minnesota power

AN ALLETE COMPANY

Iron Range – St. Louis County – Arrowhead

ISA TRANSMISSION PROJECT

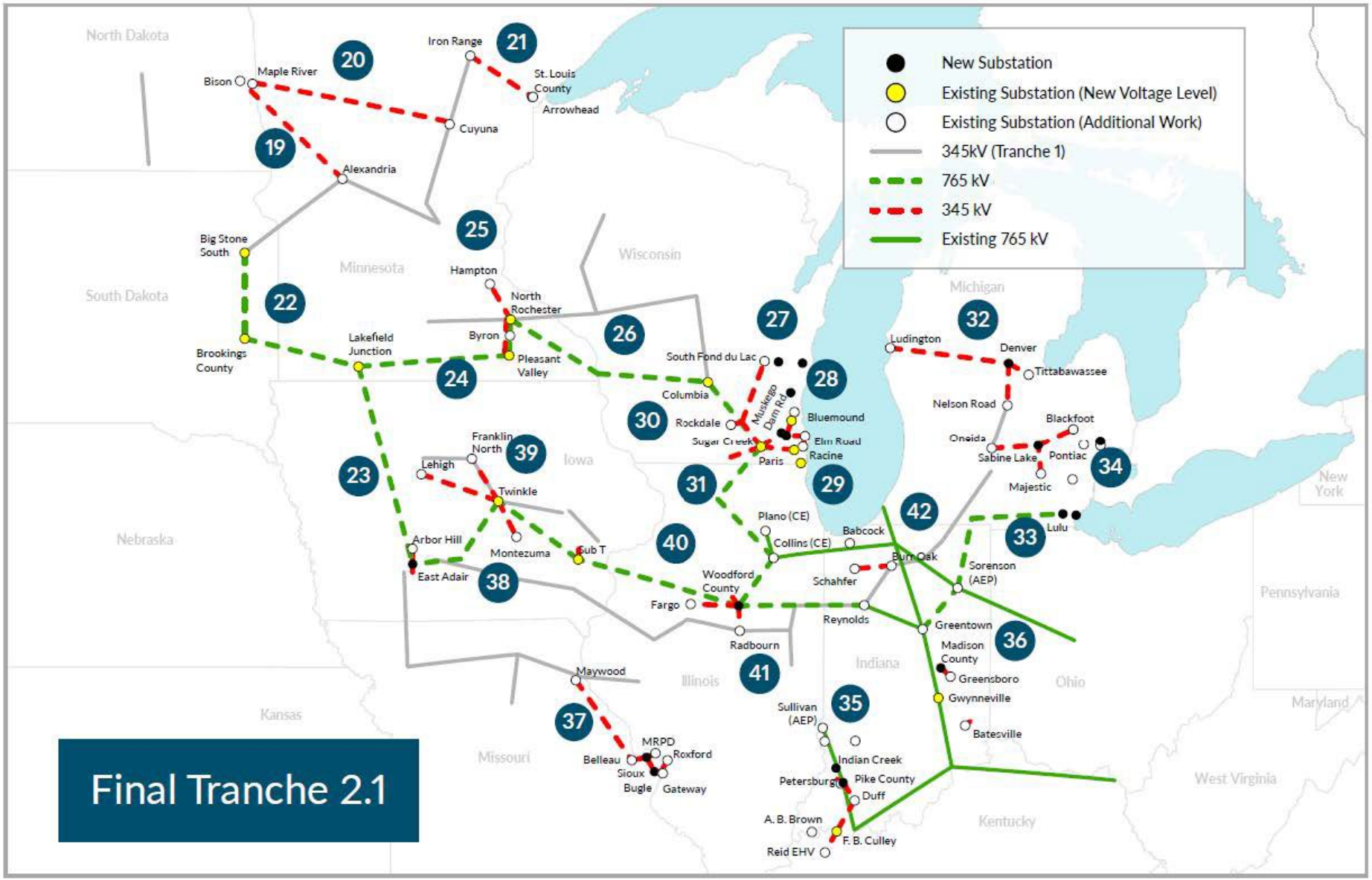
Zach Golkowski
Senior Environmental
Compliance Specialist

