

PowerOn Midwest™

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®

Minnesota Department of Natural Resources

May 2026

Utility team

Great River Energy | ITC Midwest | Xcel Energy







Project overview



PowerOn Midwest

Electricity use is growing throughout the Upper Midwest and **demand is expected to increase significantly** over the next two decades.

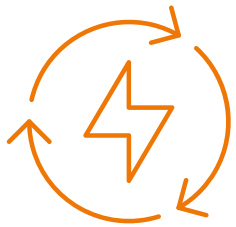
This increase in electric use, combined with the changing ways electricity is generated, requires new long-term solutions to meet the needs of our communities, states, and region to ensure we can continue delivering the reliable service you need to power your daily lives.

PowerOn Midwest—tomorrow's reliability starts today.

Project Update

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®

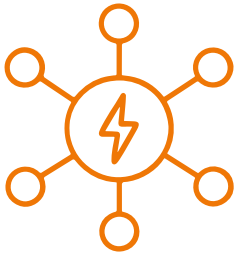
Project benefits



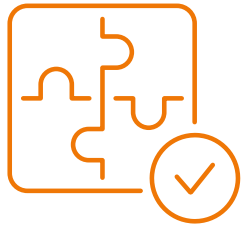
Continued electric reliability



Customer and economic benefits

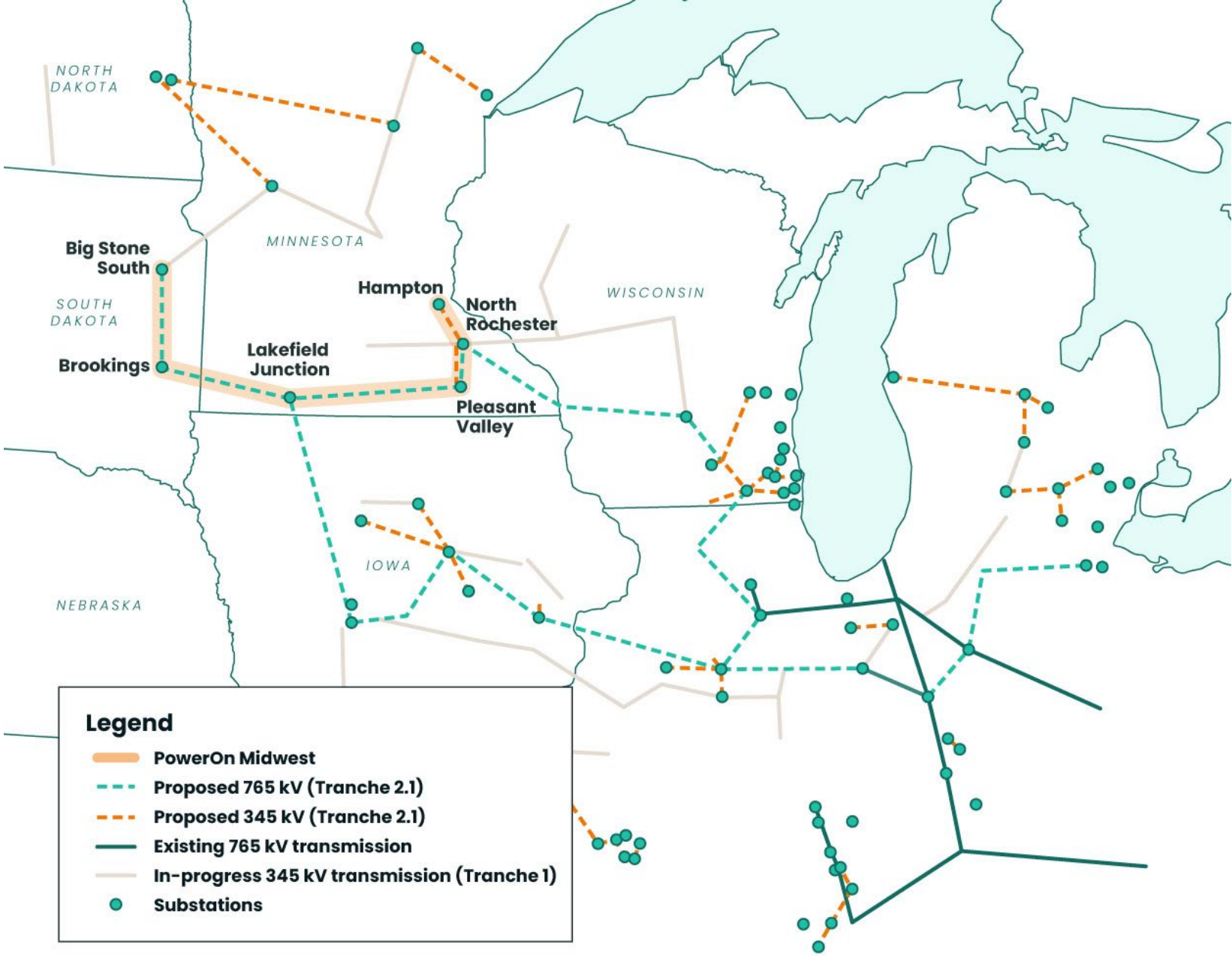


