



Features

Level 3 chargers

Plugged-in drivers around the region will now have smooth, anxiety-free travels ahead as two more Minnkota member cooperatives energize electric vehicle fast chargers in their communities.

Electric bus makes the grade 8

Just one year after West Fargo Public Schools began transporting students with an all-electric school bus, the district is already seeing the benefits and savings stack up.

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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.

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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.

California blackouts show need for all-of-the-above energy strategy









mid a global pandemic, millions of Californians were plunged into darkness this summer as heatwaves battered the state's electric grid.

Rolling blackouts were required as record-setting temperatures pushed the demand for electricity well above the available generation resources at times during Aug. 14-15. California's Independent System Operator (CAISO), the entity that manages the state's grid, ordered utilities to impose temporary blackouts for the first time in nearly two decades, pulling the plug on air conditioners, refrigerators, TVs and other electric appliances when consumers needed them most. In addition to the outages, CAISO spent significant stretches of the summer pleading with consumers to reduce their electricity usage as it dealt with system instability.

There are several causes of this crisis, but a primary issue is the overreliance on intermittent resources, such as wind and solar, while undervaluing generation resources that can operate 24/7. CAISO experienced this issue firsthand on Aug. 14, as the wind stopped blowing that evening and nearly 1,000 megawatts (MW) of wind generation vanished from the grid without warning. No additional dispatchable generation, such as coal, natural gas or nuclear, was available to meet the demand, leaving communities in the dark.

In October, CAISO completed a preliminary rootcause analysis of the summer blackouts. The analysis found that "resource planning targets have not kept pace to lead to sufficient resources that can be relied upon to meet demand in the early evening hours (as the sun goes down and solar farms no longer operate). This makes balancing demand and supply more challenging. These challenges were amplified by the extreme heat storm."

California Gov. Gavin Newsom said, "Collectively, energy regulators failed to anticipate this event and to take necessary actions to ensure reliable power to Californians. This cannot stand. California residents and businesses deserve better from their government."

Following the events in California, consumers across the Minnkota member systems have asked if a similar situation could happen in Minnesota and North Dakota. The answer is yes. To date, utilities have been able to collaborate through the Midcontinent Independent System Operator (MISO), which manages the electric grid in the Upper Midwest, to remove the risk of rolling blackouts. There have, however, been several emergency situations in recent years that have presented significant challenges for utilities, including the polar vortex event in January 2019. With limited production from wind and solar facilities due to extreme cold conditions, the electric grid remained reliable thanks in large part to the operation of dispatchable resources. Future plans to retire dispatchable resources and replace them with intermittent resources has the potential to create and accelerate grid reliability challenges in the Upper Midwest.

Renewable energy remains an important part of the future of the energy grid, but it is not positioned to stand alone as the only resource. The California blackouts should serve as a reminder that an all-of-the-above energy strategy must be embraced to ensure the region has a reliable, affordable and environmentally responsible supply of electricity – now and in the future.





Cass County Electric leaders join Fargo mayor Tim Mahoney, FMCVB CEO Charley Johnson and members of the FMWF Chamber to cut the ribbon on the new EV fast charger at the F-M Visitors Center.

Cooperation for travel electrification



The ChargePoint Level 3 DC fast charger will deliver 62.5 kW of power for a small session and kW fee.

MINNKOTA'S MEMBER COOPERATIVES BUILD NETWORK OF ELECTRIC VEHICLE FAST CHARGERS TO CONNECT SERVICE AREA

he Fargo-Moorhead Convention & Visitors Bureau (FMCVB) was bursting with North Dakota tradition on Sept. 21. Outside, dozens chatted with Norwegian lefse and krumkake in hand, a yellow woodchipper played homage to the iconic film "Fargo," and the barn-like F-M Visitors Center created a rural backdrop to the entire Midwest scene.

However, the reason for the gathering was something somewhat foreign to the flannel-clad region – until now.

"Cass County Electric has a rich history of being a leader in innovation in the communities that we serve," said Cass County Electric Cooperative's (CCEC) Bob Miller, addressing the crowd around a shiny new Level 3 direct current (DC) fast charging station. "These new chargers will establish our communities as leaders in electric vehicle (EV) adoption by providing fast charge options for local EV owners, as well as interstate travelers."

It was a ribbon cutting celebration of the

"Cass County Electric has a rich history of being a leader in innovation in the communities that we serve. These new chargers will establish our communities as leaders in electric vehicle (EV) adoption by providing fast charge options for local EV owners, as well as interstate travelers."