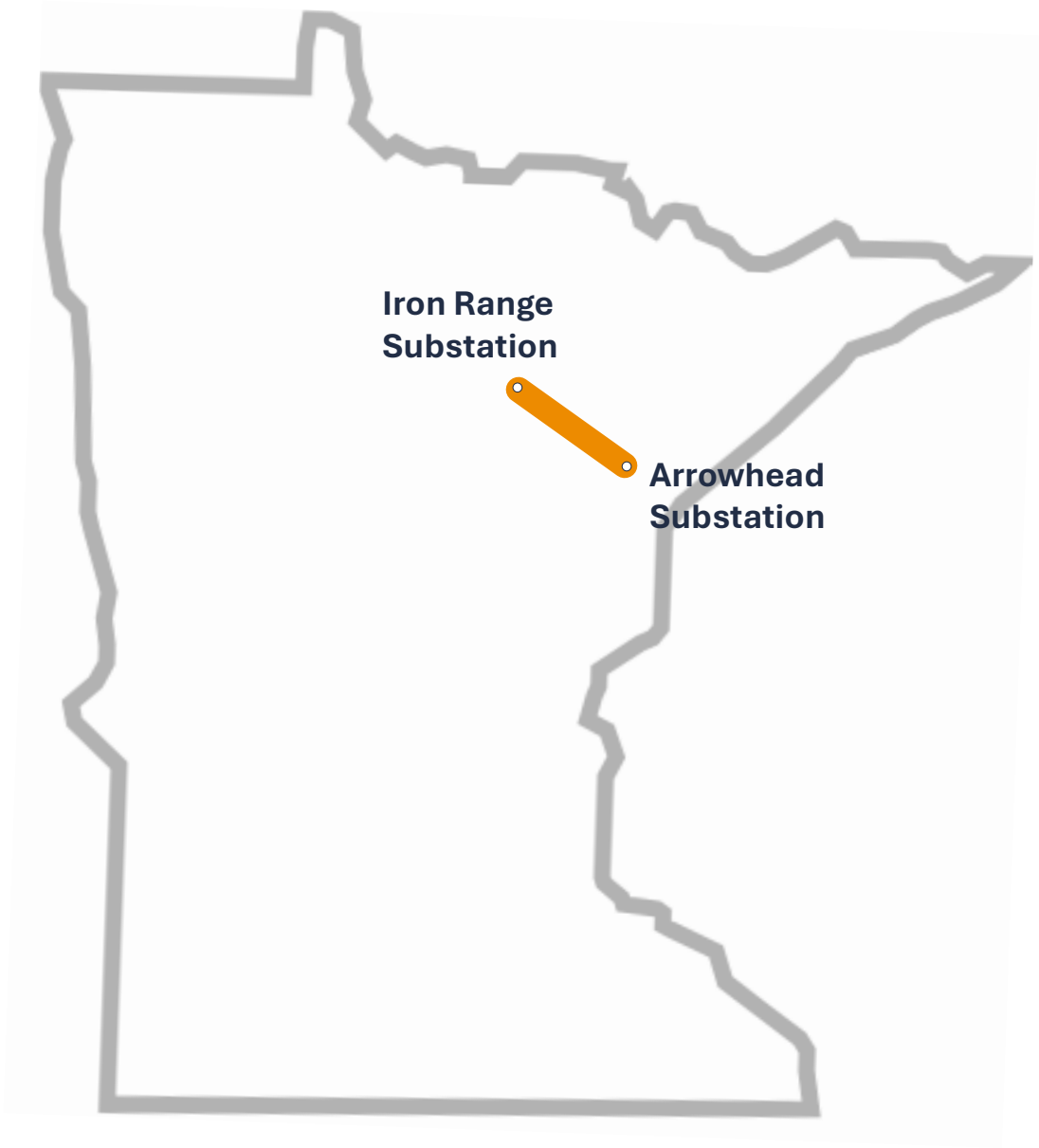
Agenda

- Introductions
- Project Overview
- Discussion

MISO-approved project #21: Part of a regional plan

Learn more at misoenergy.org





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Project need

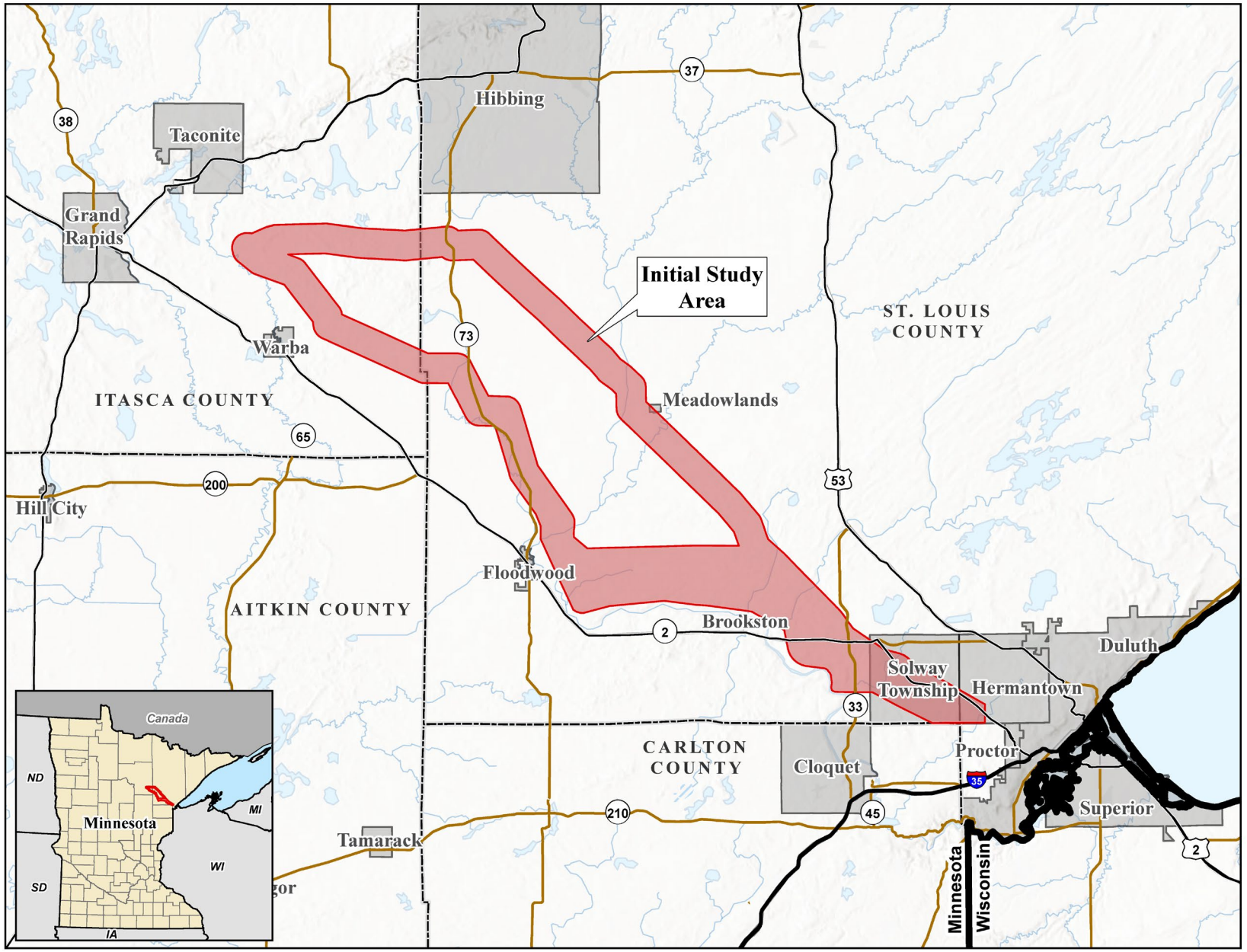