Prepares the grid for future growth



Access to new generation

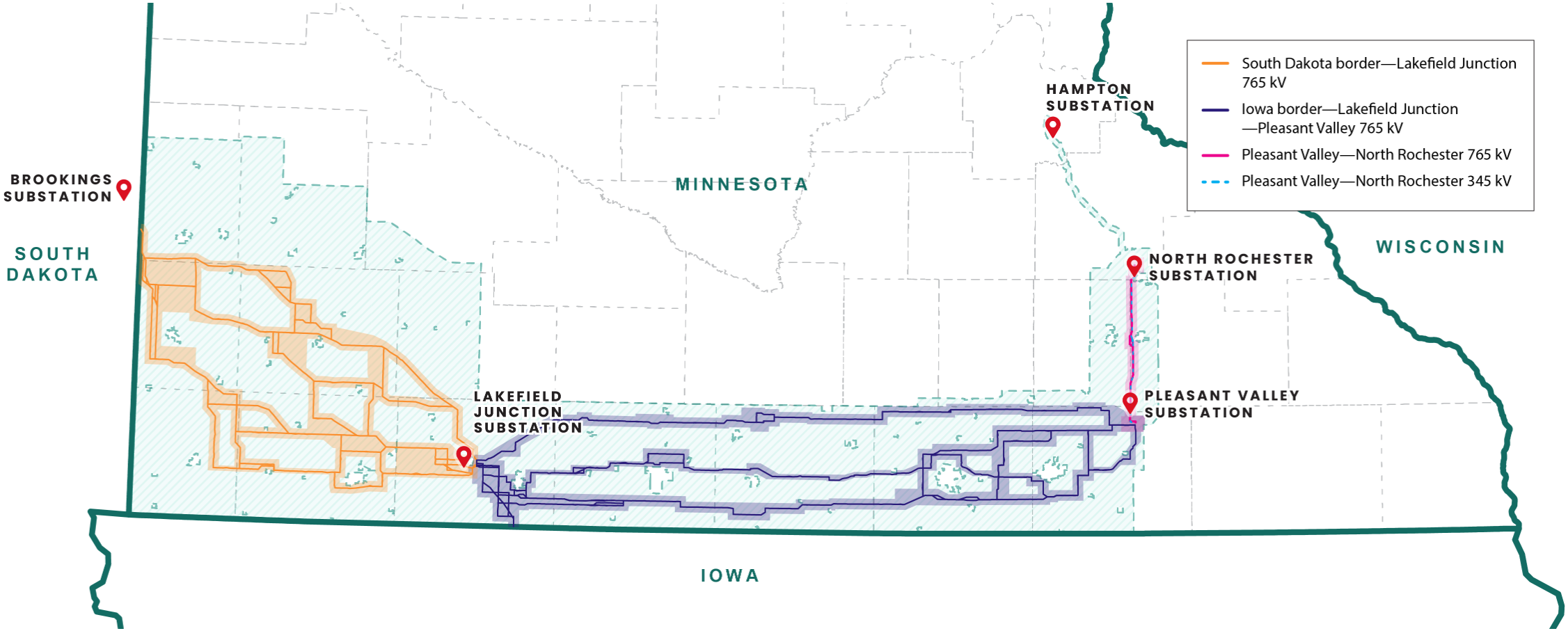
MISO Long-Range Transmission Plan Tranche 2.1



Proposed lines for illustrative purposes – routes have not been determined

Project Update

Overview map



Project Update

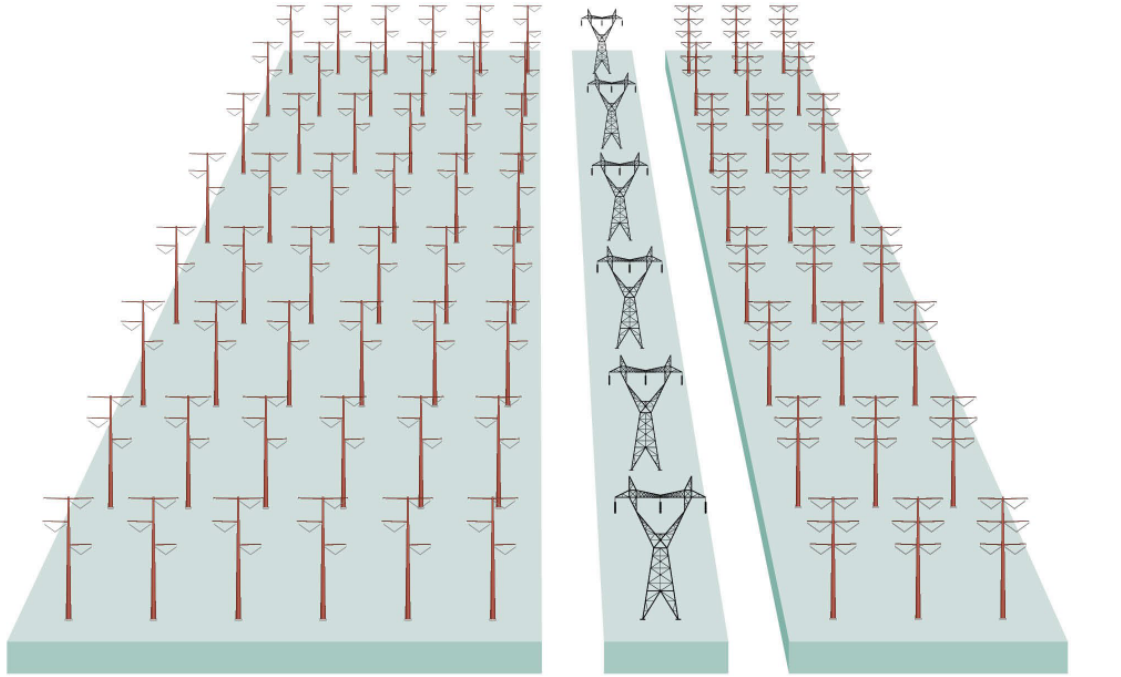
Technology

765 kV was identified as the preferred solution for PowerOn Midwest, presenting several advantages:

- Efficiently carries power over long distances
- Fewer transmission lines needed to carry the same amount of power
- Fewer structures per mile reduces impact on communities and environment
- Resilient infrastructure that can consistently deliver power
- Provides backup power pathways

A 765 kV transmission line can carry as much power as:

- **Six single circuit 345 kV lines***
- **Or three double circuit 345 kV lines***



345 kV
SIX SINGLE CIRCUIT TOWERS
(900 ft of total right-of-way)

765 kV
ONE SINGLE CIRCUIT TOWER
(250 ft of total right-of-way)

