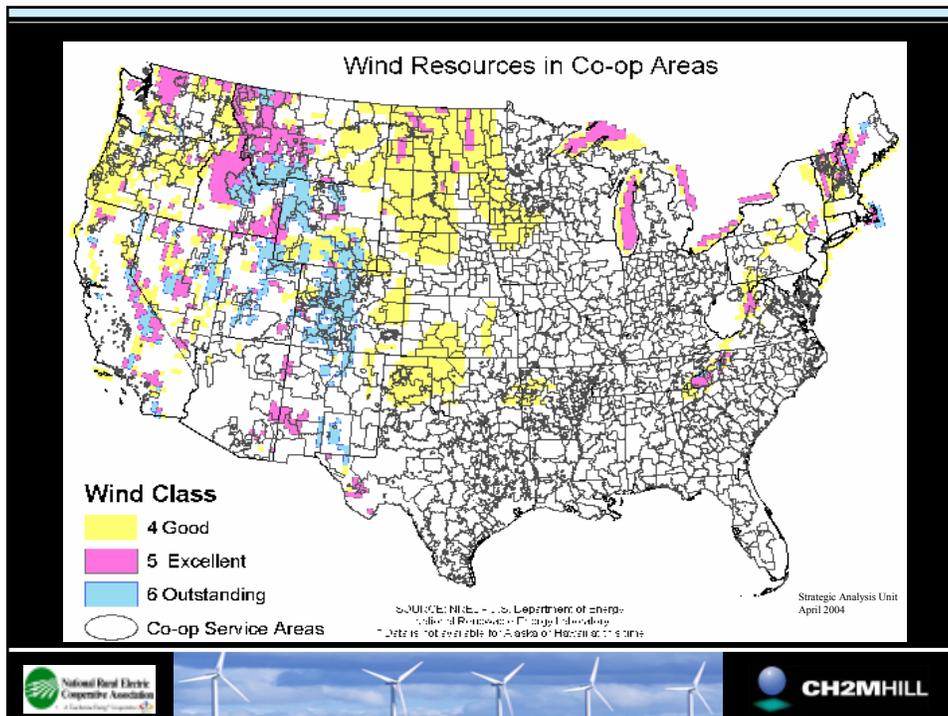


Wind Energy in the Electric Cooperative Sector



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CH2M HILL is a Technical Support
Contractor to NRECA



Co-op Wind Power Owners/Purchasers

- Kotzebue Electric Association (AK)
- Alaska Village Electric Cooperative (AK)
- Basin Electric Power Cooperative (ND)
- Minnkota Power Cooperative (ND & MN)
- East River Electric (SD)
- Great River Energy (MN & WI)
- Dairyland Power Cooperative (MN & WI)
- Dakota Electric (MN & WI)
- Salem Electric (OR)
- Orcas Power & Light (WA)
- Holy Cross Energy (CO)
- Yampa Valley Electric Association (CO)
- Tri-State G&T Association (CO)
- Illinois Rural Electric Cooperative (IL)
- Western Farmers Electric Co-op (OK)



Wind Power Benefits and Concerns

Benefits

- No fuel costs
- No emissions
- Low operating costs
- Compatible with other land uses
- Modular construction
- Cost (historically) is coming down

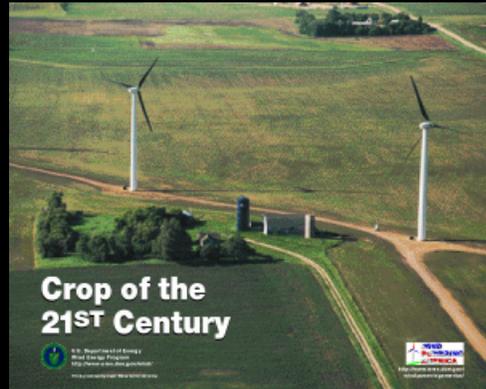
Concerns

- Visual impact
- Wildlife Including Birds/Bats
- Scheduling (intermittent resource)
- Technology risk
- Market risk
- Transmission



2005 - A Record Year for the Wind Industry

- 2,300 MW of Installed Capacity
- Notable Investments
 - *Goldmann Sachs*
 - *Seimens*
 - *Gamesa*
- John Deere promoting wind in the Ag Sector as second crop
- Wind energy getting the attention of the oil & gas industry
- Energy Policy Act (CREBs)



Challenges

- Tight turbine supply
- Higher steel prices
- Inconsistent policy support
- All-requirements contracts
- Small projects are more expensive to implement than large projects



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Clean Renewable Energy Bonds (CREBs)

- \$300 Million available for rural electric cooperatives
- Issued on a project-by-project basis
- Applications due to IRS by April 26, 2006
- Projects will be allocated the full amount requested beginning with the smallest dollar amount until the total funds are exhausted
- 2-year authorization
- Other potential Co-op funding opportunities include:
 - *Low cost RUS financing*
 - *REPI*
 - *State initiatives*
 - *Farm Bill 9006 Grants and Loans*



NRECA / Wind Powering America Partnership Activities for 2006

- Wind Interconnection Workshop with a focus on cooperative distribution systems held January 19-20. Next workshop tentatively scheduled for late May.
- 4 Webcasts – Next scheduled for April 6 “Wind in a Box” (www.repartners.org)
- Technical assistance (continually available) – Contact Mike Pehosh at NRECA (michael.pehosh@nreca.coop 703-907-5862)
- Regional Workshop (upper Midwest later this Fall)
- Expanded Wind Brief for Electric Cooperatives
- Other resources available through NRECA



NRECA is also Partnering with the U.S. DOE's Geopowering the West Program in 2006

- Geothermal Energy Workshop for Electric Cooperatives
- Support the activities of the Utility Geothermal Working Group
 - *Informational CD*
 - *Web Site*
 - *Annual meeting*
- Technical assistance (continually available) – Contact Bob Gibson at NRECA (bob.gibson@nreca.coop 703.907.5853)
- Guidebook
 - *WebCast series*



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