

December 28, 2016

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Darrell Nitschke
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

**RE: Lindahl Wind Project, LLC – Decommissioning Plan
Case No. PU-16-_____**

Dear Mr. Nitschke:

In accordance with N.D.A.C. § 69-09-09-06, Lindahl Wind Project, LLC hereby submits two (2) copies of its Decommissioning Plan for the Lindahl Wind Farm Project, as well as a copy of this letter. Electronic copies of the Decommissioning Plan and this letter were filed today with the Commission via e-mail.

If you have any questions, please let me know.

Sincerely,



MOLLIE M. SMITH

MMS/ms/60390585
Enclosures

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Decommissioning plan and cost estimate



Westwood

DECOMMISSIONING PLAN
Lindahl Wind Project

Williams County, North Dakota

October 2016

Prepared For:



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1.0 INTRODUCTION/PURPOSE

Lindahll Wind Project LLC (Lindahll) is a 150 Megawatt (MW) wind farm owned/operated by Enel Green Power North America (Enel) in Williams County, North Dakota. The project includes 75 Vestas V100 2.0MW wind turbine generators, access roads, underground collection lines, an overhead transmission line, 3 met towers, a substation, an offsite Operations and Maintenance Building, and temporary facilities such as a laydown yard and crane paths to support construction.

The purpose of this Decommissioning Plan is to outline the activities and estimated costs associated with the retirement of Lindahl Wind Project's assets at the end of the project's useful life. The plan is consistent with the requirements outlined in the North Dakota Administrative Code, Section 69-09-09 (Appendix A), and with Lindahl Wind Project's land owner lease agreements.

2.0 LAND USE AND NATURAL RESOURCE DEVELOPMENT

Prior to the development of the Lindahl Wind Project the existing land use within the project area was primarily agricultural; including crops and grassland/pasture on gently rolling topography with a lesser extent of the area consisting of wetlands, oil and gas well pads, and access roadways. Once the project areas are decommissioned, it is anticipated that the land will continue to be managed by individual landowners for agricultural uses. Lindahl Wind Project is not anticipated to impede natural resource development during the useful life nor after decommissioning.

3.0 DECOMMISSIONING ACTIVITIES

The means and methods of decommissioning activities will be the responsibility of the contractor hired to perform the work. Temporary construction activities to support decommissioning may include turning radius modifications, crane travel paths, crane pad construction. When no longer needed during the decommissioning phase, these items will be removed.

All materials and debris associated with the wind farm decommissioning will be removed and properly recycled or disposed of. Reclamation will include appropriate stabilization and topsoil respread in a manner that matches the surrounding drainage patterns and land use. As necessary, topsoil will be stripped, isolated, and stockpiled on-site prior to removal of structures and facilities. Topsoil will be applied following facility removal and tilled to a farmable condition, or re-vegetated depending upon location and land use at the time of decommissioning.

A brief summary of major decommissioning activities and the basis for cost estimating is below:

Wind Turbines and Foundations

Each wind turbine consists of three (3) steel tower segments, a nacelle, a rotor hub, and three blades, which are modular components and will be disassembled and removed from the site. The top of the foundation will be removed to a depth of three (3) feet below the final surface, or the depth required by the lease agreements. The concrete and rebar, broken into manageable-sized pieces, will be contained and hauled off site to be recycled or disposed. During reclamation subgrade soils will be de-compacted, and topsoil reapplied/tilled to a farmable condition or re-vegetated.

Access Roads and Turbine Area

Access road restoration will include the removal of road aggregate, treatment/decompaction of cement stabilized soil, removal of geotextile fabric (if any), minor grading to match surrounding drainage patterns, and reclamation.

Underground Electrical Collection Lines

Electrical cables at a depth of less than two (2) feet, or the depth required by the lease agreement, will be removed. Following any necessary removal, the area will be restored by reapplication of topsoil to match the surrounding grade and maintain existing drainage patterns. The electrical junction boxes will be removed.

Overhead Transmission Line

All support structures (poles), conductors, switches, and lines will be removed. The foundations will be removed to a depth of at least three (3) feet, or the depth required by the lease agreement. The foundation holes will be filled with a suitable subsoil material and topsoil will be applied.

Collector Substation

Any steel, conductors, switches, transformers, concrete pads, and other components of the substation will be disassembled and recycled or reused off-site. Foundations and underground components will be removed to a depth of at least three (3) feet, or the depth required by the lease agreement if applicable. Enel may seek to sell the land in "as is" condition or the aggregate may be removed, subgrade soils de-compacted, and topsoil reapplied/tilled to a farmable condition or re-vegetated.

Operations and Maintenance Building

The O&M Building is a pre-existing structure in the nearby city of Tioga, ND. Enel will seek to sell the building "as-is", repurpose the building, or sell the parcel before or after the structure is removed.

