

## Active off-peak load control season so far

Last winter, a polar vortex event sent energy market prices soaring. Fewer resources across the country were able to generate electricity in the historic cold, and demand was high for the few resources that were generating enough to sell into the electric grid.

Utilities are experiencing those high market prices again – but it's not because of a single major weather event this time. It's the climbing cost of natural gas.

"Natural gas is one of those resources that typically helps manage the variability in electricity generation, and we're seeing prices that are significantly higher than what we've seen in the past 10-15 years," explained Todd Sailer, senior manager of power supply & resource planning for Minnkota (PKM's wholesale power provider). "We're seeing prices double and triple what they were last year, or even over the last couple of years."

While the energy markets soared for only 7-10 days in February 2021's polar vortex, Sailer says this volatility could last throughout the winter season, or longer. That's good insight for cooperative members on the demand response – or off-peak – program, which allows the co-op to temporarily interrupt service to a

participant's off-peak loads (electric heating, large-capacity water heaters, electric vehicle chargers, etc.) in exchange for a lower electric rate.

Minnkota's energy marketers are preparing for 200 hours of off-peak electric heating load control this winter, but Sailer says that could rise if natural gas prices continue to climb. He also notes that load control could be spread out over more days and not always coincide with major weather events.

"If we have days of low intermittent resources in the region, like wind power, the expectation is that the markets will respond and you'll see higher markets, which will result in more off-peak control," he said.

Ultimately, the cooperative will deploy off-peak load control when it needs to protect itself from buying high-price energy from the market. This system was established years ago to avoid building more generation facilities for peak need that only arises a few days out of the year. That, in turn, keeps rates low for consumers. By being a part of the off-peak load control program, consumers can also take advantage of an even lower electric rate without any disruption in comfort.





# CEO Report

**MIKE SCHMIDT**  
CEO  
PKM Electric Co-op

**T**he PKM staff is in the process of closing the books on 2021. Last year will be remembered as a very successful year financially. Although kWh sales were down in 2020-2021, over the past six years (2016-2021) margins have averaged over \$1.1 million annually. The best part of this is rates have not increased since 2015. Equity is at an all-time high, outage times have been low and the crews have been working safely.

Financing in the electric co-op world works a little differently than you may expect. Engineering plans determine our system improvement/replacement priorities. Then a series of planning documents are created. These are typically done in four-year increments with a 10-year forward look. This creates what's called a loan packet. After the loan application has received approval by the board and the Rural Utilities Service (RUS), PKM starts construction on the prioritized projects. Once a project, or projects, has been completed, documents are submitted to RUS and approved, at which point we can borrow funds used for construction. We are currently in the process of finalizing

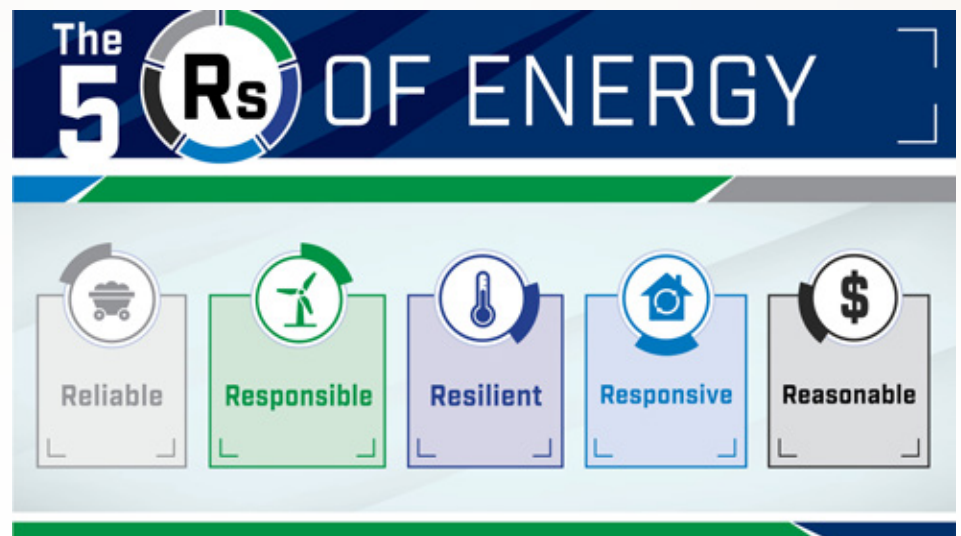
our next four-year loan.

We are in the process of completing another planning document which is called the cost-of-service study. This document breaks out all our annual expenses and puts them into buckets, which are then tied to different rate components that make up your bill. We do this on about a five-year schedule to ensure PKM's cost recovery is coming from the appropriate places.

We have had a return to a more typical Minnesota winter. Load control time to this point

is about 150 hours. Our off-peak rate compares to \$1.40 propane and \$1.90 fuel oil. A heat pump on the off-peak rate compares to 75-cent propane and 95-cent fuel oil. Having a reliable backup is crucial for safety and comfort. A reminder that as a PKM member you can access our interest-free financing up to \$6,000 to install or upgrade your existing off-peak system. The loan repayment will be added to your bill for up to 72 months.

