

The Nodak Neighbor

July-August 2021
Official Publication of
Nodak Electric Cooperative
www.nodakelectric.com

A Touchstone Energy® Cooperative 

An e-bike
for everyone

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**Our offices will be closed
Monday, September 6,
for Labor Day**

**In case of an outage,
call 1-800-732-4373.**

On the cover: Duane Hafner, Nodak member, enjoys riding around town on his e-bike.



Nodak Electric Cooperative pays out \$2 million to its members

Nodak Electric's board of directors recently granted approval to retire \$2 million of capital credits, which were applied as a credit to the active members' May power bill. Members who received electric service from Nodak Electric in 2002-2003 but no longer have active accounts were sent a check to the last known address.

In addition to the retirement of capital credits, an allocation for the 2020 margins was made in the amount of \$2.9 million. Any remaining profits or "margins" collected after expenses are returned to our member-owners. The distribution of those margins is based upon the patronage for the previous year – the amount spent with Nodak Electric for the member's electric service. Those allocations represent equity or ownership of the cooperative and just like the retirement that just occurred for the years 2002-2003, those 2020 margins will also be retired later.

The capital credit retirement of \$2 million is the third consecutive year of retirements of that magnitude. Over the course of our history, over \$50 million in capital credits has been returned to our membership. Ownership of your cooperative has benefits!

Capital Credits 101

Nodak Electric is collectively owned by its members. Our mission is to provide electric power at the cost of service. Any remaining margins are returned to our member-owners and that ownership is called equity with the cooperative. Nodak Electric uses that member equity to offset the cost of debt for construction and maintenance-saving interest expense that would otherwise be factored into the cost to provide electric service to our members through their electric rates. It is a continuous cycle of the member building equity with Nodak and then eventually being paid for usage of that equity.

AVOID UTILITY SCAMS

Scammers will threaten you with everything from shutting off your power to your home to legal action. Don't fall victim to these types of scams.



Our employees will never show up at your door to demand payment.

Never give personal information to an unknown caller or visitor. Our representatives have access to the details they need to service your account.

Demands for immediate payment by wire transfer, cryptocurrency, gift cards or cash reload cards should immediately raise red flags.



*Mylo Einarson
President & CEO*

Investment in reliability

At Nodak Electric, we have a fairly straightforward mission of providing our membership with affordable, reliable electricity that provides the best energy value in the region. While affordability is still paramount, as our society continues to modernize, the reliability component is becoming increasingly important. Every day, more of life's conveniences run on electronics that require a constant flow of power, more manufacturing processes depend on computers that demand a steady flow of power, and even many things that are needed for survival are dependent on electricity, like your home heating system. Regardless of the fuel source, your heating system most likely depends on thermostats and fans that are powered by electricity. In most cases, you can't even pump fuel for the transport of goods and services without electricity, as the fuel delivery systems require electricity to run. As power systems fail, our society quickly becomes unmanageable. This February, many of the people in southwestern United States unfortunately experienced this firsthand.

As a means of creating enhanced reliability as well as additional capacity in our highest growth region, the Berg substation was recently added to our system in south Grand Forks. This new addition provides redundancy

for our members in the Grand Forks region in case something catastrophic happens to one of our other substations and provides additional capacity for growth in the areas in and around Grand Forks.

The name Berg may sound familiar to some of our long-term members, as the substation is named after my predecessor – the former president and CEO of Nodak, George Berg. George served Nodak with dedication and distinction for 37 years as a Nodak employee, 24 years of them as the president and CEO. During George's tenure he helped guide the merger with Sheyenne Valley Electric Cooperative, managed the downsizing of the military presence in the region when the Minutemen II missiles were removed from our service area, and helped bring our largest load online – the Keystone Pipeline. Reliability and affordability were two of the guiding principles that George believed in, so naming this important new piece of our system after him is well deserved and appropriate.

Last year, our member-owners had power available an average of 99.97% of the time. That statistic is one to be proud of as it places us in the upper one-third of all cooperatives across the country. What makes it especially noteworthy is that our cooperative, with over 8,000 miles of distribution line,

is over three times the size of the average cooperative across the United States, making it even more difficult to maintain that amount of reliability. What makes this level of reliability possible is partially the investment we make in our distribution system, partially the deployment of lineworker personnel throughout our distribution system, but mostly the commitment and dedication of our lineworkers to quickly respond and take care of any problem day or night. The power we have is in the people we serve and in the people we have in place to provide those services.



ENERGY EFFICIENCY Tip of the Month

During summer months, run large appliances that emit heat (like clothes dryers and dishwashers) during the evening when it's cooler. This will minimize indoor heat during the day when outdoor temperatures are highest.

Minnkota crew members energized the Berg substation on April 16.



Electrician Jimmy Snider (left) and engineer Kara Laframboise look over some final figures on Berg substation's energization day.

