



**Vernon Electric Cooperative**

*"Information for our member-owners."*

## Could Rolling Blackouts Happen Here? (Spoiler Alert: Yes)

Summer is here now, but a mid-May and June heatwave brought some unusually high demand for electricity and a grim report from MISO (Midcontinent Independent System Operator) that their 2022 seasonal assessment indicates a deficiency between the anticipated summer peak and forecast of available generation. This deficit leaves MISO's North and Central Regions at an increased risk of rolling blackouts to help keep the grid online this summer.

The regional electric grid, managed by MISO, was strained on May 12th and again in mid-June with the combination of high electricity demand and limited generation and transmission resources.

MISO uses Emergency Operating Procedures to help address grid constraints. In some circumstances, system conditions call for electricity demand reduction measures, such as the use of our load management program. On both occasions, Vernon Electric worked closely with our wholesale power provider, Dairyland Power Cooperative, to be prepared in case there was a need to reduce our cooperative's electricity demand.

Every MISO emergency warning or event scenario is unique. "We must react to emergency grid conditions in a real-time manner and may have to call upon our members to start reducing their electricity demand at a moment's notice.", said Craig Buros, CEO & General Manager. "Using our load management program for this purpose ensures we can quickly reduce demand to avoid overloading generation resources. This use of load management is different than non-emergency full load control events which help avoid purchasing power during the most expensive times of the summer or winter. Using load management for emergency purposes supports grid reliability by reducing our electricity demand to levels that can be met by available generation resources. If demand exceeds what the grid can provide, rolling blackouts are the final step to keep the entire grid from going down, which can be a multi-day process to bring it back online."

Experiencing MISO Emergency Warnings so early in the season could be a sign of things to come. JT Smith, MISO's executive director – market operations, said a 2022 seasonal assessment indicates about a 5-gigawatt (GW) deficit between an expected peak forecast of 124 GW vs. 119 GW of expected "regularly available generation." For comparison, 1 GW is 1,000 megawatts (MW) of power or 1 million kilowatts (kW), which is approximately the size of the entire Dairyland Power system. Dairyland's 24 member cooperatives serve 284,000 homes and businesses in a four-state region.

**MISO indicated key reasons for the projected shortfall include:**

- Higher, volatile natural gas prices in the United States
- Coal-fired and nuclear power plant retirements outpacing the installation of new generation resources
- A significant amount of new generation resources coming online are wind and solar, which are intermittent and not always available when needed
- Electricity consumption continues to return to pre-COVID-19 pandemic patterns, increasing in the commercial and industrial sectors.



Although Dairyland Power has generation capacity and reserves to meet the load of Vernon Electric and other Dairyland system cooperatives, we are not immune to rolling blackouts as we are part of a regional electric network that covers the central part of the United States and part of Canada. Generation and transmission owners are unable to disconnect and operate their systems on an island; therefore, generation shortages and transmission constraints can impact a large number of electric utilities across a very large region.

Even as new generation resources are brought online, MISO may experience transmission congestion, which means the grid operator has trouble moving the electricity from where it is generated to where it is needed. This can result in not only lost opportunities to utilize renewable energy when available, but also higher costs to consumers.

In May, one of the congested areas impacted the flow of electricity from wind farms in Iowa and southern Minnesota to the rest of the MISO North and Central regions.

Dairyland is partnered with American Transmission Co. (ATC), and ITC Midwest, LLC, to build the Cardinal-Hickory Creek (CHC) transmission line. CHC is a 102-mile, 345-kilovolt (kV) line from Dubuque County, Iowa, to Dane County, Wis. This project is one of many in the MISO region that are designed to help relieve congestion, reduce energy costs for consumers, improve electric grid reliability, support decarbonization goals and the interconnection of renewable generation in the Upper Midwest.

The fact is, we are facing the possibility of power shortages and transmission constraints this summer, but participation from members during our Summer Shift initiative (avoiding electric use from 11am to 7pm) and/or enrolling your electric water heater in our load management program (\$75 credit for enrolling) can help reduce demand during the highest electricity peaks and aid our ability to keep the lights on and costs under control.