- Bob Miller, CCEC Business Accounts Executive



September energization of three Charge-Point EV fast charging stations around the Fargo-West Fargo area. Along with the F-M Visitors Center charger, CCEC installed pay-to-charge units at West Acres Shopping Center in Fargo and Hornbacher's Gateway West in West Fargo. The projects were made possible by Volkswagen settlement money granted by the North Dakota Department of Environmental Quality.

A Level 3 DC fast charging station delivers a higher rate of electricity to an EV, allowing a driver to plug in and completely recharge in 30-60 minutes, depending on the battery size and level of depletion. It's an essential tool for EV owners who are traveling far from home (where they typically do most of their charging).

"It's about time," event attendee and EV owner Rolf Brakvatne said of the new proliferation of Fargo-area chargers. When told that Nodak Electric Cooperative would be holding a similar celebration the following week for its own fast charger in Grand Forks, Rolf's wife Diane lit up beside him.

"That's good, because I have family another 75 miles north of Grand Forks," she said. "We need that charger."

These moments are why Minnkota's member cooperatives have joined forces to enhance the EV charging network in eastern North Dakota and northwestern Minnesota.



Top: CCEC's Chad Brousseau (right) chats with an event attendee at the Sept. 21 ribbon cutting.

Bottom: CCEC's Bob Miller (right) explains the features and benefits of the ChargePoint DC fast charger.



The weather was perfect for a socially distanced ribbon cutting for the CCEC EV charger at the F-M Visitors Center. The event also included the West Fargo Public Schools all-electric bus.



Grand Forks mayor Brandon Bochenski, Nodak board chair Steve Smaaladen, Nodak CEO Mylo Einarson and Nodak Member/Energy Services manager Blaine Rekken cut the fast charger ribbon.

> Electric cooperatives were born from a need to create electric infrastructure where there was none. This is the next step in fulfilling that mission.

Stepping up, plugging in

Beltrami Electric Cooperative ignited the fast-charge flame in 2018 when it installed

> the cooperative system's first Level 3 station at its Bemidji headquarters. At that time, it was the only quick charging option for hundreds of miles.

"In evaluating the existsaid Beltrami Electric's Angela encourage the adoption of EVs

through both education and EV charging corridor expansion."

ing EV charging infrastructure in our region, we discovered a need for expanding a corridor to northern Minnesota," Lyseng. "Electric vehicles will be an excellent off-peak load for utilities, and we would love to see cooperatives continue to

Other cooperatives knew a regional network of Level 3 chargers would have to be in place in order for their members even to contemplate owning an EV in a northern climate.

"It's a chicken-and-the-egg situation," said Paul Matthys, CCEC vice president of Member & Energy Services. "We feel that we have to establish some charging infrastructure so that people can get over that range anxiety."

"Between Cass County Electric and us putting these fast charging stations in, we've really helped quell that range anxiety for folks that are driving electric vehicles in eastern North Dakota," said Blaine Rekken, Nodak Electric Member/Energy Services manager.

The grant-funded chargers were an opportunity to make EV ownership easier for cooperative members, but also to boost the economic vitality of the communities they live in. Rekken noted that Nodak's new installation - the only fast charger from Winnipeg to Fargo and Minot to Bemidji would be a reason for interstate drivers to stop for a while.

"Grand Forks has always been a destination city, and now we're just making it that much more available to the electric vehicle



The Grand Forks Level 3 DC fast charger sits on the south side of the Wendy's restaurant parking lot on 32nd Ave. S.

"We are more than selling electrons. We sell a quality of life. That quality of life is anything from hot water to electric heating to all of the things that make our lives better. Electric vehicles are just one of those components to add on."

> – Blaine Rekken, Nodak Electric Member/Energy Services Manager



Level 3 chargers

Supported by Minnkota Power system cooperatives

Cass County Electric Cooperative

- West Acres Shopping
- F-M Convention and
- West, West Fargo

Nodak Electric Cooperative

• Wendy's, Grand Forks

Beltrami Electric Cooperative

community of users," he said. "That's a huge benefit."

Charley Johnson, FMCVB president and CEO, said that having multiple fast charging options in the F-M area will boost the community immensely. "It's nothing but good," he said. "It will give more people the opportunity to come here. It may be a small segment of the population right now, but it's going to grow."

Cooperation among cooperatives

Nodak Electric and CCEC have served as co-op copilots over the past year as they navigated grant writing, rate setting and infrastructure planning together. They even held conference calls with cooperatives outside of their system and attended each other's charger ribbon cuttings.

