

PKM NEWS

Electric Cooperative

NOVEMBER-DECEMBER 2021 / PKMCOOP.COM

*Merry
Christmas*

*and Happy
New Year!*

PKM Electric Cooperative
sincerely thanks all of our
members for the continuous
support they've given us this year.

We wish you a very
merry Christmas and
a wonderful new year!



From all of us at PKM Electric Cooperative!

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Member Service Report

We are already at the end of the year, and it feels like it went by so fast. We are receiving calls lately about propane and fuel oil prices compared to electric off-peak. Our off-peak rate is 5.4 cents currently and you want to add the 0.4 cent wind surcharge, so it is 5.8 cents. That compares to \$1.40 propane and \$1.90 fuel oil. If you have a heat pump on the off-peak rate, it compares to 70 cent propane and 95 cent fuel oil. We are seeing more members' heating systems upgraded to gas furnaces with a plenum heater and heat pump. If you are looking at updating, make sure you check out our rebates that may apply and ask your HVAC contractor about them also. We have seen about 27 hours of control time so far this season. Some of it has to do with scheduled power plant repairs and some not scheduled. Also, 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. You can add it to your bill up to 72 months. The cost to set it up is \$25 per thousand and you need to send the setup fee

with the loan forms when you mail them or drop them off. If you have any questions, please call.

I think this year has been one of the busiest years PKM has ever had. The lineworkers closed out a record number of work orders this year and are still working on finishing up a few more services for the railroad. The line crew did an excellent job this year. They installed 332,000 feet of underground cable in 2021 and added 60 new services. They needed to work longer hours in not-so-favorable weather to make sure projects would be finished before freezing up. We also had to bore the river up by Drayton to replace the existing feed for the Robbin substation.

The banks have been sluffing on the Minnesota side, so we needed to replace the existing feeder and get it further away from the riverbanks. PKM has also started changing meters on the Robbin substation to RF. We hope to have these done by year end. This covers about eight miles south of Highway 11 by the river and about six miles north along the river. Our new replacement

boom truck arrived that has been on order since about April 2020. Lead times on everything we purchase have been extended. Joe Marcotte has done an excellent job making sure PKM has the materials on hand to complete our projects and has enough on hand if we need to do repairs or replace existing equipment. We added a new lineworker – Kade Leeper in Hallock. He is a terrific addition to the PKM crew. We want to also welcome Sara Wurtzel to the office crew. You may have already spoken with her on the phone.

Hope everyone has a Merry Christmas and a Happy New Year. Until next year,

– **Jeff Rustad**, PKM member service manager



**YOU MAY NOT BE READY FOR WINTER...
BUT YOUR HEATING SYSTEM
SHOULD BE.**

Call our energy experts to learn how to
PREPARE & SAVE with off-peak heating!



**2022
HAPPY
NEW YEAR**

**PKM Electric Cooperative's office
will be closed
Friday, Dec. 31,
as we observe New Year's Day.**

November/December 2021 (Vol. 75, No. 6)

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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
website: 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 Dagoberg

This institution is an equal opportunity provider and employer.

Value during volatility

Minnkota and its members expect active off-peak season spurred by volatile energy markets

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 help 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 Power Cooperative (PKM Electric Cooperative'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.

“The projection is that these high prices will likely drive our demand response more than we've seen in the past years,” Sailer said.

Minnkota's energy marketers are preparing for 200 hours of off-peak 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.

