



Iron Range – St. Louis County – Arrowhead ISA TRANSMISSION PROJECT

Virtual Open House

Thank you for joining us online today. We greatly appreciate your input in helping us review and refine the preliminary route for this project. On the following slides you'll learn more about the project, review maps, and have the opportunity to provide input about the initial study area.

Who we are

[Minnesota Power](#) provides electric service within a 26,000-square-mile area in northeastern Minnesota, supporting comfort, security and quality of life for 150,000 customers, 15 municipalities and some of the largest industrial customers in the United States.

About the Project

Minnesota Power is proposing to construct an approximately 63-mile-long, 345-kV transmission line from Minnesota Power's Iron Range Substation near Grand Rapids, Minnesota, to Minnesota Power's St. Louis County Substation near Hermantown, with a connection to American Transmission Company's nearby Arrowhead Substation.

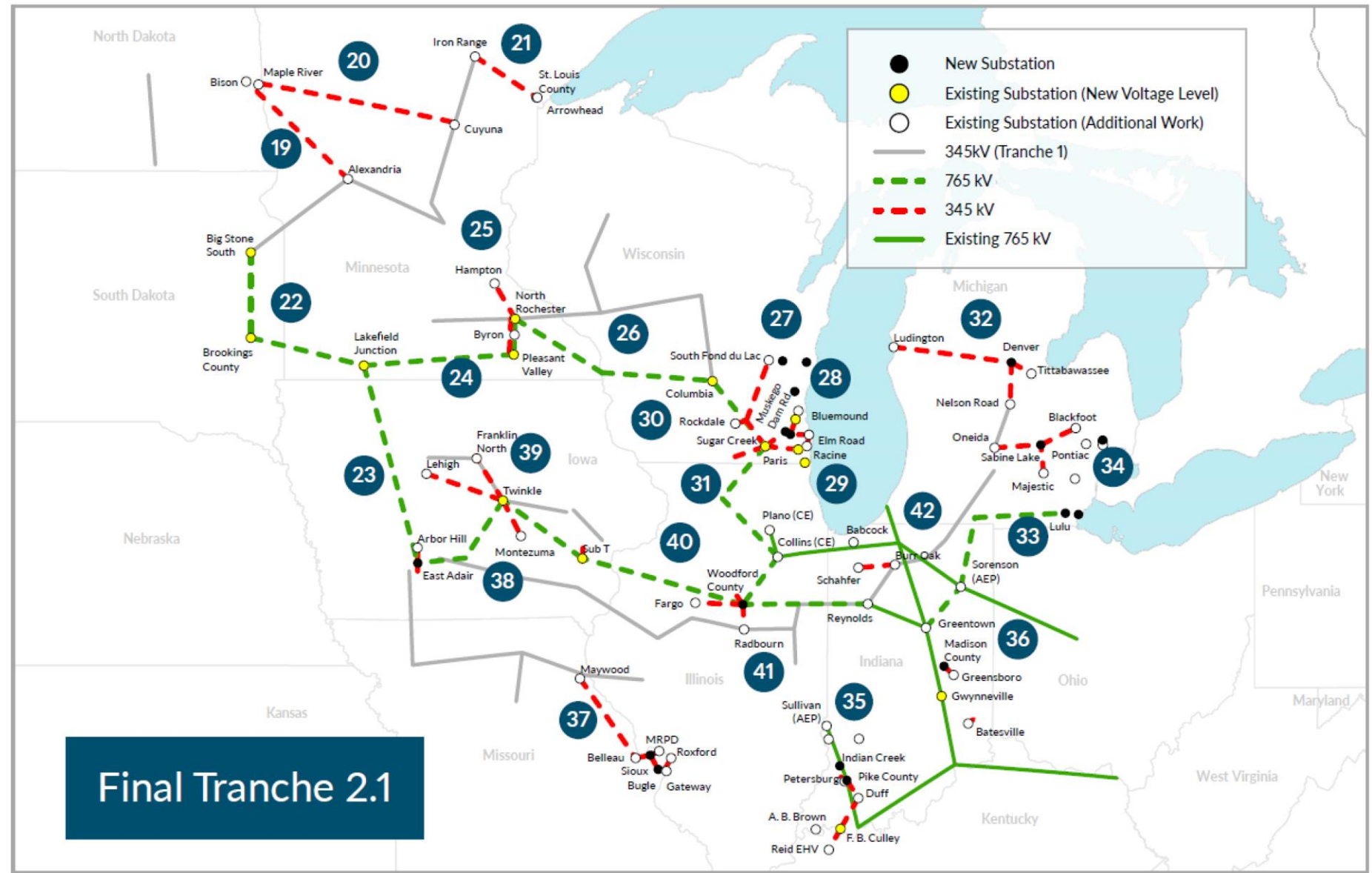


Iron Range
Substation

Arrowhead
Substation

MISO, the regional grid operator, approved this project as part of a regional plan.

