
Putting Wind on the Wires: T&D Grid Technology to Support the Growth of Wind Power



Monday, February 5, 2007





Wind Power is Growing

- ◆ 2,454 MW of capacity installed in 2006, bringing total capacity in US to 11,603 MW
- ◆ Wind industry exploring ability to realize vision set forth by President Bush of meeting 20% of requirement for electric energy
- ◆ Tremendous amount of wind generation project development, will be sustained by extension of PTC through 2008
- ◆ As with all growth, fostering a series of challenges, both policy and technical



Wind Presents Challenges from a T&D Standpoint

- ◆ Uncertainty - variable nature – does not blow consistently all of the time
- ◆ Best wind resources tend to be situated where the infrastructure to transport the electricity does not exist (or has inadequate capacity)
- ◆ Concerns about accommodating increasing penetrations of wind – recent MN study looked at 25% energy by 2020 – favorable operational and economic results
- ◆ Technical concerns about meeting requirements for LVRT, reactive power, SCADA – FERC Order 661 (Grid Code)



Our Panel for Today

- ◆ Steve Dayney – Manager, Policy Development – Xcel Energy
- ◆ Jorge Chacon – Power System Planner, Southern California Edison
- ◆ Reigh Walling – Director, Energy Solutions, GE Energy
- ◆ Bud Kerhli – Manager of Transmission System Planning, American Superconductor



For More Information

- ◆ Utility Wind Integration Group has a number of documents on studies of wind integration and interconnection
- ◆ American Wind Energy Association and National Renewable Energy Laboratory have good information on wind power basics
- ◆ We plan to post handouts from this session on the UWIG web site at www.uwig.org