

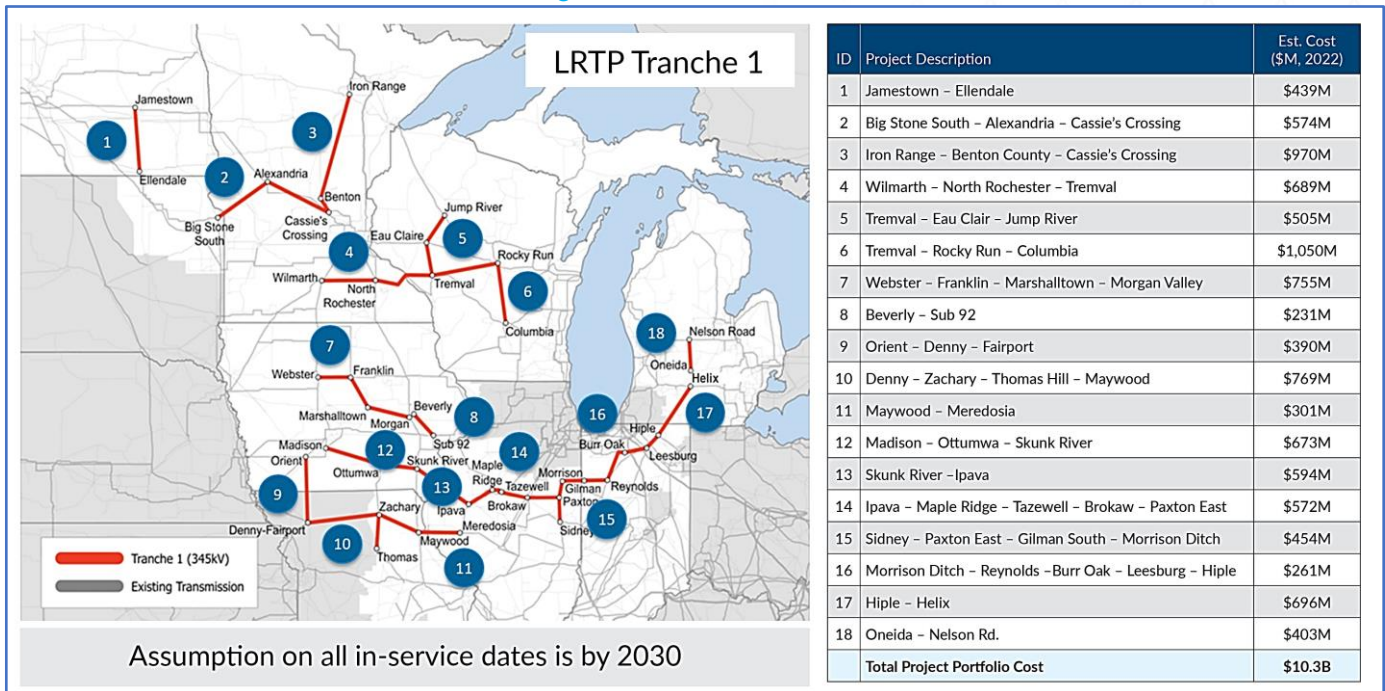


# LONG-RANGE TRANSMISSION PLAN (LRTP)

## BACKGROUND

In 2022, the Midcontinent Independent System Operator (MISO) initiated a collaborative and innovative effort known as the Long-Range Transmission Plan (LRTP) to provide a roadmap for future transmission investment across the MISO region. In July 2022, the MISO Board of Directors approved the largest portfolio of long-range transmission projects in Regional Transmission Organization (RTO) history. The \$10.3 billion investment includes 18 transmission projects in MISO’s Midwest Subregion. The Tranche 1 portfolio is the first of four planned tranches in MISO’s LRTP process.

Tranche 1 represents the first iteration and includes 18 projects across the MISO Midwest subregion estimated at \$10.3 billion



## ARE THESE PROJECTS COST EFFECTIVE?

Current analysis indicates total economic benefits of the Tranche 1 portfolio significantly exceed costs with a benefit-to-cost ratio of at least 2.2 for all resource zones in MISO Midwest. Benefit metrics include congestion and fuel savings, avoided capital costs of local resource investment, avoided transmission investment, resource adequacy savings, avoided risk of load shed and decarbonization.

JULY 2024

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### WHY ARE THESE PROJECTS NEEDED? WHAT BENEFITS CAN BE REALIZED?

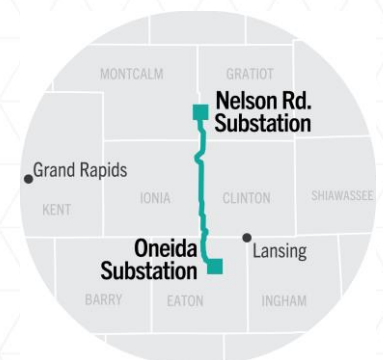
These projects are critical to ensure the integration of new generating resources is done in a manner that increases resiliency, improves reliability, and delivers wide-spread economic benefits as power producers transition to a generation fleet composed of clean, renewable energy supporting an electrified economy. Benefits include:

- **Reduced system congestion and fuel savings** – LRTP Tranche 1 projects will decrease congestion and allow more low-cost resources to be integrated, replacing higher-cost resources, lowering the overall cost to serve load.
- **Avoided capital costs of local resource investments** – LRTP Tranche 1 projects will increase regional transfer capability, which will result in an optimized balance of local resource investment and regional transmission capacity.
- **Avoided transmission investment** – LRTP projects will increase regional transmission capacity and preempt the need for reliability expansion projects and upgrades in the future.
- **Improved reliability and resilience** – The portfolio will enhance grid reliability and provide more system resilience during increasingly frequent and severe weather events.
- **Help meet decarbonization goals** – The renewable generation sources enabled by the LRTP portfolio will help accomplish the decarbonization goals set by states, corporations and other external stakeholders.

### HOW WILL MICHIGAN BE IMPACTED?

As part of Tranche 1, approximately 55 miles of new 345 kilovolt (kV) transmission line will be constructed from the Michigan / Indiana border in Branch County to a new ITC Helix Substation in Calhoun County. This will be the first new interstate connection to Michigan's transmission system in nearly 50 years. Approximately 40 miles of new 345kV transmission line will be built from Oneida Substation in Oneida Township to Nelson Road Substation in New Haven Township. Highlights of these projects include:

- Expected to provide over \$6 billion in economic benefits to Michigan ratepayers
- Approximately 4,100 jobs to be created over the span of the projects
- First greenfield development of 345kV in Michigan since the Thumb Loop project was approved in 2010
- First new 345kV transmission line interstate connection to Michigan's transmission system since 1973.
- MISO's second backbone transmission portfolio (MVPs approved 2011)
- Strategically engineered to support our clean energy transition while maintaining reliability



### WHAT ARE NEXT STEPS?

In July 2024, ITC submitted a proposed route for both Helix-Hiple and Nelson Road-Oneida to the Michigan Public Service Commission (MPSC). The MPSC has one year to determine if the routes will be approved for construction. For more information, visit [MIFutureGrid.com](https://www.mifuturegrid.com)