

Examining the North American Electric Reliability summer assessment

In early May, the North American Electric Reliability (NERC) released a report outlining their 2022 Summer Reliability Assessment.

In the report, NERC raised concerns regarding several regional transmission organizations (RTOs) and their challenges related to electric generation and transmission this summer.

NERC's Summer Reliability Assessment

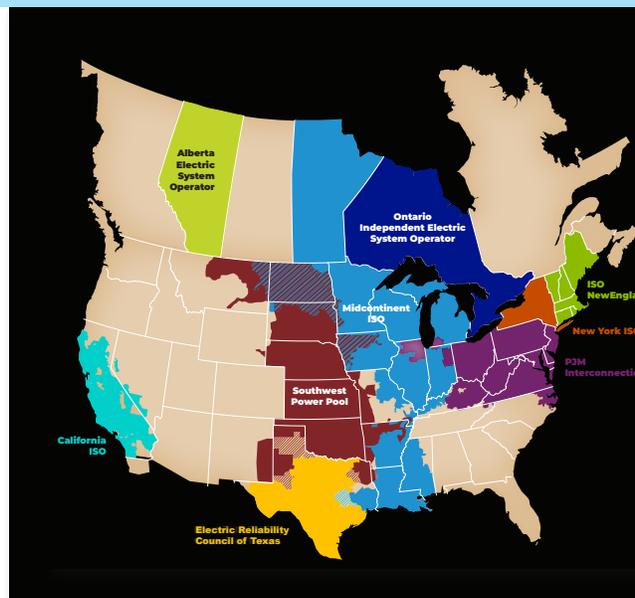
NERC placed Midcontinent Independent System Operator (MISO) in a "high risk" category for electric generation/capacity shortfalls this summer. RTOs Southwest Power Pool (SPP), the Western Interconnection, and ERCOT (Texas) were identified as "elevated risks."

NERC outlined the following factors leading to these risk levels:

- Storm damage to a key MISO transmission line connecting the MISO northern and southern areas.
- A capacity shortfall in MISO, driven by peak demand increase and less generation capacity than last summer.
- Above-average temperatures and drought contributing to high demand and lower than average output from hydro generators.
- Supply chain challenges leading to difficulty securing fuels and other key resources.
- Cybersecurity threats.

What does this mean for Corn Belt Power and its member-cooperatives?

The way the United States generates electricity is rapidly changing. More renewable energy sources like wind and solar power are coming online, while



North American RTO Map

A regional transmission organization (RTO) in the United States is an electric power transmission system operator (TSO) that coordinates, controls, and monitors a multi-state electric grid. The transfer of electricity between states is considered interstate commerce, and electric grids spanning multiple states are therefore regulated by the Federal Energy Regulatory Commission (FERC). Corn Belt Power is located in the Southwest Power Pool (SPP) RTO.

traditional sources like coal, nuclear and natural gas are being retired. Corn Belt Power believes and advocates for an all-of-the-above energy approach. All-of-the-above promotes the idea that the United States depends on a reliable and sustainable fuel supply that includes developing and incorporating domestically produced renewable energy resources to supplement baseload generation that includes biofuels, natural gas, nuclear, hydropower and coal.

In May, SPP, Corn Belt Power's regional transmission operator, reported that they project enough generation to meet summer peak demand. However, that doesn't eliminate the risk of an isolated energy emergency alert (EEA) that could be prompted by a weather event, as encountered in February 2021. Winter Storm Uri produced prolonged arctic cold that negatively impacted generation

resources in the SPP footprint.

It's important to remember that the electric grid is made up of thousands of generating stations and millions of miles of line. A power plant outage or natural disaster could have an impact on SPP's projections. Corn Belt Power and our primary power provider, Basin Electric Power Cooperative, are well-positioned to meet this summer's peak demand.

What is Corn Belt Power doing?

Corn Belt Power continues to work with policymakers and regulators on the state and federal level for a sensible all-of-the-above generation approach.

The ongoing energy transition must recognize the need for time, and technology development, while including all energy sources to maintain reliability and affordability. A resilient and reliable electric grid that affordably **Continued on page 4...**

Regular system maintenance increases reliability

Despite supply chain issues, it's been a busy summer for Corn Belt Power crews as they work across the system on maintenance and improvement projects.

In June, crews electrified the new Whalen Substation inside the Butler Logistics Park. The substation will power Shell Rock Soy Processing and other loads in the immediate area.

