

Verendrye **E**lectric **C**ooperative

Your Touchstone Energy[®] Partner





Part of a Co-op Family

- **Were a distribution cooperative**
- **Central Power Cooperative is our transmission cooperative**
- **Basin Electric Power Cooperative is our generation cooperative**

Membership

- 12,000 Meters
- 450 Million Kwhs in sales
- 31 million dollars in revenue
- 9,000 Members
- 50% of our membership in and around the City of Minot.
- 22% of our sales are to the USAF

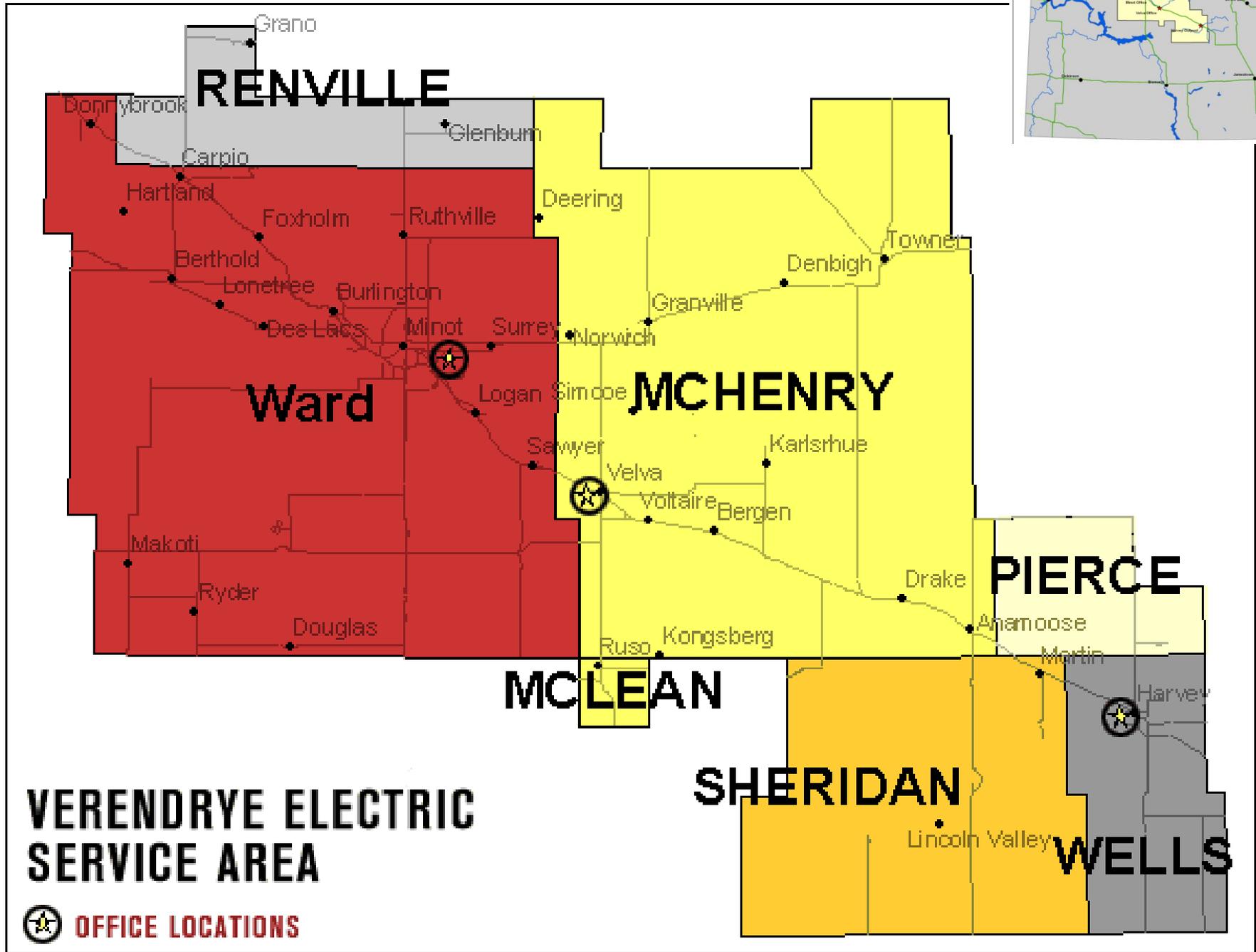




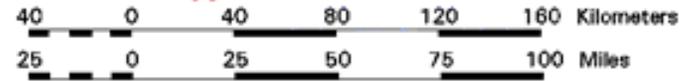
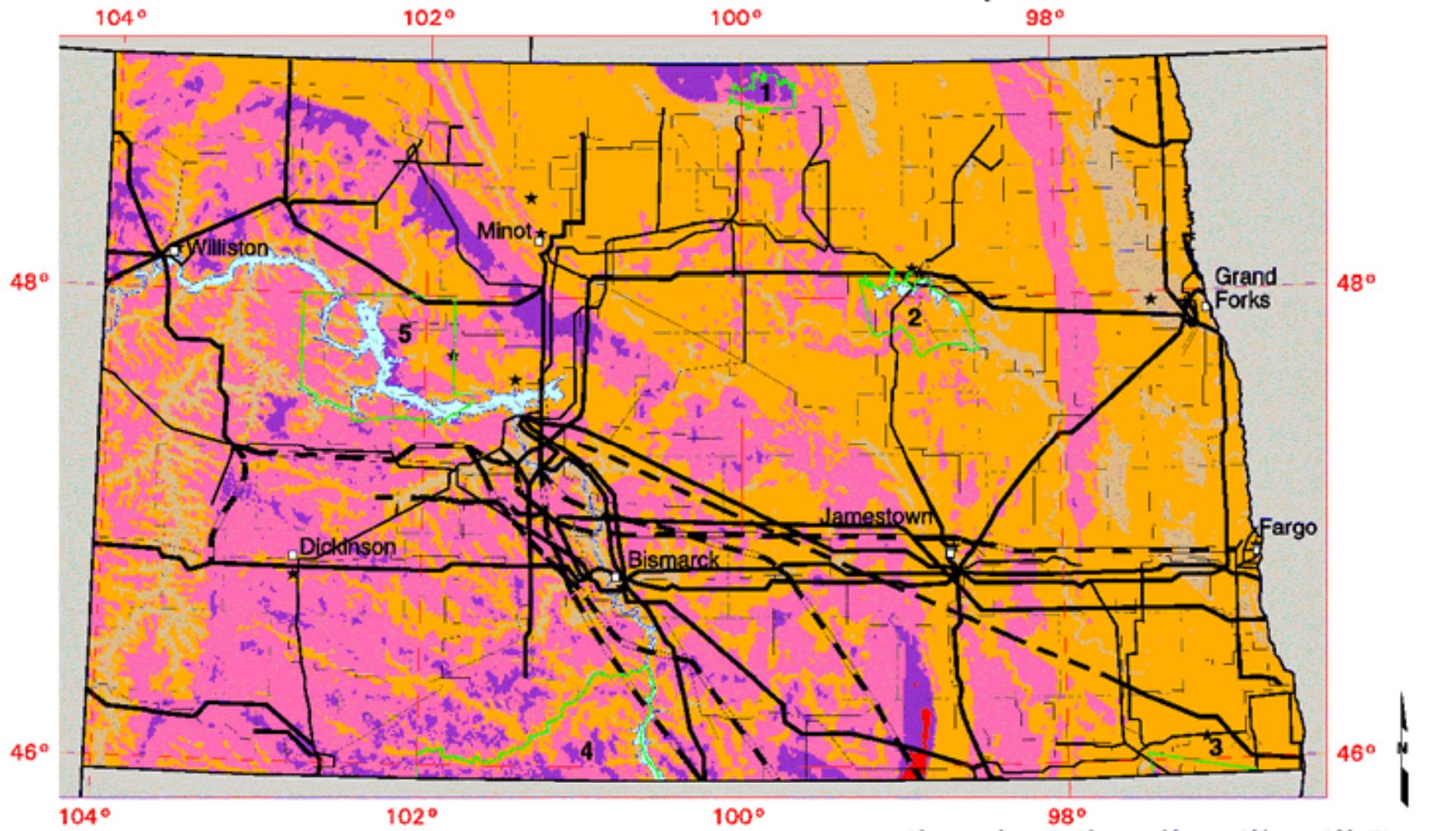
Plant

- 4,400 miles of line
- 1,500 underground
- 134 Townships
- 26 distribution substations
- 4 transmission substations
- 71 million dollars in plant





North Dakota - Wind Resource Map



Wind Power Classification				
Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m ²	Wind Speed ^a at 50 m m/s	Wind Speed ^a at 50 m mph
2	Marginal	200 - 300	5.6 - 6.4	12.5 - 14.3
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7

^a Wind speeds are based on a Weibull k value of 2.0

★ Meteorological Station with Wind Data
 □ City or Town

Transmission Line Voltage	
	69 Kilovolts
	115 Kilovolts
	230 Kilovolts
	345 Kilovolts
	Under Construction

Indian Reservations	
1	Turtle Mountain
