

# Minnkota

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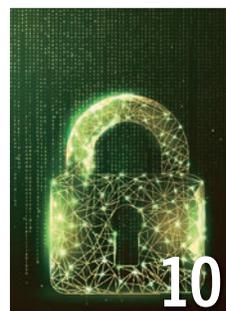
MESSENGER

Bringing  
broadband  
home / 4

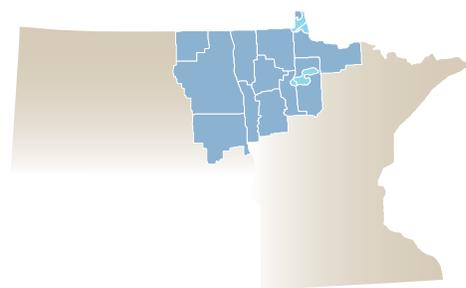


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*On the cover:* The expansion of broadband internet service is helping bridge the digital divide between urban and rural areas in Minnkota's service territory.



Minnkota Power Cooperative is a generation and transmission cooperative headquartered in Grand Forks, N.D. It supplies wholesale electricity to 11 member-owner distribution cooperatives, three in eastern North Dakota and eight in northwestern Minnesota. Minnkota also serves as operating agent for the Northern Municipal Power Agency, an association of 12 municipal utilities in the same service region. Together, the Joint System serves more than 153,000 customers.

Minnkota Messenger is published six times a year by Minnkota Power Cooperative. Its mission is to communicate Minnkota's perspectives and concerns to its members, elected officials, employees and other business audiences. For editorial inquiries, call (701) 795-4282 or email [bfladhammer@minnkota.com](mailto:bfladhammer@minnkota.com).

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## Bridging the digital divide

**F**or electric cooperatives, the story sounds familiar: A group of residents who do not have access to an essential service band together to accomplish what none of them could do alone. Nearly 80 years ago, the focus was electricity, but today it is high-speed internet.

In this issue of Messenger, we explore the parallels between the rural electrification efforts of old and the importance of rural broadband moving forward. The communities that dot Minnkota's service territory need reliable internet access to survive and thrive in today's world. While there are many areas of our region that have excellent service, there are still spots where improvements can be made.

This fall, Minnkota member Roseau Electric Cooperative began building a state-of-the-art broadband network to provide internet, TV and voice services to member-consumers in northwest Minnesota who have little or no access. The project has been well-received, with several eligible members volunteering to be first in line to be connected to service.

The hope is that better broadband access will help spark a resurgence in rural America. A movement called "placemaking" is working to attract people back to rural areas. Small businesses, like Dirty Knees Soap in Fosston, Minn. (page 12), prove you do not need to be located in a large metro area to sell products to customers across the country. They have everything they need in their northwest Minnesota town.

The benefits of high-speed internet are already being realized in some parts of Minnkota's area. In Baudette, Minn. (pop. 1,004), telemedicine services at a local healthcare center are providing citizens with a connection to specialists from hundreds of miles away. Research shows the use of telemedicine is growing at a rapid rate, especially in rural areas of Minnesota.

Minnkota, like other utilities across the country, is recognizing the advantages of digitizing many of its systems and processes, but the efficiencies gained also come with cybersecurity risks. Minnkota's cyber awareness programs continue to help employees realize that they all have a role in building a strong digital defense system that protects the region's electric grid.

There are still some people across Minnkota's service area who remember the day the lights came on and how that moment changed their lives forever. In some ways, the rural broadband effort is an extension of the original spirit that brought electricity out to homes and farms all those years ago. Affordable and reliable power helped unlock the potential of rural America. It will be exciting to see opportunities emerge as broadband internet access expands and the digital divide closes.

Ben Fladhammer  
*Editor*

Fiber technician Jeremy Sisler (left) and fiber service director Stacy Rose will help lead the NorthStream Fiber project for Roseau Electric.

# Bringing broadband home

NORTHSTREAM FIBER TO PROVIDE HIGH-SPEED CONNECTION FOR UNSERVED AND UNDERSERVED RURAL MINNESOTANS

**J**ustin Olson and Chad Johnson don't mind drizzle when there's digging to do.

The duo plowed three feet under the ground just east of Roseau, Minn., continuously feeding black cabling into the now-wet earthen trench trailing behind them. Through mist and mud, these veteran Roseau Electric Cooperative (REC) lineworkers were on day three of a learning experience.

"We're getting the hang of things," Olson said, looking to Johnson. "It's just like plowing for primary line – but now it's fiber."

Johnson and Olson were laying down the first lines of what will be NorthStream Fiber, a bold rural broadband project just launched by REC.

The initiative, branded and signed into existence on Aug. 28, aims to bring reliable fiber optic service to the areas of Roseau County that lack strong internet options.