Learn more at misoenergy.org



Project need



Enhance grid reliability in the Upper Midwest as grid operating conditions become more variable



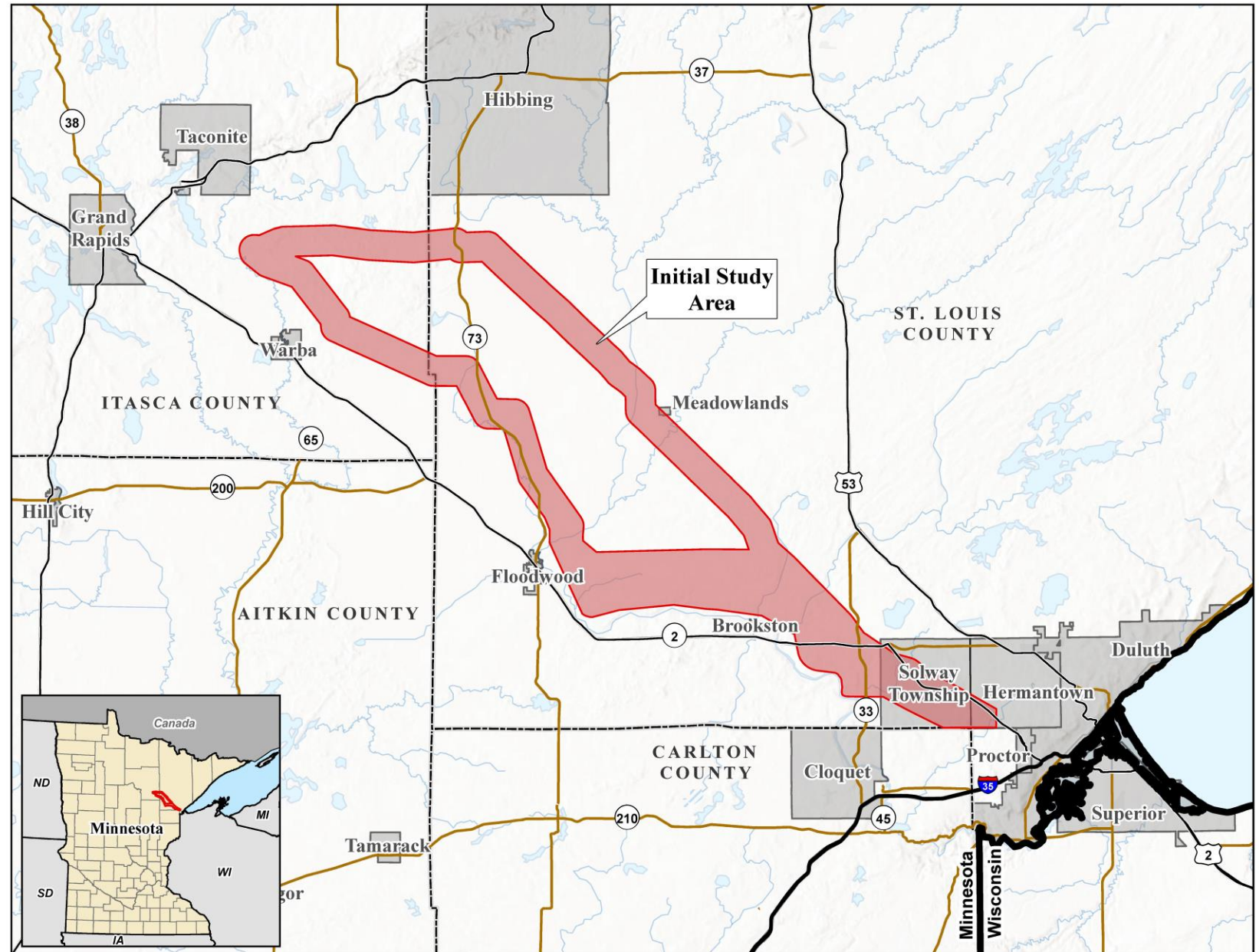
Increase grid efficiency as energy is transferred from where it is produced to where it is needed



