

# Star Lake 41.6 kV Transmission Line and Distribution Substation Project

Great River Energy and Lake Region Electric Cooperative (LREC) are proposing to construct a 41.6 kilovolt (kV) overhead transmission line and distribution substation in Otter Tail County (see map on back). A new LREC distribution substation would be located in Section 16 of Star Lake Township. To provide power to the new LREC distribution substation, Great River Energy would build 8.75 miles of transmission line extending northerly from LREC's existing Maine distribution substation located in Section 26 of Maine Township.

This project is primarily needed to serve the anticipated electric load of the proposed White Earth Nation casino facility located in Section 15 of Star Lake Township. This project provides a significant secondary benefit by allowing LREC to redirect some electric load away from four of its existing substations (Dent, Dora, Erhard and Maine), thereby increasing capacity and improving service reliability to LREC customers in the area.

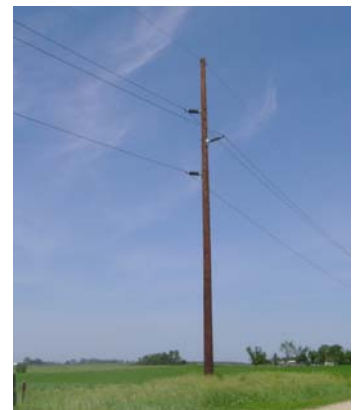
## Overview

The proposed transmission line route extends 0.75 miles north of the existing Maine distribution substation following along County Road 45, at which point the route turns and extends westerly 0.75 miles following along a common property line to 315<sup>th</sup> Avenue. The route then extends north 2.75 miles following along 315<sup>th</sup> Avenue and Otter Tail County Road 115. To avoid a large wetland located on both sides of County Road 115, the route departs the roadway alignment and follows along a common property line 0.25 miles north and 0.25 miles west to the intersection with CSAH 35. The route continues four miles northerly along CSAH 35 and CSAH 41 and ending at the proposed LREC distribution substation.

- Some segments of the transmission line will carry new LREC distribution lines attached to horizontal cross arms as underbuild.
- Typical pole heights range from 60-75 feet (see photos).



*Typical 41.6 kV single-pole wood structure with distribution underbuild*



*Typical 41.6 kV single-pole wood structure without distribution underbuild*

- Following construction of the transmission line, Great River Energy promptly repairs and restores any damages that may occur. Fair compensation is paid for any crop loss.
- The new transmission line would require a 70-foot-wide right-of-way (easement), 35 feet on each side of the transmission line. Where the transmission line follows existing roadways, a portion of the 70-foot-wide easement would overlap and share the existing road right-of-way.

## Public involvement

Great River Energy and LREC will host a public information meeting in the project area for landowners and local elected officials to provide details about the project and to seek their feedback. Once a final route is established, property owners along the transmission line route will be notified individually to discuss specific project details and compensation for the acquisition of easements.

