



A Touchstone Energy' Cooperative Kor Website at www.clearwater-polk.com

Sounding the Alarm on Grid Reliability

North Dakota, Minnesota at risk of power outages this summer

America's electric grid has become increasingly unstable – and it could begin impacting Minnkota Power Cooperative's members this summer.

That's why Minnkota and Clearwater-Polk Electric are joining many of our nation's grid operators and regulators in sounding the alarm on the vulnerabilities that are affecting power reliability. As the pace of change in the energy industry continues to accelerate, so does the risk of rotating power outages and other extended service interruptions. Minnkota's eastern North Dakota and northwestern Minnesota service area is no longer immune to the large-scale grid challenges that have been experienced in Texas and California in recent years.

As Clearwater-Polk Electric's wholesale power provider, Minnkota takes its responsibility to provide reliable, resilient and responsible electricity seriously. The cooperative has more than enough generating capacity to meet the demands of its members through its coal, wind and hydro resources. But Minnkota does not operate on the grid alone. Utilities across the Upper Midwest are connected through Midcontinent Independent System Operator (MISO). Emergency events experienced in other parts of the MISO region can and do have impacts back into the Minnkota system.



Clearwater-Polk Electric Linemen Teach Electrical safety to area 6th graders

There were 136 6th graders in attendance from the Clearbrook-Gonvick, Bagley and Fosston school districts. Local volunteers taught sessions on Animal Safety, ATV Safety, AED/First Aid, Tractor/Grain Bin Safety, Lawnmower/Small Engine Safety, Fire Safety, Chemical Safety, Electrical Safety, and Seatbelt safety. The Clearwater County Extension organizes the event.

One of the most significant industry issues is the retirement of baseload and dispatchable power plants – including coal, nuclear and natural gas – without adequate replacements. Wind and solar make up the majority of the new resources being added to the grid, but they are limited by the fact that they are only able to operate intermittently – when the wind is blowing or the sun is shining. While Minnkota supports moving toward a cleaner, more sustainable energy future, it is not something that can happen with the flip of the switch. It will take decades of planning and unprecedented technology development to achieve significant carbon reduction.

MISO expresses concerns

Minnkota is not alone in coming to these conclusions. MISO issued a dire warning in April that it does not have enough reliable power plant capacity on its system to meet its projected peak demand this summer. The result is an increasing risk of power outage events.

Minnkota both buys and sells surplus power in the MISO system, which estimates a 1,230-megawatt

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Phone 218-694-6241 - or - Toll Free (888) 694-3833

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We will be closed Monday, September **5th for Labor Day**





Cookie Ice Cream Cake

Submitted by: Carol Connell (Trail, MN)

Ingredients:

- 1 pkg Oreo cookies 1/2 gallon vanilla cream 1/3 cup butter, melted 1 cup frozen whipped topping
- 1 cup hot fudge topping, warmed up
- 12 cherries

Preparation: Crush half of the cookies to make crumbs. Combine crumbs with melted butter and press into the bottom of a 9" spring foam pan or pie plate. Stand remaining cookies around the edge of pan. Pour ³/₄ cup of fudge topping over the crust. Freeze 1 hour. Meanwhile, soften $\frac{1}{2}$ of the ice cream in microwave or on countertop. After crust has chilled, spread softened ice cream over fudge layer. Freeze 30 minutes. Scoop remaining ice cream into balls and arrange over other ice cream layer. (Isaiah Tollefson) Freeze until firm (4 hours or overnight). To serve, garnish with remaining fudge topping, whipped topping and cherries.

SCHEDULED BOARD MEETING

Held at the Clearwater-Polk Electric board room at 8:00 a.m. on the last Wednesday of each month.



Know what's **below**. **Call** before you dig. **Call Before You Dig** It's the law!

Call 811 to locate underground wires. You must call at least 48-hours in advance before any excavations (this notice does not include weekends, holidays, or emergencies).

Clearwater-Polk Electric will only locate the underground wires that are owned by Clearwater-Polk Electric, we do not locate or take responsibility for locating wires beyond the meter location. Members need a signed Underground Locating Waiver to have personal lines located.

> SIGN UP FOR AUTO-PAY AND YOU WILL BE ELIGIBLE TO WIN 25.00

EACH MONTH WE DRAW TWO MEMBER'S NAMES THAT HAVE CHOSEN TO PAY BY AUTO-PAY. THEY WILL RECEIVE A \$25.00 CREDIT TOWARDS THEIR ELECTRIC BILL.