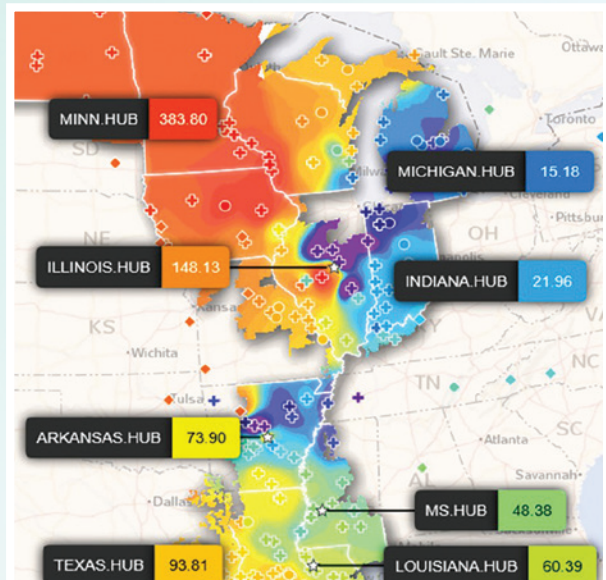
“If we have days of low intermittent resources in the region, like wind power, the expectation is that the markets will respond and you'll see higher markets, which will result in more off-peak control,” he said.

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.

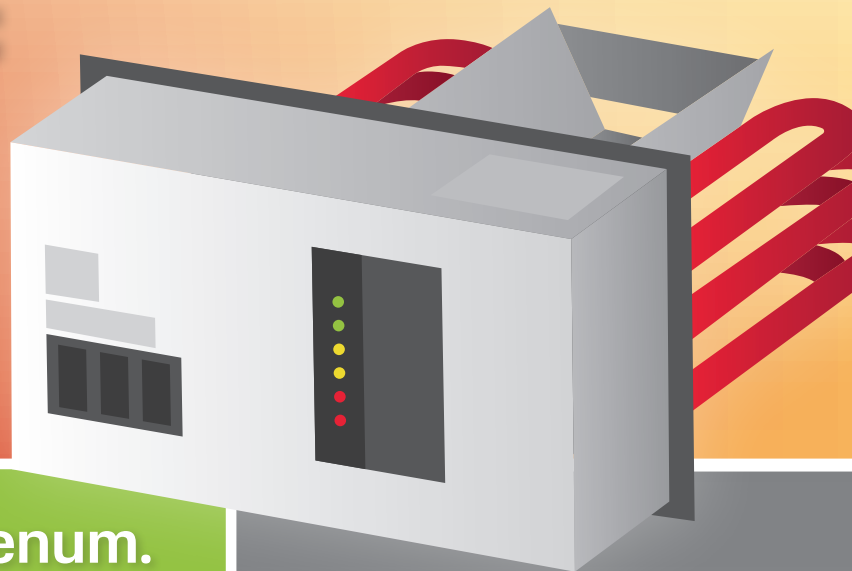
As we enter the winter, Sailer urges those who are a part of the off-peak program to make sure they have adequate backup fuel supply now. When the cooperative runs its load control tests before the peak of the cold season, confirm that all parts of your heating system are running smoothly.

“It's not just natural gas – it's propane, it's all fuel sources that have seen an increase in cost, which leads to people reliant on their off-peak system,” Sailer said. “Members should be making sure their system works.”



This image of the Midcontinent Independent System Operator (MISO) energy markets on Feb. 13, 2021, shows a swath of red, where market prices in our region climbed to about 25 times higher than recent averages. With natural gas prices high, any dip in intermittent resource generation – like wind – can send costs soaring.

Scared of propane prices?



Protect yourself with a plenum.

The costs of fuels used to heat our homes in the winter are rising, and they're rising fast. Propane prices entered this year's cold season nearly 100% higher than they were at the same time last year. In a state as frigid as ours, heating with only propane can quickly take a chunk out of your holiday shopping budget – and beyond.

Protect yourself from the volatile price of propane by utilizing a dual-fuel electric plenum heater on our popular off-peak program. The cost of off-peak electricity has remained low and stable for more than a decade, unlike the seasonal swings of propane. If you already have a plenum, make sure it's turned on and working smoothly to take advantage of enormous savings.

