Northland Reliability Project

GREAT RIVER ENERGY | minnesota power

Supporting a reliable, resilient and flexible energy grid

To maintain a continuous supply of safe and reliable electricity, Minnesota Power and Great River Energy are investing in transmission infrastructure to enhance the stability of the regional electric system and support a reliable, resilient and flexible electric grid as energy resources continue to evolve. The energy resources we use to serve our customers and members are changing, and the regional power grid we use to deliver that energy needs to change, too.

Project needs

The Northland Reliability Project will ensure the power grid in northern and central Minnesota continues to operate safely and reliably as energy resources in Minnesota and the regional power system continue to evolve. This project is also part of a large "Long Range Transmission Plan" portfolio approved by MISO, the region's grid operator, to support grid reliability across the Midwest region. As generation resources shift from fossil fuels to more renewables, the Northland Reliability Project is one part of the solution to:

Provide support to the energy grid as more renewable energy is brought online and coal operations cease at existing power plants

Improve ability to withstand more frequent extreme weather events

Increase capacity to safely and reliably deliver more clean energy from where it's produced to where it's consumed by utility customers and power cooperative members

Meet future energy needs by enabling transfer of many types of power generation to many locations to meet the long-term needs of our customers and members

About

The project consists of two major segments and some additional improvements:

- **Segment one:** Install approximately 130 miles of a new double-circuit 345-kilovolt (kV) transmission line, generally located near existing transmission line corridors
- **Segment two:** Replace approximately 20 miles of an existing 230-kV transmission line with a double-circuit 345-kV transmission line from the Benton County Substation to the Big Oaks Substation (substation to be built as part of a separate project)
- **Additional project improvements:**
  - Expand the existing Iron Range Substation, located near Grand Rapids, and the Benton County Substation, located near St. Cloud
  - Install a new substation at or near the existing Riverton Substation and reconfigure existing transmission lines in the Riverton area
  - Rebuild approximately 20 miles of existing single-circuit 345-kV line from the Benton County Substation to the Sherco Substation in Sherburne County

January 2023

Schedule

We'll undertake a robust stakeholder process as we prepare to apply for a Certificate of Need and Route Permit from the Minnesota Public Utilities Commission.

2022
Project planning and initial stakeholder engagement

2023
Routing, public engagement and permitting

2024 – 2026
Permitting, engineering, environmental surveys, real estate and public engagement

2027 – 2030
Construction

2030
Anticipated in-service

**The schedule is subject to change.*

Minnesota Power and Great River Energy have a successful history of joint development and ownership of projects that support the reliability of our electric grid to meet the needs of our communities.

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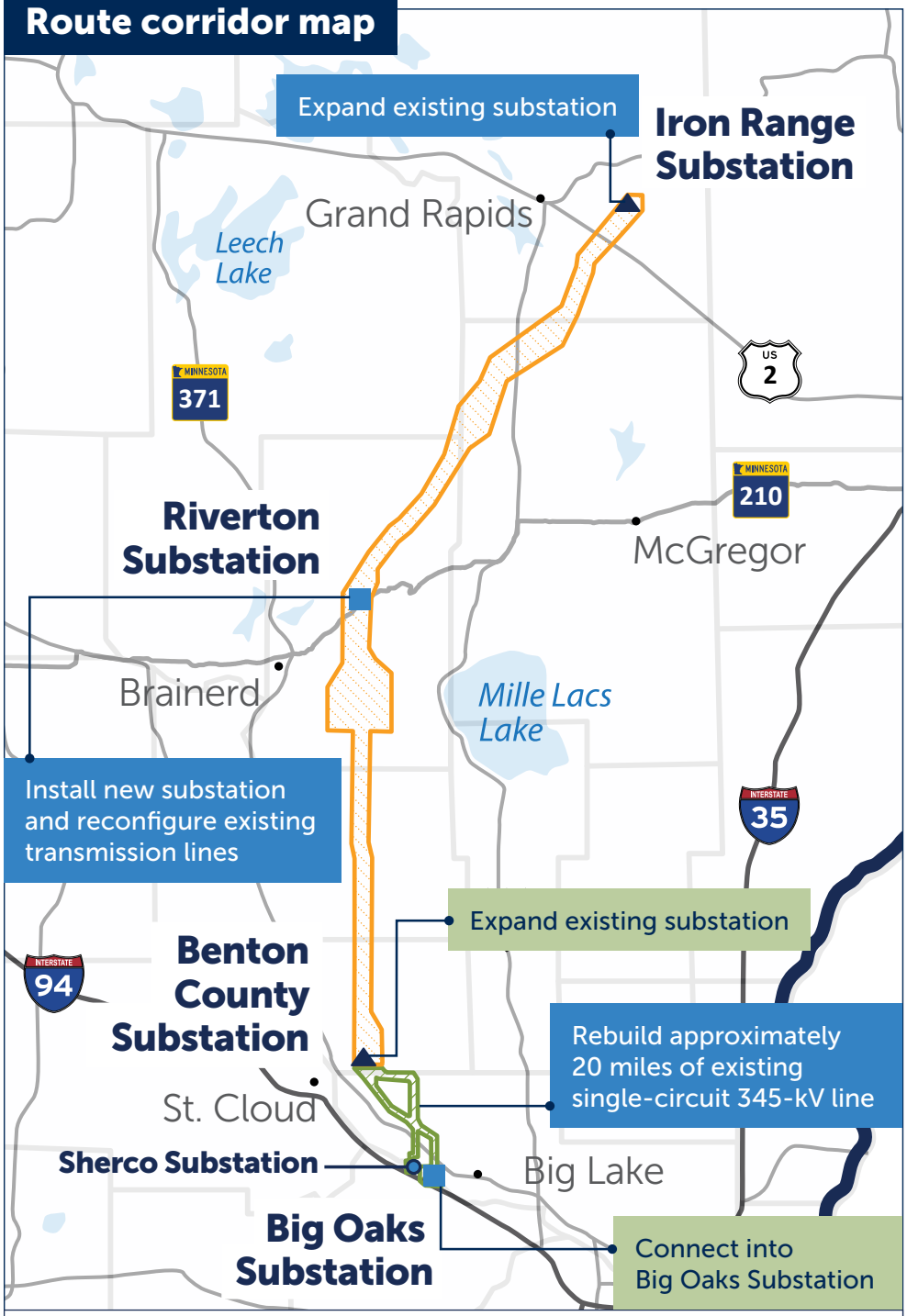
Route corridor map



Legend

- Expand existing substations
- New substation
- Segment one
- Segment two

Routing process

During the routing process, our team will identify route alternatives built on taking advantage of opportunities while understanding constraints. We'll be relying on feedback from the public, local leaders, agencies and our own expertise to develop alternatives within the route corridor.

Segment one

Install approximately 130 miles of a new double-circuit 345-kV transmission line, generally located near existing transmission line corridors.

Segment two

Replace approximately 20 miles of an existing 230-kV transmission line to a double-circuit 345-kV line from the Benton County Substation to the Big Oaks Substation (substation to be built as part of a separate project).

Additional project improvements:

- Expand the existing Iron Range Substation, located near Grand Rapids, and the Benton County Substation, located near St. Cloud
- Install a new substation and reconfigure existing transmission lines in the Riverton area
- Rebuild approximately 20 miles of existing single-circuit 345-kV line from the Benton County Substation to the Sherco Substation in Sherburne County

Connect with us

Questions? We want to hear from you.

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January 2023