Mark your calendars. The annual meeting is scheduled for July 12 at the Sky-Vu Drive In.



## Electrical Inspectors

### Marshall and Kittson Counties

Ronald Ditsch  
218-779-6758

### Polk County

George Stage  
218-284-1083

### January/February 2022 (Vol. 76, No. 1)

The PKM News (USPS 417060) is published six times a year: February, April, June, August, October and December, by PKM Electric Cooperative, Inc., 406 N. Minnesota St., Warren, MN 56762. Periodicals postage paid at Warren, MN. Subscription 25¢/year for members, \$2.50/year for non-members. POSTMASTER: Send address changes to PKM Electric Cooperative, Inc., P.O. Box 108, Warren, MN 56762-0108.

#### Office hours

8 a.m. to 4:30 p.m., Monday through Friday  
218-745-4711 or 800-552-7366

#### Electrical after-hours emergencies

800-552-7366  
e-mail: [info@pkmcoop.com](mailto:info@pkmcoop.com)  
website: [www.pkmcoop.com](http://www.pkmcoop.com)

#### Next board meeting

Boarding meeting to be held the last Tuesday of the month.

#### Officers and Directors

President ..... Mark Hatton  
Vice President ..... Michael Beaudry  
Secretary-Treasurer..... Wayne Malm  
Directors ...Paul Aakre, Steve Goodwin, Chris Mortenson,  
Blake Owens, C.J. Peterson and Tom Woinarowicz  
CEO..... Mike Schmidt  
Editors ..... Jeff Rustad, Megan Dagobert

*This institution is an equal opportunity provider and employer.*

# GRID OPERATORS, REGULATORS FORECAST RELIABILITY RISKS

---

**Energy transition represents challenges, opportunities**

---

**T**he energy industry is in the midst of one of the most challenging and disruptive periods in its history. As the pace of change continues to accelerate, grid regulators and operators are beginning to identify elevated electric reliability risks.

Rapidly changing energy mixes and extreme weather are among the biggest challenges to reliability according to the 2021 Long-Term Reliability Assessment released by the North American Electric Reliability Corporation (NERC) in December. NERC identified significant reliability risks associated with more intermittent and distributed energy resources and inverter-based resources (IBR) such as wind, solar and battery storage systems.

"The shift to more and more IBR brings unique opportunities but also integration challenges that can and must be addressed to assure continued reliability," the report concludes. "This is not an argument against the transition but a recognition that, without a collective focus, system reliability faces risk that is inconsistent with electric power's essentiality to the continent's economy as well as the health and safety of its population."

NERC is charged with the security of the bulk power system and sets and enforces reliability standards for utilities. The

organization also assesses trends, needs and remedies for grid reliability. It operates under the supervision of the Federal Energy Regulatory Commission.

The report finds most regions are projected to have sufficient capacity to meet annual peak demand under normal weather conditions, but extreme events, like a polar vortex or summer heat wave, can create shortfalls, which occurred in Texas in February 2021 and California in summer 2020.

From an energy mix standpoint, potential near-term capacity shortfalls may be caused by the retirement of coal-based generation facilities with no ready replacement. The Midcontinent Independent System Operator (MISO) region – where PKM Electric Cooperative and its wholesale power supplier Minnkota Power Cooperative operate – could lose 13 gigawatts (GW) of resource capacity from power plant retirements between 2021 and 2024. That's enough electricity to power about 9.5 million homes.

"The retirement of these traditional resources also accelerates the change in resource mix and punctuates the urgency for implementing resource adequacy and energy sufficiency initiatives in the (MISO) area," the report said.

MISO released its own Renewable Integration Impact Assessment in February 2021 and highlighted its preparation for an "unprecedented pace of change." The report concludes that "significant challenges arise" as

renewable penetration exceeds 30%.

"We begin to see at above about 30% renewable energy penetration significant stability issues in the grid and significant changes that need to be managed somehow," said Brian Tulloh, MISO's Executive Director of External Affairs, during the Midwest Energy Summit last summer in Fargo.

"As you get up into the 50% range, those challenges become increasingly more expensive," he added, emphasizing the importance of time and planning to reach these ambitious goals. North Dakota Public Service Commission Chair Julie Fedorchak estimated the cost of this transition to be \$500 billion or more.

While there are challenges on the horizon, it shouldn't discourage efforts to make our nation's electric grid as environmentally responsible as possible. But there needs to be recognition that the energy transition must be approached with caution and common sense. Electricity remains essential to our everyday lives – powering homes, hospitals, schools and businesses. If mistakes are made during this transition, they can be extraordinarily difficult to reverse.

Your cooperative embraces an all-of-the-above energy strategy that includes coal, wind and hydro. Working together with your off-peak program, these resources are essential to ensuring you receive reliable and cost-effective power – each and every day.