A plenum pairs easily with your existing oil or propane forced-air system. It uses the furnace fan you already have to move air across heater elements to heat your home, as well as the same thermostat and ductwork. Most of the fall and winter

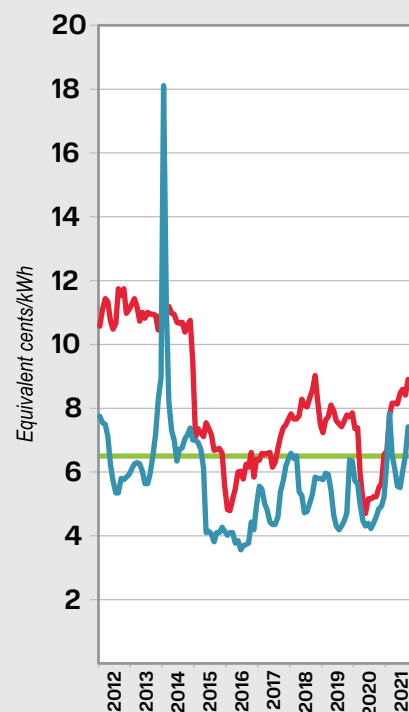
season, the plenum will deliver reduced-cost off-peak electric heat to keep your space cozy and comfortable. When your cooperative finds it necessary to lower the electric demand on its system (usually 100-200 hours per year, often during extreme cold), it will remotely switch your heat to a backup fuel, like propane. You notice no difference in comfort – but you'll notice a big difference on your energy costs!

Plenums are a safe and clean way to warm your home, and they allow you to receive the off-peak heating rate – about 50% of the standard rate – as well as a large rebate on installation. Plus, installing a plenum heater will have you relying less on your gas furnace, which can help increase the furnace's lifespan. In many cases, a plenum can be installed in conjunction with an air-source heat pump, which brings additional benefits.

Propane prices are projected to remain high throughout the winter, so call PKM today to find out how you can get started with a plenum heater.

This 10-year snapshot shows how volatile propane and fuel oil prices can be over time, as off-peak electricity rates stay low and steady. Around 2013, propane followed an upward trend that peaked nearly three times higher than off-peak electricity, and it is currently on the rise again.

Average Home Heating Prices
(Last 10 years)



— Off-peak Electricity
— Fuel Oil at 80% Efficiency
— Propane at 90% Efficiency

COLD-CLIMATE HEAT PUMPS

Your perfect winter accessory

Have you heard the old rumor that air-source heat pumps just can't keep up with the extreme cold in our neck of the woods? Times have changed, my friend – cold-climate heat pumps (CCHPs) are now the hot-ticket item for every Minnesota home.

CCHPs take the design of an air-source heat pump and kick it up a notch. They integrate a variable speed drive compressor into the technology, keeping CCHPs highly efficient even when the thermometer hits zero. In fact, they've been given higher Heating Season Performance Factor (HSPF) ratings than standard air-source heat pumps.

JUST HOW EFFICIENT ARE CCHPS?

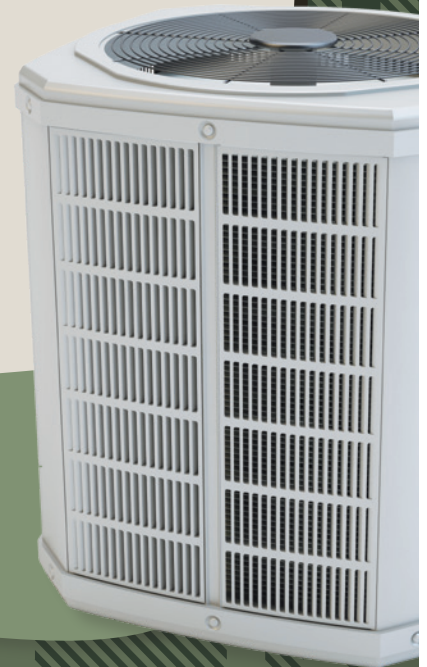
- When temperatures drop to below 47 degrees, CCHPs can run at 400% efficiency.
- At zero degrees, they still perform at 200% efficiency.
- Some companies even say their models remain efficient at as low as 20 below zero.
- Research has shown that CCHPs have been able to supply 90% of a home's heating needs with a 250% overall seasonal efficiency. That's pretty great, and it will save you a lot of money – especially with the volatile pricing of propane and natural gas these days.