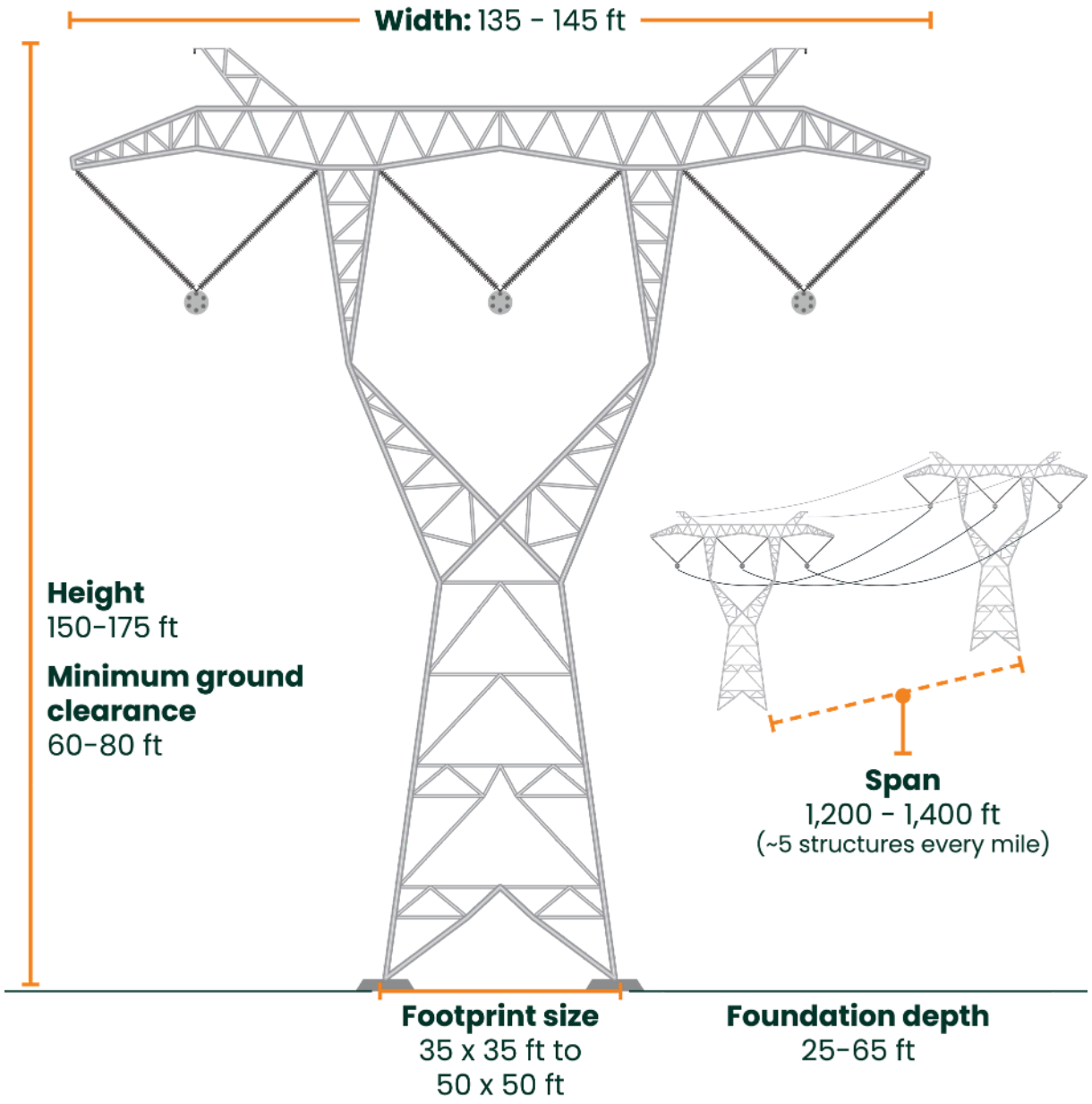
345 kV
THREE DOUBLE CIRCUIT TOWERS
(450 ft of total right-of-way)

*Data source: MISO

Project Update

765 kV Structure

- Typical structure shown



PowerOn Midwest permitting

Requires two approvals from the Minnesota Public Utilities Commission – Certificate of Need and Route Permits

Certificate of Need
(typically a 12-15-month process)

Route Permits
(typically a 12-15-month process for each permit)

The South Dakota segment will require a South Dakota Facility Permit and county-level permits; typically a 12-18 month process.

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®



Certificate of Need update

- PowerOn Midwest filed for a Certificate of Need on February 3, 2026
- 11 public information meetings April 21-23 & 28-30
- Upcoming Public Hearings Q4 2026

Certificate of Need

(typically a 12-15-month process)

Route development and permit activities

- Route development is underway with open houses coming up in June 2026 and Fall 2026
- We anticipate filing route permit applications in the first quarter of 2027
- We expect a PUC decision on a final Route mid-late 2028

Route permits

(typically a 12-15-month process for each permit)

Project timeline

2025
Project planning, initial stakeholder and public engagement

2026-2027
File PowerOn Midwest Certificate of Need application with the MPUC, Certificate of Need MPUC review process, route development, file Route Permit applications with MPUC

2027-2029
Route Permit MPUC review processes, engineering design, environmental surveys and permitting, easement acquisition

2030-2034
Ongoing easement acquisition, pre-construction activities, construction, restoration