Sitting in front of a planning map for fiber deployment, REC assistant general manager Ryan Severson described the 2017 Minnesota Rural Electric Association annual meeting that spurred the effort.

"One of the speakers presented a map

that showed the underserved and unserved areas. We were in what they called the 'black hole,'" Severson said. "That really kicked things in gear. We needed to look at what the situation was."

With help from Northwest Community Action and other funding partners, REC kicked off a feasibility study and a series of community outreach efforts including surveys, open house meetings and one-on-one conversations at fairs and festivals. They learned the need was real.

"The most asked question was: 'Why hasn't Roseau Electric done this already?'" recalled REC general manager Tracey Stoll.

"They were excited, asking 'Can you really do this?'" Severson said. "Our philosophy was, we did this 80 years ago with electricity. Our goal now is to have every member with a fiber, high-speed internet connection."

REC won four pockets of Roseau County coverage area in an FCC Connect America Fund Phase II (CAFII) auction in August 2018. The FCC will provide REC with more than \$2 million over 10 years to run fiber connections to those rural areas, but the endeavor will eventually extend farther to make sure all 6,000 REC members have some form of high-speed internet.

"Our purpose remains the same," Stoll said. "We're an electric co-op. We're here to serve the members. We believe this is just

**NORTHSTREAM**  
**FIBER**



the next step, besides providing electricity – offering a very important product to our community.”

### Connected community

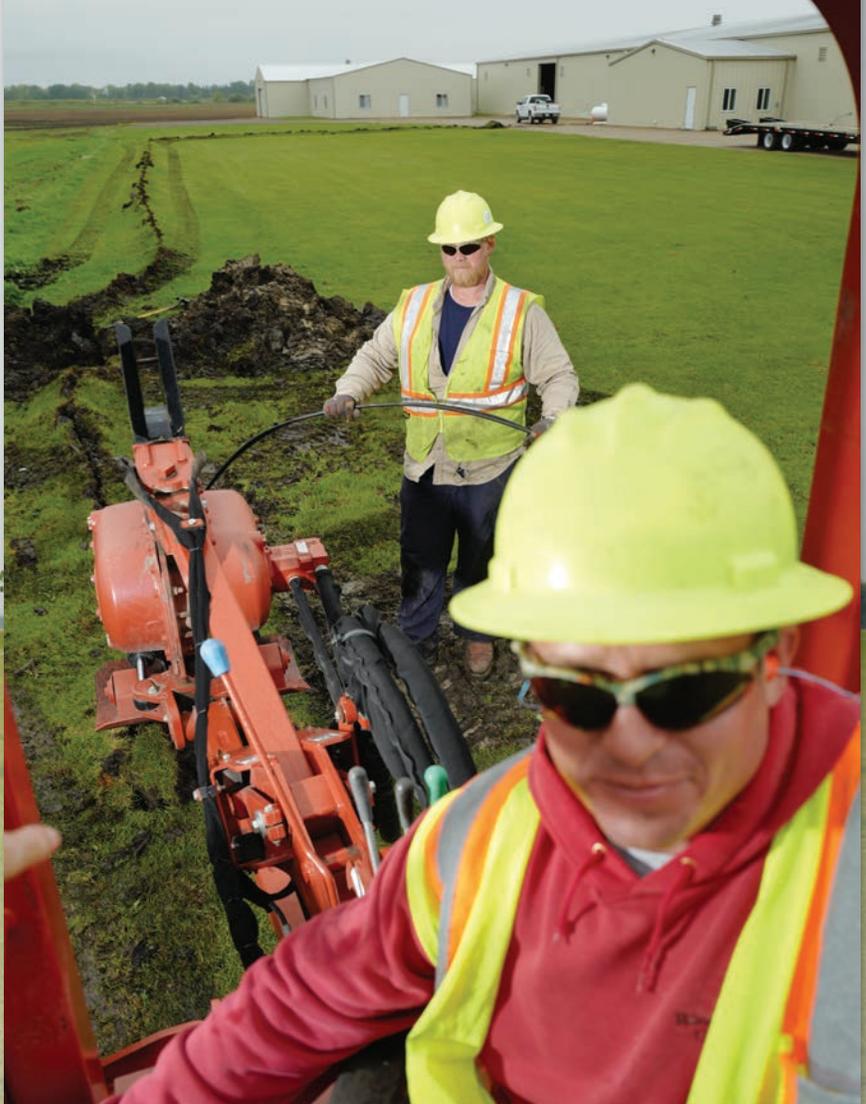
When Karolyn Eastman heard that fiber would be coming to her farmstead east of Roseau, she could only respond in interjection.