# Minnkota receives CO<sub>2</sub> storage permit

APPROVAL WILL HELP ADVANCE COOPERATIVE'S  
PROJECT TUNDRA CARBON CAPTURE INITIATIVE



Minnkota's Stacey Dahl (fifth from left), Shannon Mikula (sixth from left) and Craig Bleth (far right) stand with representatives from the Energy and Environmental Research Center and North Dakota Industrial Commission members following approval of Project Tundra's Class VI injection well permit, which will allow for the safe, permanent storage of carbon dioxide near Center, N.D.

**T**he North Dakota Industrial Commission (NDIC) approved a permit on Jan. 21 allowing Minnkota Power Cooperative to safely and permanently store carbon dioxide (CO<sub>2</sub>) deep underground near Center, N.D.

Approval of the Class VI injection well permit is an important step forward in the development of Project Tundra, which aims to install CO<sub>2</sub> capture technology at the Minnkota-operated Milton R. Young Station. About 4 million metric tons of CO<sub>2</sub> are planned to be captured annually from the coal-based power plant and stored in geologic formations approximately one mile underground near the plant site. If Project Tundra moves forward into construction, it will be the largest post-combustion CO<sub>2</sub> capture project in the world.

North Dakota is one of only two states that has received approval from the U.S. Environmental Protection Agency to

regulate geologic storage of CO<sub>2</sub> (also known as primacy). This is the second Class VI injection well permit that has been issued in the state.

"North Dakota is positioned to be a global leader in finding solutions to reduce CO<sub>2</sub> emissions," said Mac McLennan, Minnkota president and CEO. "Not only do we have ideal geology for CO<sub>2</sub> storage, we also have a state that promotes innovation and provides leadership in the development of cutting-edge energy technologies."

Minnkota developed the Class VI permit in partnership with the Energy & Environmental Research Center (EERC) at the University of North Dakota and Oxy Low Carbon Ventures. The permit builds on more than two decades of research conducted by the EERC on geologic storage of CO<sub>2</sub> in North Dakota.

"The EERC is one of the world's foremost experts in geologic CO<sub>2</sub> storage,"

McLennan said. “Working with their scientists, geologists and other energy experts in our home state has been vitally important to ensuring the safety and sustainability of Project Tundra’s CO<sub>2</sub> storage facility.”

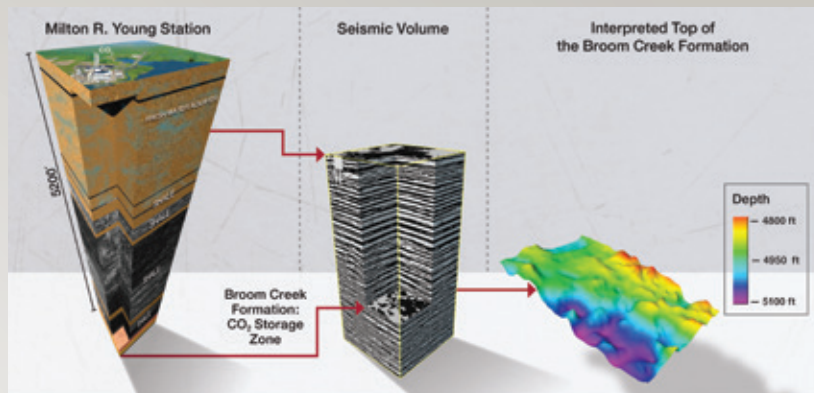
The process for receiving the Class VI permit required significant data collection, analysis and documentation to ensure safe, permanent storage. Two stratigraphic test wells were drilled more than 10,000 feet underground to retrieve core samples in 2020, while a series of seismic and geophysical surveys were also conducted in the area. The permit requires the installation of a wide array of monitoring technologies to track CO<sub>2</sub> movement in the subsurface, including down-hole and surface CO<sub>2</sub> sensors.

“We are grateful to have worked with Minnkota to help advance Project Tundra,” said Charlie Gorecki, CEO of the EERC. “This project brings together energy and environmental science and technology to use North Dakota resources in a safe, clean and sustainable manner. By applying carbon capture and storage at a coal-based power plant, we don’t have to choose between reliability, affordability and environmentally sound energy sources – we can have all three!”

Oxy Low Carbon Ventures, with 50 years of experience in the multi-disciplinary execution of carbon management, is advising Minnkota on the safe design and overall requirements of Project Tundra’s storage facility.

“We congratulate Minnkota on the approval of the Class VI permit and are proud to contribute to this groundbreaking initiative to build a carbon capture facility at their plant,” said Dr. Doug Conquest, Vice President, Services, Oxy Low Carbon Ventures. “Geologic sequestration is a safe, permanent solution for industries seeking to reduce their carbon footprint and meet their CO<sub>2</sub> emission reduction objectives.”

During the permit development process, Minnkota has worked closely with area



(Left) Conceptualized image showing the subsurface geology near the Young Station. (Middle) The 3D seismic volume generated from processing nearly 7 square miles of data. (Right) The interpreted surface for the top of the Broom Creek Formation. The depth scale is exaggerated to highlight structural highs and lows. (Image courtesy of EERC)

landowners and other key stakeholders through various open houses, virtual meetings and other outreach efforts.