4.0 DECOMMISSIONING SCHEDULE

Decommissioning of the wind farm will be initiated following the "End of Useful Life", as defined in the applicable state permits. In accordance with NDCC 69-09-09-03 (Effective October 1, 2008), this is defined as no electricity generation for a continuing period of 24 months.

Decommissioning must begin within eight months of end of useful life, and be completed within 18 months of the end of useful life (NDCC 69-69-09-04).

5.0 DECOMMISSIONING COSTS

The following is the pre-construction estimate of the cost of dismantling the wind power facility. The estimate is based on the decommissioning approach outlined above and is based on the removal of 75 Vestas V100 wind turbine generators and associated project infrastructure.

Decommissioning Estimate for the Lindahl Wind Project	
General Conditions (Field Staff Cost)	\$ 202,000
Operation & Maintenance Building (Demolition and Removal)	\$ 24,000
Substation (Dismantle and Removal)	\$ 111,000
Met Tower (Dismantle and Removal)	\$ 115,000
Access Road Removal (Remove Aggregate/Culverts/Low Water Crossings)	\$ 1,057,000
Crane Mobilization (2 Mobilization/Demobilization)	\$ 400,000
Tower Dismantle and Salvage Prep (Dismantle/Salvaging)	\$ 1,676,000
Transformer Removal	\$ 53,000
Blade Disposal (Dismantle/Disposal)	\$ 604,000
Turbine Foundation Removal (3 feet Demolition/Removal)	\$ 1,560,000
Erosion and Sediment Control BMPs	\$ 237,000
Site Restoration (Final Surfacing following Removal)	\$ 813,000
Electrical Collection/Transmission System	\$ 191,000
Total Estimated Decommissioning Cost (not including salvaged value)	\$ 7,043,000
Total Estimated Decommissioning Cost per Turbine (not including salvaged value) (75 Turbines)	\$ 94,000
Total Salvage Value for Project	\$ 4,158,000
Salvage Value per Turbine (75 Turbines)	\$ 55,000
Total Net Decommissioning Cost For Project Minus Salvage Value	\$ 2,885,000
Total Net Decommissioning Cost Per Turbine Minus Salvage Value	\$ 38,000

The cost estimates shown have been prepared for guidance in decommissioning costs from the information available at the time of estimate. Cost estimates are provided in 2016 dollars. It is important to note that steel salvage value is near an all-time low at the time of this estimate; this should be reviewed prior to financial assurance being provided. The final cost of the project will depend upon the actual labor and material costs, competitive market conditions, final project costs, implementation schedule, inflation, and other variable factors. The final project cost will vary from the estimates presented herein and are highly subject to variation.

6.0 FINANCIAL ASSURANCE

NDCC 69-09-09-08 Financial Assurance states that after the tenth year of operation the commission may require documentation of financial assurance to cover the costs of decommissioning. Lindahl Wind Project, LLC recognizes its obligation to retire its assets and intends to use internally generated funds for the decommissioning costs.

7.0 PROFESSIONAL EXPERIENCE

Westwood Professional Services (Westwood) has over 15 years of Wind power experience and has supported the development of over 35 GW of Wind projects across the United States by providing services in engineering, surveying, water resources, environmental services and GIS.

Westwood has extensive experience with government and environmental regulations, project cost estimation and project management. We have worked with Developers and Contactors on both large (over 100 turbines) and small sites to provide expertise in Wind Power generation solutions.



APPENDIX A

**CHAPTER 69-09-09
WIND TURBINE DECOMMISSIONING**

Section	
69-09-09-01	Definitions
69-09-09-02	Decommissioning Responsibility
69-09-09-03	Useful Life
69-09-09-04	Decommissioning Period
69-09-09-05	Decommissioning Requirements
69-09-09-06	Decommissioning Plan
69-09-09-07	Existing Facilities
69-09-09-08	Financial Assurance
69-09-09-09	Failure to Decommission

69-09-09-01. Definitions.

1. "Commercial wind energy conversion facility" means a wind energy conversion facility of equal to or greater than five hundred kilowatts in total nameplate generating capacity.
2. "Commission" means the public service commission.
3. "Wind turbine" means a wind turbine of equal to or greater than five hundred kilowatts in total nameplate generating capacity.

History: Effective October 1, 2008.

General Authority: NDCC 28-32-02, 49-02-27

Law Implemented: NDCC 49-02-27

69-09-09-02. Decommissioning responsibility.

The owner or operator of a commercial wind energy conversion facility is responsible for decommissioning that facility and for all costs associated with decommissioning that facility and associated facilities.

History: Effective October 1, 2008.

General Authority: NDCC 28-32-02, 49-02-27

Law Implemented: NDCC 49-02-27

69-09-09-03. Useful life.

