

# WESTERN WISCONSIN TRANSMISSION CONNECTION TO PROVIDE RELIABLE ELECTRICITY FOR WISCONSIN

INFORMATION SHEET  
WISCONSIN

NEW TRANSMISSION PROPOSAL WILL PROVIDE LOW-COST RENEWABLE ENERGY, IMPROVE REGIONAL RELIABILITY



Xcel Energy is proposing to build a new 345 kilovolt (kV) transmission line to serve communities throughout western Wisconsin. The new transmission line will help ensure regional electric reliability and increase access to new renewable energy being developed in the Upper Midwest.

## Changing energy system brings need for new transmission project to serve Wisconsin customers

As the regional electric system evolves and changes, new high voltage 'backbone' transmission is needed to provide reliable electricity and increase access to renewable energy being generated in the Upper Midwest.

The Mid-Continent Independent System Operator (MISO) operates the regional transmission grid and studies projects needed to serve customers. Along with utility and other stakeholder representatives, MISO identified several transmission projects that will meet customers needs in the coming years as the energy mix changes from one featuring fossil fuel plants to a system with more variable renewable energy. High-voltage transmission projects like Western Wisconsin Transmission Connection that link to local substations will help deliver energy to customers as they need it as plants retire and renewable energy from longer distances serve Wisconsin energy users.

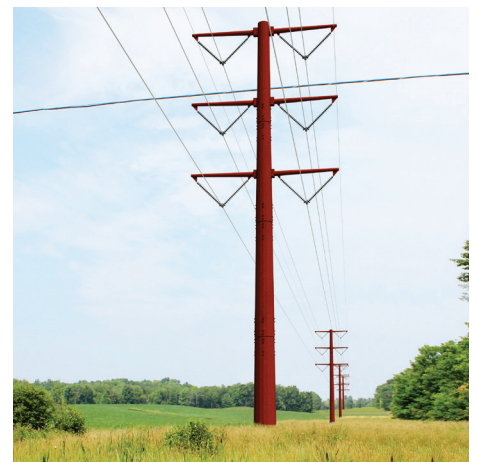
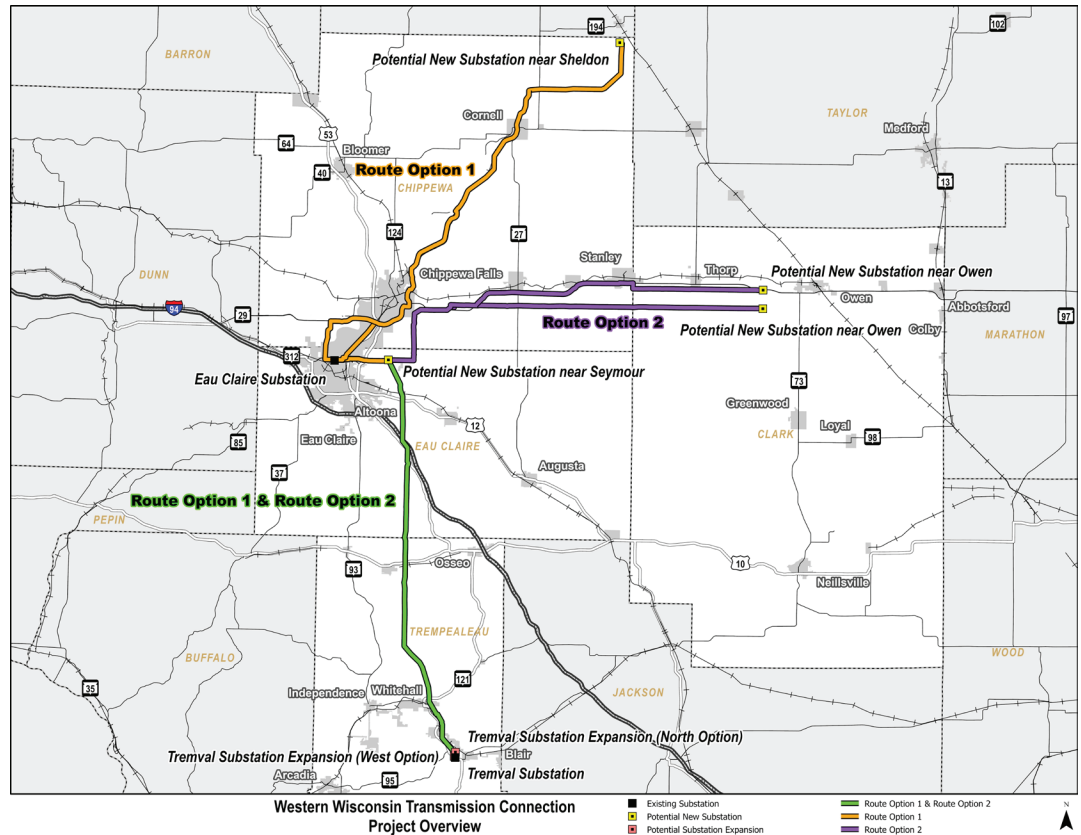
The project is part of a series of other projects that will work together to form the expanded regional grid upon which all of us depend. These projects, and others proposed in Minnesota and to the west, will help meet the region's changing energy needs, including maintaining reliability as older plants are retired, resilience in the face of extreme weather, and delivering new renewable energy to customers throughout the Upper Midwest.

