



Wind Energy and FERC Transmission and Market Design Policy

**Rob Gramlich, Advisor to Chairman Wood
Federal Energy Regulatory Commission**

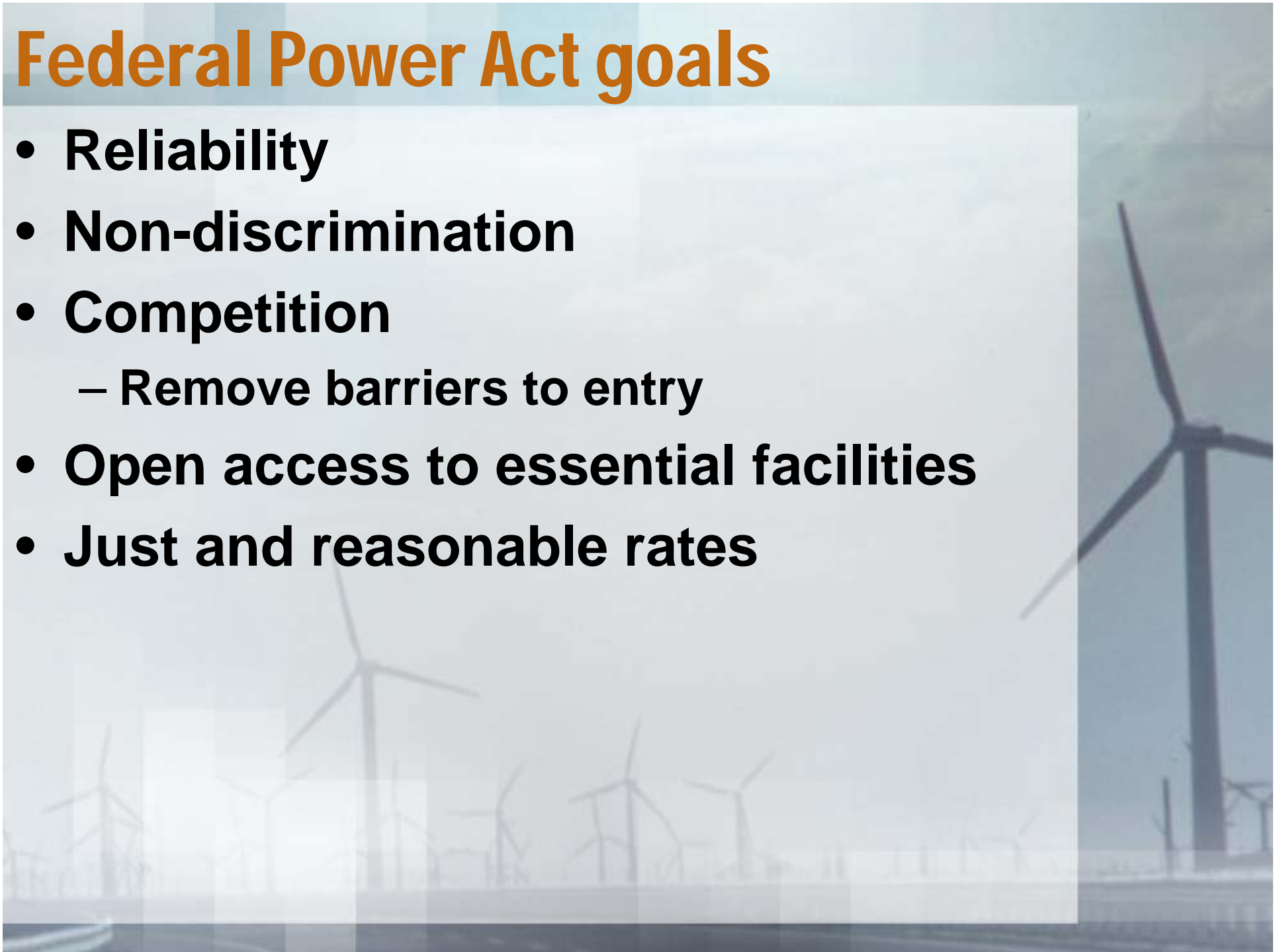
UWIG

Albany

10/27/2004

Federal Power Act goals

- **Reliability**
- **Non-discrimination**
- **Competition**
 - Remove barriers to entry
- **Open access to essential facilities**
- **Just and reasonable rates**