A commercial wind energy conversion facility or individual wind turbine is presumed to be at the end of its useful life if the facility or turbine generates no electricity for a continuing period of twenty-four months. The presumption may be rebutted by submitting to the commission for approval a plan outlining the steps and schedule for returning the commercial wind energy conversion facility or wind turbine to service.

History: Effective October 1, 2008.

General Authority: NDCC 28-32-02, 49-02-27

Law Implemented: NDCC 49-02-27

69-09-09-04. Decommissioning period.

The facility owner or operator shall begin decommissioning a commercial wind energy conversion facility or wind turbine within eight months after the time the facility or turbine reaches the end of its useful life, as determined in section 69-09-09-03. Decommissioning must be completed within eighteen months after the facility or turbine reaches the end of its useful life.

History: Effective October 1, 2008.
General Authority: NDCC 28-32-02, 49-02-27
Law Implemented: NDCC 49-02-27

69-09-09-05. Decommissioning requirements.

Decommissioning and site restoration includes dismantling and removal of all towers, turbine generators, transformers, and overhead cables; removal of underground cables to a depth of twenty-four [60.96 centimeters] inches; removal of foundations, buildings, and ancillary equipment to a depth of three feet [91.44 centimeters] and removal of surface road material and restoration of the roads and turbine sites to substantially the same physical condition that existed immediately before construction of the commercial wind energy conversion facility or wind turbine. The site must be restored and reclaimed to the same general topography that existed just prior to the beginning of the construction of the commercial wind energy conversion facility or wind turbine and with topsoil respread over the disturbed areas at a depth similar to that in existence prior to the disturbance. Areas disturbed by the construction of the facility and decommissioning activities must be graded, topsoiled, and reseeded according to natural resource conservation service technical guide recommendations and other agency recommendations, unless the landowner requests in writing that the access roads or other land surface areas be retained.

History: Effective October 1, 2008.
General Authority: NDCC 28-32-02, 49-02-27
Law Implemented: NDCC 49-02-27

69-09-09-06. Decommissioning plan.

Prior to commencement of operation of a commercial wind energy conversion facility or wind turbine, the facility or turbine owner or operator shall file for commission review the estimated decommissioning cost per turbine, in current dollars at the time of filing, for the proposed facility or turbine and a comprehensive decommissioning plan that describes any expected effect on present and future natural resource development and how the facility or turbine owner or operator plans to pay for decommissioning the facility or turbine as required by section 69-09-10-05 at the appropriate time. The commission may at any time require the owner or operator of a commercial wind energy conversion facility or wind turbine to file a report with the commission describing how the facility or turbine owner or operator is fulfilling this obligation.

History: Effective October 1, 2008; amended effective October 1, 2010.
General Authority: NDCC 28-32-02, 49-02-27
Law Implemented: NDCC 49-02-27

69-09-09-07. Existing facilities.

Owners and operators of existing commercial wind energy conversion facilities shall file with the commission the information required in section 69-09-09-06 within one year after July 1, 2008.

History: Effective October 1, 2008.
General Authority: NDCC 28-32-02, 49-02-27
Law Implemented: NDCC 49-02-27

69-09-09-08. Financial assurance.

After the tenth year of operation of a commercial wind energy conversion facility or wind turbine, the commission by order may require the owner or operator to secure a performance bond, surety bond, letter of credit, corporate guarantee, or other form of financial assurance that is acceptable to the commission to cover the anticipated costs of decommissioning the commercial wind energy conversion facility or turbine. The commission may accept a corporate guarantee if the corporation has a tangible net worth of at least ten million dollars, a ratio of total liabilities to net worth of 2.5 or less, and a ratio of

current assets to current liabilities of 1.2 or greater; or if it has an investment grade current rating for its most recent bond issuance of "Baa" or higher as issued by Moody's Investors Service "BBB" or higher as issued by Standard and Poor's Corporation, or an equivalent rating by any other nationally recognized statistical rating organization, as defined and approved by the United States securities and exchange commission.

History: Effective October 1, 2008.

General Authority: NDCC 28-32-02, 49-02-27

Law Implemented: NDCC 49-02-27

69-09-09-09. Failure to decommission.

If the commercial wind energy conversion facility owner or operator does not complete decommissioning, the commission may take such action as may be necessary to complete decommissioning, including requiring forfeiture of the bond. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the commission may take such action as may be necessary to decommission a commercial wind energy conversion facility or wind turbine, including the exercise by the commission, commission staff, and their contractors of the right of ingress and egress for the purpose of decommissioning the commercial wind energy conversion facility.

History: Effective October 1, 2008.

General Authority: NDCC 28-32-02, 49-02-27

Law Implemented: NDCC 49-02-27