PKM Electric Cooperative also offers a huge rebate and a reduced electric rate if you install your CCHP on the off-peak program. All you have to do is include a backup fuel source for the times when electric demand peaks – usually around 100-150 hours a year.

The added bonus of a CCHP is, like a standard air-source heat pump, the unit also provides your home cooling in the summer. The process is the same whatever the season. The heat pump pulls heat out of the outside air and pushes it inside in the winter, and pulls heat out of your home and expels it outside in the summer. Your house remains consistently comfortable during any wild Midwest temperature swings.

Contact PKM Electric Cooperative today to learn how you can save big and stay warm with a cold-climate heat pump!

UP TO \$500 IN REBATES!



Know the difference between the three categories of electricity generation resources

PKM Electric Cooperative uses a diverse mix of coal, wind and hydro power to ensure your 24/7 electricity needs are met. Electricity is a unique product because it operates in a near-instantaneous manner. It is generated, delivered to you and consumed in almost the same moment in time. While electricity storage technologies are in development, the vast majority of the electricity used across the country cannot currently be stored due to physical and economic constraints. Therefore, continuous electricity generation is required every second of every day.

But that doesn't mean all generation resources operate in the same fashion. There are three basic types of generation resources – baseload, peaking and intermittent – each of which bring different attributes to the grid. Learn more below about the operating characteristics for each resource.



BASELOAD

Baseload resources provide reliability and stability to the electric grid because they are designed to operate in a continuous manner during the vast majority of hours each year. Their dependable and predictable operation ensures power will be available when needed. The primary baseload resources on the U.S. electric grid are coal, natural gas and nuclear. Coal remains the most reliable and resilient resource in PKM Electric Cooperative's portfolio.



PEAKING

Peaking generation resources typically only operate when electrical demand is high (or "peaking"). These power plants are typically fueled by natural gas, diesel or biofuels and are designed to run a small percentage of the time each year. Peaking plants are able to ramp generation up and down more quickly than baseload resources, but have a much higher per kilowatt-hour cost of production because they are only used occasionally.



INTERMITTENT

Intermittent resources – like wind and solar – provide power to the grid on a variable basis. If the wind isn't blowing or the sun isn't shining, these resources are not able to produce electricity. Because electricity storage is still limited at grid scale, baseload and peaking resources are required to fill in the gap to ensure reliable electric service can be maintained. Production from wind and solar can be severely limited during extreme weather events, like a polar vortex, when communities need reliable electricity the most.



Energy Efficiency Tip of the Month

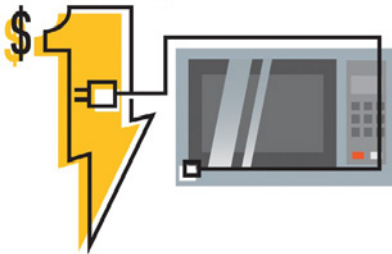
Maximize your heating system's performance by inspecting, cleaning or replacing air filters once a month or as needed to reduce energy costs and prevent potential damage to your system.

Make sure radiators, baseboard heaters and warm-air registers aren't blocked so air can flow freely.

Source: Dept. of Energy



What can you get for \$1?



6 hours of microwave use

The contents of your grocery cart may get expensive, but not the power to prepare them! It takes only \$1 of electricity to use a microwave for around six hours, so you can keep your chicken defrosting or your nachos melting without breaking the bank.

Electrical Inspectors

Marshall and Kittson Counties

Ronald Ditsch
218-779-6758

Polk County

George Stage
218-284-1083

Cold Weather Rule and Energy Assistance Program

Cold Weather Rule

In accordance with Minnesota's Cold Weather Rule (216B.096), electric service cannot be disconnected for nonpayment between Oct. 1 and April 30 if electricity is the primary heat source and ALL of the following statements apply:

- Your household income is at or below 50% of the state median household income. Income may be verified on forms provided by PKM Electric Cooperative or by the local energy assistance provider.
- You enter into and make reasonably timely payments under a payment agreement that considers the financial resources of the household.
- You receive referrals to energy assistance, weatherization, conservation or other programs likely to reduce your energy bills from PKM Electric Cooperative.

