

Community Winds of Winona County

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Winona County**

***Local Energy/Local Opportunities
St. Cloud, Minnesota
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Community Winds of Winona County

- Undertaken by new county
Economic Development Authority
- Goal to establish a model and process
for other communities to use
- Requires a multi-year commitment of
resources

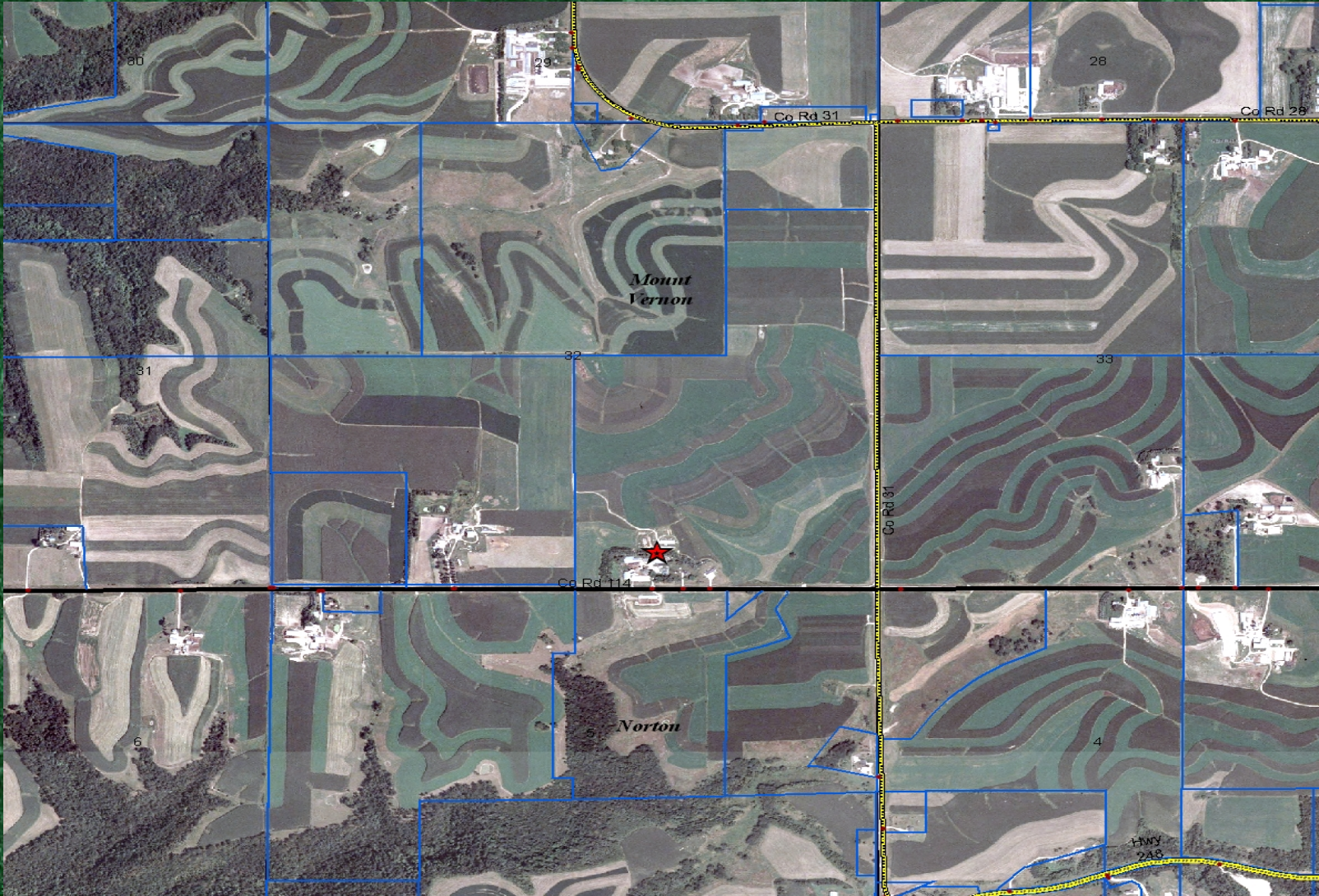
Community Winds of Winona County

Contract w/ Winergie Wind Energy Inc.

Established Preferred Locations

- **Good wind resource**
- **Proximity to substation/distribution lines**
- **Preferred utility's service area**
- **Evaluated raptor migration activity**

Aerial View of Location



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Project Partners

- St. Charles EDA
- Lewiston Altura School District
- Lewiston EDA
- St. Charles School District
- Winona State University
- St. Mary's University
- SE Minnesota Technical College
- Wilson Township
- Winona County

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Engineering & Physical Development

- ✓ Final Negotiations with Xcel for PPA
- ✓ Utility Interconnection Study
- ✓ Project Design/Engineering
- ✓ Equipment Procurement
- ✓ Wind Data Analysis (Wind Logics)
- ✓ Easements & Permits (CUP, FAA)

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Est. Energy Production

- 2 MW Suzlon S64 Turbine
- 40% Capacity factor
- 727 Ave. KW output
- 8,766 Hours per Year
- 6,372,882 Annual KWH

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Project Financing

- Received \$200,000 state community-based energy development rebate
- Recently secured \$3.2 million in CREBs
- Have identified willing private investors
- Working to determine best mix of public & private investment, to establish partners' legal relationship (JPA)

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Financial Review

- Development costs about \$125,000 and total costs about \$3.1 million
- C-Bed PPA to provide \$.0415/kwh
- An estimated payback of 12 to 15 years, with every combination of public and private yielding a slightly different ROI

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Conclusions:

- Turbine supply continues to tighten
- Plenty of work still ahead of us
- Project is challenging, requiring flexibility on the part of all partners
- Good communication is vital in community-based projects