Enhance grid reliability in the Upper Midwest as grid operating conditions become more variable

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

2025
Stakeholder engagement and routing

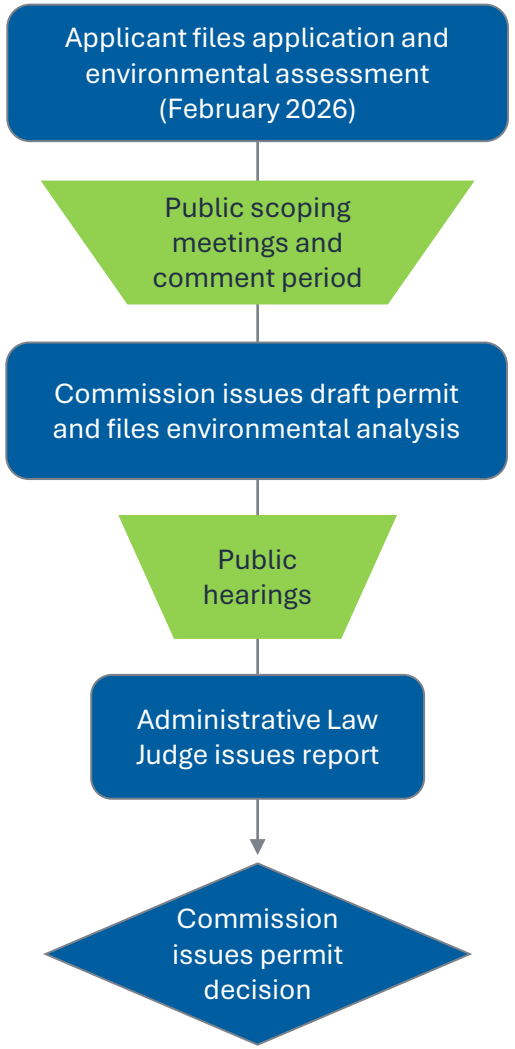
2026-2028
Permitting, engineering, environmental surveys, ROW acquisition, and public engagement