> **CURRENT WINNERS** ANDREW BURFORD **ROBERT J. ANDERSON** TRAVIS A. VETTLESON NANCY R. PERSON

STAD

RULES: Ads for Clearwater-Polk Electric members only. Current Events newsletter will only be published every other month. Ads must be received by the 10th of the print month. Limit your ads to two items. No commercial ads, please.

REMINDER -

"Free-ForSale-Give Away- or Wanted ads can be posted in our newsletters for our members.

FOR SALE: Roll out trundle. Fits under a day bed, like brand new. 218-694-4075.

TROUBLE CALLS DURING OFFICE HOURS 7:00 am - 4:30 pm, Mon. - Fri. CALL 694-6241 or 1-888-694-3833 **AFTER HOURS** OUTAGES CALL 1-877-881-7673



Cool breeze for a warm family game night?

It's too hot, so you've gathered the family under the fan for a breezy game night. Four hours later, you've emerged the champion with a prize package of memories.

It's a powerful experience, powered by just 3 cents of ceiling fan energy That's the value of electricity.



Grid Reliability...continued

(MW) shortfall in power plant capacity to meet its reserve margin. For context, one megawatt-hour (MWh) is enough electricity to serve more than 800 homes with an hour's worth of power.

"Due in large part to decarbonization goals set by our members and the states in our region, our resource fleet is increasingly reliant (Troy Horn) on intermittent and weather-dependent resources," said Wayne Schug, vice president of strategy and business development at MISO. "As this trend continues in the future, MISO needs to evolve the grid, our markets, and our operational capabilities, which is just as complex as it sounds."

In a recent interview in the Wall Street Journal, MISO CEO John Bear added to this point by saying, "As we move forward, we need to know that when you put a solar panel or a wind turbine up, it's not the same as a thermal resource."

MISO's peak demand for electricity typically occurs in the summer months during the hottest days of the year. The organization is conducting training and exercises to prepare for worst-case scenarios and is also implementing lessons learned and best practices. Likewise, Minnkota's energy marketing team is working to ensure it's ready to respond to volatile market and reliability conditions.

NERC issues grim report

The North American Electric Reliability Corporation (NERC) – the federal regulatory entity responsible for the reliability of the nation's electric grid – is also expressing concerns heading into the summer season. According to NERC, MISO is in the "high risk" category, and has the potential of "facing capacity shortfalls in its north and central areas during both normal and extreme conditions due to generator retirements and increased demand."

NERC's Summer Reliability Assessment notes that reliability challenges are being compounded by evolving demands on the power grid, which has grown increasingly complex as renewable energy assets are added.

"There's clear, objective, inclusive data indicating that the pace of our grid transformation is a bit out of sync with the underlying realities and the physics of the system," said John Moura, NERC's director of reliability assessment. Along with the changing power supply mix, NERC also identified extreme weather conditions, high seasonal demand for electricity, supply chain issues and cybersecurity threats as other risks impacting reliability.

What is Minnkota doing?

While there are challenges, Minnkota supports efforts to reimagine how electricity can be produced, delivered and consumed. But the implementation of these ideas must be met with caution and common sense. After all, there is a lot on the line. A resilient and reliable electric grid that affordably keeps the lights on is the cornerstone of the American economy and our national security. Any missteps in an energy transition of this magnitude can have irreversible consequences.

So, what can be done? Minnkota is only one of thousands of utilities across the country, but it is taking its own steps to protect itself from power reliability challenges.

□ Training and education

Minnkota's employees are trained to respond to emergency grid events and continuously work to shield members from the volatility of the grid and markets. The cooperative also invests significant time in helping member-consumers, lawmakers, business interests and others in the general public understand the challenges the industry faces and the complexity in providing reliable power to the region.

□ Maintaining a diverse energy mix

Minnkota's energy portfolio consists of a diverse mix of coal, wind and hydro resources. Working together, these facilities help ensure 24/7 reliability on the Minnkota system. Coal-based facilities remain the workhorse of the system and are routinely available to produce power during the vast majority of each year.

Upgrading our power delivery systems

Minnkota is building, upgrading and replacing the power delivery resources that connect its communities. New technologies are being added to Minnkota's grid to provide enhanced data and communication capabilities – all in an effort to respond more quickly to issues and improve overall reliability.

Continuous cybersecurity evolution

Minnkota continuously works to protect the electric grid from physical and cyber security threats. Energy experts in Minnkota's Control Center monitor the grid 24 hours a day to ensure the safety of the cooperative's employees, infrastructure and data.