“Our people at the Young Station are personally invested in the safety and environmental responsibility of this project because this is their home,” McLennan said. “We are thankful for the support we’ve received from the communities in Oliver County and remain committed to communicating with them as the project continues ahead.”

In 2022, Minnkota will work with its partners to further refine Project Tundra’s engineering plans and overall project economics. A request has been submitted to the state’s Lignite Research Council to provide special grant funding to assist with the final construction-ready engineering plan.

Minnkota anticipates making a decision on whether to move forward with construction of Project Tundra in late 2022. The approximately \$1 billion project would primarily be funded through federal 45Q tax credits. If approved by the cooperative’s board of directors, construction could begin near the end of the year with a goal to commence operations in 2026.

To learn more about Project Tundra, visit [ProjectTundraND.com](http://ProjectTundraND.com).



Test wells were drilled in 2020 to ensure the proposed storage zones were suitable for CO<sub>2</sub> storage.



# Save money and energy in 2022 with energy efficiency rebates!



**Energy efficiency rebates for members remain in effect for 2022. Please see the chart for a sample of incentives.**

All incentives, criteria and guidelines for resident and business members can be found at

**pkmcoop.com**

or by calling

**218-745-4711**

## Sample 2022 Electric Rebates for Members

EQUIPMENT	SPECIFICATIONS	REBATE
Air-source heat pump	<17 SEER ≥17 SEER	\$300/ton* \$500/ton*
Ground-source heat pump	Closed loop Open loop	\$500/ton* \$500/ton*
Electric water heater	Must be on off-peak program	\$200-\$500 per unit
Off-peak electric heat (plenum, baseboard, hanging heater, etc.)	Must be resistance electric on off-peak program	\$50/kW*
Electric boiler, brick storage, slab storage	Must be on off-peak program	\$80/kW*
Electric vehicle (EV) charger	240V-rated Level 2 charger on off-peak	\$100/kW/limit \$500 per account

*Every install must be new equipment and provide proof of purchase unless site verification is approved. \*These amounts include a rebate from Minnkota Power Cooperative, which has a capped rebate, so call for details.*

**All criteria are listed on the rebate form.**

✓ Rebates? **Check!**

✓ Energy efficiency tips? **Got 'em!**

✓ Smart gadgets? **You bet!**

Your cooperative's refreshed **Value of Electricity website** will show you all the ways you can use electricity more effectively to add convenience, intelligence and savings to your home.



**VALUE OF  
ELECTRICITY**

Check it all out at  
**valueofelectricity.com**

# The value of an air-source heat pump

Half of your home's energy use flows to heating and cooling, so why not make the process as efficient, affordable and responsible as possible? PKM Electric Cooperative can help!

If you're replacing your system or building new, an air-source heat pump (ASHP) offers the perfect balance of comfort and savings, both in the hot summer and the frozen winter. The technology has advanced rapidly and is now powerful enough for our weather here in Minnesota.

## How does it work?

The equipment functions just like an air conditioner, but uses the reverse process to warm your home when it's cold. It's a heating system and A/C in one, reliably powered by electricity. A heat pump is so efficient because it doesn't generate heat – it simply transfers existing heat where you want it.

The mechanics of an ASHP are innovative but the process is simple. When it's warm outside, the heat pump pulls the warm air out

of your home and moves it outside. When it's cold outside, it works in reverse, pulling the heat from the outdoor air and transferring it inside. When it's too cold to pull enough heat out of the chilly air – or if you're a part of PKM Electric's popular off-peak program – the system can easily switch to a backup energy source, maintaining comfort and efficiency.

## What do I save?

The off-peak program allows you to receive a reduced electricity rate, close to half of the standard rate. Plus, PKM Electric offers large rebates on ASHP equipment. In addition to saving money, an ASHP will also help you limit your use of propane or natural gas, protecting you from volatile pricing and shortages.

You'll ultimately consume less, save more and electrify your future. That's the value of an air-source heat pump.

If you want to learn how PKM Electric Cooperative can help you save with an ASHP, call us at **218-745-4711** or visit **pkmcoop.com**.



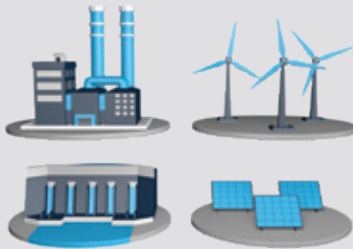
See the video at  
[ValueofElectricity.com](https://www.valueofelectricity.com)



# YOUR ELECTRIC GRID

A reliable and resilient electric grid is essential to our modern lives – even if we don't think about it often. The electricity you use is generated, delivered and consumed almost instantaneously, and that means resources must be available to produce electricity every second, every day.

Your electric grid is unique to our region, ready to respond to any challenges that come its way. PKM Electric Cooperative receives its energy from Minnkota Power Cooperative. The co-ops work together to make grid choices that create reliable and affordable electricity for your home, farm or business.