Meet the growing demand for reliable clean energy in the Upper Midwest

Initial Study Area

The Study Area will be evaluated for potential routing opportunities based on stakeholder feedback

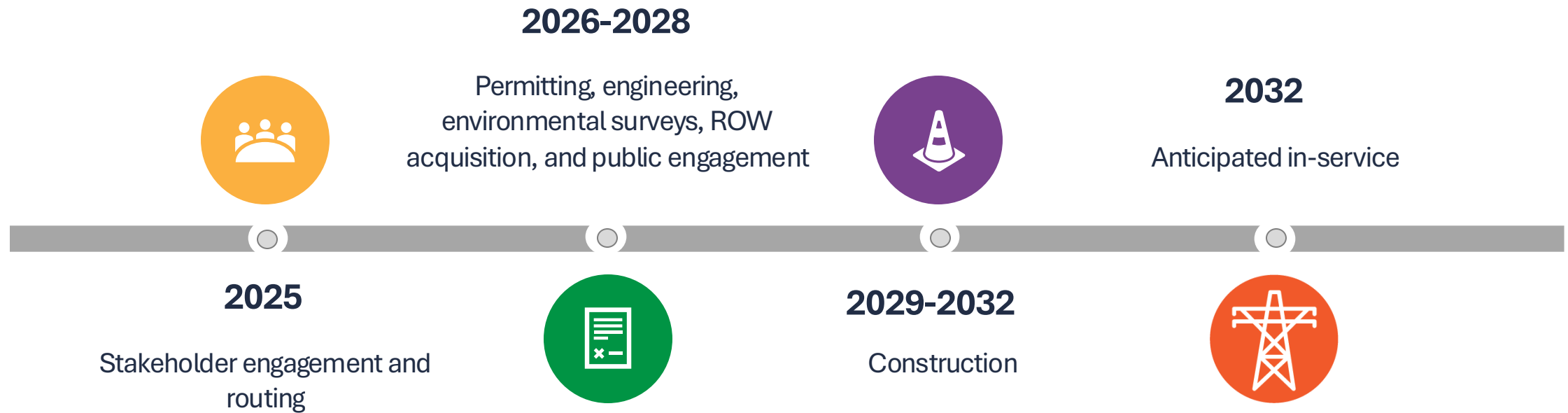


Project components

A new, approximately 62-mile-long, single-circuit 345 kilovolt (kV) transmission line built on double-circuit capable structures from Minnesota Power's Iron Range Substation near Grand Rapids in Itasca County, Minnesota to Minnesota Power's St. Louis County Substation near Hermantown, Minnesota

A new, approximately 1-mile-long double circuit 345 kV transmission line from Minnesota Power's St. Louis County Substation to American Transmission Company's Arrowhead Substation near Hermantown, St. Louis County, Minnesota

