



Making tomorrow's energy possible. Together.

Minnesota Legislative Energy Commission Update
January 24, 2024

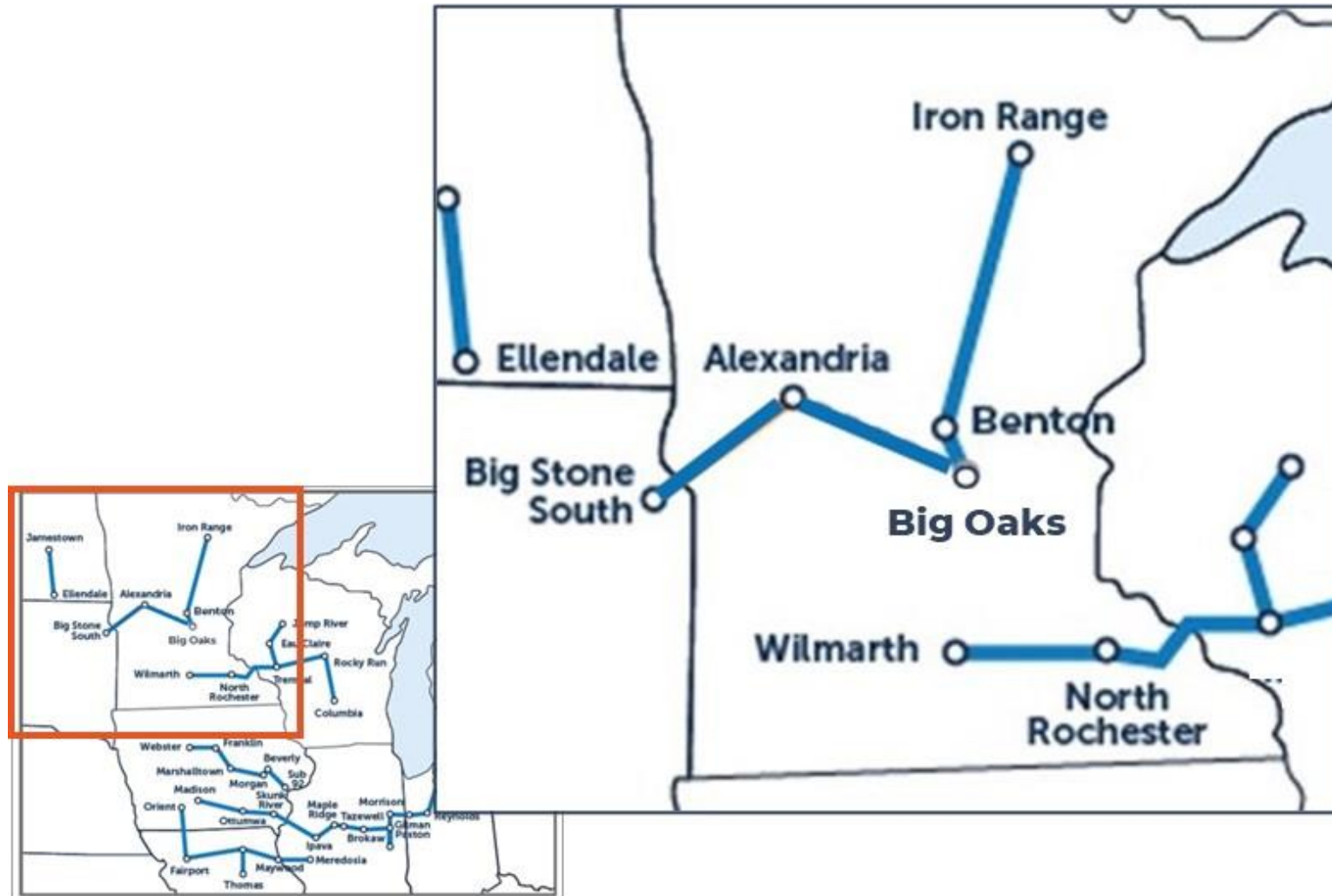
CapX2020 Transmission Expansion 2004 - 2017