As a part of the Minnkota system, PKM Electric is connected to a diverse mix of energy resources.

The backbone of the Minnkota grid is coal, a resilient resource that's consistently energized and stable in extreme weather conditions.



Coal is just one piece of the power puzzle. About 42% of Minnkota's generation capacity comes from carbon-free resources like wind and hydro.



Minnkota collaborates with grid neighbors to buy and sell excess power, keeping the entire grid balanced and dependable.

Wind and solar are a growing part of our nation's energy mix, but they are not positioned to meet the 24/7 demand for electricity. Although battery storage is improving, it is still many years away from large-scale deployment. 24/7 resources (like coal and natural gas) will be needed well into the future for grid reliability.



Minnkota's generated power travels through a system of high-voltage power lines, substations and distribution lines before it makes its way to YOU!

**WANT TO SEE  
THE VIDEO?**

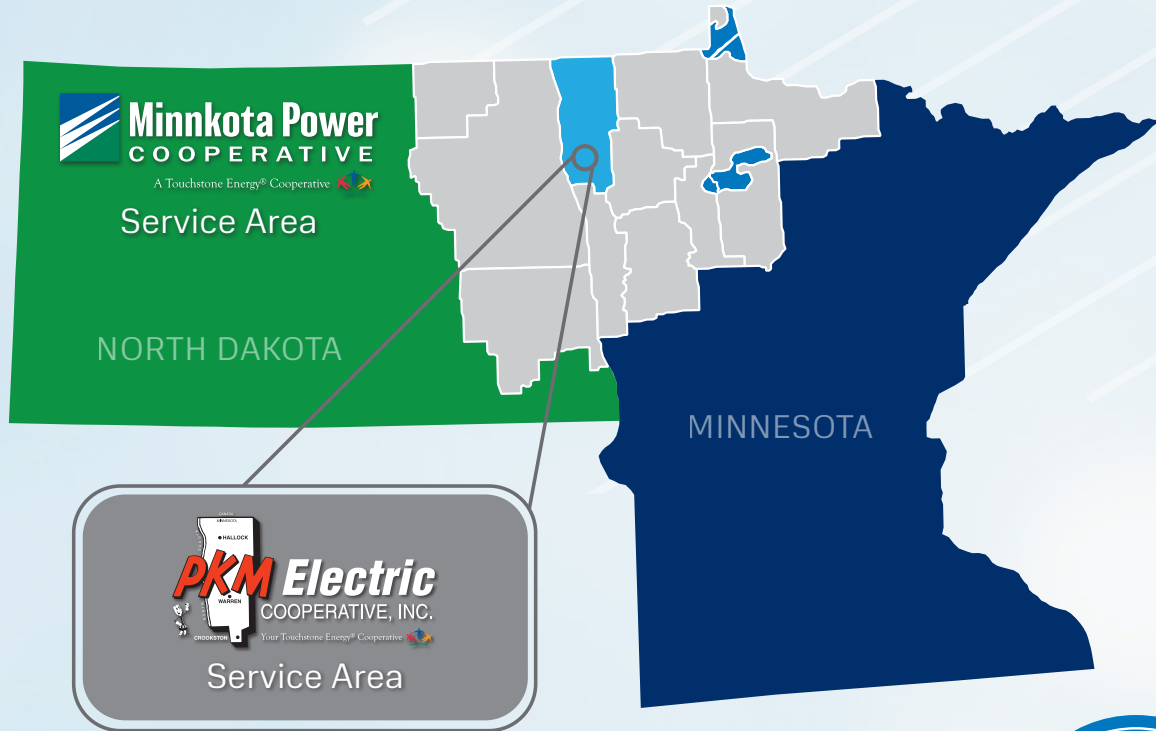


**SCAN THIS CODE  
WITH YOUR PHONE!**



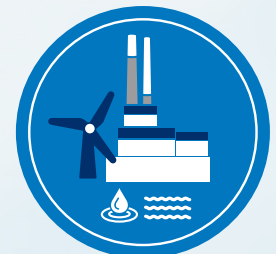
# How electricity gets to YOU

Electricity doesn't just happen – it must be generated, sent incredible distances, and then converted to flow safely to farms and communities. PKM Electric Cooperative works hand-in-hand with our wholesale power provider, Minnkota Power Cooperative, to deliver reliable energy at every point in the process. Take a look!



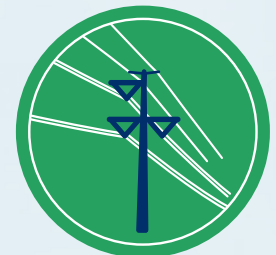
## Generation (Minnkota Power Cooperative)

Minnkota produces electricity from a diverse mix of energy sources. Around 55% of its generation capacity is derived from coal at the Milton R. Young Station in Center, N.D. (near Bismarck). The remainder of Minnkota's generated electricity comes from North Dakota wind turbines (34%), hydropower from Garrison Dam (8%) and other resources (3%).