“Yay!” she cried, her laugh echoing off the metal walls of her farm shop. “It’s overdue, and it’s needed in our rural community. If our town, just five miles west of here, can get it, our rural areas should be involved, too.”

Eastman has roots in rural Roseau, having been born and raised there. Although their house is in town, she and her husband have farmland around the area. They bought this particular farm 13 years ago and use it as a base for their tractors, trucks, combines and collectibles.

“This broadband would not only serve this farm, it would be serving our north farm as well for internet services. We would be able to use this in so many ways,” she said. “As you know, agriculture is shifting every day.”

Eastman explained that their operation now must rely more on automation, GPS and other electronic services that weren’t available 20 years ago. Like many of the farm families surrounding them, they look



Chad Johnson (background) and Justin Olson are among the many Roseau Electric lineworkers running broadband fiber cabling to homes and businesses this fall. Roseau Electric’s new NorthStream Fiber initiative will bring high-speed internet to unserved and underserved areas of Roseau County.

to a mobile hot spot to connect them to internet services, security systems, inventory management, grain bin monitoring and more. That hot spot can lose power or pause, slowing up or disrupting day-to-day work.

Broadband fiber could eliminate that misery.

“It gives you comfort to have buildings and farm equipment fully served as you drive away for the day,” Eastman said.

Agriculture will be just the beginning beneficiary of gigabit-capable internet. NorthStream Fiber will support other industries vital to the communities of Roseau and Warroad, Minn.

In the manufacturing sector, REC’s fiber initiative will serve as a recruiting tool for local powerhouse companies Marvin and Polaris. Marvin hires in all areas – manufac-



Roseau native Karolyn Eastman says she’s eager for the enhanced opportunities fiber internet will bring to her farm operation.

**“Our philosophy was, we did this 80 years ago with electricity. Our goal now is to have every member with a fiber, high-speed internet connection.”**

– Ryan Severson, *assistant manager*  
Roseau Electric Cooperative



turing, sales, marketing, etc. – while Polaris’s focus is on product research, development, engineering and manufacturing.

“That whole atmosphere of design, they can now do a lot of it from home and have that connection,” Severson said. “We hope to bring this into the medical field so that people can have their medical visits online. They won’t have to leave their home, so maybe they can stay in that house longer.

“It’s going to keep people here,” he added.

### Getting it done

A partnership agreement between REC and Wikstrom Telephone Co. allows the companies to combine their resources to encompass an area of up to 2,000 REC members. Within that region, the REC crew will first bring fiber to the CAFII-awarded areas.

An additional Border-to-Border Broadband Development Grant, if awarded, will allow them to extend the network to even more homes, farms and businesses over the next five to seven years.

To build out the entire network could ultimately take more than 600 miles of fiber. Co-op line-workers will be running the underground and aerial fiber (strung along the power lines) themselves,

and REC hired two new team members to guide the process – fiber technician Jeremy Sisler and fiber service director Stacy Rose.

“From experience, the fiber is consistent,” Rose said. “There is no maintenance, unless it gets cut. It’s magic – it just runs.”

The ADSS fiber that will run aboveground

(about 85% of the project) is metal-free and strengthened by Kevlar so it can be installed in the REC power space, allowing REC to leverage their already-trained line crews.

In the meantime, Rose will be sending out informational letters and going door-to-door to eligible homes, sharing these new offerings and TV, telephone and internet packages with those who have been longing too long for a reliable connection.

“They’ve all been pretty excited about it, that they finally have an option for good internet speeds from a company that’s been here for 80 years,” she said.

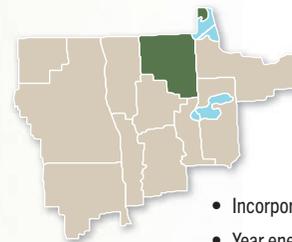
As Eastman waits for the line crew to arrive in her own yard, there’s no quelling her northern community pride.

“The co-op in Roseau has really done a lot of fine things, and fast,” she beamed. “What they are doing is looking outside the box, their paradigms, and they’re seeking ways to make things better for rural people.”

By Kaylee Cusack / Photography Kevin Jeffrey



Fiber technician Jeremy Sisler explains a rural home’s newly installed network interface device, more commonly known as a NID.

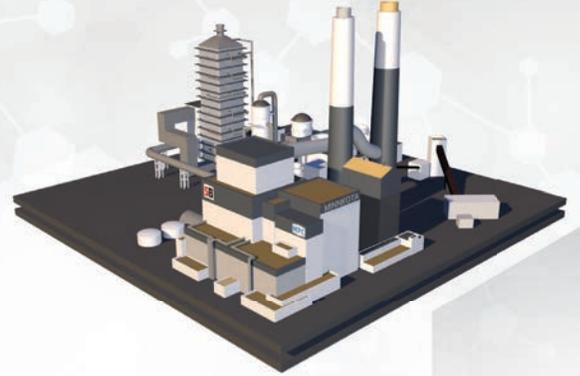


Served by  
**Roseau Electric Cooperative**  
Roseau, Minn.

