



minnesota power

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RECEIVED

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PUBLIC SERVICE COMMISSION

August 17, 2011

VIA EMAIL and OVERNIGHT DELIVERY

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

RE: Bison 1 Wind Project
Oliver/Morton Counties
Siting Application
Case No. PU-09-151

Dear Mr. Nitschke:

Enclosed please find an original and 10 copies of Minnesota Power's Decommissioning and Restoration Plan in the above-referenced case.

Please let me know if you have any questions regarding this filing.

Yours truly,

David R. Moeller

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Attachment

c: Ron Gullicks, Minnesota Power
Jim Atkinson, Minnesota Power
Mike Pontius, Minnesota Power

**Bison 1 Wind Project
Oliver/Morton Counties
Siting Application
Case No. PU-09-151**

Introduction

Minnesota Power (MP) submits the following Decommissioning Plan as required by ND Administrative Code Section 69-09-09-06.

Bison 1 Wind Project is located in Oliver and Morton Counties approximately 11.5 miles Northwest of New Salem, North Dakota. Construction of the Bison 1 Wind Project began in October 2009 and is expected to be complete by year end 2011. The project was separated into two phases; Bison 1A and Bison 1B. Bison 1A is comprised of sixteen (16) 2.3 MW Siemens wind turbines that were installed and became operational in 2010. Bison 1B is comprised of fifteen (15) 3.0 MW Siemens Direct Drive turbines that are being constructed in 2011. Bison 1B is expected to be in commercial operation by year end 2011.

Decommissioning and Restoration

MP will remove the wind facilities in accordance with North Dakota Wind Turbine Decommissioning guidelines (ND Chapter 69-09-09). This includes:

- Dismantling and removal of all towers, turbine generators, transformers, and overhead conductors
- Removal of underground cables to a depth of twenty-four inches (60.96 centimeters)
- Removal of foundations, buildings, and ancillary equipment to a depth of 3 feet
- Removal of surface road material and restoration of the roads and turbine sites to substantially the same physical condition that existed immediately before construction
- Grading, adding topsoil, and reseeded according to natural resource conservation service technical guide recommendations and other agency recommendations, areas disturbed by the construction of the facility or decommissioning activities, unless the landowner requests in writing that the access roads or other land surface areas be retained.

Decommissioning Costs

Consistent with MP's other generation units located in Minnesota, MP will set aside decommissioning funds consistent with its obligations as a Minnesota public utility under Minn. Stat. § 216B.11, and Minn. Rules 7825.0600 and 7825.0700, to assure that MP will meet any North Dakota decommissioning obligations. If ordered by the North Dakota

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Public Service Commission, after the tenth (10th) year of operation, MP will secure a performance or surety bond, letter of credit, corporate guarantee, or other form of financial assurance acceptable to the Commission to cover the anticipated costs of decommissioning.

**Salvage Values
(Per Turbine)**

	lbs	\$/lb	
Tower/Nacelle/Bedplate/Cabinets	478,270	0.09	\$43,044.30
Bolt Cage / foundation steel	16,000	0.09	\$1,440.00
Hub	66,120	0.09	\$5,950.80
Main shaft / generator	33,060	0.09	\$2,975.40
Copper cables / bus bars	16,210	2.15	\$34,851.50
Aluminum platforms/ladders etc	15,430	0.6	\$9,258.00
GSU Transformers			\$6,000.00
			<u>\$103,520.00</u>

**Cost of Removals
(Per Turbine)**

Crane	\$17,000.00
Operator	\$10,350.00
Iron Workers	\$16,350.00
Crane Mob & Demob	\$30,000.00
Remove 4' of foundation	\$10,000.00
Trucking	\$7,000.00
Cost per turbine	<u>\$90,700.00</u>

**Cost of Restoration
(Per Turbine)**

Mob / Demob	\$2,000.00
Equipment and operators	\$11,000.00
Decompaction / seeding	\$2,400.00
	<u>\$15,400.00</u>

Estimated Cost per turbine to remove turbines and restore landscape net of salvage value.	\$2,580.00
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Note: The difference between the estimated Salvage Values and Costs for Removals and Restoration is less than 5%, which is within the accuracy of this estimate. As a result, it can be assumed the net decommissioning cost is negligible, or zero.

Decommissioning Period

Minnesota Power will begin decommissioning the commercial wind energy conversion facility within eight months after the time the facility reaches the end of its useful life, as determined in ND Administrative Code Section 69-09-09-03. Decommissioning will be completed within eighteen months after the facility or turbine reaches the end of its useful life.

The useful life of the Bison Substation and other associated facilities may extend well beyond the useful life of the wind turbines and the Project Certificate term. MP anticipates that the cost to decommission the substation will also be totally offset by the salvage value of the components.

MP also reserves the right to explore alternatives regarding Project decommissioning at the end of the Project Certificate term. Retrofitting the turbines and power system with upgrades based on new technology may allow the wind facility to produce efficiently and successfully for many more years.