



PowerOn Midwest™



Tomorrow's reliability starts today.





Working together to continue providing reliable power to the communities we serve



Great River Energy

Great River Energy is a not-for-profit wholesale electric power cooperative which provides electricity to approximately 1.7 million people through its cooperatives and customers. Through our member-owners, we serve two-thirds of Minnesota geographically and parts of Wisconsin.



ITC Midwest

ITC Midwest is an electric transmission company that owns, operates, and maintains more than 6,600 circuit miles of transmission lines across Iowa, Minnesota, Illinois, Missouri, and Wisconsin.



Xcel Energy

Xcel Energy is a leading energy provider, dedicated to serving millions of customers with reliable, affordable energy. We make energy work better for customers, helping them thrive every day. Headquartered in Minneapolis, we work every day to generate and distribute electricity and gas to customers across eight states.



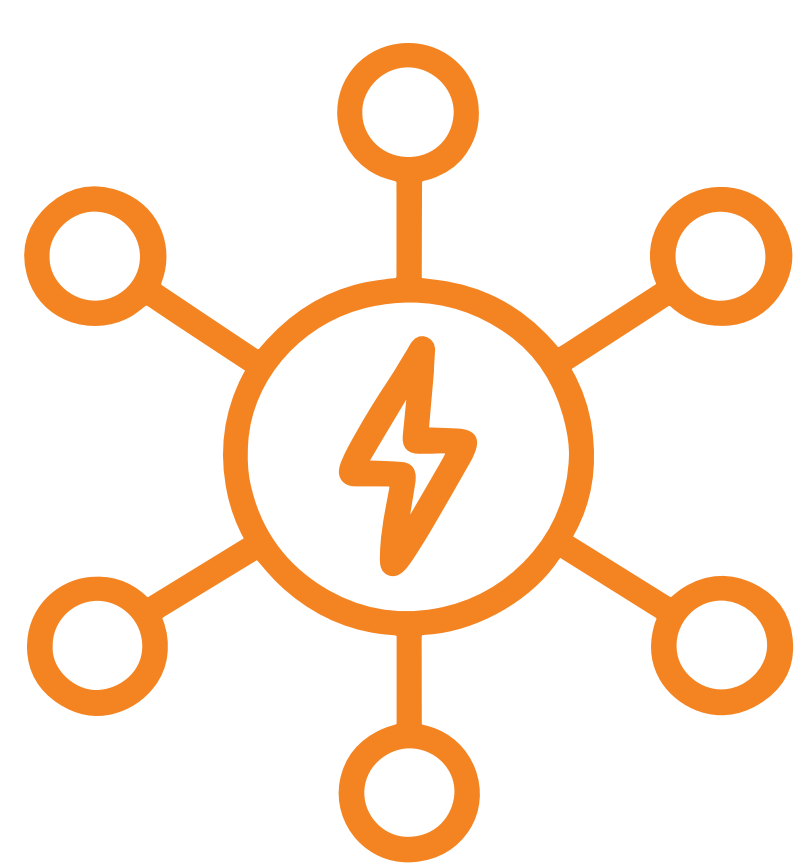


Studied solution maintains reliability and delivers key benefits



Reliable electricity

Delivers on our commitment to customers and electric cooperative members that electricity is delivered where and when it's needed—regardless of the weather, electric generation source, or demand.



