Fact Sheet

Long Range Transmission Planning (LRTP) Tranche 2.1

Under the Reliability Imperative's Transmission Evolution pillar, MISO is transforming how it plans for and manages the grid of the future, given all the complex changes underway. As part of this effort, Long Range Transmission Planning (LRTP) develops regional projects to ensure the transmission system is reliable, economic and compliant in the future based on utility and state goals and policies, projected conditions and industry trends. Tranche 2.1 is the second phase of LRTP and builds on the foundation of Tranche 1. Tranche 2.1 includes 24 projects and 323 facilities across the MISO Midwest subregion estimated at $21.8 billion and targeted to go in service from 2032 to 2034. It builds a 3,631-mile 765 kV and 345 kV backbone that ensures future reliability while providing benefits that exceed costs. See the MTEP24 Report for more information.

Robust Portfolio

- The Tranche 2.1 portfolio is a significant step toward enabling future generation as envisioned by MISO's members, utilities and states. It is primarily a reliability-based portfolio, but also provides a broad range of value.
- The portfolio was developed through a proven process that included substantial stakeholder engagement, including more than 300 meetings and feedback on the process and solutions.
- MISO is confident its comprehensive regional planning process has appropriately managed the uncertainty inherent in developing solutions that address a resource mix and issues 20 years into the future and in estimating the value of those solutions to MISO members.
- A broad set of stakeholders supported the portfolio.

765 kV Backbone

- After extensive analysis, MISO determined a 765 kV backbone is the right choice.
- 765 kV lines can carry more electricity, minimize land use, and reduce energy losses while maintaining high reliability.
- With more renewable generation in the future, which is typically located long distances from where energy is needed among greater populations, the technology is ideal to facilitate large power transfers across the footprint.
- With growth of new data centers, U.S. manufacturing and electrification, 765 kV lines can also accommodate the increasing electricity demand expected.
- Investing in higher-capacity lines now, avoids the cost of upgrading or building additional lines in the future.

Benefits / Costs

- MISO understands the criticality of our transmission planning process and that investments of this size must bring value to ratepayers, our members, businesses and local economies.
- MISO is required to clearly demonstrate the value from this portfolio, and we have. Tranche 2.1 meets all requirements by addressing multiple reliability issues, providing a benefit-cost ratio ranging from 1.8 to 3.5 as well as numerous other benefits.

- Tranche 2.1 will deliver significant economic development benefits to local economies in the MISO region.
- Investing in transmission is an investment in economic development as new expanding economies require reliable power. Transmission also has the potential to attract new businesses and support connections to promising high-growth industries, such as data centers.

Costs to Ratepayers

- MISO takes ensuring reliability and value to customers very seriously and is mindful that affordability is important when performing regional transmission planning.
- Tranche 2.1 is estimated to cost MISO members about $5 per 1,000 kWh of energy used while providing $10 to $18 of value over that same amount of usage per month in value. The greatest expense in Future 2A, however, is the cost of generation, which is estimated at four to five times the cost of transmission.

Next Steps

- Tranche 2.1 was approved by MISO's Board of Directors on December 12, 2024. MISO will support projects as they move through state regulatory processes.
- MISO will determine which projects require the Competitive Transmission Administration (CTA) process to select the transmission developer and post the schedule of the Request for Proposal process following Board approval.