



# Building Transmission for the Future: Overview of Projects and Initiatives

- Commerce has a variety of roles as it relates to transmission infrastructure in Minnesota:
  - Representing the interests of Minnesota residents, businesses, and governments before regional and federal bodies as it relates to transmission issues
  - Representing the public interest before the Minnesota Public Utilities Commission (PUC) including analyzing certificates of needs and cost recovery for transmission investments.
  - Conducting environmental analysis, review, and technical expertise on behalf of the PUC for proposed energy projects including transmission lines.

# Commerce Role: Office of Energy Reliability and Security

- Office of Energy Reliability and Security
  - Operates pursuant to MN Statutes 216A.07, 216C.15, and various Executive Orders (eg. EO22-20, EO23-23) in addition to other federal mandates and responsibilities.
  - Represents Minnesota's interests before regional and federal bodies that plan for energy infrastructure and set policies that affect system reliability and security in Minnesota.
  - Areas of priority include: transmission planning, grid operations, petroleum/natural gas/delivered fuel system constraints, community resilience for vulnerable populations, and cyber and physical security issues.
  - Focus on the impacts of regional transmission planning and grid operations on electric system reliability. Including facilitation of the Joint Targeted Interconnection Queue Transmission Study Process federal award from the US Department of Energy (JTIQ GRIP Award).
  - Develops and maintains the State Energy Security Plan along with the emergency allocation and conservation procedures. Provides situational awareness on emergent energy reliability issues.

# Transmission Infrastructure in Minnesota: Opportunities and Challenges

- Lack of transmission capacity is a barrier to new wind and solar development
- Minnesota's high-voltage electric transmission system is part of a much larger regional system that is planned and operated by the Midcontinent Independent System Operator (MISO)
- In 2022, to reduce transmission constraints, MISO approved a long-range transmission plan (LRTP) for 17 large Midwest transmission projects, three of which are in Minnesota
- Planning and constructing regional portfolios of cost-shared “backbone” transmission lines is more effective than a state-by-state approach because the multi-state transmission system works together as an integrated whole
- MISO and the neighboring Southwest Power Pool have also jointly planned five new interregional transmission (JTIQ) projects to help reduce interconnection barriers

# Federal Award for JTIQ GRIP Project: Overview

- Joint Targeted Interconnection Queue Transmission Study Process and Portfolio (JTIQ GRIP Project)
  - Funding through the US Department of Energy as part of its Grid Resilience and Innovation Partnerships (GRIP) Program
  - Partnership between Commerce, MISO, SPP, GPI, and several transmission owners (including Xcel Energy and Ottertail Power)
  - \$464 million federal award for a \$1.8 billion transmission infrastructure investment in the upper Midwest.
  - Project locations include Iowa, Kansas, North Dakota, Nebraska, Minnesota, Missouri, South Dakota

# The Five-Project JTIQ Portfolio: Example of Interregional Transmission Planning

JTIQ Portfolio	Location by RTO
Bison – Hankinson – Big Stone South 345 kV	MISO
Lyons Co - Lakefield 345-kV (Minnesota)	MISO
Raun – S3452 345 kV	MISO - SPP
Auburn – Hoyt 345 kV	SPP
Sibley 345 Bus Reconfiguration	SPP



# Federal Award: Outcomes and Benefits

## JTIQ Project Anticipated Outcomes and Benefits:

- Demonstrate a replicable/scalable solution to interregional interconnection and transmission planning studies
- Leverage long-range studies of generation projects to deliver optimized transmission solutions
- Allocate costs among projects over time with an innovative fixed per-MW charge
- Unlock approximately 30GW of new generation, mostly wind and solar
- Community engagement focusing on energy literacy
- Targeted training and workforce development for disadvantaged communities

The background of the slide is a repeating pattern of speech bubbles in various colors (red, yellow, pink, white, and blue) against a teal background. Each speech bubble contains a dark blue question mark. The bubbles are scattered across the top half of the slide, while the bottom half is a solid dark blue with a faint, larger-scale version of the same pattern.

# Questions?

Jon Kelly

Director, Government Affairs

651-356-4061

[Jon.Kelly@state.mn.us](mailto:Jon.Kelly@state.mn.us)