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## Route identification and review

The project includes route segments to connect the new transmission infrastructure to existing and new substations that will serve communities throughout western Wisconsin.

The Public Service Commission of Wisconsin (PSCW) rules require we submit at least two route options for consideration (with some exceptions) and give priority to following existing utility lines and roadways. Xcel Energy will be seeking input from local officials, landowners and other key stakeholders to help identify route options to propose in the Certificate of Public Convenience and Necessity application.



This simulated image demonstrates a 345-kV transmission line 'double-circuited' with a 1150kV transmission line.

**Tremval to Eau Claire segment:**

- Both route options would follow an existing 161-kV transmission line from the Tremval substation near Blair towards Eau Claire. The 161-kV line would be removed and a new double-circuit transmission line would be built with a 345-kV circuit on one side and the 161-kV circuit on the other side.
- We anticipate proposing only one route in this segment because it follows an existing 161-kV line and is the least impactful route for landowners and local communities.

**East Eau Claire substation**

- For both routes 1 and 2 we will be proposing to build a new 345 kV substation east of Eau Claire located in Seymour Township.

**Route 1:**

- This route primarily follows an existing transmission line between the existing Tremval substation and existing Eau Claire substation. From the existing Eau Claire substation there are two route options. One option would follow MISO's identified route along an existing transmission line near Business 53 through Hallie near Hwy 29 where it connects with the other option. The other option would follow existing transmission lines west from the existing Eau Claire substation to the Wheaton Generation Plant and then run east along the south side of Hwy 29 towards Hallie where it connects with the other option. At the connection point, Route 1 then continues east along the south side of Hwy 29 to 50th Avenue and then runs up Hwy 178 to where it meet up with an existing line that runs along the Old Abe State Trail to Cornell. From Cornell, the line continues to follow an existing transmission line to Holcombe and then east to Sheldon where it would connect to an existing 345 kV transmission line and new substation.

**Route 2:**

- This route primarily follows an existing transmission line between the existing Tremval substation and a new substation east of Eau Claire in the Town of Seymour. From this new substation, the line would run east along an existing transmission line and then north along N 90th Ave/Hwy UN/160th St and then east along the south side of Hwy 29 and then crosses Hwy 29 to connect to an existing transmission line on the southeast side of Lake Wissota. From here, the line runs east to Hwy 29 where there are two options. One option primarily follows the east/south side of Hwy 29 to Stanley to where it connects to an existing transmission line on Hwy UN and east along Hixton Road where it would connect to an existing 345 kV transmission line and new substation west of Owen. The other option follows an existing transmission line straight east to where it would connect to an existing 345 kV transmission line and new substation west of Owen.



This simulated image demonstrates what a new 345-kV line could look like.

**NEXT STEPS AND PROJECT SCHEDULE**

This project is in its early stages with multiple opportunities for public input and engagement prior to a final route decision by the PSCW.

**2023:**

- Landowner and local government engagement, including public open houses

**2023-2024:**

- Review comments and input from landowners and local officials
- Begin developing Certificate of Public Convenience and Necessity (CPCN) application

**2024:**

- File CPCN application with PSCW

**2024-2025:**

- PSCW reviews CPCN application, including public hearing

**2025:**

- PSCW route decision expected

**2025-2026:**

- Landowner negotiations and easement procurement
- Design and engineering

**2026-2027:**

- Construction

**2027-2028:**

- Project complete

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