Strategically utilizing demand response

Minnkota has one of the most robust and effective demand response (also called off-peak) programs in the country. Through the program, Minnkota and its members can temporarily control electric heating, water heating and vehicle charging loads – shifting electrical demand when economical resources are not available.



To reward our faithful readers, one member's name will be drawn at random each month and placed somewhere in the newsletter. If you should find your name, let us know before the 15th and win \$25 off your next bill.



Operation Round-Up awards over \$11,000...



Front row L to R: Sarah Larson (Bagley Community VBS), Annie Butler Ricks (United Way of Bemidji Area), Lily Krona (Clearwater County 4-H), Jessica Whaley (BAAC), Scott Paavola (FHL Academy), **Cindy Benson (Operation Round Up** board member). Back row L to R: Lori Agnew (Bagley Elementary Fourth grade), Carolyn Combs (Bagley Elementary Art), Kim Hanse (Bagley Elementary Library), Donna Rae Carlson (Clearwater County 4-H), Derek Loiland (Bagley Babe Ruth Baseball), Tim Mullan (Bagley Babe Ruth Baseball), Lexi Lofgren (Rhythm & Ride), Hillary Paulson (Rhythm & Ride).

The Clearwater-Polk Electric Trust awarded over \$11,000 in the latest chapter of Operation Round-Up on June 6. Thirteen entities were recipients. Checks were given to recipients on June 14.

Recipients were as follows:

- Bagley After Prom
- Bagley Area Arts Collaborative, Inc (BAAC)
- Bagley Babe Ruth Baseball
- Bagley Community Vacation **Bible School**
- Bagley Elementary School Art Department
- Bagley Elementary School Library
- Bagley Elementary Fourth Grade swimming
- Clearbrook/Gonvick School Renaissance Learning
- Clearbrook/Gonvick School MoreStarfall
- Clearwater County 4-H
- FHL Academy
- Rhythm & Ride
- United Way of Bemidji Area for Imagination Library Program

We encourage the recipients to spread the word to other organizations that Operation Round-Up has money to share.

DOWNED POWER L4NES DOS & DON'TS

Downed power lines may not look dangerous, but don't be fooled. These lines are likely carrying electric currents strong enough to cause serious injury or death. If you come across a downed power line...



Stay at least 50 feet away from the downed line (about the length of two school buses)



If closer, bunny hop at least 50 feet away keeping both feet together and landing at the same time



Report the downed power line to [YOUR ELECTRIC COOPERATIVE], Call 911 if there is imminent danger.

DON'Ts



Don't attempt to move a downed power line - even with items that are not typically

conductive

Don't touch a structure near or connected to the downed power line. They could be energized for thousands of vards and pose serious hazards

- Stay in your vehicle until help arrives. Avoid touching the metal frame or any other metal in your vehicle.
- Call 9-1-1 and report the downed line. If you need to exit the vehicle due to fire, jump clear of the car keeping both feet together. Cross your arms over your chest and burny hop at least 50 feet away from the vehicle. Never touch the vehicle and the ground simultaneously because this increases the risk of electrical shock.

2022 ~ Clearwater-Polk Electric Newsletter



Deanna Lefebvre General Manager

If you read the "Sounding the Alarm on Grid Reliability" article that started on the front page of this issue, then you learned that MISO, our regional grid operator, is in the "high risk" category and has the potential of "facing capacity shortfalls in its north and central areas during both normal and extreme conditions due to generator retirements and increased demand" during this summer season. What does this mean for Clearwater-Polk Electric members?

If there is a capacity shortfall in the MISO region and a grid emergency is declared, Minnkota Power Cooperative, Clearwater-Polk's power supplier, will be directed to implement temporary controlled outages to balance the grid.

As I write this article there are hot temperatures expected over the weekend. This could be our first experience with rotating controlled outages. Your co-op's team of employees is working hard, preparing our communication plan, as well as our plan to monitor our system so no services are left without power once the power interruptions due to the controlled outages have been restored.

This constant state of change that we are in has been taking us down roads never traveled and these rotating controlled outages is one more that we will navigate through.

In January 2021 Clearwater-Polk implemented a new rate structure that included a demand charge on the residential accounts. As a member of Clearwater-Polk Electric, you know how to make smart energy choices that help you save money. But just as important as how much electricity you use is when you use it. In preparing for the demand charge to the residential services, we worked very hard to educate our members about electric demand.