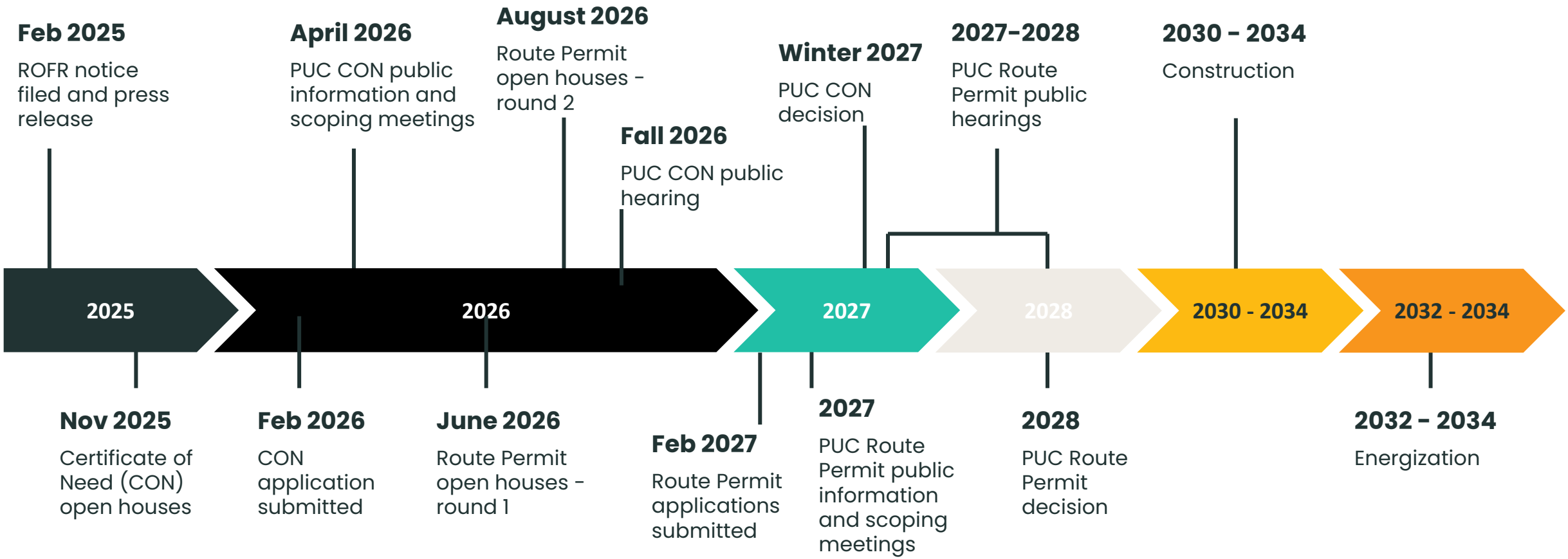
2032-2034
Anticipated in-service (individual segment in-service dates will vary)

SHORT-TERM SCHEDULE

1. **February** – CON filing
2. **April 2026** – CON scoping meetings
3. **June 2026** – Routing open houses; round 1
4. **Fall 2026** – Routing open houses; round 2
5. **Q4 2026** – MPUC Public hearings
6. **February 2027** – Route permit application submittal

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®

Preliminary schedule



Route development

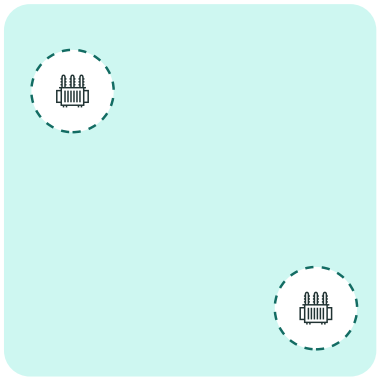


Route development

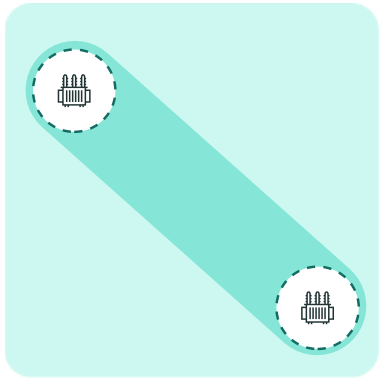
- Routing open houses in June 2026

Opportunity for communities, stakeholders, and landowners to view route maps, provide feedback, and ask questions of utility staff

