



FERC Evaluating Resilience: What's up in the Markets?

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The grid in the MISO Region is resilient as a result of the combined efforts of MISO, MISO Members and States



Technology and Security

- ✓ Maturing identification, protection, detection, response, and recovery capabilities

Operations

- ✓ Improving the ability to anticipate, contain, and recover

Markets

- ✓ Operating efficient markets that incent and coordinate resilient outcomes

System Planning

- ✓ Enhancing planning criteria to ensure a reliable, flexible transmission system

- Draws upon Department of Energy, North American Electric Reliability Corporation, and National Academy of Engineering efforts related to resilience
- The term "Electric Grid" is the interconnected network for delivering electricity and includes the generation, transmission, and distribution systems, & the NERC registered Functional Entities
- Definition expanded to include grid stressors such as change related to portfolio evolution and increasing complexity

MISO's large footprint enhances resilience

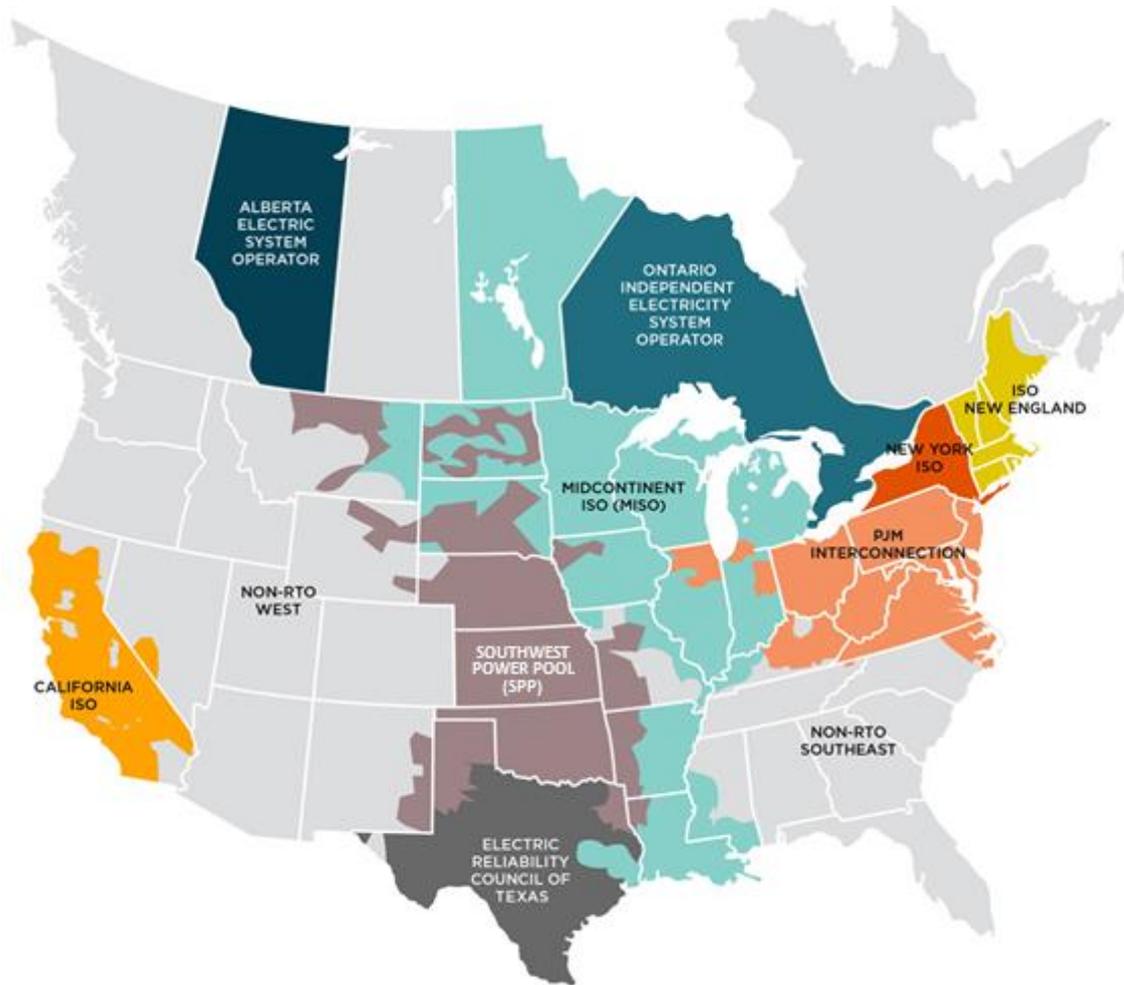
It might be hot in the south while it's cool in the north...