MINNESOTA'S COLD WEATHER RULE DOES NOT COMPLETELY STOP WINTER DISCONNECTS.

Before disconnecting electric service to residential members between Oct. 1 and April 30, PKM Electric Cooperative must provide:

- A 30-day notice of disconnection;
- A statement of members' rights and responsibilities;
- A list of local energy assistance providers;
- Forms on which to request Cold Weather Rule protection; and
- A statement explaining available payment plans and other options to continue service.

Energy Assistance Program

The Energy Assistance Program (EAP) is a federally funded program through the U.S. Department of Health and Human Services, which helps low-income renters and homeowners pay for home heating costs and furnace repairs. Household income must be at or below 60% of the state median income (\$65,964 for a family of four) to qualify for benefits. **Applications must be received or postmarked by May 31, 2022.**

To learn more about the EAP program or to apply for assistance:

- Visit the Minnesota Department of Commerce Energy Assistance website, <https://mn.gov/commerce/consumers/consumer-assistance/energy-assistance/>, for more details and to access the application portal.
- Contact your county EAP service provider for additional information and assistance.

Northwest Community Action
218-528-3258 or 800-568-5329

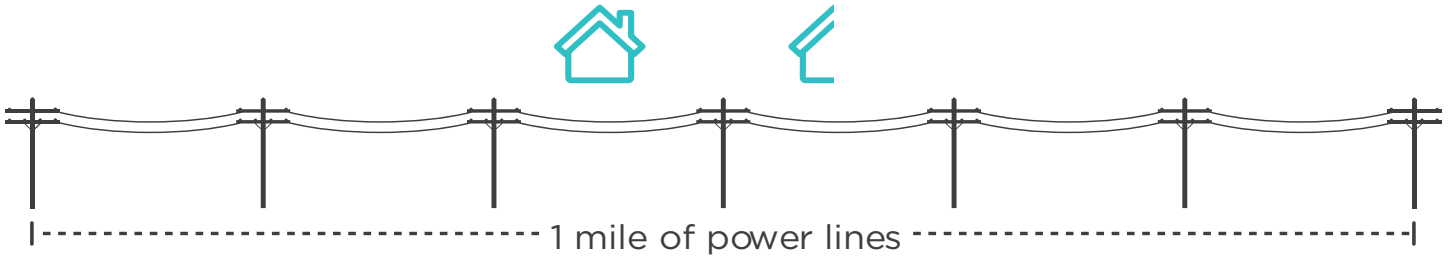
Tri-Valley Opportunity Council, Inc.
218-281-9080 or 866-264-3729

PKM Electric Cooperative exists because of you, and we are dedicated to the people and communities we serve. If you are having difficulty paying your electric bill and do not qualify for either of these programs, please contact **Chelsy Davey at 218-745-4711** to set up a payment plan.

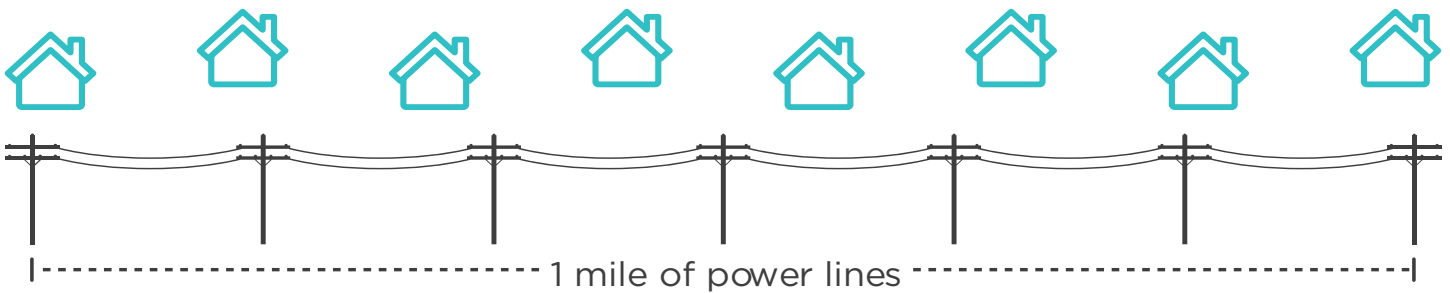
GOING THE EXTRA MILE

Electric co-ops maintain more miles of power lines per consumer than other electric utilities. Even though we power fewer consumers on our lines compared to other utilities, we'll always go the extra mile for you, the consumer-members we proudly serve.