- Incorporated – July 25, 1940
- Year energized – 1944
- Board members – 9
- General manager – Tracey Stoll
- 2018 members: 6,450
- Miles of line – 2,175



# Minnkota receives DOE grant for Project Tundra



**M**innkota Power Cooperative is ready to take the next step forward with Project Tundra thanks to grant funding provided by the U.S. Department of Energy (DOE).

The cooperative received \$9.8 million from the DOE, which then provided access to \$15 million from the state of North Dakota's Lignite Research Fund. The funding will be used to conduct a Front-End Engineering Design (FEED) study on Project Tundra's proposed carbon capture system at the Milton R. Young Station near Center, N.D.

"Project Tundra is a unique opportunity for North Dakota to lead the world in the advancement of carbon capture technologies," said Mac McLennan, Minnkota president & CEO. "This Department of Energy grant will assist us in completing advanced research and engineering design on the project – one of the final steps before deciding whether to move forward and begin construction."

The vision for Project Tundra is to equip Unit 2 at the coal-based Milton R. Young Station with technologies that will capture more than 90% of the CO<sub>2</sub> emissions. The CO<sub>2</sub> would then be permanently stored in a deep geologic formation more than a mile underground. The FEED study will support advanced design work, engineering and evaluation of project economics.

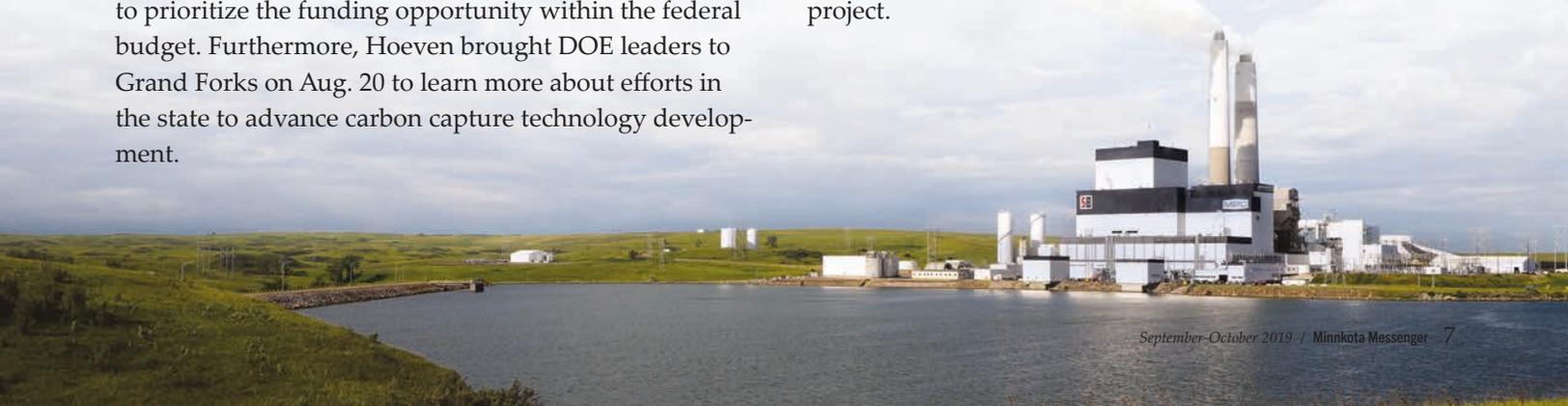
U.S. Sen. John Hoeven was instrumental in helping to prioritize the funding opportunity within the federal budget. Furthermore, Hoeven brought DOE leaders to Grand Forks on Aug. 20 to learn more about efforts in the state to advance carbon capture technology development.

"North Dakota is leading the way in developing carbon capture, utilization and storage (CCUS) technologies and these funds will help to advance these efforts, including enabling the completion Project Tundra's engineering and design study," Hoeven said. "Completion of this study will enable the implementation of the technology at the Milton R. Young Station, allowing more than 90% of CO<sub>2</sub> emissions to be captured from the station's Unit 2 generator. Developing and deploying this technology is a win both for consumers, who will continue to have access to affordable energy, and for environmental stewardship."

In addition to research on the CO<sub>2</sub> capture system, Minnkota is also conducting significant research on deep geologic storage of CO<sub>2</sub> near the Young Station. In September and October 2019, a geophysical survey will be completed near Center, N.D., to gather valuable information about rock layers in the deep subsurface. Minnkota engaged with landowners and local leaders and received state permits prior to beginning this research.