Throughout the day, energy use fluctuates based on consumer demand. Typically, most

households use larger amounts of electricity in the morning when most people are getting ready for their day, and in the evenings when people return from work, cook dinner, wash clothes and watch television. These times when people in our community are using more electricity at the same time are called "peak" hours.

By shifting some of your energy use to hours when demand is lower, also known as off-peak hours, you can save money on your electric bill and help keep rates lower for your cooperative.

This is the education that we focused on, with the ultimate goal of helping our members keep their bills lower and cooperative's rates low.

Now, that education is more important than ever. It is no longer just about keeping bills and rates lower. The picture is bigger, and the importance is greater. Now it's about keeping the lights on also.

It is fortunate that Clearwater-Polk members are ahead of the curve learning about electric demand. This education will go a long way and I hope that you will share what you know.

As a reminder, here are a few easy ways you can shift energy use to off-peak hours:

✓ Adjust your thermostat. During summer months, raise the thermostat a few degrees during peak hours.

✓ Wash full loads of clothes in cold water during off-peak hours.

✓ Run the dishwasher right before you go to bed, or air-dry dishes by opening the dishwasher instead of using the heated dry cycle.

✓ Turn off lights and electronics when not in use. (Try to make this a daily habit, whether during peak or off-peak hours.)

If you have creative ways or ideas to reduce demand, please share them with us, and your friends and neighbors.

Are you ready for storm season?

Here is a storm ready checklist to help you be prepared if a major outage occurs.

 Stock your pantry with a three-day supply of non-perishable food, such as canned goods, energy bars, peanut butter, powdered milk, instant coffee, water and other essentials (i.e., diapers and toiletries).

 Confirm that you have adequate sanitation and hygiene supplies including towelettes, soap and hand sanitizer.

• Ensure your First Aid kit is stocked with pain relievers, bandages and other medical essentials, and make sure your prescriptions are current.

• Set aside basic household items you will need, including flashlights, batteries, a manual can opener and portable, battery-powered radio or TV.

• Organize emergency supplies so they are easily accessible in one location.

Understanding Power Surges and Blinks

Have you ever noticed your lights blink during a thunderstorm? Or perhaps you've noticed a blinking microwave clock when you arrive home. When this happens, you've likely experienced a brief disruption to your electric service, which could result from a power surge or blink. While the symptoms of surges and blinks can appear similar, what's happening behind the scenes can be quite different.

What's a power surge?

Power surges are brief overvoltage spikes or disturbances of a power waveform that can damage, degrade or destroy electronic equipment within your home or business. Most electronics are designed to handle small variations in voltage; however, power surges can reach amplitudes of tens of thousands of volts—this can be extremely damaging to your electronic equipment.

Surges can be caused by internal sources, like HVAC systems with variable frequency drives, or external sources, like lightning and damage to power lines and transformers.

Clearwater-Polk Electric encourages all members to install surge protective devices (such as surge protector power strips) to safeguard your sensitive electronics. If you're experiencing frequent surges in your home or business, contact a qualified electrician to inspect your electrical system.

What's a power blink?

Power blinks are also brief service interruptions, but they're typically caused by a fault (short circuit) on a power line or a protective device that's working in reaction to the fault. Faults can occur through a variety of instances, like squirrels, birds or other small animals contacting an energized power line; tree branches touching a power line; or lightning and other similar events. In fact, when it comes to power disruptions caused by critters, squirrels reign supreme.

Any of the events noted above can cause your power to blink, but you may also experience a brief interruption when protective devices that act like circuit breakers are working to detect the fault. Believe it or not, these brief power blinks caused by protective devices are actually good because that means the equipment is working as it should to prevent a prolonged outage.

Regardless of the cause, Clearwater-Polk Electric crews will be on their way to inspect the damage and make necessary repairs after a power outage.

There's a lot going on this summer. If you have any questions or concerns that you would like to visit about, please feel free to stop in.

As always, stay safe, happy & healthy! Deanna



10 EASY WAYS TO SAVE

Here are 10 habits you can tweak to save energy:

- 1. Use cold water to wash your clothes.
- 2. Unplug battery chargers when not in use.
- 3. Skip the heat-dry setting on your dishwasher.
- 4. Unplug appliances and electronics not in use.
- 5. Run full loads of laundry instead of several smaller ones.



- 6. When drying clothes, include a dry towel for the first 20 minutes.
- Keep your refrigerator at 35° to 38°F and your freezer at 0°F.
- 8. Reduce the setting on your hot water heater.
- 9. Use smart power strips that shut off power to items not in use.
- 10. When buying new appliances, consider ENERGY STAR versions.

Learn more at