## Transmission (Minnkota Power Cooperative)

Once the electricity is created at one of Minnkota's generation facilities, it is sent through miles and miles of high-voltage transmission lines across North Dakota and Minnesota. These lines branch out into multiple local service areas, like PKM Electric Cooperative.



## Distribution (PKM Electric Cooperative)

This is where your cooperative takes over. The high-voltage power from the transmission line is "stepped down" (or converted to a usable voltage) at a local distribution substation. From the substation, the electricity enters the distribution lines that are built and maintained by your cooperative team. These lines are the last path to your home or business.



# Board meeting **highlights** *November and December*

## **A regular meeting of the board was held Tuesday, Nov. 30, 2021.**

Mark Hatton, president who presided, asked for roll call. Upon calling the roll, the president reported that all directors were present with the exception of Director Goodwin.

Director Woinarowicz and Director Aakre gave their reports on Minnkota and Square Butte.

Line Superintendent Joe Marcotte presented the monthly safety and operations report, indicating no accidents and no lost time. MREA was present on Nov. 23 with the topic of OH lines and grounding. Highlights from Marcotte's report included Olson Underground working very hard to get the rest of our underground cable installed before freeze up and the linemen are busy terminating the ends. Marcotte and two other linemen went down to South Dakota to look at the new Truck 70. They made a few small changes and it is estimated to be delivered before the end of the year. The new #61 we ordered in February 2020 has a targeted build date of Dec. 6, so we will probably not see this until 2022. Marcotte also shared praises for the linemen for doing a great job this fall working longer hours in not-so-favorable weather at times to get these projects done. In total we installed around 95,000' of 4/0 cable and around 237,000' of 1/0 cable. Our pole testing was done by RAM and Shelquist with about 27 bad poles. Most were along the river.

Manager of Member Services Jeff Rustad shared recent activities within his department. Rustad shared some highlights from his last session of MIP. He has been working on a couple gateways for the RF metering. The gateways have been programed with new cell modems, having them find their way to the Yukon server. Randy Vetter has finished his calculations for summer IPP. All the accounts we had did a good job of shedding load and most did not have much yellow zone run time. Minnkota has been doing some yellow zone control and dual heat. We have received a lot of calls about off-peak pricing compared to electric since the rising price of oil and propane.

The CFO opened her report with an office update to the directors highlighting that we have been busy working on closing out 219 forms and year-end projects are right around the corner. The 2022 budget preparations continue with the capital requirements budget included for discussion later in the meeting and the operating budget requiring closer year-end reported data for more accuracy.

The CFO continued with the presentation of the Operating and Financial report for the cooperative. Historical data for margins for a 10-year PTD and YTD comparison were provided and discussed. She reported that we ended the month with a modest, but respectable

operating margin considering the reduced revenue we have experienced throughout the year. Expenses remain well below budget. The vehicle costs per mile remain low. Other financial data was presented and discussed along with the current tier of 4.32 up from last year.

The CEO was unable to attend the meeting.

Upon presentation of the reports from the management staff, questions and comments from the board concerning their reports were addressed. The monthly reports of the CEO and management staff of the cooperative presented at the meeting to the board were received.

Line Superintendent Joe Marcotte presented information to the directors about ordering a new digger truck. We need to get one on order due to the extended wait time. It will be put on the 2023 budget. Marcotte is working on getting final quotes on pricing. We would keep the new digger in Warren and move the current

digger from Warren up to Hallock. The board approved the order.

Brady Martz & Associates, P.C. has completed the 990 for review. The drafted information was distributed to the directors for verification of completeness and accuracy. The board approved the content of the Form 990 prepared by Brady Martz & Associates.

The 2022 operating budget preliminary review was discussed and will be finalized at the December meeting for discussion and approval as the November reported financials will aid in accuracy for budget projections.

The 2022 capital budget preliminary review was discussed and will be finalized at the December meeting for discussion and approval. Staff held several meetings to discuss capital needs going forward.

Other agenda items discussed were the Cooperative Network board of directors ballot and dates and locations discussed for the winter planning meeting.

## **Apply now for a PKM Scholarship**

Individuals in PKM's service area who are members of the cooperative, their spouses or children.

- Applicants planning to attend an accredited postsecondary educational institution in pursuit of their initial postsecondary degree. These institutions could include technical colleges, universities or colleges.

- Eligible applicants include high school seniors, active college students enrolled in an accredited institution in pursuit of their initial degree and nontraditional students who are initiating or resuming their initial postsecondary degree. Nontraditional students include "older than average students" or individuals who did not begin a program after high school. This could also include students whose first postsecondary degree was interrupted.