Project Tundra is estimated to cost \$1 billion. The project is currently seeking financial partners to help utilize existing 45Q federal tax credits, which are currently \$50 per ton of CO<sub>2</sub> that is captured and stored in a geologic formation deep underground.

Visit [ProjectTundraND.com](http://ProjectTundraND.com) to learn more about the project.



Barb Gooderum, registered nurse at LakeWood Health Center, demonstrates how the facility's telemedicine equipment provides live video feed to the facility.



# A northern connection

## TELEMEDICINE USE GROWING IN NORTHERN MINNESOTA

**A** little room no larger than 12 by 12 feet just inside LakeWood Health Center in Baudette, Minn., has provided a big boost for residents of the Lake of the Woods region.

As you walk into the clinic, the cozy room features cameras and a monitor that allow doctors and nurses to talk to and examine patients from hundreds of miles away. It's called telemedicine and it is quickly becoming an essential part of rural healthcare.

Telemedicine provides a secure, live video/audio connection between a patient and a specialist. Doctors can hook up tools to the cameras and send live images of the patient to a specialist. Everything from prescription refills to cancer consultations can be conducted via video chat.

"We are very rural, so telemedicine does help our community greatly, especially our elderly," said Carrie Davidson, foundation and marketing director. "Transportation is sometimes difficult, so being able to offer specialists, when we can't have specialists here every day Monday through Friday, really makes a difference."

LakeWood patients have access to specialists in several areas, including derma-

**“We are very rural, so telemedicine does help our community greatly, especially our elderly. Transportation is sometimes difficult, so being able to offer specialists, when we can’t have specialists here every day Monday through Friday, really makes a difference.”**

– Carrie Davidson, foundation and marketing director  
LakeWood Health Center

tology, gastroenterology, hematology, infectious diseases, internal medicine, mental health, oncology, psychiatry, vascular medicine and wound care.

The clinic has telemedicine agreements with Sanford Health and the Altru Health System to see patients remotely. It also has access to e-emergency through the Avera eCare Emergency program, which allows the facility to connect with doctors and nurses while in the emergency room. The connection to LakeWood means physicians and nurses can assist with diagnosing and treating patients from Avera’s virtual hospital 24 hours a day, every day.

Less travel, especially in the challenging winter months, and more time with family is helpful for many patients dealing with illness or injury. For residents in Baudette, it’s not uncommon to travel for several hours for a brief appointment.

“If we can keep those patients close to home and close to family, it helps recovery,” Davidson said.

## Rapid growth

Barb Gooderum, registered nurse at Lakewood, said the clinic has received as many as 17 telemedicine appointments over a three-hour period. For that reason,

her work station is portable. She can take it to the LakeWood Care Center, a nursing home, plug in the cord and access Wi-Fi to help patients without removing them from their room. Her tools are internet-capable so that, if needed, she can send the information across the prairie for others to review.

“We also have an electronic stethoscope so the provider can hear,” Gooderum said. “We place the stethoscope and the provider can immediately hear lung and heart sounds.”

The use of telemedicine by Minnesotans is rapidly growing, according to a study conducted by the Minnesota Department of Health and University of Minnesota School of Public Health. In a first-of-its-kind report published in 2018, researchers found that telemedicine visits jumped from 11,113 in 2010 to 86,238 visits in 2015.

In addition to reliable electricity, future growth will depend on strengthening the area’s rural broadband network. As connectivity to the internet improves, LakeWood plans to expand its offerings. That could mean more staff or work stations taking care of patients via telemedicine.

“The people up here really like it,” Gooderum said. “Sometimes you get people who prefer the face-to-face interaction. And that’s fine. But for convenience sake, this works out pretty well.”



### Served by Baudette Municipal Utilities

Baudette, Minn.

- Town population: 1,106
- Meters served: 782
- Wholesale power provider: Northern Municipal Power Agency (NMPA)
- Minnkota is operating agent for NMPA



With her portable work station, Barb Gooderum is able to take the telemedicine equipment with her to other locations at the LakeWood Health Center and the local elderly care facilities.

By Kevin Fee / Photography Kevin Jeffrey



# Strengthening cybersecurity

DIGITAL DEFENSE TAKES PEOPLE POWER AT MINNKOTA

Justin Haar's job is to think like the bad guy.

As a cybersecurity specialist, he spends his days combing through code searching for gaps in Minnkota's digital defense systems. While kicking the tires on the network systems, firewalls and other applications is important, Haar said that technology is actually becoming a smaller part of protecting against cyberattacks.

"When we look at how to secure our system, there are three aspects: people, the processes and the technology," Haar said. "Technology is the smallest part. The best way to protect an organization is to educate the people and to build secure processes."

