

Staying Connected with Our Legislators

One of the most important things we can do is let our voices be heard by those elected to represent us. LREC values a positive relationship with our local legislators. We were able to connect with Minnesota's Senator Jordan Rasmusson, Senator Rob Kupec, Representative Tom Murphy, and Representative Jeff Backer over the past year when they all were able to attend one of our board meetings. We appreciate our legislators being available to us throughout the years. We must continue to build and strengthen our relationships with them, especially during this time of significant energy transition.

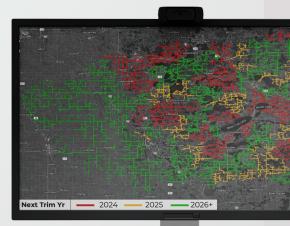
I met with Senator Jordan Rasmusson last month to discuss his experience being a part of a delegation from Minnesota that traveled to Germany this past summer. Organized by the University of Minnesota, this bipartisan and bicameral delegation included Minnesota House Majority Leader Jamie Long, the chairs of the House Energy and Commerce Committees, Minnesota Public Utilities Commissioner Joe Sullivan, Department of Commerce Commissioner Grace Arnold, Minnesota Pollution Control Agency Commissioner Katrina Kessler, and Minnesota Department of Transportation Commissioner Nancy Daubenberger. Senator Rasmusson serves on the State's Commerce Committee and Capital Investment Committee. A delegation from Minnesota has traveled to Germany before, and the major purpose of the trip is to observe Germany's energy transition and the lessons being learned from it.

Tim Thompson's CEO Column continues on the back page →

Bringing Vegetation Management to the Next Level with AiDash

Your electric cooperative takes an aggressive, educated approach when it comes to **vegetation management (VM)** efforts. Managing vegetation along LREC overhead lines is a dynamic and complex process that requires quality data to quantify the forest cover adjacent to the lines. In previous years, success was achieved utilizing Arborcision, but as technology has developed, more comprehensive methods have emerged and become cost effective to employ.

In 2022, LREC purchased AiDash technology to ensure all VM efforts were directed in an efficient, validated, and impactful direction. AiDash utilizes satellite imagery and artificial intelligence (AI) to take a snapshot of the system and show where lines are overgrown and how to best address them. Additionally, with each subsequent imaging, the AI algorithm will acquire more data which will serve to better inform upcoming VM recommendations.



AiDash is changing the face of VM for the cooperative. We look forward to continuing to provide safe and reliable electricity to our members.

LAKE REGION ELECTRIC COOPERATIVE'S 87TH

ANNUAL MEETING

THREE LOCATIONS • SAVE THE DATE

CEO Column (continued from front page)

Senator Rasmusson highlighted Germany's current rapid energy transition to carbon free energy. The war in Ukraine has shut off Germany's supply of inexpensive natural gas it had been importing from Russia, forcing Germany to bring some coal back into its energy generation portfolio. Germany has also aggressively phased out its nuclear power generation and had its last nuclear power plants closed in April of 2023. Germany phased out nuclear so quickly that it had to restart coal plants. Senator Rasmusson's primary takeaway from his trip was Germany's lack of electricity generation diversity, together with its reliance on imported natural gas, leading to high electricity rates and intermittent reliability. Rasmusson's experience shed light on Germany's difficulty managing new energy sources before being confident and certain

that everything necessary to transmit and distribute the new energy sources is in place. Senator Rasmusson spoke to the challenges faced by industrial customers in Germany that are unable to be competitive with others around the world right now because of such high energy costs.

In Minnesota, Senator Rasmusson hopes the regulatory processes can be reimagined to allow utilities to be nimbler so they can be equipped to handle future transmission demands resulting from our energy transition. These processes currently are very slow and prevent utilities from gaining approvals timely enough to ensure all the pieces can be in place to accomplish the goals set by the 2023 Minnesota carbon free standard law.

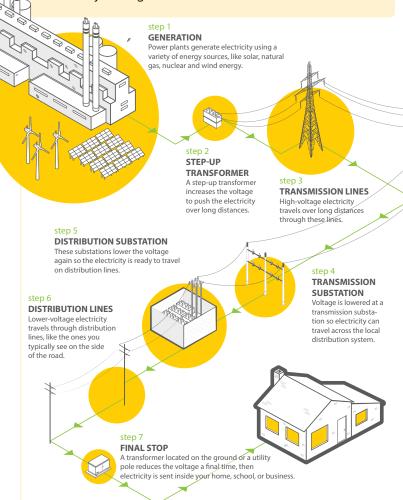
I am so thankful for Senator Rasmusson's time last month visiting about his experience in Germany because so much of it resonates with what is happening here in Minnesota. I want LREC to be the cooperative you deserve by staying connected with all our stakeholders, including our members, elected officials, (regardless of party), and any others who value what we are about—which is making you feel good about what your cooperative is doing for you. I appreciate your engagement as a member. Customers in Germany are highly engaged as they pay approximately three times more than we do in the U.S. for electricity. LREC wants and needs high member engagement now so we can work to prevent our nation from experiencing the extremely high power costs customers are currently

How Electricity Gets to You

The electric grid is considered one of the most complex *machines* in the world, quietly and consistently delivering the electricity we need for everyday life.

If you look at the graphic below, you'll see there are a number of steps to ultimately deliver power to its final stop — your home. These steps involve *fixed costs* such as poles, wires, transformers, meters, etc; not to mention the maintenance of all these items. The costs for these things are incurred whether or not energy is being used at a service location or not.

To ensure these costs are properly recovered—regardless of how much/little energy is consumed—it is common for utilities to bill a *fixed* **facility charge** in addition to a *metered* **energy cost**. This ensures fixed costs are distributed fairly among members/consumers.



Transmission Projects

The following projects are part of a larger group of 18 transmission projects approved in 2022 by our region's grid operator, the Midcontinent Independent System Operator (MISO). It's part of the first phase of integrating new generation resources and boosting grid resilience as the energy transition continues.

facing in Germany.

Tim thomps

Northland

Reliability

Project

Northland Reliability Project
Great River Energy and Minnesota Power are jointly building the Northland Reliability
Project, an approximately
180-mile 345-kilovolt (kV)
transmission line from northern Minnesota near Grand
Rapids to central Minnesota near Becker. Learn more
at northlandreliabilityproject.com

Alexandria to Big Oaks
Expansion Project
Great River Energy, Minnesota
Power, Missouri River Energy
Gy Services, Otter Tail Power
Company, and Xcel Energy are
developing another transmission project called Alexandria-Big Oaks. This will add a
new transmission circuit to the
existing 345-kV transmission

Cuyuna Series
Compensation
Station

Brainera

Pierz

Benton County
Substation
St Clove
Sherco Substation
Big Dake
Big Daks Substation

Legend

Expand existing substations
New substation
Segment one
Segment two

[2]

120 – 180 feet h lew 345-kV

double-circuit weathering steel structure installed on existing centerline

state 94 were built as 'double-circuit capable' to accommodate a project such as this, which minimizes the need for additional easements from landowners. A short segment of new construction will be needed to connect the 345-kV transmission line from the Alexandria Substation to the new Big Oaks Substation. Learn more

about the project at alexandriatobigoaks.com

65 – 90 feet high
Existing 230-kV ...
wood H-frame
structure to be
removed

structures that run mainly along Interstate 94 (part of the

CapX2020 project). The transmission structures along Inter-