2029-2032
Construction

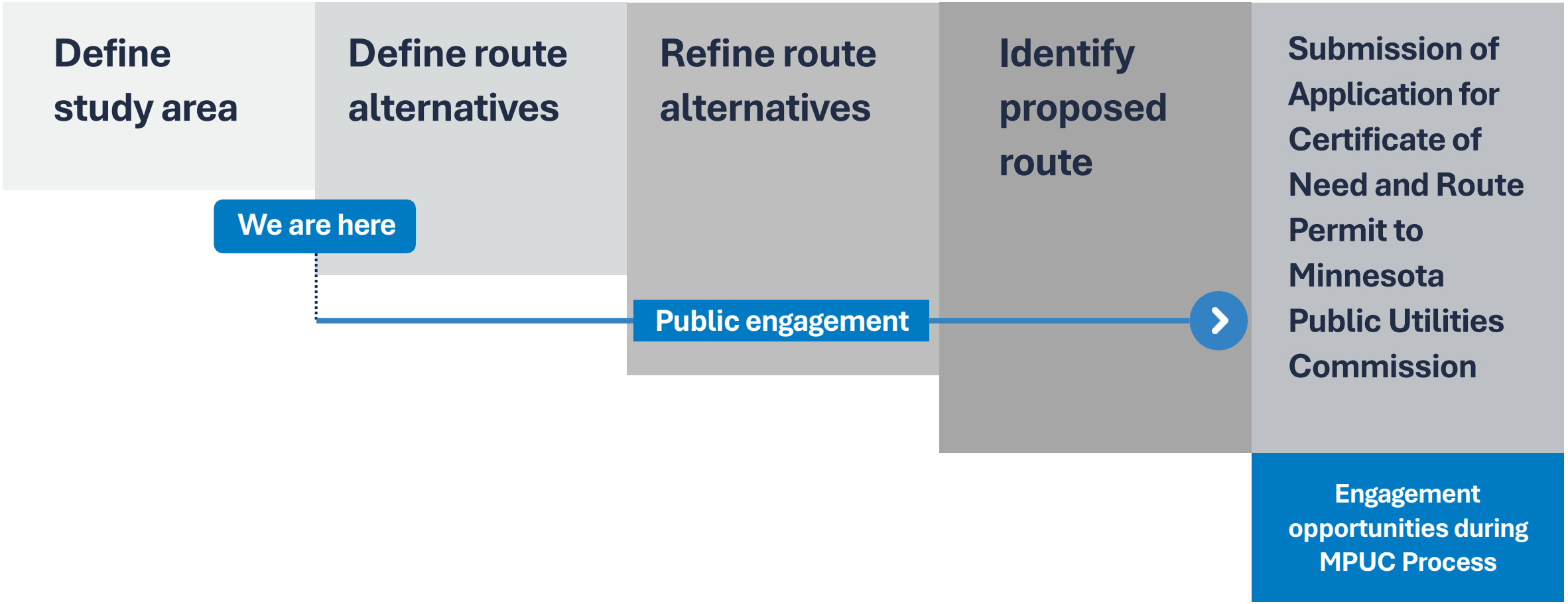
2032
In-service

MINNESOTA PUBLIC UTILITIES COMMISSION

High Voltage Transmission Line Permitting Process



Our routing process & input opportunities



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

Typical design

Structure type factors:

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

Minimum right-of-way of 150 feet
Average of 5 – 7 structures per mile
Typical height 120 – 180 feet

Upcoming community engagement

- Website launch in May 2025
- Open houses in May 2025
- In-person and virtual engagement opportunities
- Engagement through the Minnesota Public Utilities Commission permitting process

Communicating our path forward

Ongoing communication with stakeholders and landowners throughout all phases of the project.

May 2025 Open Houses

Tuesday, May 20	Wednesday, May 21	Thursday, May 22
1:00-3:00PM Yanmar Arena 1401 NW 3rd Avenue Grand Rapids, MN 55744	**5:00-8:00PM** Floodwood Event Center 201 W 7th Avenue Meadowlands, MN 55765	**12:00-2:00PM** Hermantown Gov't Center/ City Hall – Training Center 5105 Maple Grove Road Hermantown, MN 55811
5:00-8:00PM Meadowlands Community Center 7758 Western Avenue Meadowlands, MN 55765		**5:00-8:00PM** Solway Town Hall 4029 Munger Shaw Road Cloquet, MN 55720

Questions?