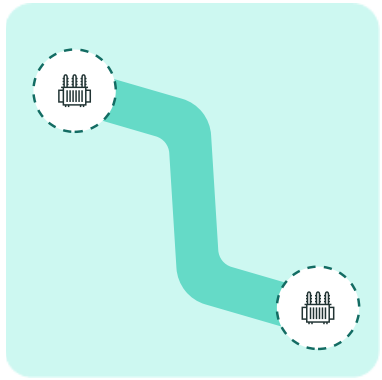
Define study area



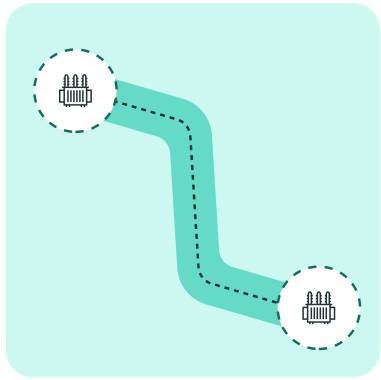
Identify route corridors



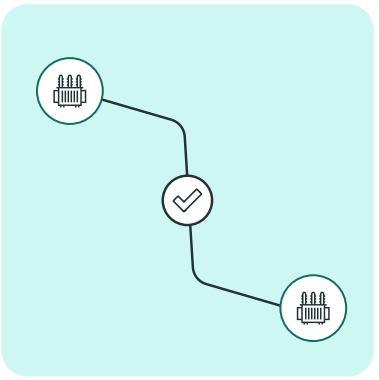
Refine to preliminary routes



Identify proposed route



MPUC determines final route

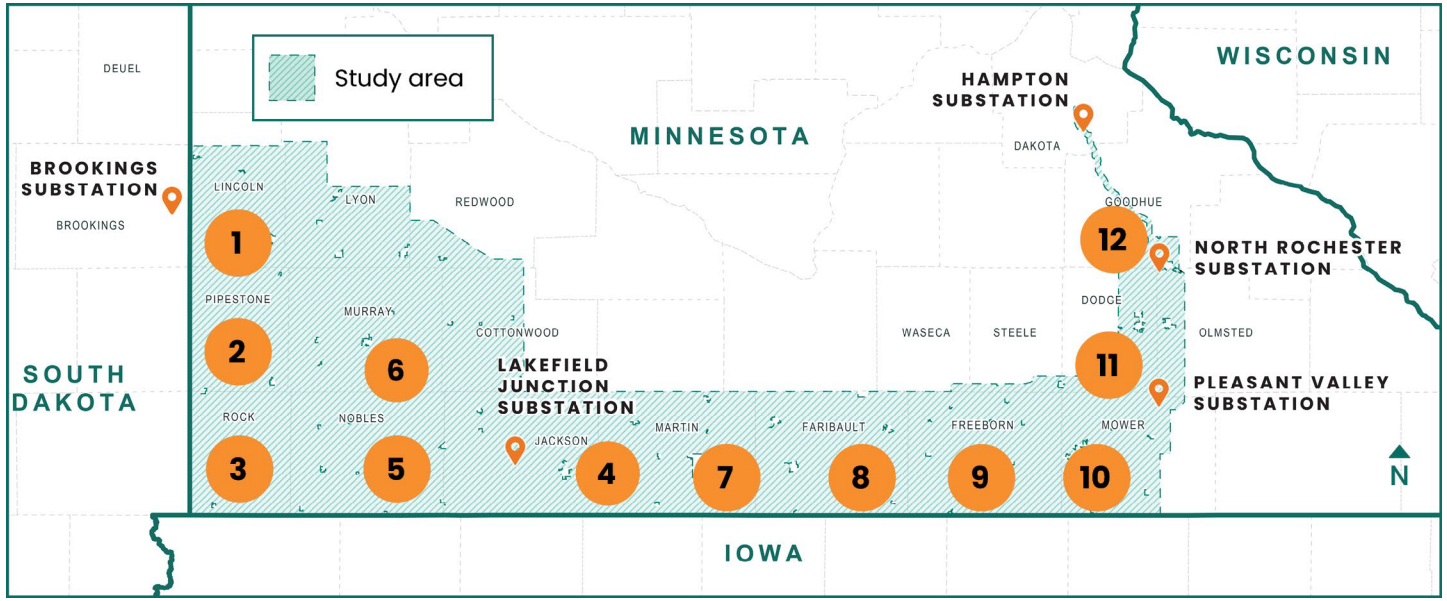


Project Update

Engineering Considerations

- We are guided by Minnesota State routing criteria:
  - Follow existing corridors – Roads, section/property lines, transmission lines
- Important factors for 765 kV:
  - Distance of the route – approx. $6 million per mile
  - Keeping the line straight – Angles increase the size of the structures and cost significantly increases
  - Span length restrictions - Features which cannot be spanned must be avoided

Upcoming routing open house schedule – week 1



1. June 2, 2026 | 10 a.m. – 12 p.m.

Lake Benton Community Center

114 Center St S, Lake Benton, MN 56149

2. June 2, 2026 | 4 p.m. – 6 p.m.

St. Leo Catholic Church

415 S Hiawatha Ave, Pipestone, MN 56164

3. June 3, 2026 | 10 a.m. – 12 p.m.

Luverne Generations Events

105 S Estey St, Luverne, MN 56156

4. June 3, 2026 | 4 p.m. – 6 p.m.

Fox Lake Event Center

730 125th St, Sherburn, MN 56171

5. June 4, 2026 | 10 a.m. – 12 p.m.

Worthington Event Center

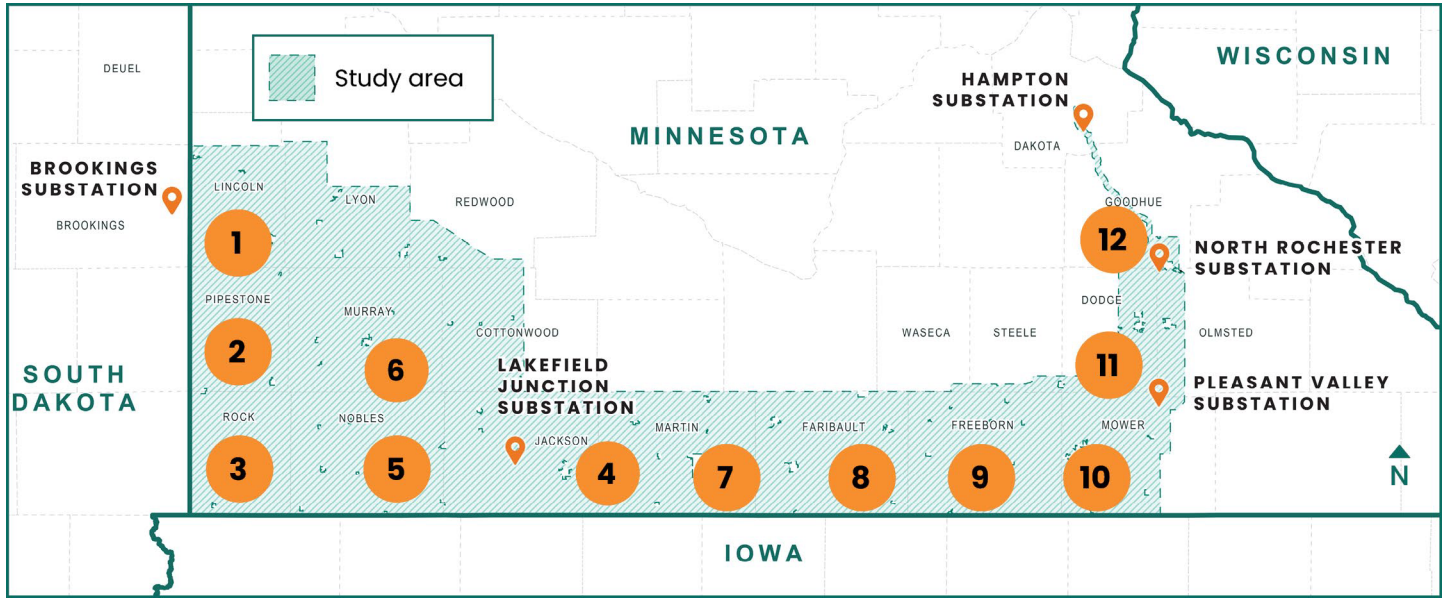
1447 Prairie Dr, Worthington, MN 56187

6. June 4, 2026 | 4 p.m. – 6 p.m.

Fulda American Legion

106 W Front St, Fulda MN 56131

Upcoming routing open house schedule – week 2



7. June 9, 2026 | 10 a.m. – 12 p.m.

Knights of Columbus

920 E 10th St, Fairmont, MN 56031

8. June 9, 2026 | 4 p.m. – 6 p.m.

Golden Bubble

11575 State Highway 22, Wells, MN 56097

9. June 10, 2026 | 10 a.m. – 12 p.m.

Wedgewood Cove Golf Club

2200 W 9th St, Albert Lea, MN 56007

10. June 10, 2026 | 4 p.m. – 6 p.m.

Doubletree

1701 4th St NW, Austin, MN 55912

11. June 11, 2026

10 a.m. – 12 p.m. | 4 p.m. – 6 p.m.