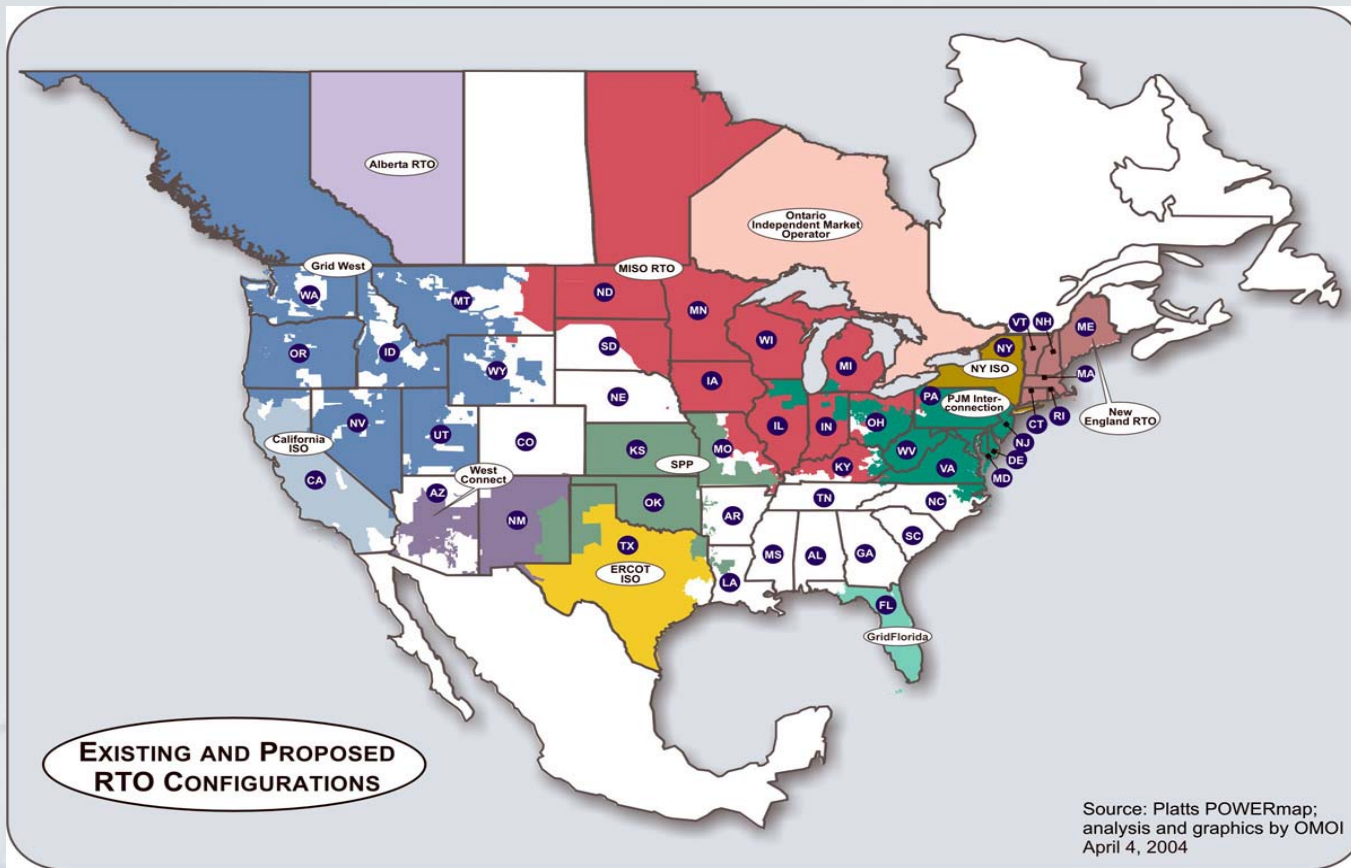
Challenges for wind

- **Has served local utility niches**
 - Not a big player in wholesale markets
- **Faces a lack of regional grid capacity**
- **Barriers to entry:**
 - Transmission tariffs impose charges exceeding costs imposed
 - Undeveloped and inconsistent interconnection requirements
 - Imbalance penalties
 - Capacity credits??