"It's cooperation among cooperatives," Matthys said, a reference to one of seven core co-op principles. "Just sharing intel and information on what others have experienced in the cooperative world has been very beneficial."

"We slay the same dragons together," Rekken added, "and we're just glad to have a partner in our sister cooperative."



The local Chamber Ambassadors were in attendance for the Grand Forks fast charger ribbon cutting. The station could serve as an economic booster for the community.

As more ribbons are cut and more glowing chargers dot parking lot landscapes, these innovators are raising EV awareness for members and bolstering economic development – a shared win for co-ops, commuters and communities.

"We are more than selling electrons. We sell a quality of life," Rekken said. "That quality of life is anything from hot water to electric heating to all of the things that make our lives better. Electric vehicles are just one of those components to add on."



West Fargo Public Schools transportation director Brad Redmond (left) and bus driver Leo Rognlin (right) showcase e16, the district's 100% electric school bus.

Electric bus makes the grade

WEST FARGO PUBLIC SCHOOLS SEES SAVINGS, BENEFITS AFTER A YEAR WITH AN ELECTRIC ADDITION TO THE FLEET

> est Fargo Public Schools (WFPS) bus driver Leo Rognlin arrives at the district's transportation garage at 6:50 a.m. every work day. His pre-trip routine is always the same - check his bus's tires, look at the brakes and examine the engine compartment before

> > starting his route.

He's like a well-oiled machine. His bus, however, is not.

"That's probably the difference between the electric and the diesel - I don't have to check oil," he said.

Rognlin is the lucky driver of WFPS's all-electric Blue Bird school bus, purchased by the district and community part-

ners like Minnkota Power Cooperative and Cass County Electric Cooperative (CCEC) in 2019. The bus, designated as e16, began its second school cycle of transporting students this September, following a successful "freshman" year.

"Oh, we were very happy," said Brad Redmond, WFPS transportation director. "We saw significant savings on our energy costs, and it ran really well as far as being able to go out and do the route. "

Even though bus routes were stopped early in the spring when COVID-19 kept students learning at home, a cost comparison of the electric bus to a diesel counterpart (purchased at the same time) showed a total operations and maintenance savings of \$3,269.62 over seven months. The diesel bus cost 42 cents a mile to power and drive, whereas the electric bus cost only 14 cents per mile.

Although the upfront cost of an electric bus is higher, Redmond believes the savings could bridge that gap over the lifetime of the bus. He added that once the district has the bus for a few years to confirm the savings



WFPS bus driver Leo Rognlin says even with COVID-required masks, he and the students have no problem hearing each other on the quiet bus.

and performance hold up, he could see them investing more in electric.

Power perks

The benefits of the electric bus went beyond savings. Rognlin, a new driver for WFPS this year, said he had no problem translating his diesel-bus training to an allelectric rig.

"It operates very similarly to a diesel," he said. "I really like it. It's been a great ride and performs well on the highway. I have more than enough acceleration if I have to merge into traffic."

On top of the speedy acceleration, the electric motor has other benefits. Rognlin doesn't have to stand in the cold to refuel he simply pulls into the garage and plugs in. But there's one perk he appreciates most.

"It's nice and quiet. I can hear what's going on with the kids better," he said. Even though students are more widely spaced this year as a COVID-19 precaution, Rognlin says they can still easily communicate without the obtrusive rumbling of a diesel engine. "I think that it's a more enjoyable experience for them," he said.

"The biggest question from them is, 'Why does this bus have green bumpers?' You explain to them that this is an allelectric school bus, and they think it's pretty neat," Redmond said. "It's an emerging technology that I think is going to be a part of their future, and they're one of the first in the state to ever be a part of this."

Lessons learned

The WFPS transportation department knew the first winter would be a learning experience, for them as well as for the manufacturers - it was the first truly northern climate the technology had faced. A decrease in the bus's 100-mile range was expected in the coldest months (as is also expected with diesel), and the bus still had plenty of battery power to cover its daily routes.

WFPS worked with Blue Bird and its

local distributor, Cummins, to retrofit nylon fittings for coolant that cracked in the temperature drop. They also collaborated on a winter package for the bus that insulates the battery compartment from the cold. A software update was also added, allowing the bus to preheat the cabin and coolant while plugged into the charger.

As Redmond and his team learn more about the bus, school districts from coast to coast have reached out about WFPS's experience. With the financial support and electrical systems guidance of CCEC, the school district has become a national trailblazer.

