

Regional Transmission Interconnection Issues: Effects on the Ratepayer Joseph Sullivan, Commissioner

The Minnesota Public Utilities Commission's mission is to create and maintain a regulatory environment that ensures safe, adequate and efficient utility services at fair, reasonable rates consistent with State telecommunications and energy policies.

MISO membership is beneficial to Minnesota

- MISO and other RTO's established by FERC Order 2000 to drive competition and increase reliability
- Purpose of MISO and RTOs in general is to PLAN for and operate transmission infrastructure
- Benefits to Minnesota
 - Access to larger power market
 - Diversity of power supply
 - Lower wholesale energy prices
 - Lower capacity/reliability costs
- Minnesotans' energy bills today are hundreds of millions of dollars lower per year because of MISO

Problem: Minnesota's Long-Term Energy Planning Interests are Limited with Minimal Transmission Capacity

Transmission planning process in MISO has been bogged down over the last decade. Transmission planning and buildout has not kept pace with needs.

- Lack of planning/buildout has led us to today where interconnection costs are extremely high forcing projects to drop out.
- Lack of transmission capacity along the border between MISO and SPP (the "seem") is limited and creating problems for projects in Minnesota
- LRTP (Long Range Transmission Planning) and JTIQ (Joint Targeted Interconnection Queue Study) aim to address these issues.

Problem: Regional Transmission Capacity MN PUC Perspective

1. Siting of (Large) Wind and Solar Projects is Increasingly Inefficient Due to Lack of Available Capacity for New Resources

- Projects 'go' to areas where interconnection is possible, causing inefficient siting of resources
- Projects are permitted (using state resources, landowner time and attention) and are not built

Туре	Operating	Pending	Permit In Progress	Expected
Wind	3,774 MW	632 MW	700 MW	240 MW
Solar	262 MW	180 MW	920 MW	300 MW

Problem: Regional Transmission Capacity MN PUC Perspective

2. Minnesota's Long-Term Energy Planning Goals will be harder to achieve with Minimal Transmission Capacity

- Reliable and Safe Service;
- Efficient Utility Service
- Fair and Reasonable Rates;
- Access to Clean Energy Resources;
- Implementation of Commission-Approved Utility Resource Plans; plans which align with state goals, may be in jeopardy