conductor (Suspended-Steel Weight)	62,781	Pounds	\$0.11	\$7,063
Transformers (copper windings)	371,100	Pounds	\$0.31	\$115,041
Transformer (Steel)	144	Tons	\$225.00	\$32,400
Transformers (oil)	29,744	Gallons	\$0.70	\$20,821
Subtotal Salvage				\$3,971,000
Total Demolition Minus Salvage Value				\$8,220,000
Total Demolition Minus Salvage per Turbine				\$132,600