Events By Saker

401 8th St SE, Kasson, MN 55944

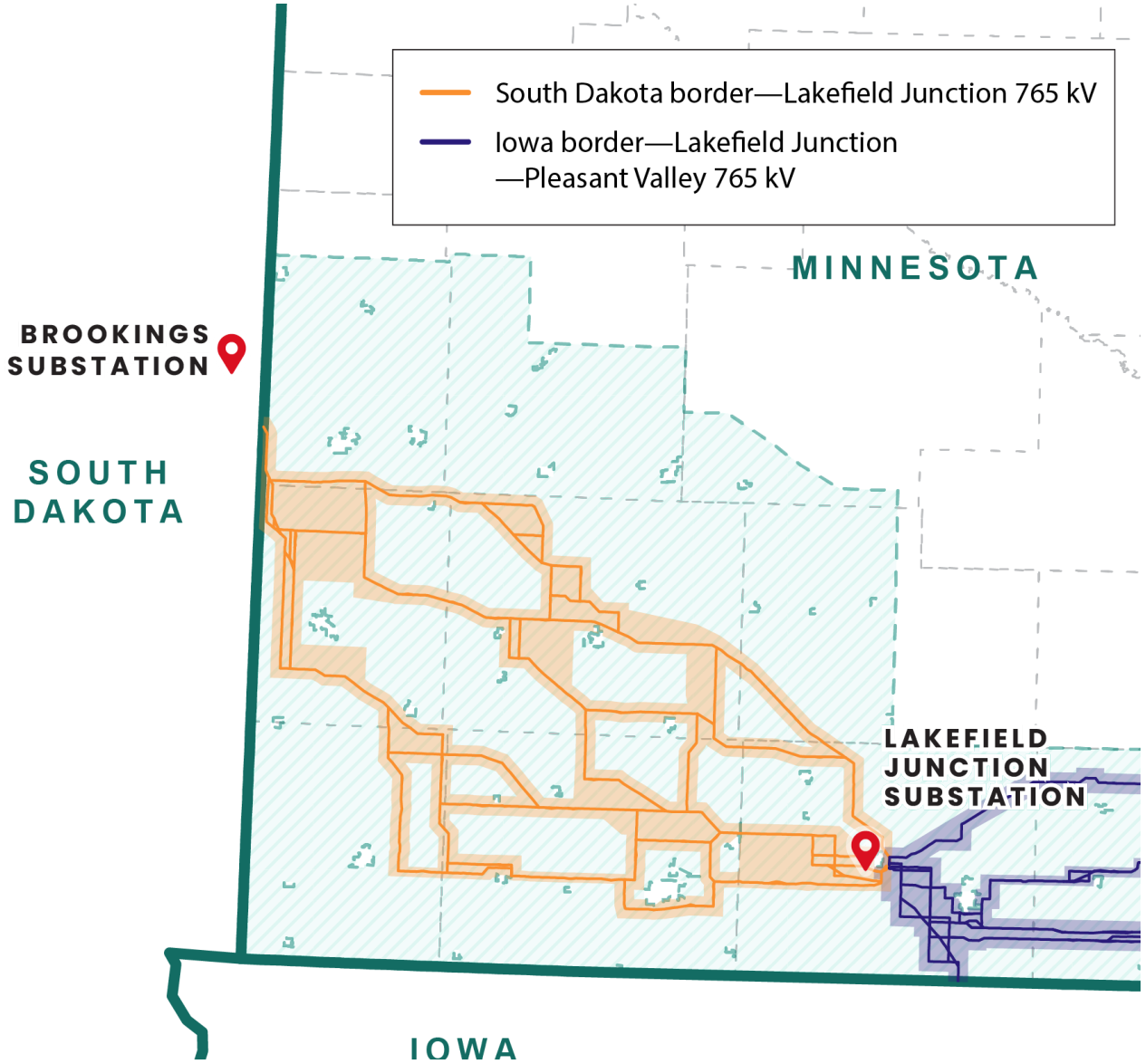
12. June 12, 2026 | 10 a.m. – 12 p.m.