"Two of CCEC's core values are innovation and commitment to community," said Chad Brosseau, CCEC business accounts executive. "With new technology, there are always unknowns and challenges to overcome. By partnering with our member organizations, we can help them take those first steps."

Whether it's taking those first steps or driving those first miles, Rognlin is just glad e16 has become a part of his daily routine. "It's an outstanding bus, in my opinion. Being the new guy, I figured I would just get what I get, but I was fortunate that it was assigned to me," he said.

By Kaylee Cusack / Photography Michael Hoeft



A part of Leo Rognlin's morning routine is unplugging e16 before he starts his route.



hen Josh Marvig started his position as a dual patrol officer for Fargo Police and Fargo Parks in 2018, he knew he had a great gig to bridge any gaps to the community. When he helped integrate a new pair of kilowattpowered wheels into the fleet, his love of the

position amped up.

"With my own background of liking to ride motorcycles, the fact that I got to spend

the entire summer riding a motorcycle around..." Marvig trailed off, beaming beside his ride. "People are super happy to see an officer in the to see him on a unique quiet, something they've never seen before - it's definitely a conversation starter."

parks. And when they get vehicle – something that's

Officer Marvig is breaking down barriers with his new, all-electric police motorcycle. The bike hit the parks this spring with help of several community partners, including Cass County Electric Cooperative (CCEC). By mid-September, Marvig had already racked up more than 2,200 miles on the motorcycle, covering more than 100 parks, 130-plus miles of trails and 2,300 acres of land that aren't as easily accessible with a squad car.

"It's done everything we expected and then some," he said.

Other than police lights and decal graphics, the off-road-capable electric motorcycle looks like a normal motorcycle, but lacks the jolting roar of a gas-powered vehicle.

"It's quiet and perfect for the parks whether you look at that from a law enforcement standpoint, that people literally do not hear me coming, or for just blending in," Marvig explained. "You're taking that exhaust noise and those smells out of the



Officer Marvig explains the unique dash functions of the electric motorcycle.

"Cass County Electric is a pioneer in new technology, and we are the trusted energy advisors for our members and communities. The partnership with the Fargo Police Department is an excellent example of this, and we plan to use the technical data and statistics to educate members on EV technology."

- Paul Matthys, CCEC vice president of Member & Energy Services

parks, especially down trails and at events."

As for range, the bike's 160-mile battery has no problem covering a full patrol day. Marvig has never had to recharge mid-shift and simply plugs in at night to wake up to a full charge.

The savings are also adding up. In the month of August, the electric motorcycle cost only \$1.60 in electricity to cover 400 patrol miles. For the entire summer, it cost just over \$8 to charge and nothing was spent on maintenance (no oil to change). Marvig says most squad cars average only 10 miles per gallon, much of that consumed while the cars idle.

Community project

Brian Arett, director of the Fargo Park District Foundation, noted that CCEC was invaluable to securing funding for the motorcycle. The cooperative not only provided \$6,000 in Operation Round Up grants and corporate funds, but also helped with a grant submission to the North Dakota Department of Commerce, which provided an additional \$10,000 for the \$20,600 fully loaded police bike.

"Cass County Electric's enthusiastic support of this project underscores their incredible involvement in the communities they serve," Arret said. "We are so fortunate for the role they played in making this project happen and very appreciative of their efforts."

Commitment to community is a core electric cooperative value. Paul Matthys, CCEC vice president of Member & Energy Services, said that helping add an electric vehicle (EV) to the police fleet was a way to show that principle in action while spreading EV awareness.

"Cass County Electric is a pioneer in new technology, and we are the trusted energy advisors for our members and communities," Matthys said. "The partnership with the Fargo Police Department is an excellent example of this, and we plan to use the technical data and statistics to educate members on EV technology."

Officer Marvig knows his bike can't do everything the police department needs, like transporting someone to jail or running license plates. However, he still thinks it's just the start of electrification to come.

