Preparing for the Next Wind Energy Boom

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Today’s Talk

• History of Wind Development in MN
• MN’s Future Development and Investments
• Sharing / feedback
• Questions and Concerns about wind

Photo by Netty Barr
Installed Wind Capacity (99-May 07)
Q4 2017 Installed Wind Power Capacity (MW)

Total Installed Wind Capacity: 89,078 MW

Source: American Wind Energy Association Market Report
Where are large Wind Farms in Minnesota?
Transmission and substations
Lessons Learned and Best Practices

- Early Communication
- Development Agreements
- Watch for indicators
Other Contributing Factors

- Production Tax Credit (PTC)
- Progressive State attitude toward renewable energy

The federal renewable electricity PTC, inflation-adjusted per kWh tax credit for electricity generated by qualified energy resources and sold by the taxpayer to an unrelated person during the taxable year.
Wind Production Tax Revenue

- Production Tax: State Statute 272.029
- What is it and how is it used.

A tax is imposed on the production of electricity from a wind energy conversion system.

(1) 12 MW and larger, $.12 per kWh of electricity produced by the system;

(2) 2-12 MW (medium scale), $.036 per kWh of electricity produced by the system; and

(3) < 2, > .25 (small scale), .012 cents per kWh of electricity produced by the system.

Exempt: wind energy conversion systems with the capacity of .25 megawatts or less, and 2 MW if owned by a political subdivision.
2016 Wind Energy Production Tax

- MN Statute 272.029
- Payable year 2017
- $12,067,411 total
- 80% County, 20% Twp
- RMEB Survey
  - 13 of 18 Co collected
  - Tax relief,
  - Capital projects
  - Road & Bridge
Example: Mower County

- $2,373,932 in 2017 production tax revenue from wind energy
- Nearly $15 million since 2007

“Our entire community benefits from the production tax revenue received by our county. This last year, the county board committed $400,000 of the county portion of revenue from the wind energy production tax toward improving roads and bridges. We’ve used the remainder as a tax relief for citizens.”

Tim Gabrielson, Mower County Commissioner/Chair
Minnesota’s Investment Today

- 17.7% of MN energy production
- $12.07 Million Annual Production Tax (2017 MN Dept of Rev)
- $10-$15 Million Annual Landowner Payments
- $6.8 Billion Capital Investment in MN
- 3,499 MW installed; 900+ MW in development
- >100 companies wind-related supply chain; 20 manufacturing facilities
- 3,000 Minnesota Jobs
Example: Jackson County

- $1,593,508 to County
- $398,377 Townships
- Annual Community Fund
  - 13 grants across 4 counties totaling $39,000
Why Rural Community Investments?

- Production Tax Benefits
- Stable annual farm income
- Jobs - during and after construction
- Lower electric bills
- Clean energy
What Are You Hearing?

- Benefits?
- Trade offs?
Future Wind in MN

- New development
- Repowering
- 2-4 MW Turbines
U.S. Potential Wind Capacity in Megawatts (MW) at 80 Meters

Total Potential Wind Capacity: 10,640,080 MW

Source: AWS Truepower, NREL
Why Future Investments for MN?

- **Wind is Cost Competitive**
  - Dropped 66% in last 6 years

- **Lower risk investment**
  - Hedging against fuel costs
  - Cheaper than new natural gas plants

- **Long-term economic impact**
  - Tax revenue, landowner payments, continued job growth

- **Clean Energy Commitments**
Table Discussions

- What are you hearing?
- What questions or concerns?
Coffee Talk...What We’re Hearing...

- Aesthetics
- Health Impacts
- Local Jobs
- Signal Interference
- Property Values
- Noise
- Crop Dusting Pilots
Table Discussions – Ideas!

• What ideas do you have for how these questions/concerns might be addressed?
Final Reflections – Key Take-aways...
Thank you!

www.cleanenergyresourceteams.org  www.swrdc.org  www.windonthewires.org