2	Devil's Lake Sioux
3	Lake Traverse
4	Standing Rock
5	Fort Berthold

U.S. Department of Energy
 National Renewable Energy Laboratory





Three Wind Farms in our service area

- **Minot Wind (1&2)---Basin Electric**
 - 5 turbines, 7.1 MWs
- **Velva Wind Farm---Xcel Energy (Acciona)**
 - 18 turbines, 12 MWs
- **PrairieWinds ND 1---Basin Electric**
 - 77 turbines, 115.5 MWs



PrairieWinds Project Impacts

- **300+ construction workers over five months.**
- **Local subcontractors**
 - **25,500 Cubic Yards Concrete**
- **40+ landowners receiving lease payments**
 - **around \$4,000/yr/turbine**
- **\$400,000+ in annual property taxes**
 - **three school districts**
- **8 full time jobs**



Verendrye Direct impacts

- **New sales to maintenance buildings, substation buildings and station power**
- **Contract maintenance work on the wind farm**
- **Local PR exposure with the wind farm in our backyard**
- **Promotes energy blend with renewable source as part of the mix**
- **Member Tours**



Other Wind Activities

- **Several Wind Developers leasing land**
- **A few are installing MET towers**
- **Most do not have a purchase power agreement**
- **Most do not have transmission access**
- **Creates a lot of hype with little chance of a wind farm being built**
- **Questions?**