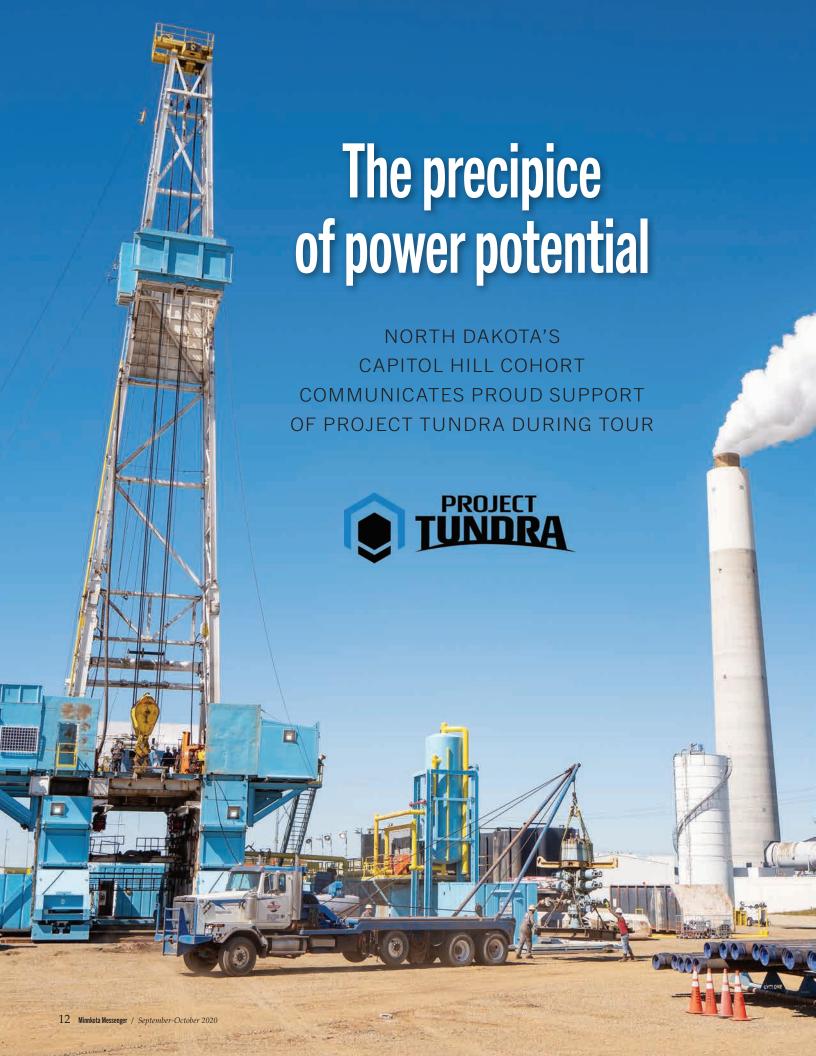
"I think there is a future there," Marvig said. "And working with Cass County Electric with this project, I think it is cool that we can show that this is a completely electric vehicle - and a unique one."

By Kaylee Cusack / Photography Michael Hoeft

About the bike

- Model: Zero DSR
- Range: 163 miles (city)
- Battery size: 14.4 kWh
- Charge source: 120-volt outlet
- Charge time: 10 hours
- Recharge cost: \$1.60
- Max top speed: 100 mph











Sen. John Hoeven

Sen. Kevin Cramer

Rep. Kelly Armstrong

he skyline of Minnkota's Milton R. Young Station changed the morning of Sept. 4, 2020. Joining the tall stacks of the coalbased Unit 1 and 2 generators was a new soaring structure – the tower of a test well rig placed just south of the main plant, primed and ready to begin drilling deep into the subsurface for geologic data supporting Project Tundra.

The test well was the centerpiece of an invitation-only event drawing a steady stream of nearly 30 hard-hat-clad visitors to the site that day, including North Dakota's delegation to Washington, D.C. The crowd of policymakers, industry partners and media was hungry to learn more about the technological progress of Minnkota's first-of-its-kind carbon dioxide (CO₂) capture and storage initiative.

Minnkota's Stacey Dahl welcomed Sen. John Hoeven, Sen. Kevin Cramer and Rep. Kelly Armstrong with a note of thanks for their efforts in securing the state and federal funding needed for Project Tundra's research and development.

"We wanted to show you how these dollars are being used and the very promising future of this project," Dahl said, pointing to the plant. "It's really dynamic. We're proposing to capture over 90% of the CO₂ emissions from that larger unit on the left."

The senators, congressman and others followed tour leader Dan Laudal, project manager of Project Tundra, to a table of boxes filled with rock core samples. The cores were collected from the project's first test well site, drilled this summer four miles to the northwest. "We're going to collect more of this rock core, some 13-hundred

feet, and do a whole lot of well logs to try to get all the data we need to support the permits," he explained.

Wes Peck, assistant director for subsurface strategies at UND's Energy & Environmental Research Center (EERC), fielded questions from the delegation about the cores before them. Sen. Hoeven pointed to a box filled with porous sandstone. "Is this the one you're aiming for?" he asked.