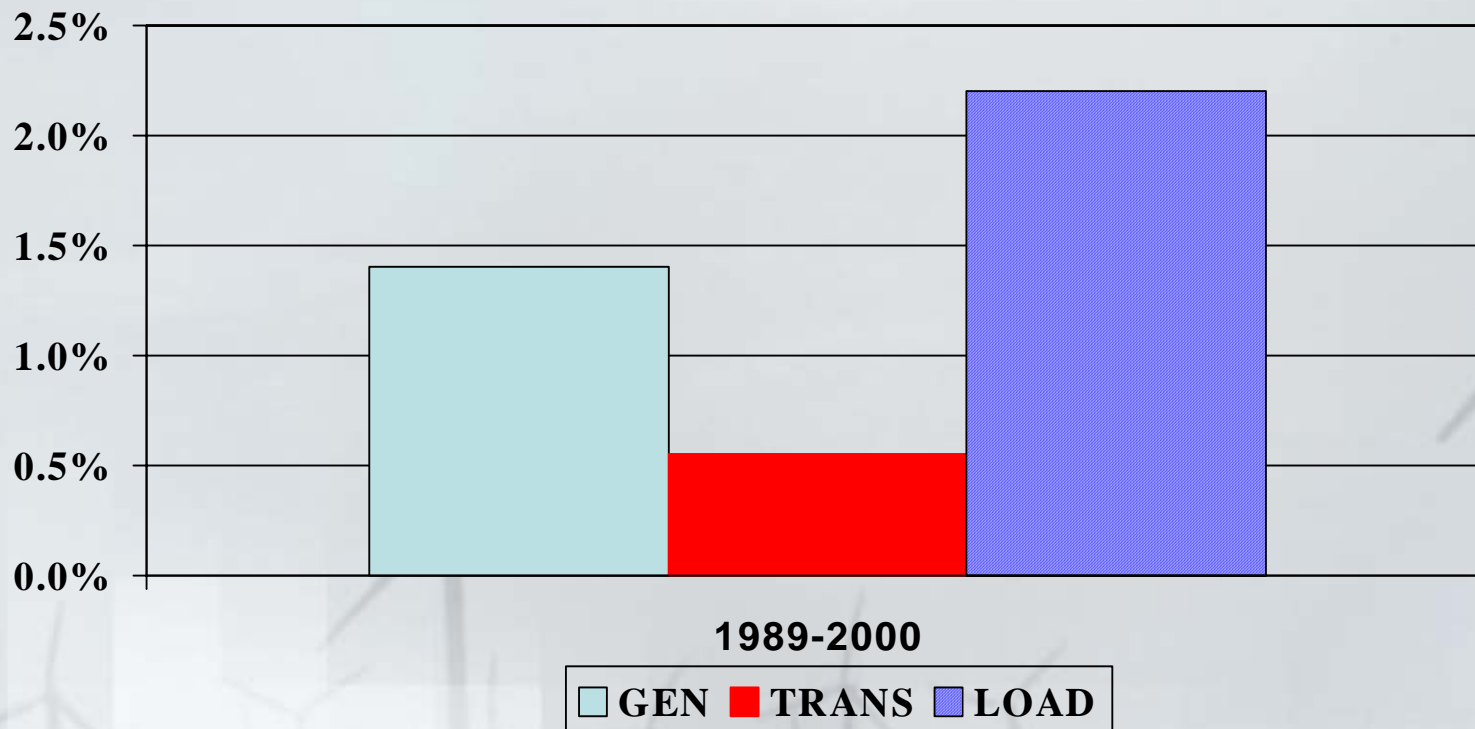
Benefits of RTOs

- Eliminate imbalance penalties, pancaked rates
- Regional coordination and planning