CapX2020 is a joint initiative that has successfully executed the upgrade and expansion of over 800 miles of transmission in 4 states

- Continued reliable service for customers
- Strengthened the transmission grid
- State Renewable Energy Standards
- New generation outlet
- Regional transmission support



Grid North Partners advocated for MISO's LRTP and now member-utilities are actively developing projects

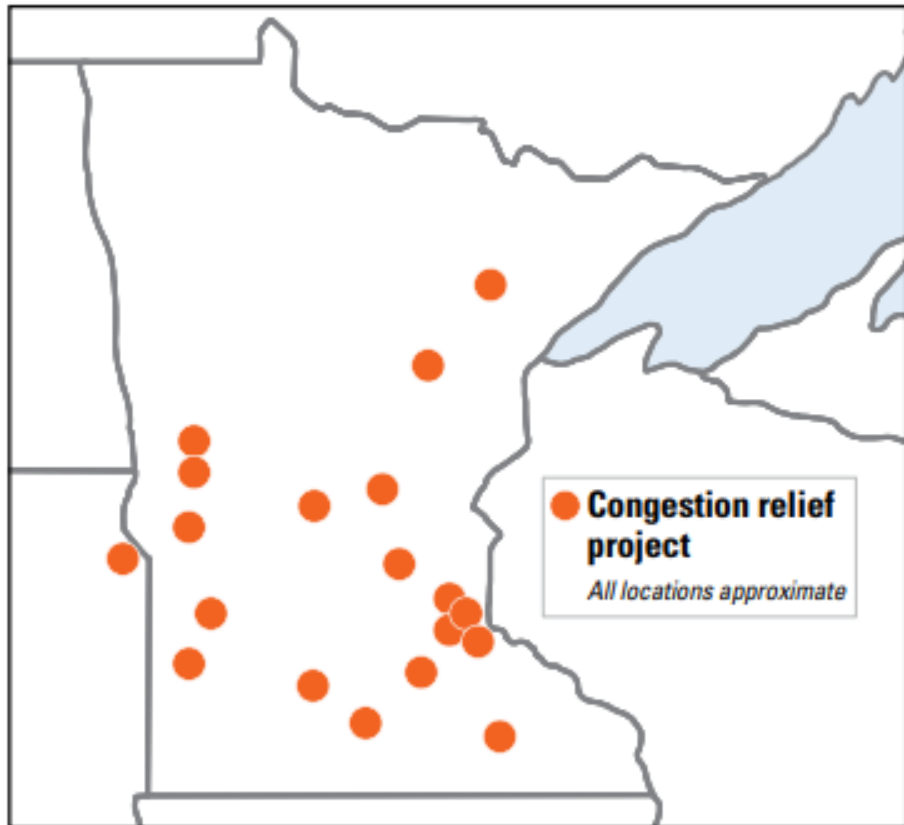


Grid North Partners Near-Term Congestion Study

- In recent years, congestion has risen beyond normal levels due to:
 - Generation construction outpacing the construction of transmission
 - Planned and unplanned system outages
 - Generation being built in areas formerly without generation
- Regional transmission is the long-term solution; however, development requires 8-10 years on average
- In 2023, Grid North Partners collectively undertook a study to identify and develop near-term solutions to incrementally resolve congestion
 - Collectively analyzed both historical and forward-looking congestion
 - Identified physical limiting equipment on every congested element
 - Forecasted congestion relief for each solution



Grid North Partners member utilities plan to individually construct 19 near-term solutions



Project Highlights:

- 19 solutions
- Total cost: ~\$130 million
- Congestion benefits: >300 million (>2:1 B/C)
- Estimated in-service dates: 2023 – 2026
- Scope: Primarily upgrades of existing equipment
- Two of 19 require PUC permits (CapX2020 Brookings second circuits)
- Helps enable construction of LRTP projects

Going Forward

- The Grid North Partners member utilities will continue to identify and implement short-term and long-term congestion solutions that are economically justified, as well as work with policymakers and MISO to make changes
- Actively engaged and supporting MISO LRTP Tranche 2 efforts