Haar says the threats continue to evolve and expand in complexity. Most hackers are not trying outsmart the technology, but rather focus on tricking people into providing the information they need to access the system – an act commonly referred to as phishing. Fraudulent emails and other deceptive online practices are becoming more common.

"If one of our employees opens a phishing email, it doesn't matter what kind of firewalls we have in place or how good our other IT tools are because they've just let them past all that and into the system," Haar said.

The consequences can be serious. Wrongdoers can initiate viruses, system malfunctions, communication failures and – in a worst-case scenario – access to the systems that control the electric grid and power plant operations. The electric utility industry is unique in that the motivation for such an attack is often not directly related to financial gain.

"The biggest threats to the cooperative have a lot more to do with interrupting our ability to generate and transmit electricity, and those come from nation states," Haar said. "It's not necessarily going to come from a hacker sitting in their basement. These threats come from large, well-funded, well-organized groups. That makes them particularly challenging to deal with."

Haar said Minnkota employs a "defense-

in-depth” strategy that creates layers of security for a hacker to go through. Each layer presents a potential fail point where an anomaly could be noticed by Minnkota staff.

## Risks are real

The real-world impact of grid cybersecurity came to light in 2015 when hackers caused large-scale blackouts on Ukraine’s power grid. It was the first time a cyber-attack was known to cause a widespread power outage.

“In the Ukraine attacks, we know the wrongdoers didn’t just break into the system,” Haar said. “They were living in those systems for months before the actual attack. They were very patient in learning everything they could so that when they were ready to initiate their attack, they had what they needed to take control of the system.”

Fast forward to 2019, the United States experienced its first disruptive cyber event on the electric grid. While the event did not cause a blackout, generation issues or other grid impacts, it did temporarily affect system visibility for a utility in the western United States. The North American Electric Reliability Corporation (NERC) published a report in September on lessons learned from the event. NERC is responsible for developing and enforcing regulatory standards to ensure the reliability of the nation’s grid.

The first NERC Critical Infrastructure Protection (CIP) standards went into effect in 2008, and since then several new versions have added requirements and broadened the number of regulated entities and assets. These standards are enforced nationwide through recurring audits conducted by eight regional entities. Noncompliance subjects utilities to potential million-dollar fines per day, per violation.

“The number of NERC cyber requirements and impacted assets have drastically increased,” said Theresa Allard, Minnkota’s compliance manager. “The detailed requirements are complex, but it’s forced us to take a deep dive into all aspects of security and ensure we’re addressing everything.”

Allard said Minnkota uses compliance

requirements as a base foundation and implements additional best-practice standards to mitigate risk and enhance security.

## Practice makes perfect

Minnkota has an ongoing cyber awareness program that reminds employees of the potential dangers that exist online.

“We’re trying to get our employees to think in terms of risk and recognize that just because a cyberattack hasn’t happened to us doesn’t mean it couldn’t happen in the future,” Allard said. “The threats we hear about are real and Minnkota is just as much of a target as any other utility.”

For two days in November, a large group of Minnkota employees will get a chance to put their cybersecurity knowledge to the test. The NERC-organized GridEx event will provide realistic simulations to help employees determine how they would respond to cyberattacks, communication failures, social media upheaval and other security-related incidents. It will be Minnkota’s first time as an active participant in the exercise, which includes hundreds of organizations from across the country.

“GridEx is going to allow us to think critically about how we would handle a variety of physical and cyber incidents,” Allard said. “The goal is to gather the lessons we’ve learned and implement those lessons into improved and better coordinated processes and procedures.”

Perhaps not surprisingly, the focus of GridEx is on how the people respond more so than the technology. That’s by design, Allard said.

“The technology is only as good as the people and the processes behind it,” she said.

*Editor’s note: October is Cybersecurity Awareness Month.*

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– Theresa Allard, Minnkota compliance manager



Served by  
**Fosston Municipal  
Utilities**

Fosston, Minn.

- Town population: 1,508
- Meters served: 893
- Wholesale power provider: Northern Municipal Power Agency (NMPA)
- Minnkota is operating agent for NMPA

# Keeping it clean

SMALL-TOWN SOAP COMPANY FINDS BIG OPPORTUNITIES  
WITH ONLINE SALES AND MARKETING

A few years back, Pete and Heidi Danos stood in the middle of a busy street fair in a Chicago suburb, their booth filled with an array of bar soaps and their company name displayed loud and proud: DIRTY KNEES SOAP CO.

On the surface, the name was clean. But the Danoses wanted to put the dirty designation to the test.

“We started getting feedback on the name, which came in very different ways,” Pete said from under the brim of his Dirty Knees Soap

Co. hat. “We had people who would stop by and say, ‘Dirty Knees. That’s a great name.’ Or,” he continued, shifting to a jokingly judgmental inflection and single raised eyebrow, “‘Dirty Knees?’”