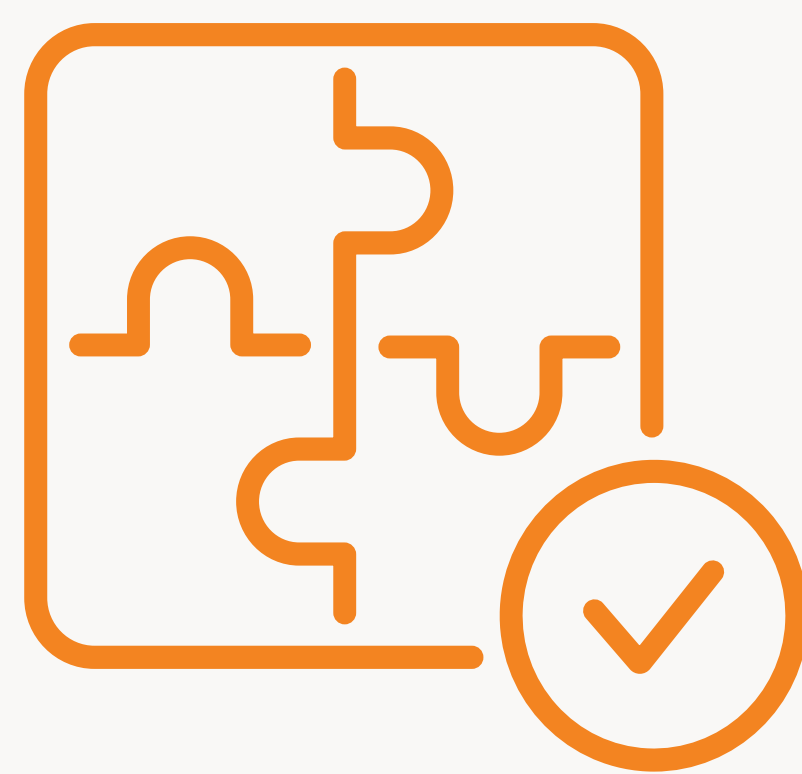
Future-ready grid

Addresses rising electricity demand, which is projected to grow significantly over the next two decades.



Customer and economic benefits

Enables more cost-effective generation while improving reliability, opening doors for future economic growth across the region.



Access to new electric generation

Supports a range of energy sources added to the grid, providing a balanced and reliable power supply for the future.