New substation, new level of service

RECENTLY ENERGIZED BERG
SUBSTATION ELEVATES OPPORTUNITIES
FOR NODAK ELECTRIC COOPERATIVE

On April 16, several teams assembled at the Grand Forks site of Berg substation, the newest to be integrated into Minnkota Power Cooperative's system of more than 255 substations across North Dakota and Minnesota, and the latest to join Nodak's division of more than 50 distribution substations. After months of planning and construction, it was time to bring life to the lines and metal.

The anticipation? Electrifying.

"Everybody wants it to be perfect," said power delivery substation engineer Kara Laframboise as she and other power pros from Minnkota and Nodak performed their final checks.

When power began to flow through Berg substation that day, it became the next link in a regional electric grid that rapidly has become more connected, intelligent and reliable – due in large part to the deployment



“We’re continually seeking ways to increase reliability. Our members are always at the forefront of our minds. When we add new substations, our members usually don’t see that – along with all of those other innovative things that happen behind the scenes. But we want to celebrate those advancements, because they help us meet our mission of providing the highest-quality electric service.”

– Blaine Rekken, Energy Services Manager
Nodak Electric Cooperative

of distribution automation (DA) technologies.

“With distribution automation, it’s not your typical substation anymore,” said Blaine Rekken, Nodak Member/Energy Services manager. “Our members should know that we’re actively working to advance our substations. Berg is the newest with this technology, but we’re also working with Minnkota, our power provider, to retrofit many of the older ones.”

Distribution automation uses state-of-the-art telecommunications equipment to allow control center operators to access more grid information remotely. Operators can see an issue as it happens – such as low or high voltage, blown fuses, overloads, etc. – and then either resolve the problem themselves or send the correct crews to the site immediately. Before DA, the control center had to rely on the “guess and check” method of dispatching crews, which could lead to longer outage times.

“This technology is going to create a more reliable system and safer environment,” said Minnkota System Operations superintendent Reed Daws. “If we deem something is wrong in a sub, we can de-energize it while we wait for someone to get there, and they can go in safely and see what’s going on. Instead of losing high-investment equipment like transformers, we might be able to de-energize them and save them. In the end, it’s going to be very valuable, not only on the financial side, but also keeping people with safe, reliable power.”

“Minnkota is putting more DA into more substations to make them smarter,” Rekken said. “Our collective goal is to provide power,

and to do it with the least amount of disruptions. This is one of the ways we’re doing it.”

The new Berg substation is not only a smart substation – it’s a necessary one. The sub is energized for extra capacity for a growing Grand Forks area, relieving pressure on the existing system. It will also add needed redundancy and the ability to move power from one substation to another in the event of an outage. That means minimal outage times for members.

“We’re continually seeking ways to increase reliability. Our members are always at the forefront of our minds,” Rekken said. “When we add new substations, our members usually don’t see that – along with all of those other innovative things that happen behind the scenes. But we want to celebrate those advancements, because they help us meet our mission of providing the



Updated regulator control panels at distribution substations like Coleman will help Minnkota’s control center better monitor and respond to fluctuations in voltage.



Technical maintenance technician Perry Flaten checks for proper voltages in the CT/PT box at the Coleman substation.

DRIVING THE DIALOGUE ON GRID RELIABILITY

With grid challenges coming into focus, our local power leaders are working to chart a path forward.

In the wake of devastating outage events over the past year – from a heatwave that crippled California’s electric grid to a February deep freeze that left Texas without power for days – leaders of Minnkota Power Cooperative (Nodak’s power provider) have been communicating the importance of grid reliability and resiliency with the nation’s top regulators and policymakers. As the electric utility sector navigates one of its most transformational periods, questions remain on how ambitious environmental goals may affect affordable and dependable service.

“It is an exciting time for our industry, but it can also be daunting,” Mac McLennan, Minnkota president and CEO, told members of the U.S. Senate Energy and Natural Resources Subcommittee on Energy during a June 23 hearing. “We all want to push for it to be a better product – more reliable, more resilient, affordable for every household and as clean as possible. To reach these goals, we need to work together.”

About 42% of Minnkota’s generation capacity comes from carbon-free sources such as wind and hydropower. Although Minnkota has added a significant amount of renewable energy, coal remains a critical resource to ensure reliability.

North Dakota energy leaders, policymakers and regulators discussed lessons learned from recent national outage events during the Midwest Energy Summit on June 8 in Fargo, where McLennan participated in a panel focused on grid reliability.

While North Dakota is looking for solutions to ensure its residents have 24/7 power, it is part of two multi-state grids where the decisions of other entities have enormous impacts. Minnkota participates in the Midcontinent Independent System Operator (MISO) market, where renewables currently account for about 10% to 12% of the grid’s resources. MISO Executive Director of External Affairs Brian

Tulloh said challenges begin to emerge as that percentage increases.