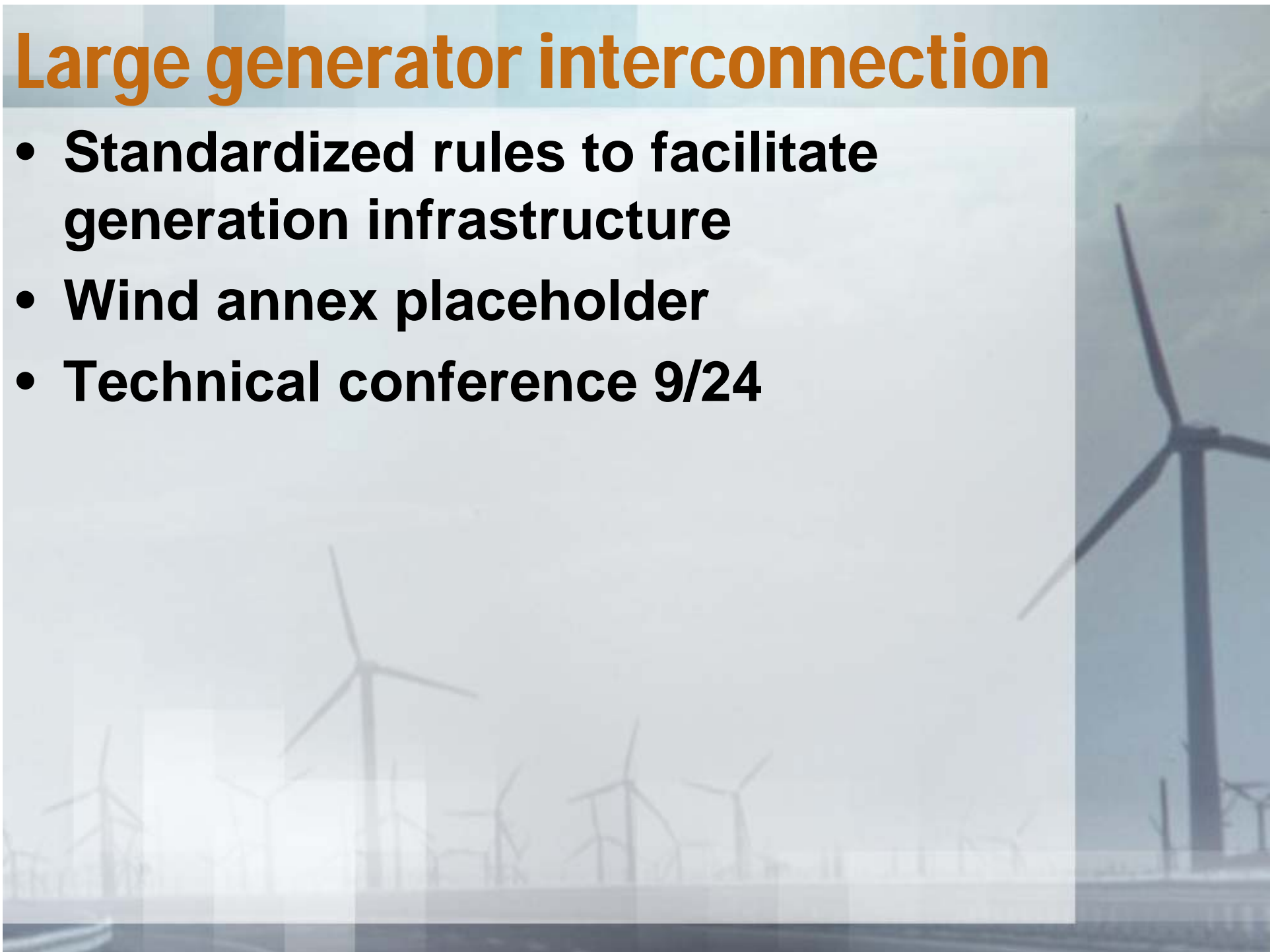
Wind needs transmission

- **Need to overcome lagging transmission investment**



Large generator interconnection

- **Standardized rules to facilitate generation infrastructure**
- **Wind annex placeholder**
- **Technical conference 9/24**



Small generator interconnection

- **Proposed rule April 2002**
- **Working through comments and consensus building**



Tariff reform

- **Order No. 888 Tariffs may not serve all purposes**
- **Pilot programs to accommodate wind**



Capacity credits

- **Much of generation value is captured through capacity obligations**
- **Wind likely provides some but not all capacity value of its max capacity**
- **Developments to provide for capacity value at RTOs**