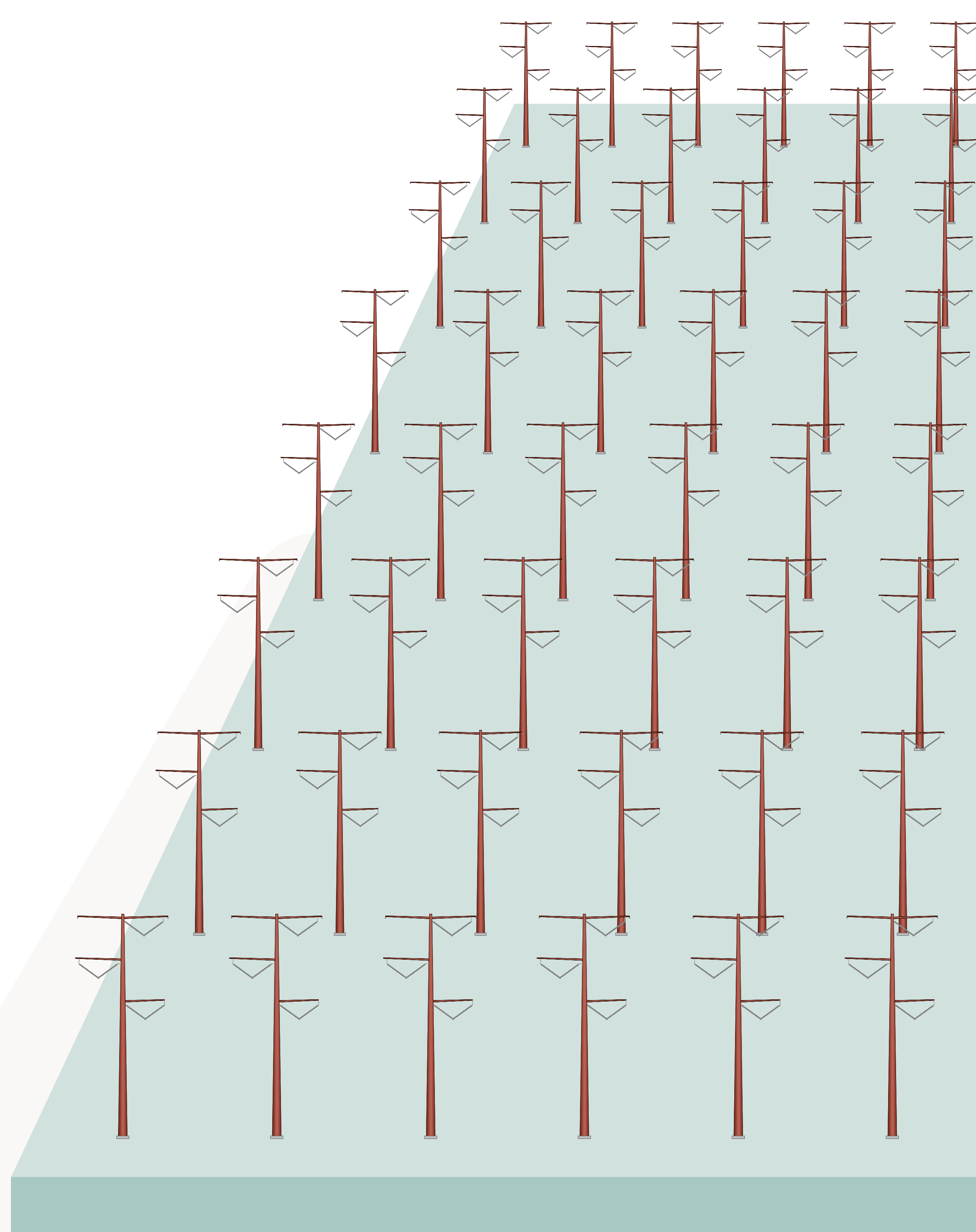




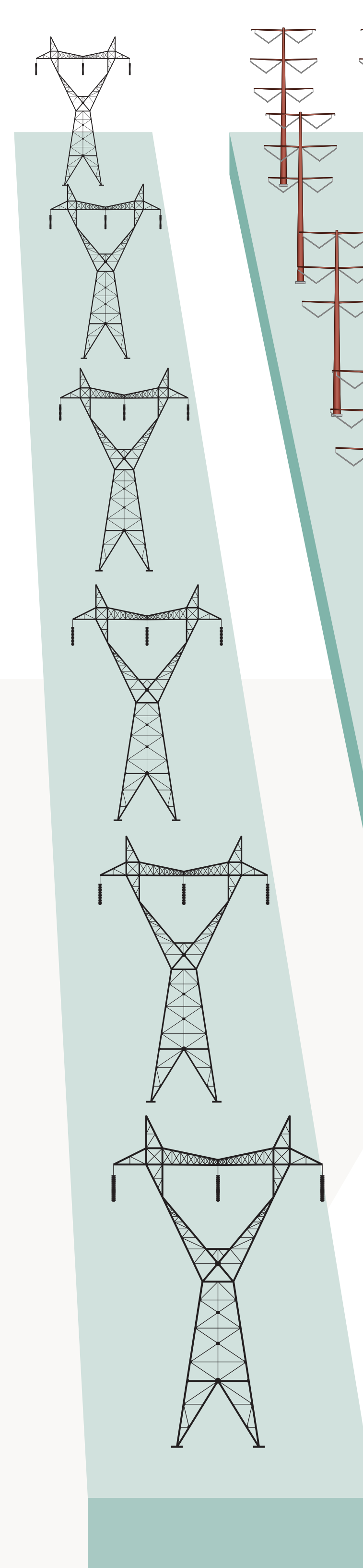
765 kV technology

765 kilovolt (kV) technology was identified in the planning process as the preferred solution for the region, presenting several advantages:

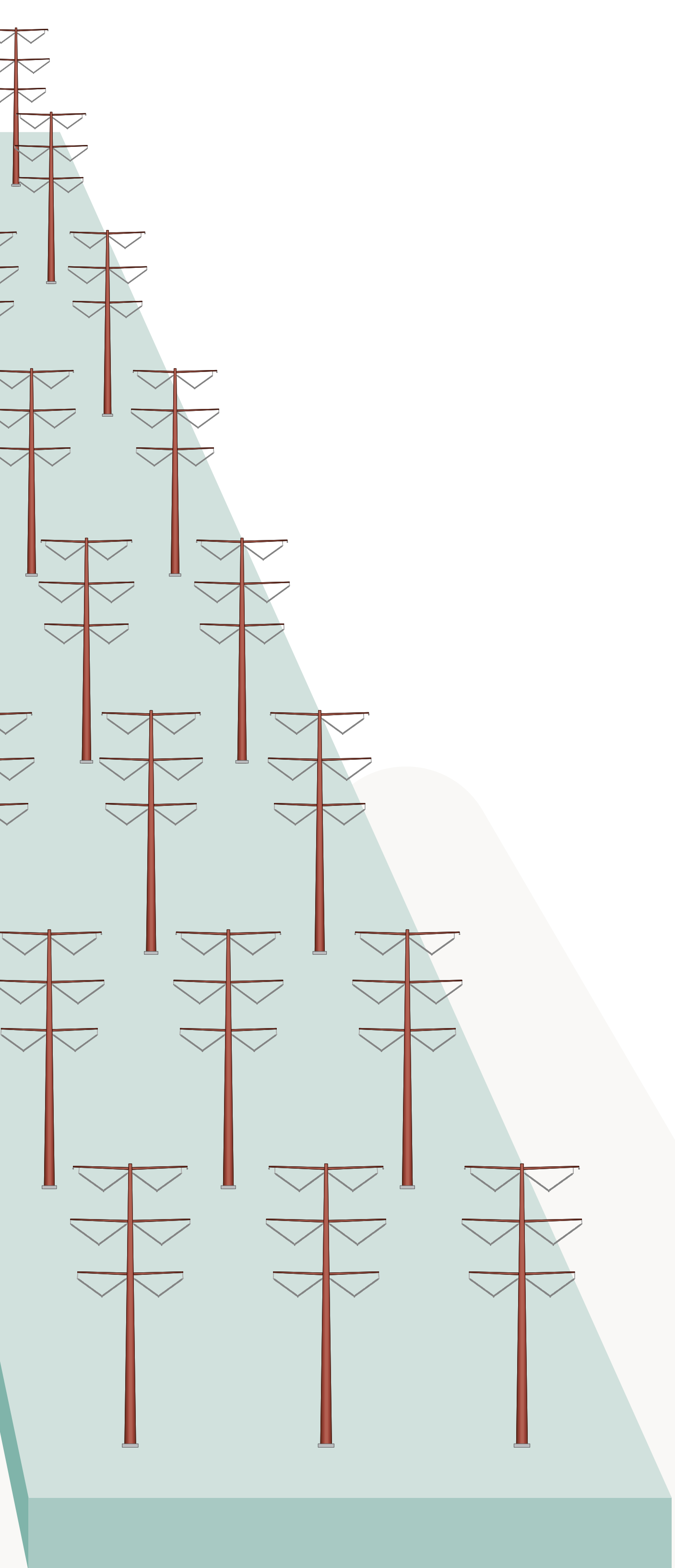
- Efficiently carries power over long distances
- Fewer transmission lines needed to carry the same amount of power
- Fewer structures reduce impact on land, communities, and the environment
- Resilient infrastructure that can consistently deliver power
- Provides backup power pathways



**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)



A 765 kV transmission line can carry as much power as six 345 kV single circuit lines or three 345 kV double circuit lines.