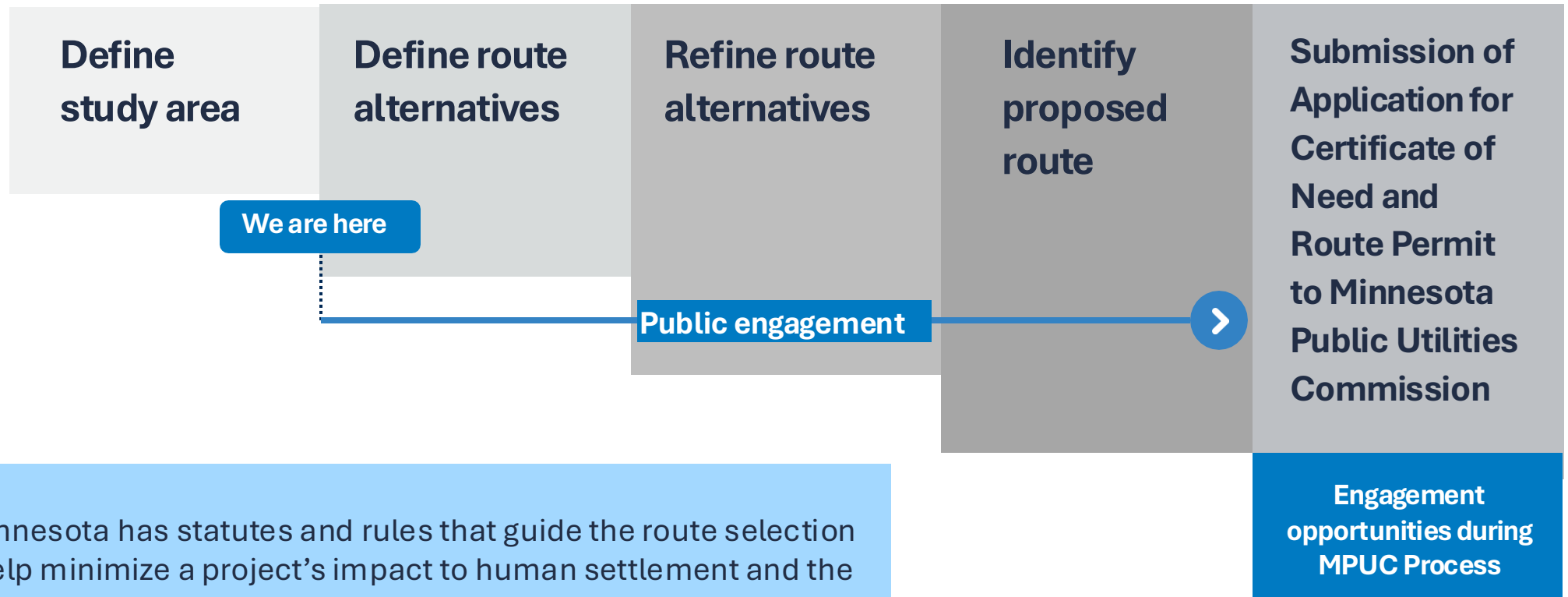
Project timeline



Permitting timeline



Our routing process & input opportunities



The state of Minnesota has statutes and rules that guide the route selection process and help minimize a project's impact to human settlement and the environment. Input from you, local leaders and agencies as well as our own expertise is critical as we develop and finalize a route.

Routing process considerations

The criteria for route development is set by Minnesota statute and guides our routing process. To route a project, we consider:

- Opportunities
- Constraints
- Engineering and construction considerations

Anticipated studies

Field surveys allow the project team to verify or collect new information about the proposed route to help minimize impacts for construction of the transmission line. Studies may include:

- Geotechnical
- Biological
- Cultural resources
- Wetland and waterbodies
- Invasive species
- Protected species
- Raptor nests



Right-of-way

What is a right-of-way?

A right-of-way, or ROW, is a strip of land used for a specific purpose such as the construction, operation and maintenance of a road or transmission line. Right-of-way is typically secured as an easement on a property.

What is an easement?

An ownership interest in real property allowing Minnesota Power the right to construct, operate and maintain a transmission line and other associated infrastructure on your property.

Our right-of-way acquisition process



Landowners are contacted to begin right-of-way acquisition process.



An easement is presented to a landowner. An offer based on fair market value is presented.



We work closely with the landowner to resolve concerns and reach an agreement. An easement is recorded.