Zumbrota VFW

21 E 1st St, Zumbrota, MN 55992

Route corridors

South Dakota border – Lakefield Junction



Project Update

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®

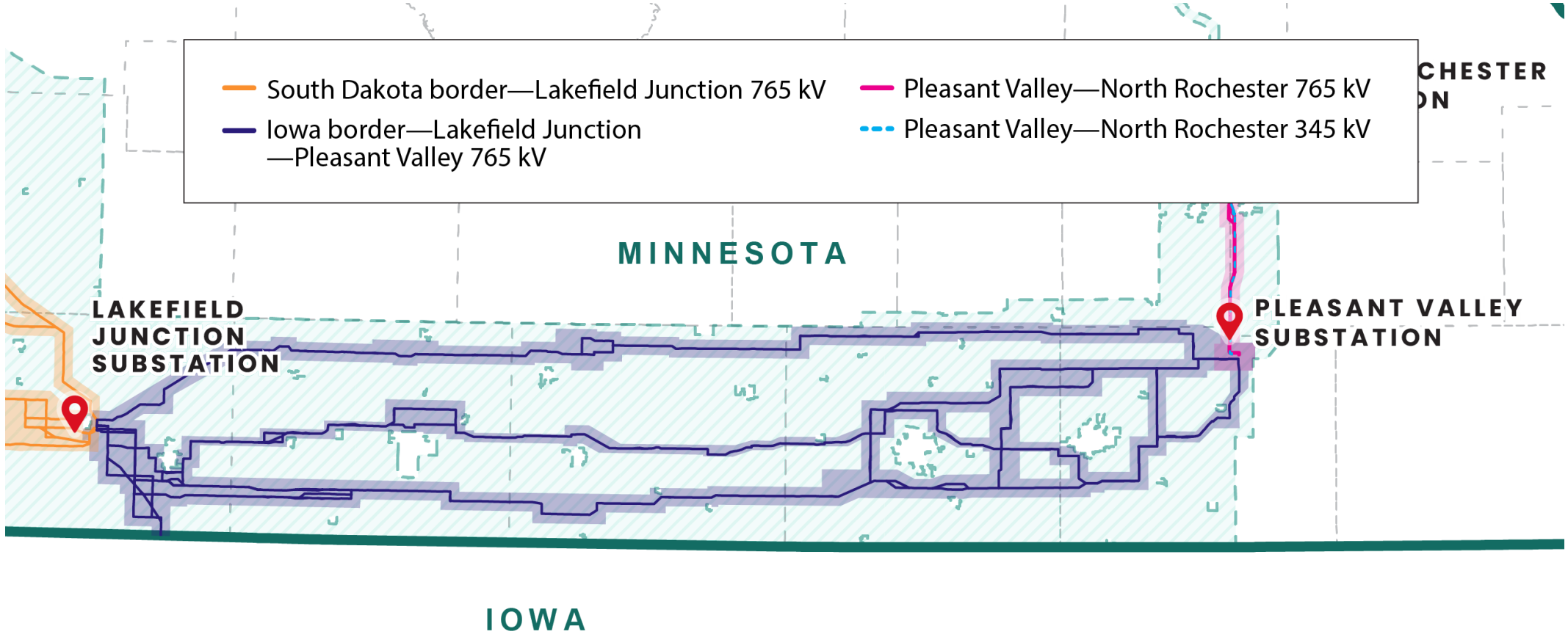
Routing Goals and Opportunities

- Develop routes that meet Minnesota routing guidelines and are cost effective
- Minimize impacts on landowners and farming practices
- Minimize impacts to wind and solar projects
- Minimize impacts of sensitive habitats and natural resources
- Minimized length – minimizing overall impacts to the built and natural environment
- Develop an I-90 route to address comments from MPUC

Constraints

- Avoid Lake Benton and Lake Sheteck
- Avoid large chain of lakes running northwest to southeast
  - Talcot Lake (Talcot Lake WMA)
  - Heron Lake (Heron Lake WMA)
  - South Heron Lake
  - Timber Lake (Timber Lake WMA)
- Avoid culturally sensitive areas
  - Pipestone National Monument
  - Hole-In Mountain (WMA)
- Avoid State Parks
  - Split Rock Creek State Park
  - Blue Mounds State Park
  - Lake Shetek State Park