**Not to scale.*





Connect with us



PowerOnMidwest.com



Connect@PowerOnMidwest.com

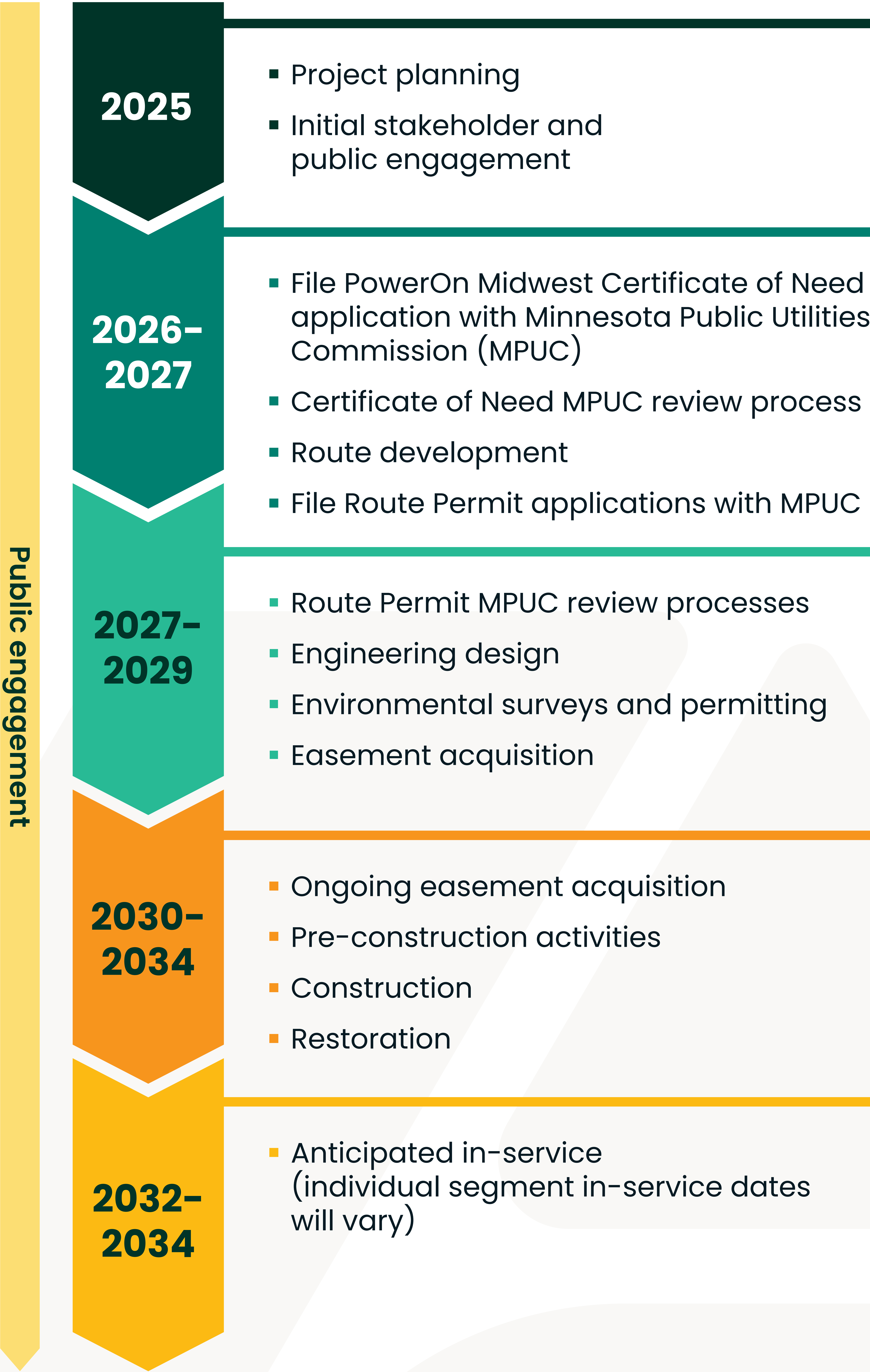


888.283.4678





Preliminary schedule



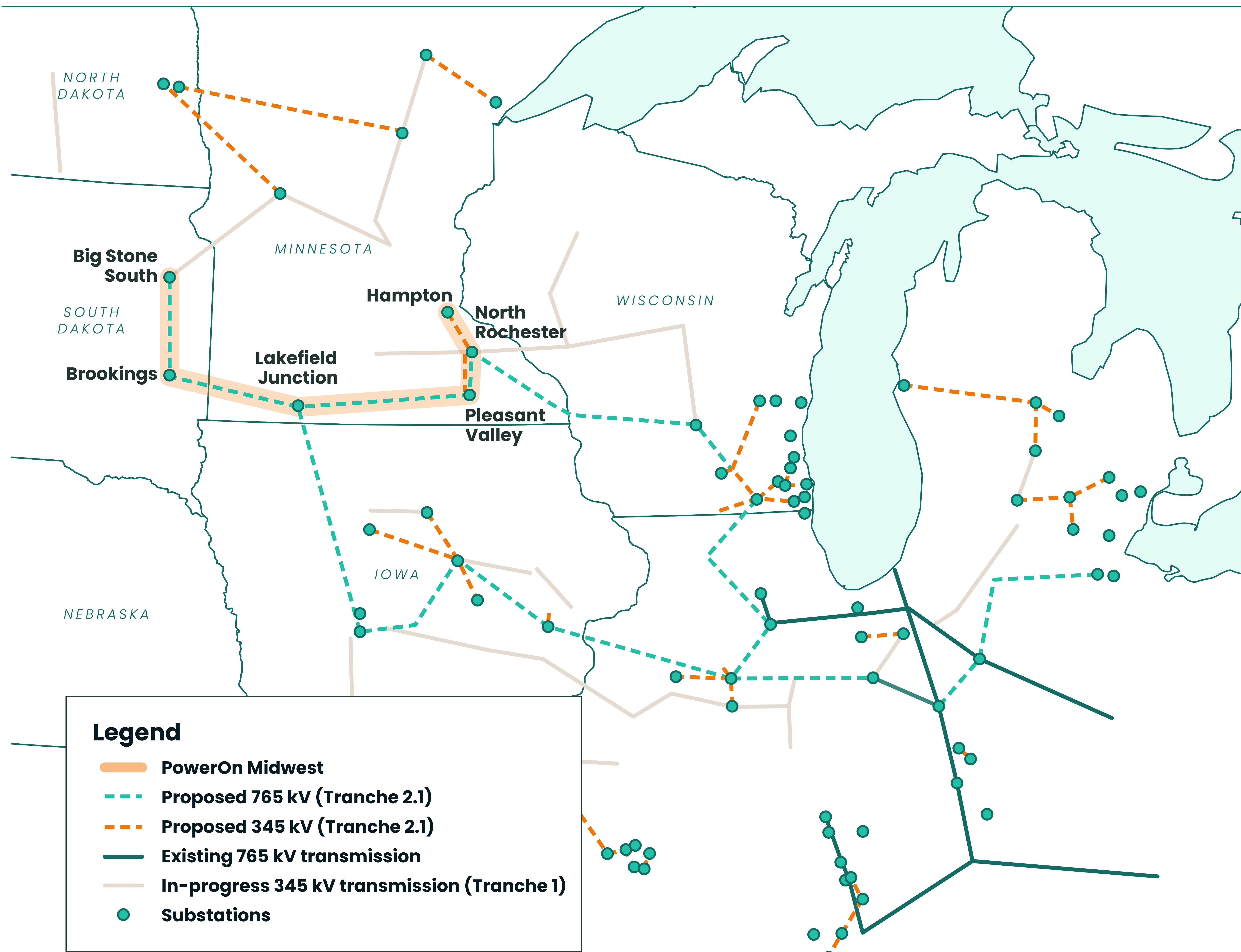


Upgrading our regional energy grid

Electricity use is growing throughout the Upper Midwest. Demand is expected to increase significantly over the next two decades due to:

- New and expanded manufacturing
- Technology
- Devices in our homes and businesses that use more electricity
- Growth in new industries

This increase, combined with the changing ways electricity is generated, requires long-term planning and solutions to meet the needs of our communities, states, and region to continue delivering the reliable service needed to power our daily lives.



MISO, the regional grid operator, approved PowerOn Midwest as part of a portfolio of Long Range Transmission Projects in December 2024.

Learn more at:

misoenergy.org





Study area

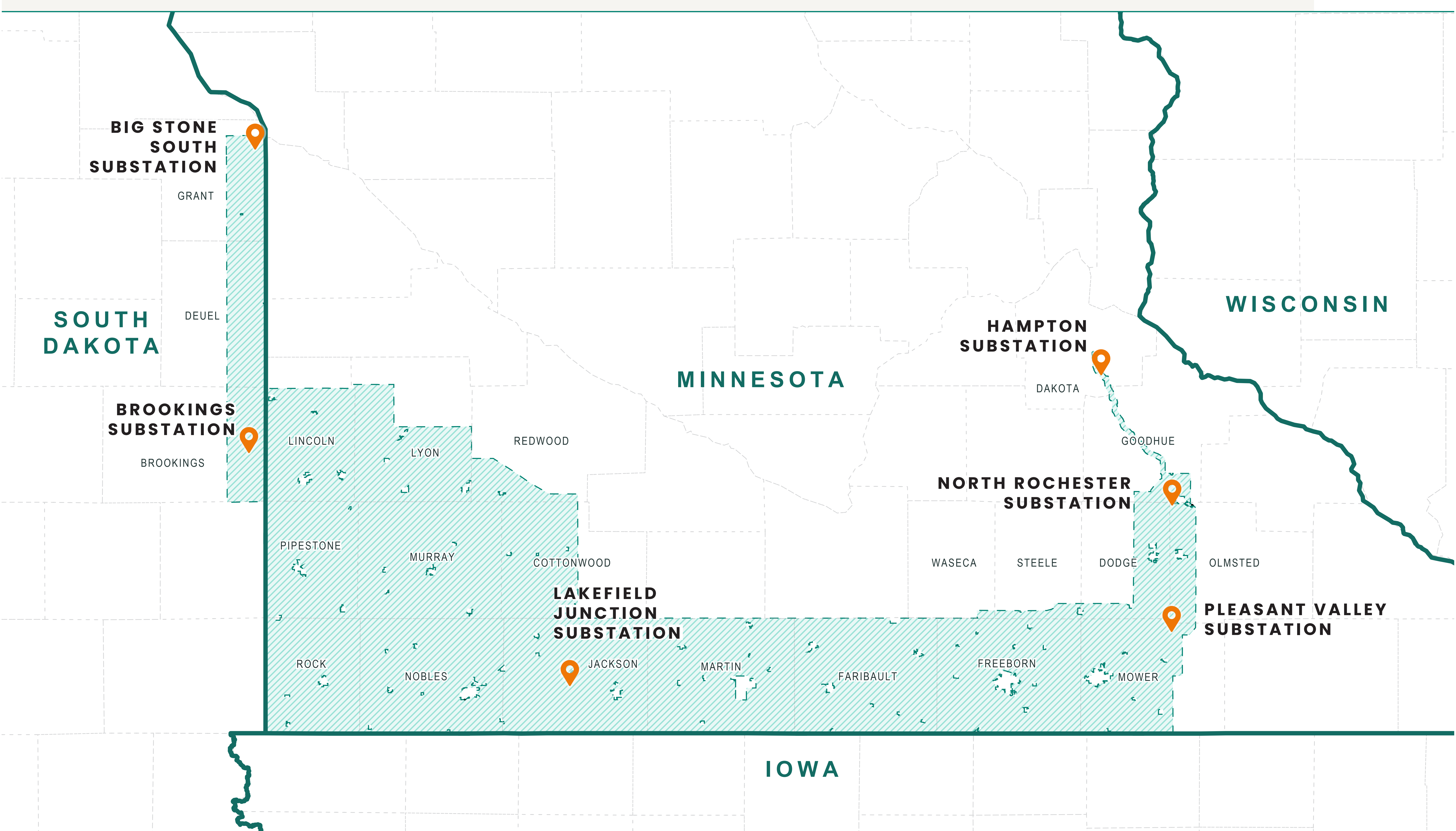
PowerOn Midwest segments include:

Big Stone South–Brookings County–
Lakefield Junction 765 kV (**MISO LRTP #22**)

Lakefield Junction–MN/IA border 765 kV
(**MISO LRTP #23**)

Lakefield Junction–Pleasant Valley–
North Rochester 765 kV (**MISO LRTP #24**)

Pleasant Valley–North Rochester–
Hampton 345 kV (**MISO LRTP #25**)



This map shows the area that will be studied during future routing discussions.

PowerOn Midwest will offer multiple opportunities for stakeholders, Tribal entities, and the public to provide input into the siting and routing process.

PowerOn Midwest is in the early stages of project development. The utilities anticipate beginning the routing process and filing Route Permit Applications with the Minnesota Public Utilities Commission following the Certificate of Need filing.



765 kV structure

Typical structure