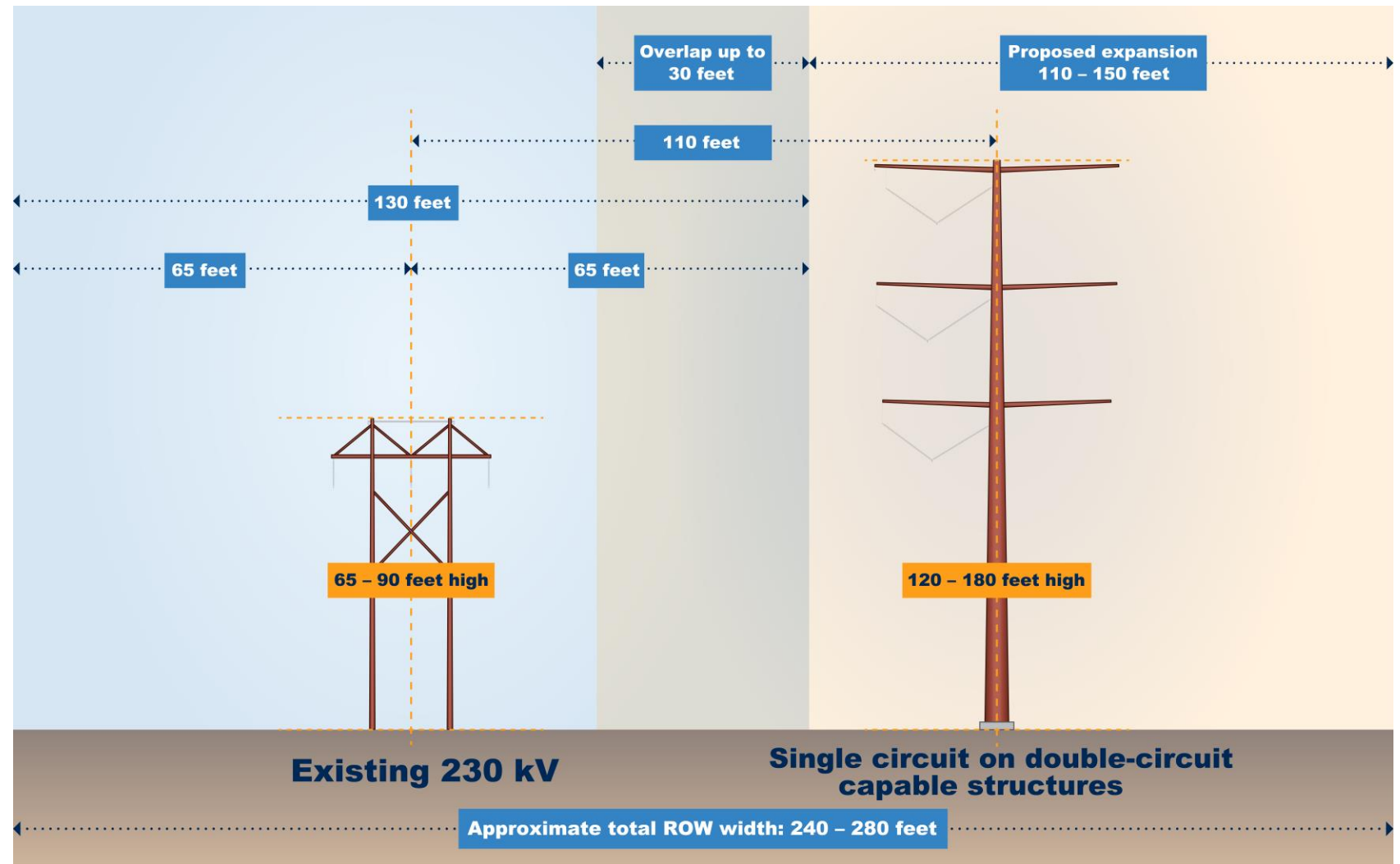


The utilities construct, operate, and maintain the transmission line within the right-of-way.

Typical design

Structure type factors:

- Land use/land cover
- Topography
- Water/wetlands
- Soil types



Typical preconstruction and construction activities



1

Initial surveying, right-of-way clearing and access routes



2

Structure staking, surveying and soils investigations as needed



3

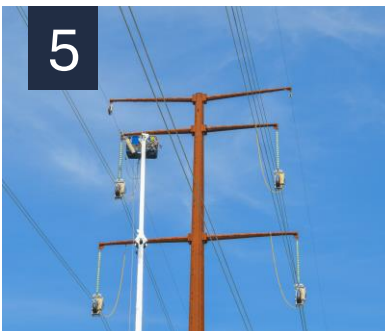
Foundation installation

Foundation type may vary depending on structure



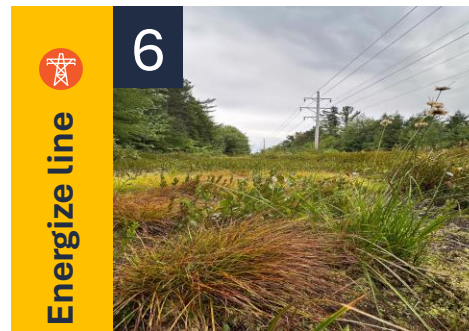
4

Assemble and set structures



5

Wire installation



6

Cleanup and restoration



Energize line

Connect with us!



- Email the project team:
connect@ISATransmissionProject.com
- Call the project hotline: **1-888-510-5303**
- Sign up to receive project updates or submit a comment: **ISATransmissionProject.com/contact-us**

You can also sign up to receive updates from the Minnesota Public Utilities Commission. Visit **edockets.state.mn.us/documents** and enter the docket number:

- Certificate of Need docket number 25-111
- Route Permit docket number 25-112

Thank you!