

**BASIN ELECTRIC  
POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE  
BISMARCK, NORTH DAKOTA 58503-0564  
PHONE: 701-223-0441  
FAX: 701-557-5336



**RECEIVED**

March 25, 2010

MAR 29 2010

**PUBLIC SERVICE COMMISSION**

Darrell Nitschke, Executive Secretary  
North Dakota Public Service Commission  
600 East Boulevard Avenue, Dept. 408  
Bismarck, ND 58505

Dear Mr. Nitschke:

Basin Electric Power Cooperative (Basin Electric) owns and operates two wind energy facilities in North Dakota, Minot Wind and PrairieWinds ND1. Minot Wind consists of two (2) NORDEX 1.3 megawatt (MW) turbines on 60-meter steel towers installed in 2002 and three (3) 1.5 MW General Electric (GE) turbines on 80-meter steel towers installed in 2009. PrairieWinds ND1, also installed in 2009, consists of seventy-seven (77) 1.5 MW GE turbines on 80-meter steel towers. PrairieWinds ND1, a wholly-owned subsidiary of Basin Electric, was permitted by the North Dakota Public Service Commission under Energy Conversion Site Compatibility Certificate No. 14.

Enclosed please find the decommissioning and cost estimate information for the facilities described above. If you have any questions or concerns regarding this matter, please contact me at 701.557.5495.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kevin L. Solie'.

Kevin L. Solie  
Senior Environmental Analyst

/gmj  
Enclosure  
cc: Deb Levchak

1 **PU-10-78** Filed: 3/29/2010 Pages: 3  
**Decommissioning and Cost Estimate Information**

# **Basin Electric Power Cooperative Decommissioning Plan and Cost Estimate**

## **Basin Electric Power Cooperative Facilities**

Basin Electric Power Cooperative (Basin Electric) owns and operates two wind energy facilities in North Dakota, Minot Wind and PrairieWinds ND1. Minot Wind consists of two (2) NORDEX 1.3 megawatt (MW) turbines on 60-meter steel towers installed in 2002 and three (3) 1.5 MW General Electric (GE) turbines on 80-meter steel towers installed in 2009. PrairieWinds ND1, consists of seventy-seven (77) 1.5 MW GE turbines on 80-meter steel towers installed in 2009. PrairieWinds ND1, a wholly-owned subsidiary of Basin Electric, was permitted by the North Dakota Public Service Commission Energy Conversion Site Compatibility Certificate No. 14. The following decommissioning and cost estimate information pertains to all above-referenced facilities.

## **Decommissioning**

Decommissioning and site restoration would include dismantling and removal of all towers, turbine generators, transformers, and overhead cables; removal of underground cables to a minimum depth of twenty-four inches; removal of foundations, buildings, and ancillary equipment to a minimum depth of three feet 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 (NDAC 69-09-09). Access roads will be removed unless the affected landowner provides written notice requesting the road or portions of the road be retained.

The site will be restored and reclaimed to the same general topography that existed just prior to the beginning of the construction. Areas disturbed by the construction of the facility and decommissioning activities would be graded, top-soiled, and reseeded according to natural resource conservation service technical guide recommendations and other agency recommendations (NDAC 69-09-09).

## Decommissioning Cost and Funding

Estimated costs for decommissioning are depicted in the following table:

				<b>Per Turbine Cost</b>	
Crane Mobilization (Rubber-tired crane)		\$	25,000		\$ 325
Crane Demobilization		\$	25,000		\$ 325
Crane Rental per week		\$	25,000	1/2 week per turbine	\$ 12,500
Demolition of Turbine Pedestal			3	days each site	
Backhoe Jackhammer		\$	150	per hour	\$ 3,600
Operator		\$	70	per hour	\$ 1,680
Truck		\$	50	per hour	\$ 1,200
2 laborers		\$	50	per hour	\$ 1,200
Welder to cut rebar		\$	70	per hour	\$ 1,680
Trucks to remove Turbine Components					\$ 10,000
Surface Reclamation	Days Required		2	days each site	
Grader		\$	150	per hour	\$ 2,400
Operator		\$	70	per hour	\$ 1,120
Wheel loader		\$	120	per hour	\$ 1,920
Truck to remove gravel		\$	50	per hour	\$ 800
2 Laborers		\$	50	per hour	\$ 800
Surface Area to be Seeded		Sq. Ft		per turbine	
Disturbed area around turbine		2,000			
Road Reclamation	Assume 400 feet per turbine	16,000		0.41 Acres	\$ 1,000
					<b>\$ 40,550 Total</b>

Roughly 425 tons of salvage steel per turbine are available; the current value of salvage steel is estimated to be \$40,000 to \$80,000 per turbine, based on historical prices. The estimated total cost for decommissioning 82 turbines is \$3,325,100. The estimated value of the salvage steel ranges from \$3,280,000 to \$6,560,000. Accordingly, it is anticipated that the total decommissioning costs for the facilities will be covered by the salvage value of recovered facility components. If the salvage value of facility components does not cover the cost of decommissioning, Basin Electric would fund the difference.