"These three," Peck replied, describing more thoroughly how the solid, uniform geologic layers of North Dakota's Broom Creek Formation create a safe and stable environment for CO₂ injection and long-term storage. "These are full of knowledge, and we're wringing it out," he said with a grin.

The tour transitioned from rocks to J-ROC1 (the name given to the test well) with a walking Q&A led by the rig's drilling supervisor. The delegation climbed into the belly of the rig itself



The EERC's Wes Peck (right) describes rock core samples collected from North Dakota's **Broom Creek Formation.**



and learned more about the process of drilling 10,000 feet into the subsurface. The data gathered from this well (rock samples, water samples and pressure tests) will be used to complete 3D simulations of how CO₂ would move though the potential injection site, a requirement for the next stage of the project's permits.

The visit's final learning moment came in the form of a more than 50,000-pound vibroseis truck, a massive piece of research machinery that uses a heavy, vibrating plate to send high-frequency sound waves into the earth. The data collected helps create a vibrant seismic map of important subsurface details. Minnkota and the EERC have used this research method in past surveys.

The time is now

After an hour of rocks, rigs and research, the tour's guests of honor took time to reflect on how far Project Tundra had come from its conception, and what its completion could mean for the industry and the people of North Dakota.



Howard Watt of SAExploration explains how a vibroseis truck collects geologic data with sound waves.

"There's never been a time more important than now," Sen. Hoeven said. "This partnership is vital to the future of coalfired electricity. It's so important, not only in terms of the carbon capture piece, but in terms of, really, long-term economic viabilitv."

Sen. Hoeven described the role of the 45Q tax credit in making carbon capture innovations like Project Tundra economically practical for those willing to take on the challenge of early development. He added that strengthening North Dakota's energy foundation would in turn strengthen the nation's energy security and keep greatpaying, high-quality jobs in the state.

"You're making a difference – not just for North Dakota, but for the country. And really, for the world, in terms of being the leader in carbon capture," he said.

Sen. Cramer echoed the sentiment that "the time is now" for energy technologies that extend the life of coal-based plants like the Young Station.

"We are really at the cross section of innovation, finding the solution that allows the continuing of low-cost, reliable, 24-hour, seven-day-a-week baseload electricity, while finding even more ways to ensure that environmental protection is a priority," he said.

Cramer commended Hoeven on his tireless work to make the 45Q tax credits a reality. He noted that it wouldn't have happened without the bipartisan federal support garnered by projects that promote a cleaner environment and responsible energy planning.

"We're on the precipice, really, of doing some good things, as long as we can let you all do what you do best, and that is find the solution," he said.

Rep. Armstrong reminded attendees that coal has been a part of the North Dakota landscape for generations and that energy



The N.D. delegation emerges from a tour of the Project Tundra test well.

evolution has happened in many forms across the state - from ethanol plants in Casselton and Spiritwood to the oil boom of the Bakken. But, he added, that development doesn't happen without the right mix of policy and people.

"We can't do it if there aren't people willing to take risks, if there aren't communities willing to accept these types of projects into their neighborhoods," he said.

Armstrong continued, saying that a part of his role in Congress is to educate people on why the type of power produced in North Dakota is so essential, and to make sure there is an even energy playing field. "Not because it's just important to us, but why it's important to them. And this is a part of the energy solution. People all over the world know it," he said.

"It's just a fantastic project moving forward, not just for North Dakota, but for the whole country and the whole world. And I have no doubt in my mind we'll do it right and we'll do it best here," the congressman concluded.

Before sending the crowd back through

the Young Station gates, John Harju -EERC vice president for strategic partnerships - reminded them how North Dakota's policy team was integral to the success of Project Tundra from the very start of the state's carbon capture research.

"I remember [then] Gov. Hoeven helping us put together a bill from the Industrial Commission for the state to put forward comprehensive rules to do exactly what we're doing out here today," Harju recalled. He added that Cramer (a Public Service Commissioner at the time) was helping approve resources from the state while Armstrong (a state senator at the time) assisted from Dickinson. "Now, we export that brilliant talent to Washington, and they're helping make it happen from there. I always like to say great partners make great projects, and this is a perfect example of that."

Learn more about the science and progress of Project Tundra by visiting ProjectTundraND.com.

By Kaylee Cusack / Photography Michael Hoeft

A positive charge

RETIRING MINNKOTA VICE PRESIDENT AND CFO REFLECTS ON A 27-YEAR COOPERATIVE JOURNEY



aren Thingelstad's smiling face isn't the only one that greets you when you walk into her Minnkota office. The cooperative's vice president and CFO is flanked by bright doodads, grinning mugs and upbeat mementos that personify her essence.