IA border – Lakefield Junction – Pleasant Valley



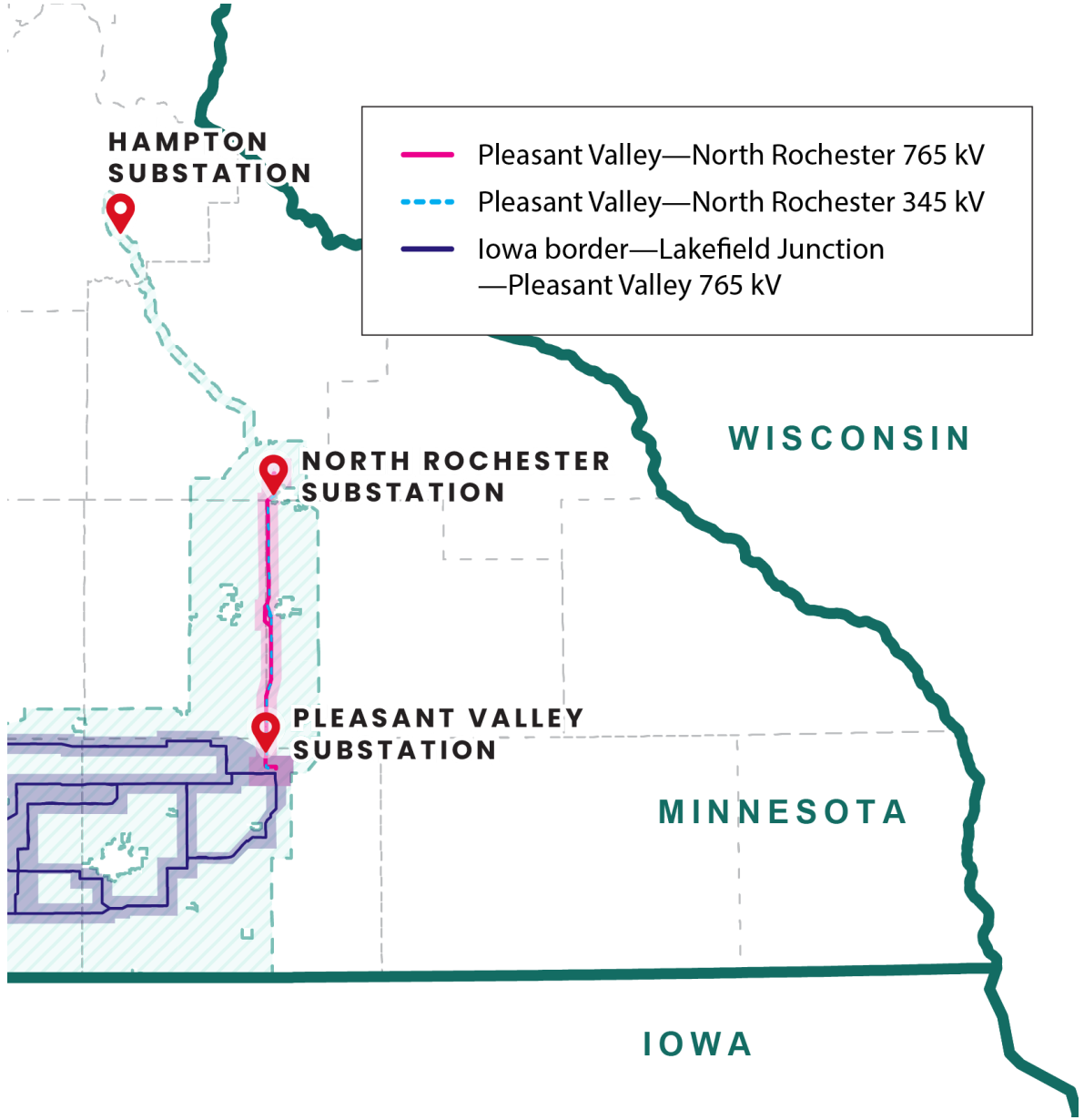
Routing Goals and Opportunities

- Develop routes that meet Minnesota routing guidelines and are cost effective
- Minimize impacts on landowners and farming practices
- Minimize impacts on sensitive habitats and natural resources
- Minimized length – minimizing overall impacts to the built and natural environment
- Develop an I-90 route to address comments from MPUC

Constraints

- Lakefield – Iowa
  - Avoided nearby MDNR lands and conservation easements – federal and state
  - Avoided crossing Des Moines River and sensitive habitat
- Lakefield – Pleasant Valley
  - Avoid airports, wind farms, and north-to south chains of lakes
  - Avoid LAWCON properties
  - Seek to avoid several WMAs
  - Wild Indigo Prairie Scientific and Natural Area west of Brownsdale (utility crossing exists southwest of Brownsdale)

Pleasant Valley – North Rochester



Project Update

GREAT RIVER ENERGY. ITC A FORTIS COMPANY Xcel Energy®

345kV Structures

Pleasant Valley to North Rochester segment only



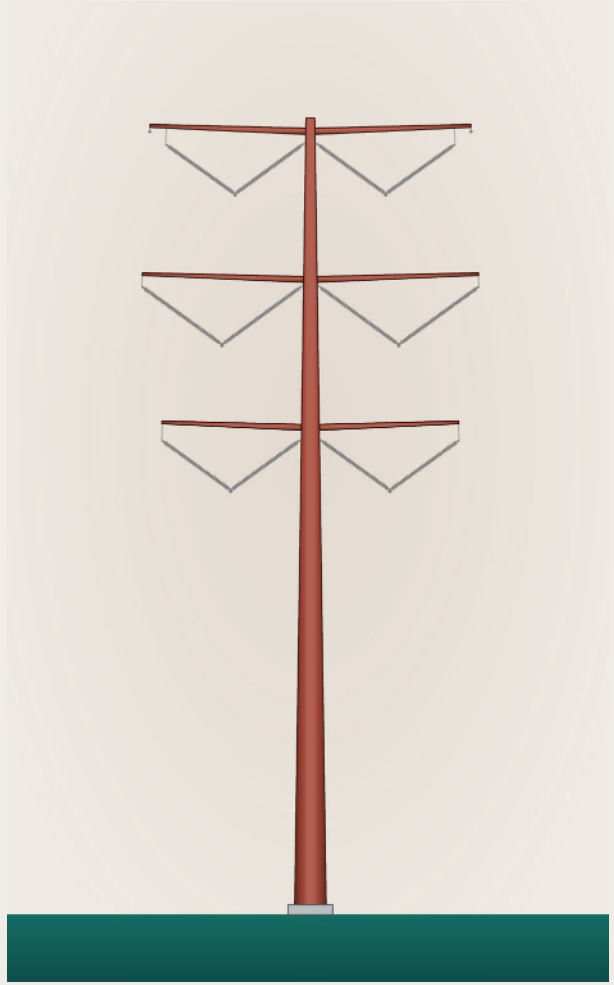
Existing typical wood and steel H-frame structure (single circuit)

Height	70-100 ft
Width	54 ft
Span	400-1,000 ft
Minimum Ground Clearance	26-38 ft
Foundation Depth	Varies
Right-Of-Way Width	150 ft

Project Update

345kV Structures

Pleasant Valley to North Rochester segment only



Preliminary typical structure (double circuit)

Height	90 - 160 ft
Width	14 – 50 ft
Span	800 – 1,200 ft
Minimum Ground Clearance	26 - 38 ft
Foundation Depth	30 – 40 ft
Right-Of-Way Width	150 ft

Routing Goals and Opportunities

- 345 kV line = 2032 ISD
- 765 kV line = 2034 ISD
- Utilize the existing Xcel 345/161 kV corridor for the rebuilt 345 kV line and the new 765 kV line
- Minimize impacts on residences along the existing corridor
- Potentially some realignments of the existing adjacent 161 kV line for optimized crossings near homes and at waterbodies.

Constraints/Considerations

- Existing transmission lines
- Development near Byron substation
- Solar development
- South Fork Zumbro River WMA
  - Crossed by existing corridor/not federally funded
- Karst features
- Calcareous fens

Items for Discussion

- Discuss MDNR lands that are more suitable for routing opportunities and other possible mitigation methods to offset potential impacts
- MDNR's review of routes and the Early Coordination process
- Agency Q&A

Points of contact

- Desired frequency of meetings
- Future engagement – who to involve, and for what parts of the project
- Agency comment milestones – June to August, prior to finalization of the routes to be filed in Route Permit Applications

Connect with us



More information

For additional project information, please visit our website.

PowerOnMidwest.com

Connect@PowerOnMidwest.com

888-283-4678

PowerOn Midwest™

Thank You

GREAT RIVER ENERGY.

ITC A FORTIS COMPANY

Xcel Energy®