**Postmark  
Deadline:  
April 15, 2022**

**Applications  
available at local  
schools, PKM office  
or online at [www.pkmcoop.com](http://www.pkmcoop.com)**

## **PKM ELECTRIC COOPERATIVE POLITICAL LEADERS**

### **Federal Legislators**

#### **President Joe Biden**

The White House  
1600 Pennsylvania Ave. NW  
Washington, D.C. 20500  
[www.whitehouse.gov](http://www.whitehouse.gov)  
202-456-1111

#### **Senator Tina Smith**

720 Hart Senate Office Building  
Washington, DC 20510  
Phone: 202-224-5641

#### **Senator Amy Klobuchar**

425 Dirksen Senate Building  
Washington, D.C. 20510  
[www.klobuchar.senate.gov](http://www.klobuchar.senate.gov)  
202-224-3244  
1-888-224-9043 (Minnesota office)  
Fax: 202-228-2186

#### **Congresswoman Michelle Fischbach**

1237 Longworth House Office Building  
Washington, D.C. 20515  
[www.fischbach.house.gov](http://www.fischbach.house.gov)

202-225-2165

Fax: 202-225-1593

### **State of Minnesota Legislators**

#### **Governor Tim Walz**

Capitol Building, Room 130  
75 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155  
800-657-3717  
[www.mn.gov/governor](http://www.mn.gov/governor)

#### **Senator Mark Johnson**

95 University Avenue W.  
Minnesota Senate Building,  
Room 3111  
St. Paul, MN 55155  
651-296-5782  
[sen.mark.johnson@senate.mn](mailto:sen.mark.johnson@senate.mn)  
[www.senate.mn/members](http://www.senate.mn/members)

#### **Representative John Burkel**

309 State Office Building  
St. Paul, MN 55155

651-296-9635

[rep.john.burkel@house.mn](mailto:rep.john.burkel@house.mn)

#### **Representative Deb Kiel**

255 State Office Building  
St. Paul, MN 55155  
651-296-5091  
800-339-9041  
[rep.deb.kiel@house.mn](mailto:rep.deb.kiel@house.mn)



The tentative plan for the winter planning meeting will be to have it at Minnkota on Jan. 24 and 25, 2022.

The president reminded the directors that the 2022 ACRE and REPAC contributions are now being accepted. Please submit to the administrative assistant for processing.

Financials were provided for Carr's Tree Service. Other informational items were presented including 2020 and 2019 FEDAC and Carr's Tree Service Compilation and YTD work comp totals.

### **A special meeting of the board was held Monday, Dec. 20, 2021.**

Mark Hatton, president who presided, asked for roll call. Upon calling the roll, the president reported that all directors were present. Director Owens participated via phone conference.

Director Woinarowicz and Director Aakre gave their reports on Minnkota and Square Butte.

Line Superintendent Joe Marcotte provided his report via the emailed monthly board packet as he was unable to attend due to his attendance at a regional meeting in Bemidji.

Manager of Member Services Jeff Rustad shared recent activities within his department. Minnkota did its annual ripple voltage test on Dec. 7-8, 2021. We did the normal accounts and added all the substations with a couple extras. The gateway is set and running on the Robbin substation for the AMI metering. Rustad has about 50 meters changed to RF on this substation already. Rebates for 2021 were presented with discussion to continue rebates for 2022.

The CFO opened her report with an office update to the directors that the office was continuing to work on closing out work orders for the year and 219 form processing. There is an abundance of paperwork that needs to be addressed prior to year-end close and the annual inventory in February.

The CFO continued with the presentation of the Operating and Financial report for the cooperative. Historical data for margins for a 10-year PTD and YTD comparison were provided and discussed. Other financial data was presented and discussed. The current tier is up from last year at 4.29. We ended the month with a larger-than-expected operating margin considering the reduced revenue we have experienced throughout the year. Expenses remain well below budget as we head into the last few weeks of 2021.

The CEO was unable to attend the meeting.

Upon presentation of the reports from the management staff, questions and comments from the board concerning their reports were addressed. The monthly reports of the CEO and management staff of the cooperative presented at the meeting to the board were received.

The 2022 operating budget was presented to the directors for consideration with the changes recommended from last meeting. Staff held several preparation meetings and shared their methods of recommendation with the directors. The board approved the 2022 operating budget.

The 2022 capital requirements budget was presented to the directors for consideration. Staff held several meetings to discuss capital needs going forward. The board approved the 2022 capital budget.

With the approaching NRECA Annual and Regional Meeting and NRTC Annual Meeting, voting delegates had been selected at the August 2021 meeting.

An engagement letter confirming the auditing services provided to PKM for the year ended Dec. 31, 2021, by Brady Martz was presented. The board understood and accepted the terms outlined in the Brady Martz engagement letter by signing the required document.

Policy Bulletin 2-8.2: Anti-Nepotism was presented

for discussion. The policy establishes terms for relatives and significant others of board members or cooperative employees may not be employed by cooperative. Relative is defined as a spouse, child, brother, sister, parent, aunt, uncle, nephew or niece, son-in-law, daughter-in-law, brother-in-law, sister-in-law, mother-in-law and father-in-law, as well as an aunt, uncle, nephew, niece, or child of a board member's spouse or employee's spouse.

