MISO Overview

• Independent, non-profit organization responsible for maintaining reliable transmission of power
• First Regional Transmission Organization (RTO) approved by the Federal Energy Regulatory Commission (FERC)

• 42 million end-use customers
• 99.99% system reliability
• $25 billion energy market
• 192,000 MW of generating capacity
  – Send operating instructions to 6,000+ generators every 5 minutes
• 65,800 miles of transmission lines
• 52 Members
• 426 Market Participants
• Jurisdictions
  – 15 States
  – 1 Canadian Province
  – City of New Orleans
MISO Planning Objectives

**MISO Board of Directors Planning Principles**

- **Develop a transmission plan** that meets all applicable NERC and Transmission Owner planning criteria and safeguards local and regional reliability through identification of transmission projects to meet those needs.

- **Make the benefits of an economically efficient electricity market available to customers** by identifying transmission projects which provide access to electricity at the lowest total electric system cost expansion plan that meets reliability needs, policy needs, and economic needs.

- **Analyze system scenarios** and make the results available to state and federal energy policy makers and other stakeholders to provide context to inform regarding choices.

- **Provide an appropriate cost allocation mechanism** that ensures that costs of transmission projects are allocated in a manner roughly commensurate with the projected benefits of those projects.

- **Coordinate planning processes** with neighbors and work to eliminate barriers to reliable and efficient operations.

- **Support state and federal energy policy requirements** by planning for access to a changing resource mix.

**Fundamental Goal**

The development of a comprehensive expansion plan that meets reliability needs, policy needs, and economic needs.
MISO’s value-based transmission planning process seeks to ensure appropriate transmission projects are in place given an evolving resource portfolio.

Future Development

- Existing Fleet
- Accelerated Alternative Tech
- Policy Regulation

A variety of policy and economic based Futures provides multiple long-term views of future resource mix

Long-term Transmission Strategy

- Long-term overlay roadmaps guide near-term transmission decisions

Regional Transmission Plan Development

- Conditions Precedent
- Robust Business Case
- Cost Allocation and Recovery
- Policy Consensus

Long-term Strategy and conditions precedent frame regional transmission plan

The graphics are for illustrative purposes ONLY
Through that process MISO has facilitated significant transmission investment in its region

Cumulative investment:
- $12.9 billion constructed
- $26.3 billion approved

Values in billions
Some aspects of the electric and gas industries are regulated by FERC, while others are regulated by state utility commissions.

### Electricity: Who regulates what?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Regulator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation of the commodity</td>
<td>Unregulated in some areas; states in others, but never FERC</td>
</tr>
<tr>
<td>Siting/ construction of generation &amp; transmission</td>
<td>States</td>
</tr>
<tr>
<td>Wholesale sales, rates &amp; transmission</td>
<td>FERC</td>
</tr>
<tr>
<td>Retail sales &amp; distribution</td>
<td>States</td>
</tr>
<tr>
<td>Reliability of high voltage transmission system</td>
<td>FERC</td>
</tr>
</tbody>
</table>

### Natural gas: Who regulates what?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Regulator</th>
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</thead>
<tbody>
<tr>
<td>Production of the commodity</td>
<td>Unregulated*</td>
</tr>
<tr>
<td>Siting and construction of interstate pipelines and storage</td>
<td>FERC</td>
</tr>
<tr>
<td>Transportation, including rates for services</td>
<td>FERC</td>
</tr>
<tr>
<td>Sales of gas in interstate commerce</td>
<td>FERC</td>
</tr>
<tr>
<td>Local distribution companies</td>
<td>States</td>
</tr>
</tbody>
</table>

*While gas producers are subject to safety/environmental standards, they do not have state-designated “territories” as many electricity generators do, and there is no price or rate regulation at the state or federal levels.*
MISO coordinates extensively with state regulatory agencies to ensure current and future energy needs are met.

- RTO scope - single vs. multi-state.
- State geography – single vs. multi-RTO.
- MISO spans 15 largely traditionally regulated states – one that is fully within the MISO footprint.
- Significant coordination both with individual state regulatory agencies, and the Organization of MISO States.