...meaning electricity demand will not peak in both areas at the same time...

...which creates opportunities to serve high-load areas with power generated elsewhere...

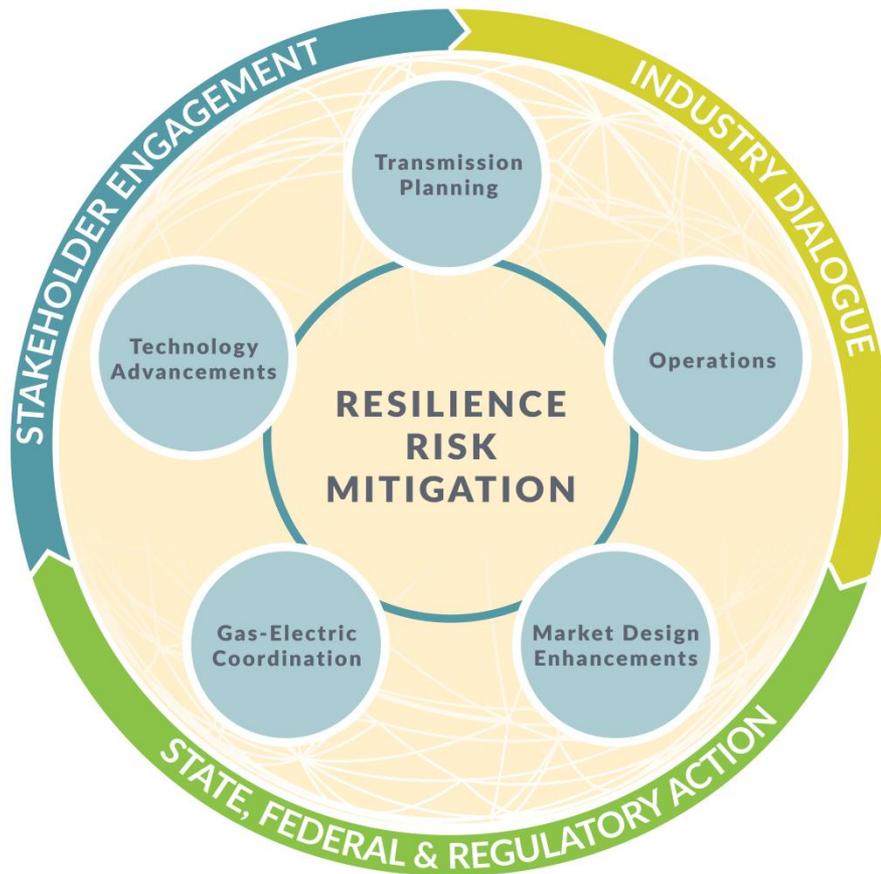
...which reduces stress on the system, making it more reliable and resilient

Resilience is a shared responsibility and industry discussions should expand beyond RTOs/ISOs



- FERC's efforts have focused only on the RTO regions, but resilience is widely shared
- Utilities, regulators, distribution system operators, MISO and other entities all play key roles in making the electrical system resilient, based on each party's jurisdictional boundaries and expertise.
- MISO is committed to working with all entities both within and beyond the MISO region to maintain and improve the resilience of the electrical system.

Opportunities for future industry dialogue to support resilience



Inter-regional Operations

- Enhance Inter-regional Operations to Enable Wider Tools to Respond to Events

Transmission Planning

- Opportunities to Incorporate Resilience Value into Transmission Planning Processes

Technology Tools

- Facilitate Implementation of Advanced / Secure Operational Tools
- Ensure CIP Compliance Enable Adoption of Best Practices