This was the start of the pair’s business journey, which began in the Chicago area after the birth of their twins. That’s where the name truly came from – chasing around two little crawlers on hands and knees.

“I just started by making a batch of soap and handed it out a little bit and realized, wait a minute, we’ve got something good,” Heidi said.

Once Dirty Knees started getting soap into a few stores in the Chicago area, the Danoses got the itch to move the family to Heidi’s hometown of Fosston, Minn., and press the gas pedal on entrepreneurship. Pete admits that he thought it would be harder to build out the brand in a Minnesota town of 1,500.

“But then, through strategic efforts, we decided to really focus online,” he said. “With the unfortunate trend of brick-and-mortar shops closing down and the big box shops taking over, that trend showed us that we needed to focus

on online marketing, online space, newsletters, Facebook, Instagram and things of that nature.”

The risk paid off. Soon, Heidi and Pete’s “something good” evolved into a booming business of bar soaps, body washes, beard oils, body butters and lotions. Since emphasizing online, the operation has grown a couple hundred percent year over year.

“All the fears were kind of washed away naturally,” Pete punned.

## Raising the bar

The backyard shop where Heidi crafts and packs creations like Minnesota Wood bar soap, Bare Naked lotion and Bean All Over body butter is unlike any other shop environment. Visitors experience an aromatic mix of earthy spice and clean linens and shelves methodically lined with bottles, boxes and tins marked with the Dirty Knees logo.

When this space came on the market three years ago, it was just in time. After three years back in Fosston, the company landed a wholesale deal with Whole Foods and needed a larger and more efficient production area.

“The way that we positioned the machinery and the processes allows us to do as much as we can, while still keeping the integrity of small batches with limited ingredients, without mass production, so you’re still getting top quality,” Pete said.

Heidi says her modest ingredient lists allow her to put more of the good stuff in a bottle. Each soap, lotion, body wash and cream contains fewer than 10 ingredients (compared to the average 15-20 in other brands) and, because of the simplicity of the recipes and process, they can keep the customer cost at a boutique bargain.

“We keep our retail prices accessible as we



Dirty Knees creates, bottles and packages all of its products in the Danos family’s home in Fosston.

**“I just started by making a batch of soap and handed it out a little bit and realized, wait a minute, we’ve got something good.”**

– Heidi Danos, Dirty Knees Soap Co.

want to make it available to as many people as possible,” Heidi said.

Heidi and Pete’s fans have driven the development of their product line. When a friend asked for a lotion that wouldn’t irritate her sensitive Scandinavian skin, Heidi whipped it up. When online customers started requesting body wash versions of their favorite bar soap scents, Heidi made it happen.

“Then we had our bearded mascot over here, so we now have beard oil,” Heidi said with a glance to bewhiskered Pete. “It’s all just grown very organically.”

## Broadband boost

Dirty Knees Soap Co. couldn’t leverage its dynamic customer feedback and engagement without a reliable internet connection.

The Danoses have had access since they moved back to Fosston, but things ramped up when Garden Valley Telephone Co. ran a fiber internet upgrade through town in 2016. The Minnesota cooperative is extending its system even farther now after receiving a \$20 million USDA rural broadband loan in 2018, part of a larger nationwide effort to connect rural America to high-speed services.

That speed has helped the Dirty Knees duo pick up the pace on the dozen different web-based platforms they need to run and market the business, encompassing the online storefront, bookkeeping/accounting, social media, blogs, newsletters, email tools, etc.

When asked if she could do it all without strong internet, Heidi was matter-of-fact. “It would be impossible,” she said. “There’s no way I could do it.”

With broadband, Dirty Knees sees 75% of its sales from online orders, shipping to all corners of the country with single orders, large store or-

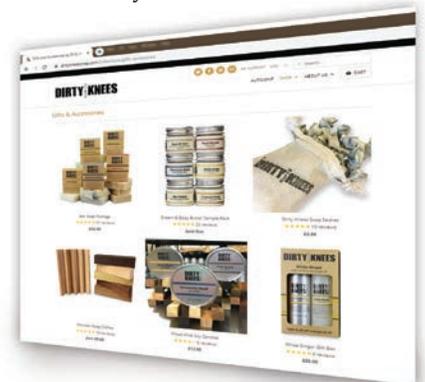


ders and its new subscription service – a popular addition that has grown 150% over last year.

As the business continues to thrive, Pete and Heidi are looking for expansion opportunities. For now, they are happy to be in the heart of rural Minnesota, using their artistry and tongue-in-cheek style to foster a national Dirty Knees following.