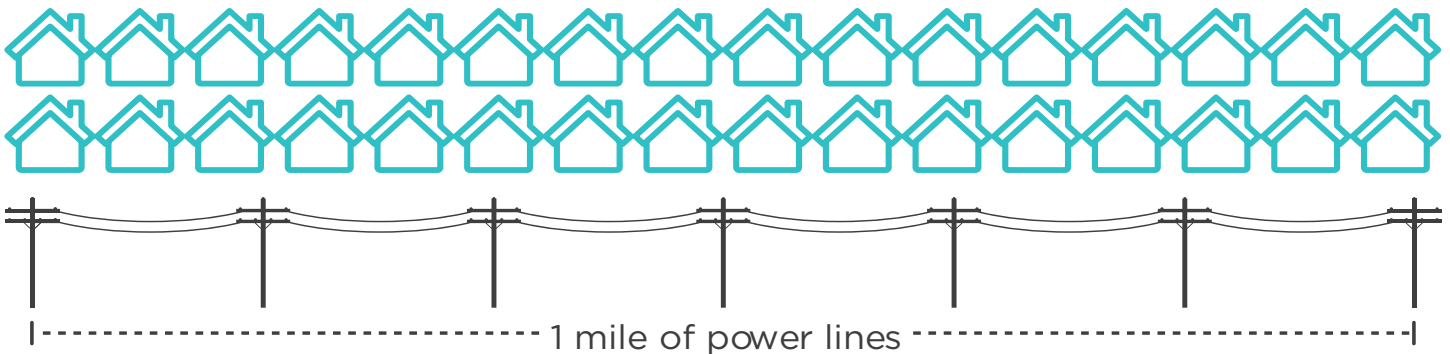
PKM ELECTRIC COOPERATIVE – Serves 1.6 consumers per mile of line



ELECTRIC COOPERATIVES – Serve 8 consumers per mile of line



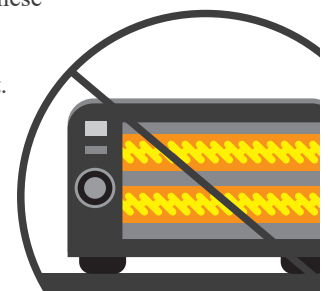
OTHER ELECTRIC UTILITIES – Serve 32 consumers per mile of line



TIPS TO DITCH THE SPACE HEATER

Space heaters are energy hogs, and older models can be extremely dangerous. This winter, ditch the space heater and try these alternative solutions to stay cozy.

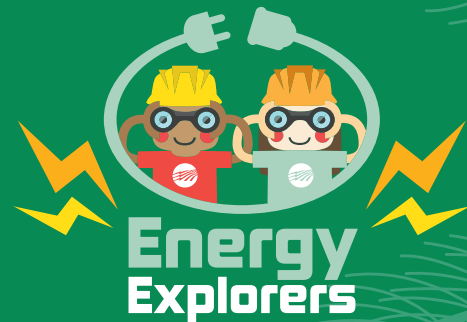
- Use an electric blanket to keep warm during the night.
- Caulk and weatherstrip around all windows and doors to prevent heat loss.
- Consider adding insulation to your attic and around duct work.



HOLIDAY SAFETY WORD SEARCH

Remember to keep electrical safety in mind this holiday season!