"You see all of these? Positivity is important to me," Thingelstad said, pointing around her desk to several gifts received over the years from friends, family and co-workers. "[Minnkota vice president and CISO] Dan Inman brought me that one over there – 'One small positive thought in the morning can change your whole day," she continued, reading from a wall hanging.

This is a part of the legacy Thingelstad will leave when she retires from Minnkota in early November 2020. The power player well-known as Minnkota's first female executive has leveraged her optimism and never-quit attitude into an incredible career.

"It's just been a big challenge, and that's probably the part I've enjoyed the most. I never felt bored or that I wasn't learning something," she reminisced. "I was given a ton of opportunity that I so very much appreciate."

An accountant's account

As a public accountant in 1993, Thingel-stad was working long hours, six to seven days a week during tax season when her daughter, Hannah, was an infant. She knew it was time for a career change when she came home in time to say goodnight – and was met by terrified tears.

"She didn't know who I was. So, I just cried with her, and I said I just can't do this anymore," Thingelstad said. "We always say that we thank Hannah for mom's job, because the next day I opened the paper... and there was a job for Minnkota Power. I so believe things happen for a reason."

Thingelstad spent four years as a

Minnkota accountant before being promoted to procurement manager - a role that had her splitting time between heels at headquarters and steel toes at the station. The Milton R. Young plant was entering an era of large projects such as environmental upgrades, and the construction of the 345kV Center to Grand Forks transmission line would be a cross-state effort. They were massive undertakings with many moving parts, and it took someone with a balance of finance, friendliness and feistiness to help bring everything together.

Through the monumental work of those projects, Thingelstad had proven herself an exemplary leader. She was promoted to senior manager of finance in 2013, and less than a year later was named Minnkota vice president and CFO – the first woman to hold an executive role.

"It was humbling and exciting. I always wished that my mom and dad would have been alive to see that," she said with welling eyes. "They were just really proud of me and what I had done here already."

Lasting impact

Since accepting the CFO role in 2014, Thingelstad has artfully overseen more than a half dozen Minnkota departments, spanning finance and accounting, procurement, HR, safety, buildings and grounds and more. Her tenacity has not only inspired her colleagues, but has lifted her to role model status among other aspiring female leaders in the community. In 2018, she was named to the UND Accounting Hall of Fame and last year was asked to deliver a keynote to the Greater Grand Forks Women's Leadership Cooperative. Her subject of choice was, unsurprisingly, "Your Attitude, Your Choice."

But Thingelstad doesn't see herself as exceptional.

"I just see myself as me, as one of all

the other women in the city. I think a part of it is not to be afraid to let your path take you where it takes you," she said. "You have to be willing to just say, I don't know the answer, but I'll find out."

Thingelstad has enjoyed watching Minnkota evolve into an innovation leader in the industry and a philanthropy leader in the community. In her retirement, she plans to keep her ties to both strong. She'll continue to be active with the UND School of Business advisory board, the UND Alumni Foundation board, the Altru Health Foundation board and other charitable endeavors.

As for her connection to the industry, it's safe to say her Minnkota family won't shake her.

"It's a great place to work, with awesome people. My executive staff colleagues are far more like my really good friends than they are simply co-workers," she said. "That's also what makes it so hard to leave."

When it's time for Thingelstad to pack up all of her small office keepsakes of the past, she'll do it with big plans for the future. She'll have more time to do what she loves - spending time with her family, especially her children and grandchildren, traveling (she already has a Florida trip planned with her best friend), and relaxing hobbies like reading, walking, biking and cooking.

"I have always worked and given it my all, so I don't really know who I am not working. I'm going to figure that out," she said. "You have to let the doors open and the paths change, kind of like vour career."

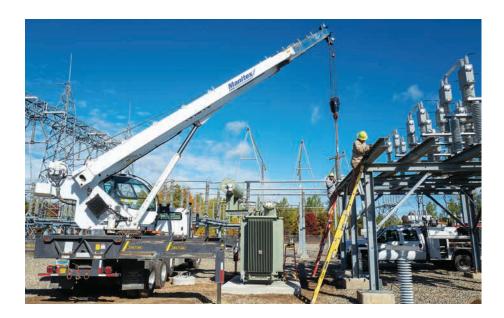
By Kaylee Cusack / Photography Michael Hoeft



"I have always worked and given it my all, so I don't really know who I am not working. I'm going to figure that out. You have to let the doors open and the paths change, kind of like your career."