Electrical maintenance crews replaced arresters and 69 kilo-volt insulators at the following substations: Templeton, Hanover, Gar, Breda, Pioneer, Graettinger, Linn Grove, Boone Valley and Heartland. Elsewhere across the system, electrical maintenance crews upgraded transformers, replaced switches, and regulators.

The cooperative's meter crew replaced meters at Round Lake, Ayshire, Klemme, Galbraith, Estherville Municipal One and Two and Eagle Grove.

"Most of this work was due to age," said Mike Finnegan, electrical system superintendent, Corn Belt Power. "The jobs are part of our yearly workplan."

Corn Belt Power transmission crews began reconductoring line from Pocahontas to Dover in June.

Contract crews continue work on the rebuild from Sherwood to Manson and Parkersburg to Aplington Junction.

"All of these projects are moving forward with materials from Corn

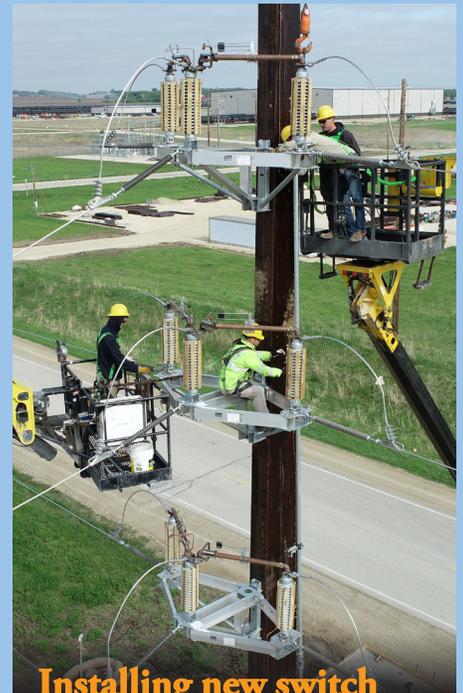
Belt Power, as the contractors are experiencing delays due to production times," said Jeremy Stattelmann, transmission superintendent, Corn Belt Power. "We're also experiencing delays in receiving materials. We're currently waiting on an order of poles to complete the Humboldt to Weaver line rebuild."

Wait times on products and materials continue to increase. Lead-times for insulators and transformers are 32 and 30 weeks respectively. In October 2021, Corn Belt Power ordered 550,000 feet of conductor. The cooperative didn't receive the first shipments of that conductor until late April of this year. The current lead time for conductor is anywhere from 52 to 60 weeks.

"Items as simple as bolts are now on a eight to 20 week wait time, depending on size," said Stattelmann. "We could normally get those within a week. We're working on maintaining our stock of certain items, while working through the workplan. We want to ensure we have material should we have a weather-related event."

Fiber from Burt Switching Station to Algona is moving forward. This will create a fiber path with the newly installed AccessWrap fiber on the Midland Power Cooperative distribution system. Contract crews finished splicing fiber in June.

In total, in 2022, more than 65.5 miles of transmission line will be reconducted or replaced with fiber installed. ■



Installing new switch

Above | Corn Belt Power transmission crews install a new two-way switch pole outside the Whalen Substation May 18. The new substation will help power Shell Rock Soy Processing inside the Butler Logistics Park.



Metering

Above | Shawn Ruberg, meter technician, Corn Belt Power, sets a meter box inside the Whalen Substation May 18. Crews energized the new substation June 22.

Corn Belt Power crews string new conductor along a stretch of line between Pocahontas to Dover June 21. In total, 10.3 miles of line will be reconducted when the project is complete.



Tyler Baxter

Collin Weber

Weber, Baxter complete course

Corn Belt Power's Collin Weber, energy services engineer, and Tyler Baxter, engineer III, recently completed an eight-week Dale Carnegie course. The course titled, Effective Communications and Human Relations, taught attendees how to build trust, motivate people to act, gain ways to project an enthusiastic attitude, communicate logically, clearly and concisely; and energize and engage listeners.

The course also helped attendees discover ways to manage stress and minimize worry, encourage positive thinking, and commit to continuous improvement.

Congratulations, Tyler and Collin!

News in brief

Prairie Energy Cooperative holds annual meeting

On Wednesday, June 1, Prairie Energy Cooperative held its board, cooperative staff and attorney-only annual meeting. The meeting was filmed and put on the cooperative's social media platforms.