The board adopted Policy Bulletin 2-8.2: Anti-Nepotism effective Dec. 20, 2021, and a copy of Policy Bulletin 2-8.2 was appended to the official minutes of this meeting.

The staff presented the revised and updated Restated and Amended Wholesale Power Contract reflecting the Minnkota board's recent action to approach the membership to extend our contractual relationship. Minnkota works with RUS to affirm that the modification aligned with their requirements.

The board approved the Restated and Amended Wholesale Power Contract providing for the extension of the term of said contract through Dec. 31, 2058, and any applicable additional delivery points under it; and the president and secretary are authorized to execute said Restated and Amended Wholesale Power Contract.

Financials were provided for Carr's Tree Service. Their next meeting will be held on Jan. 13-14, 2022.

The staff concluded the meeting with miscellaneous information including information on lead times on material, cooperative energy sales, director training opportunities and NISC director election results.



## **Notice on service updates/new services**

***Attention members who are planning for new service(s) construction and/or improvements:***

If you are looking to add a new service or are adding load and may need to upgrade your existing service, please give Joe Marcotte a call at the PKM office so he can add you to the schedule. Materials such as transformers, yard switches and wire can be extremely hard to get and may be 6 to 12 months out. Call **218-745-4711**.

## **Save money with off-peak**

Propane prices are high right now. Did you know you could save on winter costs by incorporating off-peak electric into your heating system?



### **TAKE A LOOK!**

- Off-peak resistance electric heat at 5.4¢/kWh\* is equal to paying \$1.40 for a gallon of propane.
- An even more efficient off-peak air-source heat pump at 5.4¢/kWh\* is equal to paying 75¢ for a gallon of propane – and that's a steal.

The savings add up fast! Call PKM Electric for more information on our voluntary off-peak program.

*\*plus wind surcharge*

## **ELECTRIC WATER HEATER PROGRAM**

Efficient

Safe

Reliable

Low upfront cost



Contact  
**PKM Electric at  
218-745-4711**  
for more  
information

*Rebates are available!*



## Winter energy-saving tips

Keep the cold out and the warm in this winter with the following energy and money-saving tips from PKM Electric.

**SEAL AIR LEAKS** – Air leaks are among the greatest source of energy loss in a home. According to the Department of Energy, caulking, sealing and weatherstripping where appropriate can save 10-20% on heating and cooling. Look for air leaks in walls, ceilings, windows, doors, lighting and plumbing fixtures, switches and electrical outlets. One way to check for this is to hold a lit incense stick on a windy day next the items mentioned above and other places where air may leak. If the smoke stream travels horizontally, you have located an air leak.

After finding the leaks, consider the following:

- Weatherstrip doors and windows.
- Caulk and seal air leaks where plumbing, ducting or electrical wiring comes through walls.
- Install foam gaskets behind outlet and switch plates on exterior walls.
- Use foam sealant on larger gaps around window trims, baseboards and other places.
- Check to ensure the fireplace damper is closed and fits properly when not in use.

**ITEM TO NOTE:** When adding insulation or air sealing, be sure to consult a

professional if the job is complicated or the home is tightened so much that mechanical ventilation may be needed. There are professional services that offer a complete energy audit with blower door and thermal camera imaging for a fee.

**FURNACE FILTER** – Replace your furnace filter as necessary or recommended. There's a reason this is one of the most common tips mentioned. A

dirty filter causes a furnace to work harder.

Put a timer on your block engine heater – if you have cars, trucks or tractors plugged in, a timer can help you save energy.

**CHANGE LIGHTS TO LED** – Save up to 80% on lighting by going to LED over incandescent. Just look on the box to ensure the lumen output is equal to the ones you are replacing. Many more tips are available at [www.energy.gov](http://www.energy.gov).

### Estimating energy usage and cost

When it comes to energy use, every home is unique. Home construction, the number of appliances, how they are used and the length of time they are used all factor into your monthly electric statement. If you want to get a better handle on where your energy dollars are going, use the following information to begin estimating how much electricity your appliances use.



**Step 1** – Since the wattage of an appliance or electrical equipment determines the electrical usage per hour, the first step is to determine the wattage. The wattage of an appliance is found on the serial plate. It is possible that electrical equipment may be expressed in volts and amperes rather than watts. If so, multiply volts and amperes together to determine the wattage. – **Example: 120 volts x 12.1 amps = 1,452 watts**

**Step 2** – Use the formula to estimate usage and cost. The formula is (watts x hours of operation)/1,000 watts = kilowatt-hours. To find the cost, multiply the kWh by the rate. Keep in mind that you are billed in kWh. 1,000 watts equals 1 kilowatt. – **Example: A light uses 100 watts and is left on 15 hours. How many kWh are used and what does it cost you?**

$$\begin{aligned}\text{kWh use} &= (100 \text{ watts} \times 15 \text{ hrs}) / 1,000 \text{ watts} = 1.5 \text{ kWh} \\ \text{Your cost} &= 1.5 \text{ kWh} \times \$1.21 = \$1.815\end{aligned}$$