- Karen Thingelstad, retiring vice president and CFO

News**briefs**



Crews complete substation and line rebuild projects

s the fall colors change and cool-**A**er weather arrives, Minnkota's power delivery crews have finished work on several major projects aimed at addressing aging infrastructure and improving service to the membership.

In mid-October, substation crews completed a rebuild of the Oklee substation in northwest Minnesota. The existing substation was nearly 70 years old and had reached the end of its useful life. The new substation includes advanced comMinnkota's power delivery crews work to install ripple injector equipment at the Wilton substation near Bemidji, Minn. The equipment is used as part of the cooperative's demand response program.

munication technology and other systems that will help enhance overall system reliability.

Crews dedicated a significant amount of the summer to improving the transmission system in northeast North Dakota. About 22 miles of aging 69-kilovolt (kV) line in the area was disassembled and replaced with new, modern infrastructure. Additionally, construction of a new Edinburg substation and 22 miles of 115-kV transmission line was completed in the fall.

Before the end of the year, crews aim to complete the new Berg substation (near Grand Forks), demand response improvements at the Wilton substation (near Bemidji) and major upgrades at the Concrete substation (near Cavalier, N.D.).

October is Co-op Month

Ooperatives have shown great **U**resiliency throughout the COV-ID-19 pandemic, continuing to meet members' needs for reliable, affordable and environmentally responsible electricity. This year's Co-op Month theme, Power On, focuses on the toughness and strength electric cooperatives bring to their local communities.

As a cooperative, Minnkota is owned and governed by a board of directors democratically elected from the membership - not faraway investors. Cooperatives are everywhere, helping people meet

their common needs through group effort. They provide just about any good or service their members need.

Cooperatives across the world adhere to seven principles, which include: 1) voluntary and open membership, 2) democratic member control, 3) members' economic participation, 4) autonomy and independence, 5) education and training, 6) cooperative among cooperatives and 7) concern for community.

Concern for community is the principle that stands out during these challenging times. Minnkota and its member cooperatives were



built by the community to serve the community, and that's what we'll continue to do - Power On.

Pfau, Laudal receive LEC's distinguished service award

he Lignite Energy Council (LEC) recognized Gerry Pfau, senior manager of project development, and Dan Laudal, environmental manager, with its distinguished service award for continuing the advancement of Project Tundra.

LEC made the announcement during its virtual fall conference held on Sept. 30 and Oct. 1. Pfau and Laudal were acknowledged for their leadership roles during the engineering and design stages of





Gerry Pfau

Dan Laudal

Project Tundra. In addition, Kevin Thomas, who retired earlier this year as Minnkota's plant environmental superintendent, received the Ambassador of Lignite Award in recognition of his support for the industry.

Minnkota employees donate to YWCA Cass Clay

Minnkota employees made a \$500 contribution to YWCA Cass Clay in September through their Jeans Day fund. The donation was suggested by a local participant of the Midwest Nest Design Challenge, which selects a nonprofit organization every year to benefit with fundraising and awareness.

As a beneficiary of this year's Design Challenge, YWCA Cass Clay received monetary and home furnishing donations gathered by regional interior designers. One of the participants reached out to Minnkota's Jeans Day committee to become involved in the fundraising effort of the contest.

"The generous donation from Minnkota's Jeans Day fund will be used to provide food support for families living in YWCA's Supportive Housing Program," said Erin

Dahl, housing director for YWCA Cass Clay. "In addition, we provide assistance with basic needs such as food, clothing and transportation, depending on each woman's unique needs."

Minnkota employees contribute to the Jeans Day fund in exchange for the privilege of wearing jeans on Fridays and during other donation drives.



McLennan meets with U.S. Energy Secretary

Mac McLennan, Minnkota president and CEO, met with U.S. Energy Secretary Dan Brouillette, U.S. Sens. John Hoeven and Kevin Cramer, North Dakota Gov. Doug Burgum and other energy leaders Sept. 1 in Minot to discuss the challenges and opportunities facing the state's energy industry.

McLennan focused on Project Tundra – a project currently being evaluated by Minnkota that would install carbon capture technology at the coal-based Milton R. Young Station. The Department of Energy considers Project Tundra to be a marquee project and has provided grant funding for research, development and engineering.

"I'm grateful to Secretary Brouillette for his time and the productive discussion we had on rules and regulations that are of paramount importance to our membership," McLennan said. "The Secretary is well-versed on the issues impacting our industry and understands the important role an all-of-theabove energy strategy plays in our nation's economic growth, security and opportunity."





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