“The name sparks something in people. We do sell a lot in Minnesota, but we’re also shipping it all over,” Heidi said. “I think of it like buying a Kentucky bourbon in California. We’re sending Minnesota Wood all over the place, too!”

*Above:* Pete and Heidi Danos display a tray of charcoal-swirled Minnesota Wood bar soaps – one of their bestselling products. *Below:* The full product line can be ordered through [DirtyKneesSoap.com](http://DirtyKneesSoap.com). The Danoses anticipate a strong surge in online sales as the holidays approach.



By Kaylee Cusack / Photography Kevin Jeffrey

# Power delivery crews dodge rain to finish rebuild projects

**M**innkota's Power Delivery crews have spent a good portion of the 2019 construction season finding creative ways to work around the consistent rainy, wet conditions.

In October, they're seeing the light at the end of the tunnel. Crews will energize the completely rebuilt Litchville and Warren substations located in southeast North Dakota. Both substations were originally built during the early days of the electric cooperative movement as Minnkota member Cass County Electric Cooperative was bringing electricity out to farms and ranches.

Minnkota crews have replaced that aging equipment with a new, modern substation to meet the

area's long-term energy needs. In addition to improved reliability of the infrastructure, the rebuilt substations also provide significant benefits in terms of communication. An upgraded computer system, known in the industry as SCADA, will help gather and analyze data, while also monitoring and controlling equipment processes remotely. It's part of a long-term upgrade project to add smart grid technology at the older substation sites. All new substations have the technology in place.

Minnkota operates and maintains more than 255 substations on behalf of its member cooperatives in eastern North Dakota and northwestern Minnesota. Initiating the rebuild of an existing substation or

replacing equipment goes through a meticulous review process where age, location, system demand and many other factors are considered. A construction work plan is developed on an annual basis and approved by a board consisting of representatives from the 11 Minnkota member cooperatives.

In September, Minnkota crews also energized a rebuilt section of 69-kilovolt (kV) transmission line near Roseau, Minn. The 15-mile stretch of line replaced aging infrastructure originally built in the 1950s. The new line is designed for improved performance and reliability.



Minnkota crews work to rebuild the Litchville substation, which will help improve reliability for electric cooperative members southwest of Valley City, N.D. The rebuilt substation replaces a 1950s-era substation, which had previously been delivering power in the area.

# Young Station earns Distinguished Safety Award

The Milton R. Young Station is celebrating yet another safety distinction this fall. The coal-fired power generation facility was presented with the Lignite Energy Council's (LEC) 2018 Distinguished Safety Award on Oct. 3. To be eligible for the award, a plant or mine must maintain an accident incident rate lower than the national average.

"We are really happy to qualify for this award from LEC," said Craig Bleth, Minnkota senior manager of power production. "Safety is a team effort. Each employee at the plant played a role in this achievement. Thanks to our employees for working safely, and thanks for continuing to pay attention to safety each and every day."

Safety and Physical Security supervisor Troy Karlberg and plant managers Andrew Freidt (Operations and Maintenance) and Tim Hagerott (Engineering/Environmental)

accepted the honor at the LEC Fall Conference in Bismarck. Minnkota joined three others in winning the award – Montana-Dakota Utilities' Lewis & Clark Station, Couteau Properties Company's Freedom Mine and Falkirk Mining Company's Falkirk Mine. The LEC also presented the prestigious Safety Excellence Award to Coyote Creek Mining Company's Coyote Creek Mine and Basin Electric Cooperative's Leland Olds Station.

"Without a doubt, attention to workplace safety in the lignite industry is one of our proudest hallmarks," said Jason Bohrer, president and CEO of the Lignite Energy Council. "The couple hundred companies that comprise the Lignite Energy Council believe that the efficient production of a low-cost reliable energy source – while maintaining or even enhancing our environment – cannot be achieved

without serious attention to the health and safety of the men and women who work to produce that product."

Karlberg said that the Distinguished Safety Award is an achievement that the Young Station has been trying to regain since 2016. This April, the Young Station hit an important safety milestone, passing one million work hours without a lost-time injury – never before accomplished at the plant. Safety has been and will continue to be a top priority for not only the Young Station, but also all of Minnkota.

"It is truly an honor to receive the 2018 Distinguished Safety Award on behalf of all the men and women at the MRY station," Karlberg said. "It is not just about safety training and safety meetings. It is about our employees' commitment to safety every day they come to work and going home to our families every night."



Jason Bohrer (far left), CEO of the Lignite Energy Council, presents safety awards to North Dakota's energy companies. (Starting fifth from left) Minnkota Safety and Physical Security supervisor Troy Karlberg and plant managers Andrew Freidt (Operations and Maintenance) and Tim Hagerott (Engineering/Environmental) accepted the Distinguished Safety Award on Minnkota's behalf.

