

NORTH DAKOTA WIND ENERGY DEVELOPMENT

Prepared by: ND Office of Renewable Energy & Energy Efficiency
ND Department of Commerce
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Pioneer Projects:

1. Spirit Lake Indian Reservation (0.1 MW)
2. Turtle Mt. Indian Reservation (0.1 MW)
3. Grafton No. Cent. Vo-Tech School (0.065 MW)
4. Richardton Sacred Heart Monastery (2 turbines – 0.125 MW)

Existing Utility-Scale Projects:

1. Valley City/Oriska - Minnkota Power (0.9 MW)
2. Petersburg – Minnkota Power (0.9 MW)
3. South of Minot – Basin Electric (2 turbines – 2.6 MW)
4. Edgeley/Kulm – FPL/Basin Electric (27 turbines – 40.5 MW)
5. Edgeley/Kulm – FPL/Otter Tail Power (14 turbines – 21 MW)
6. Wilton – FPL/Basin Electric (33 turbines – 49.5 MW)
7. Velva – EHN/Xcel Energy (18 turbines – 12 MW)
8. Oliver County – FPL/Minnesota Power (22 turbines – 50.6 MW)
9. Dickey County – Acciona Wind Energy USA (60 turbines – 90 MW)

Utility-Scale Projects under Construction:

1. Oliver County – FPL/Minnesota Power – Phase 2 (32 turbines – 48 MW)
2. Cavalier County – FPL Energy (106 turbines – 159 MW)

Previously Announced and Reported Utility-Scale Projects:

1. Rugby – PPM Energy (100 turbines – 150 MW)
2. Berthold - Frey Winds (50 turbines - 100 MW)

Recently Announced Utility-Scale Projects:

1. Luverne - M-Power, LLC (100 turbines – 150 MW)
2. Valley City – FPL (133 turbines – 200 MW)
3. Gascoyne – Crownbutte Wind Power – Phase I (13 turbines – 20 MW)
4. Gascoyne – Crownbutte Wind Power – Phase II (134 turbines – 200 MW)
5. Hartland – Denali Energy & Montgomery Energy Partners – Phase I (333 turbines – 500 MW)
6. Hartland – Denali Energy & Montgomery Energy Partners – Phase II (333 turbines – 500 MW)

Transmission Projects Recently Announced:

1. Proposed 230kV transmission line 5 miles in length (Noltimier, Grand Prairie, and Baldwin townships – NE of Valley City)
2. Proposed 230 kV transmission line and new substation from Pillsbury, ND to existing Maple River substation NW of Fargo (60 miles).

Other Activities Previously Announced and Reported:

1. Basin Electric Power Cooperative announced the future development of up to 100 MW of wind energy south of Minot, ND at the completion of a 2-year resource study.
2. Turtle Mt. Community College (1 turbine – 0.67 MW)
3. Projects under consideration (working w/Commerce Econ. Dev. Office) in Stanley, Wishek, Napoleon, Rolla and Griggs/Steele Counties area

Other Activities Recently Announced:

1. On December 17, 2007 Xcel Energy issued an RFP seeking up to 500 MW of new wind resource. Final proposals are due March 18, 2008.

ECONOMIC DEVELOPMENT IMPACT OF WIND ENERGY

1. North Dakota Industries:

DMI Industries – West Fargo – Manufacturer of rolled steel wind turbine towers. DMI is currently employing approximately 350 workers in West Fargo, and recently added facilities in Canada and Oklahoma. To date, DMI has manufactured over 2,000 towers for the wind industry.

LM Glasfiber – Grand Forks – Manufacturer of wind turbine blades. Currently employing upwards of 750 workers; and recently expanded their facility by 100,000 square feet. They have experienced a tremendous growth rate.

Wanzek Construction – Fargo/West Fargo Installation of wind energy turbines. Currently employing 500 workers, this year between 20 - 25 percent of company's work is wind energy related. Services are provided nationwide.

Others: EAPC Engineers, Crown Butte Wind, Suzlon Wind Energy Corp., Energy & Environmental Research Center

2. Local Development Impacts:

Construction phase jobs
Ongoing employment (operation & maintenance)
Income and property taxes
Landowner payments – wind leases and annual development payments

3. ND Tax Incentives for Wind Energy Development

An income tax credit of three percent per year of the actual cost of acquisition and installation of the wind device is available. It is allowed in each of five years, beginning with the year of installation.

A property tax exemption is available for installations having a nameplate capacity of less than 100 kW. It is obtained through the county director of tax equalization and is good for five years.

For large wind projects (nameplate generation capacity of 100 kW or more) there is a property tax reduction, currently calculated at 1.5 percent of assessed value. The reduced property tax is good for the initial power purchase agreement period.

A sales tax exemption applies to any sales or use tax that otherwise would be due in the construction of a wind powered electrical generating facility having a nameplate capacity of 100 kW or greater. It is available through the State Tax Commissioner's office.

OTHER WIND ENERGY ACTIVITIES

1. North Dakota has one of the most comprehensive wind resource monitoring programs in the country. As of today, there are 68 sites at which detailed data on wind speeds and direction have been obtained. In many cases, the ND Dept. of Commerce Office of Renewable Energy & Energy Efficiency has provided matching funds for the purchase and installation of the equipment needed to undertake the studies.
2. The Office of RE/EE has sponsored a teacher course on wind energy in August of 2006, and has agreed to sponsor an additional course in 2007. The course is designed for middle/high school science and technical education teachers and is presented by the KidWind Project (www.kidwind.org).
3. The cost of wind energy equipment has increased dramatically because of steel pricing and the high demand for wind turbines. According to a Basin Electric spokesman, the rule of thumb cost for a 1 MW turbine is now \$1.6 million compared to slightly over \$1 million a few years ago.

4. The federal production tax credit for wind energy, if not renewed by Congress, is scheduled to expire at the end of 2008. Based on what has happened in the past, this would result in a dramatic decline in the wind energy industry.