# Power Cost Adjustment (PCA) Charge Coming?

**M**other Nature handed the utility industry a perfect storm in mid-May when an early heat wave scorched the region. High temperatures ramped up demand for electricity when some utilities had power plants offline for spring maintenance in preparation for the summer. A lack of generation resources combined with high fuel prices and not enough transmission capacity strained the regional grid, causing wholesale electricity prices to rise well beyond forecasted levels.

“As a not-for-profit electric cooperative, we set our retail electricity rates as close to actual cost as possible,” said Craig Buros, CEO & General Manager. “Given the extreme circumstances in the wholesale power market and increased cost of generation this year, VEC has received a couple Power Cost Adjustments on our wholesale power bill. High sales and low controllable costs have allowed the cooperative to absorb those PCA charges, but the continued high cost of generation could lead to additional power cost charges and the need for the cooperative to pass on adjustments that might come in future months.”

What is a Power Cost Adjustment?

A PCA occurs in two forms: charge and credit.

Dairyland Power Cooperative – our wholesale power provider – has an obligation to secure enough generation resources to cover the electricity needs of all 24 member cooperatives when they are at their peak demand. As a member-owner of Dairyland, Vernon Electric receives most of its electricity needs from Dairyland. Power is provided in multiple ways:

- The power plants Dairyland owns (coal, natural gas, hydro, biogas)
- Purchase power agreements (PPAs) where Dairyland has agreed to purchase the electricity generated by a facility (solar, wind, hydro)
- Purchasing power, if needed, from the regional grid operator, MISO.

A PCA credit can occur when fuel costs are low and electricity production and sales are high, as we experienced in 2020 and 2021. Power cost adjustment credits received by the cooperative were passed back to the members. This year power cost charges are likely due to multiple factors:

- higher-than-budgeted fuel costs (mainly, natural gas and coal);

- transmission congestion within the regional grid, which limits the amount of available energy – especially renewable energy – that could be delivered where it is needed;
- An unexpected heat wave when power plants are unavailable due to seasonal maintenance;
- higher-than-budgeted costs to purchase energy from the market when power plants are unavailable.

“Dairyland nor MISO can predict what Mother Nature will throw at us next, but we are closely monitoring other outside pressures that will impact our wholesale power rate, including supply chain, interest rates, fuel prices and energy market prices,” said Dairyland’s President and CEO Brent Ridge. “Sustainable, safe, reliable and cost-effective electricity is our priority. Our members are counting on us.”

Employees in Dairyland’s System Operations Center balance members’ electricity needs against MISO’s pricing for electricity. If members can do the Summer Shift and move unnecessary electricity use to the hours before 11 a.m. or after 7 p.m., electricity demand during times of peak pricing within the MISO system can be reduced, thus keeping overall rates stable and affordable.



## DoWATT'S Right!

### Energy Efficiency Rebates Available – Lighting Rebates

- LED Bulb ..... \$0.50 each for five or more
- Occupancy Sensor ..... \$5
- LED Exit Sign ..... \$5
- LED Commercial Fixture ..... \$0.50 per 800 lumens in the fixture

#### Eligibility Criteria

- Items must be new, purchased in 2022 and must be installed on Vernon Electric’s lines.
- Rebates are in place through December 31, 2022. Funds are limited, so members are encouraged to submit as soon as possible.
- Rebate not to exceed the cost of bulb or fixture.
- All documentation listed below is required and must be submitted no later than 3 months after purchase date.

- ▲ Lighting Rebate Form (available at [www.vernonelectric.org](http://www.vernonelectric.org) or by contacting our office)
- ▲ A copy of your receipt or invoice for each item purchased
- ▲ For all fixtures, include packaging or documentation showing number of lumens per fixture as required

To see all rebates available for water heating, Energy Star appliances, heating, ventilation, heat pumps, agriculture, commercial, water conservation, solar energy, and energy audits, visit our website or request information by mail. You also may find additional incentives from Focus on Energy ([www.focusonenergy.com](http://www.focusonenergy.com)).

**Watt's New**

The information in this newsletter has been prepared for you by David Maxwell, Marketing and Communications. Comments or questions regarding information contained here should be directed to:

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