“We begin to see, at above about 30% renewable energy penetration, significant stability issues in the grid,” Tulloh said, referencing MISO’s Renewable Integration Impact Assessment.

Grid stability challenges quickly become an issue of public safety and security, North Dakota Public Service Commission Chair Julie Fedorchak said. “What I took away from the February event was if we don’t have power, our society quickly becomes pretty unmanageable,” she said.

Minnkota also recognizes the need to make reductions in carbon dioxide (CO₂) emissions. The cooperative and its members are currently evaluating Project Tundra – an effort to install carbon capture technology at the coal-based Milton R. Young Station near Bismarck, N.D.

Stacey Dahl, Minnkota senior manager of external affairs, provided an overview of Project Tundra during a June 3 meeting with Environmental Protection Agency (EPA) Administrator Michael Regan. Regan said the Biden administration has a “positive viewpoint” of carbon capture technology.

“There’s no doubt there’s huge potential,” he said of carbon capture during his visit. “And right here in North Dakota we’re seeing leadership.”



Minnkota CEO Mac McLennan discusses grid reliability at the Midwest Energy Summit on June 8 in Fargo. Photo courtesy of Fargo Moorhead West Fargo Chamber.



Stacey Dahl (foreground), Minnkota’s senior manager of external affairs, updates EPA Administrator Michael Regan (far right) on Project Tundra.





(Left) John Vojacek displays the Verve 3 Trek, one of the best-selling e-bikes at Scheels. (Above) A close-up look at an e-bike's removable battery pack.

AN E-BIKE FOR EVERYONE



Have you been curious about electric bicycles (or e-bikes) cruising around your community? If you're wondering how they work or why you would even want one, you're in good company – we've heard the same questions from our members. We decided to check in with the Grand Forks Scheels store to learn more about this newly trending technology.

John Vojacek, Scheels service shop manager and e-bike expert, says his store has carried battery-powered bikes for more than six years. However, they've become more mainstream in the past year or so as people begin experiencing the wide range of benefits for every age and activity level. Vojacek loves hearing stories from customers whose lives have been enhanced by a little electric pedal assistance.

"One gentleman who winters in Arizona, he would sit on his porch and every morning he'd watch a bike group go by – just a simple coffee ride," he recounted. "He said there was no way he could keep up, but now with an e-bike, he can ride with that group down to the corner to get coffee. It's exciting, on our side, to know that we can help folks fit in or keep up."

E-bikes have three levels of classification. Class 1 e-bikes give electric pedal assist only, with the motor simply amplifying the rider's pedal power up to 20 mph. Class 2 e-bikes have the same 20-mph cutoff, but they are also allowed to have a throttle, allowing the motor to fully propel the rider forward. Class 3 are higher-performing e-bikes, with a drive system that will assist pedaling up to 28 mph.

Scheels usually stocks Class 1 and Class 3 models, with prices ranging from around \$1,500 for the Electra Townie Go up to \$3,150 for the popular Verve 3 Trek. There are models on the market that are more expensive (some up to \$7,000 or more), and there are also some that are less. However, Vojacek urges potential buyers to seek out a store with an e-bike-trained service staff (like Scheels) or a knowledgeable independent bike shop to ensure you are purchasing a safe and durable bike with a UL-listed battery.

"E-bikes in Europe are huge, and have become one of the main ways people get around. That technology is now making its way over here, and they already have all of the kinks worked out. They're super reliable and super easy to use," he said.

E-bike batteries can typically be charged from depleted to full power in three hours, giving 30-80 miles in assisted range, depending on performance setting. Some daily commuters (who arrive to work sweat-free) will plug in their bike or battery pack at their desk and have a full charge for the ride home. The effective range of the battery does decrease slightly in colder temperatures, but the batteries are water resistant for off-roading experiences that take a rider through puddles or rain.

"If you've never ridden one before, come in and take one for a test ride. We always see guests with a 'perma-grin' when they get back, because they're so much fun to ride," Vojacek said, adding that they are a great way to work toward health goals. "It makes it enjoyable to get out and ride. If you enjoy the activity, you're going to do it a lot more than if it's a chore."

Our Scheels expert doesn't yet have an e-bike at home – but he'll soon be one of the many taking a seat. "I have two young boys that are into racing BMX right now. When they get into high school, there's no way I'm going to be able to keep up with them on a bike, so an e-bike is going to be my jam," he said with a chuckle.

BENEFITS OF TREE TRIMMING

Clearing trees and overgrown vegetation is vital to provide safe, reliable power to our members.

We clear certain areas in our service territory, known as rights of way, to:

- Keep power lines clear of tree limbs
- Restore power outages more quickly
- Keep crews and members of our community safe
- Reduce unexpected costs for repairs



**Vegetation management
improves service reliability for
you – our members!**