### Quick facts

Transmission line length – **8.75 miles**

Voltage – **41.6 kV**

Structures – **Single wood poles**

Span length – **280 to 400 feet apart**

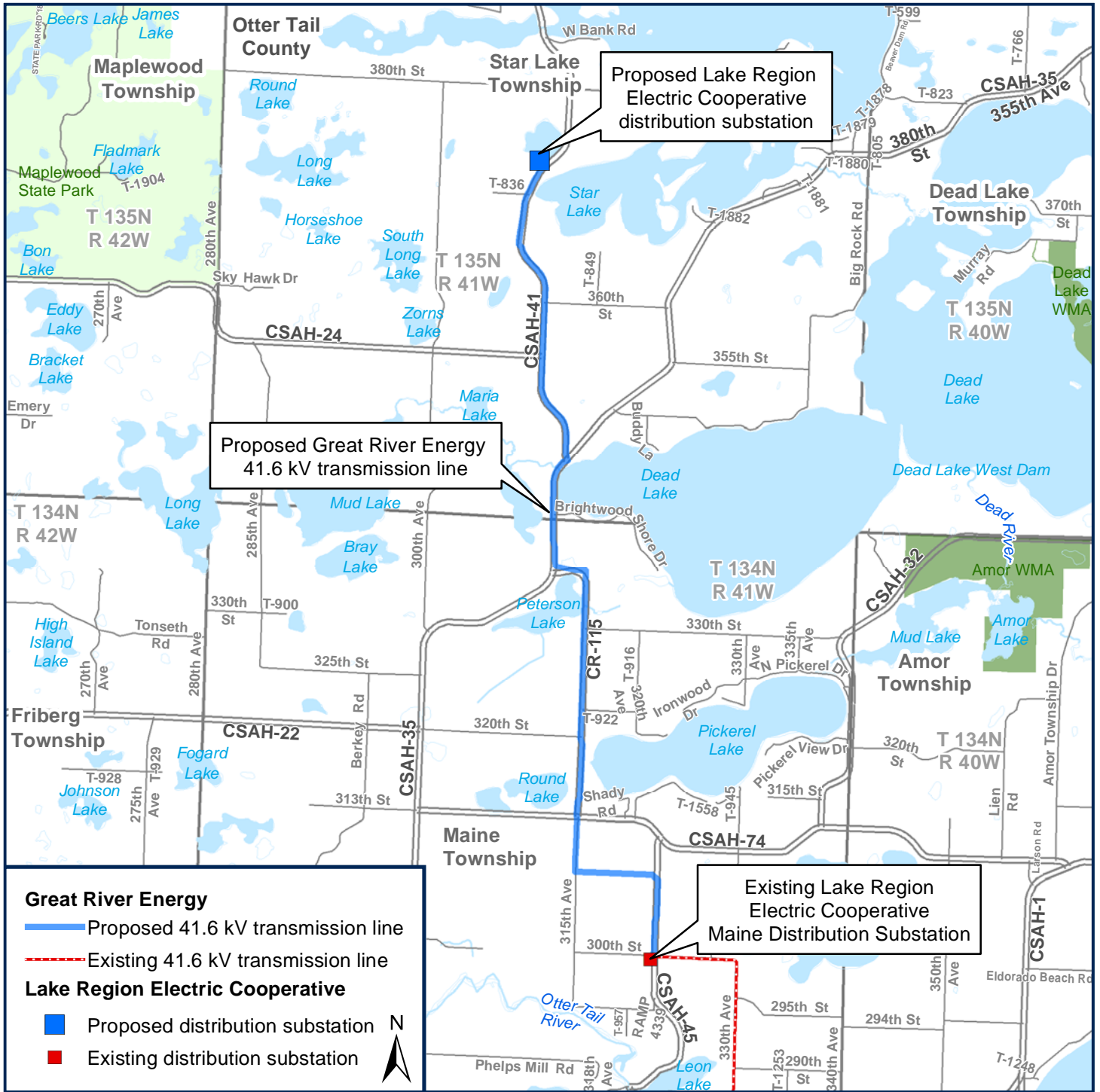
Right of way width – **70 feet, 35 feet on each side of the transmission line.**

Permits – **US Army Corp of Engineers, MN Department of Natural Resources, Otter Tail County Highway Dept.**

### Schedule

Public notifications	<b>January – February 2016</b>
Surveying/design	<b>Spring 2016 – Summer 2016</b>
Acquire easements/ Environmental permits	<b>Summer 2016 – Winter 2016</b>
Power line construction	<b>Winter 2016 – Summer 2017</b>
Fully operational	<b>Fall 2017</b>

# Proposed project



## Great River Energy representatives

For project updates and information, visit [greatriverenergy.com/starlake](http://greatriverenergy.com/starlake) or contact:

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 Land Rights  
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## About Great River Energy

Great River Energy is a not-for-profit electric cooperative providing wholesale power to 28 distribution cooperatives in Minnesota and into Wisconsin. Our member cooperatives distribute that electricity to 660,000 families, farms and businesses serving approximately 1.7 million people.