At the meeting, Allyn Waddingham (District 3) and Donald Christopherson (District 7) were re-elected for three year terms. Officers are as follows: President: Marion Denger; Vice President: Josh Amonson; Secretary/Treasurer: Donald Christopherson; Assistant Sec/Treasurer: Allyn Waddingham.

Prairie Energy will hold three member appreciation events later this year, instead of an in-person annual meeting.

North Central Iowa Research Farm receives donation

Corn Belt Power, Prairie Energy Cooperative, Basin Electric Power Cooperative and CoBank teamed up to donate \$6,000 to the North Central Iowa Research Farm in Kanawha.

The research farm was seeking funds to build a new shop/office/meeting room adjacent to their existing building. The research farm is used for educational purposes for all ages. The farm totals 92 acres, 80 of which are dedicated to research. Researchers study corn, soybeans, fertility, tillage, cropping systems, cover crops, insects, disease, weed management and tile. The farm is run by the Iowa State University Extension Office.



Research farm receives donation

Above | Pictured from left: Mark Grundmeier and Blake Smith, North Iowa Research Association; Todd Foss, Prairie Energy Cooperative; Mervin Krauss, North Iowa Research Association; and Brandon Zwiefel, agriculture specialist for the North Iowa Research Farm.



Hydropower tour

Above | A group of Corn Belt Power Cooperative LEAD alumni snap a group photo June 21 following a tour of the Gavins Point Dam located in Yankton, S.D. Employees photographed from left are: Sam Moore, accountant III; Patrick Connor, plant manager; Rod Stephas, assistant plant manager; Tyler Herrig, electronics technician; Jim Mertz, electrical maintenance foreman; Eric Hankey, SCADA technician; Matt Donald, electrical maintenance foreman; John Naber, electrical/control; Brittany Dickey, vice president, business development; and Courtney Christensen, administrative assistant.

LEAD group tours hydropower facility

Alumni from Corn Belt Power's Leadership Exploration and Development (LEAD) toured Gavins Point Dam June 21.

The dam, located on the Missouri River near Yankton, S.D., is home to three, 44 mega-watt turbines and is operated by the U.S. Army Corps of Engineers. The power generated at the station is marketed by the Western Area Power Administration (WAPA). Corn Belt Power has a 21 mega-watt WAPA allotment in its power supply.

Gavins Point Dam was constructed as a part of the Pick-Sloan Missouri Basin Program, authorized by the Flood Control Act of 1944 by Congress. It is one of six hydropower facilities on the Missouri River. ■

Area business representatives network with cooperative system employees at the Touchstone Energy Cooperatives of Iowa Golf Outing at Spring Valley Golf Course, Livermore, June 7. Distribution co-ops invited businesses to participate that contribute to the economic successes of local rural communities.

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June Touchstone Energy Volunteer Challenge winner | Richard Hall, member service representative, Calhoun County Electric Cooperative Association, donated his \$100 prize drawing to the City of Manson.

NERC Story *Continued from page 1*

keeps the lights on is the cornerstone of our rural economy. Electric cooperative families and businesses rightfully expect the lights to stay on at a price they can afford. To maintain the reliability of your power supply, we must adopt an all-of-the-above strategy that includes renewable energy as well as dependable resources we have come to rely on like coal, natural gas, nuclear, and hydropower. This diverse energy mix is essential to meeting those expectations day in and day out.

We are keenly aware that the sun doesn't always shine, and the wind doesn't always blow. While we support and encourage the development and use of renewable energy, the intermittent nature of renewables means there may be times when there simply isn't enough of it to keep the lights on all the time. Its place is to supplement a reliable and affordable baseload generation mix. That's why we must continue to recognize the value of and operate baseload generation plants now and into the future.

After the February 2021 event, we worked with our regional transmission organization to refine communication processes and emergency operations procedures. We are better equipped to respond to and communicate potential EEA events impacting our service area, should they arise in the future.

Our mission remains the same. We are here to provide safe, reliable, and affordable electricity that is also environmentally responsible. We will continue to advocate on your behalf and do everything we can to continue to live up to that mission. ■



Courtyard re-mulched

Left | Corn Belt Power employees braved the heat and pitched in to help re-mulch the cooperative's courtyard June 9. Working together, employees completed the task in less than half a day.

Corn Belt Power Cooperative **Watts Watt**

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