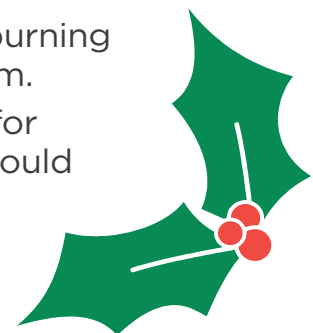
Read the safety tips below, then find and circle the bolded words in the puzzle.



D	T	T	X	M	L	N	L	W	V	B	H	G	P	M
P	E	Y	E	N	H	S	A	G	E	T	Q	W	C	O
D	C	R	A	K	P	T	C	K	J	X	N	C	J	Q
E	X	R	E	I	O	J	I	T	B	S	L	E	Y	I
M	P	W	W	T	W	F	R	V	V	Z	U	U	V	J
X	R	K	Z	Z	A	T	T	L	X	W	L	M	X	Y
D	T	Z	G	P	N	W	C	C	N	L	Z	A	H	Z
I	N	S	P	E	C	T	E	D	P	F	R	R	Z	T
D	P	G	V	B	E	E	L	L	Q	P	H	V	W	F
A	J	K	F	L	B	A	E	S	K	H	I	Z	W	M
N	M	V	D	T	W	V	X	R	I	R	B	H	U	C
C	O	N	B	B	R	W	O	H	O	W	Q	N	Q	P
X	A	W	X	S	N	O	I	T	A	R	O	C	E	D
C	K	L	B	T	K	R	A	J	B	C	M	D	Y	P
X	C	M	A	Y	S	K	B	O	Y	Q	M	Q	K	Q

- Do not overload electrical outlets with too many **decorations** or appliances.
- Make sure your Christmas tree is **watered** daily.
- Turn off all **electrical** decorations before leaving home or going to sleep.

- Never leave a **candle** burning if you're not in the room.
- Extension cords used for holiday decorations should always be **inspected** for damage or exposed wires.



Board meeting highlights *September and October*

A regular meeting of the board was held Tuesday, Sept. 28, 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 Directors Malm and Woinarowicz.

Line Superintendent Joe Marcotte presented the monthly safety and operations report, indicating no accidents and no lost time. The linemen have been very busy working on installing underground for new services. They have installed around 13,000 feet of cable so far this year and have at least that much more cable to be installed before freeze up. PKM hired on Kade Leeper, one of our summer helpers, full-time for Hallock.

The manager of member services provided his report via the emailed monthly board packet as he was unable to attend due to his attendance at MIP.

The CFO opened her report with an office update. The office is working on transitions to new positions. Interviews were held for the office opening. The position was offered to Sara Wurtzel and accepted with a start date of Oct. 6, 2021. With the recent change to the Cold Weather Rule, we are wrapping up our disconnects for the year.

The CFO continued with the presentation of the operating and financial report for the cooperative, referencing her written report outlining details.

The CEO referenced his submitted written report outlining recent meetings he had attended. He highlighted information received at the CARRS meeting including a crew update – their employees have doubled in the last five years – and approving an auditor.

Upon presentation of the reports from the management staff and CEO, questions and comments from the board of directors 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.

Upon motion duly made by Director Goodwin, seconded by Director Aakre and unanimously carried, an executive session was called. The president returned the meeting to regular order concluding the executive session at 10:20 a.m.

At this point in the meeting, legal counsel Andrew Sorbo from Minnkota's legal team presented the Amended Articles and Bylaws for filing. Sorbo shared the prepared certificate for review and execution, as well as getting signatures on the Amendments themselves. Minnkota will file with the Secretary of State to finish the process.

Policy Bulletin 25-1: Electrical Vehicle Charging Program was presented by Andrew Sorbo for discussion. The policy's objective is to establish an incentive program for the installation of electric vehicle home charging equipment on the off-peak program. The policy establishes an incentive program for the installation of electric vehicle home charging equipment

on the off-peak program. The terms offering incentives which may include rebates offered through Minnkota Value of Electricity Campaign, as well as an off-peak rate for the charging of personal use electric vehicles by members. To qualify, members must have an active regular single-phase electric service at the same location in order to be eligible for this additional service under the terms of this policy.

Following discussion, upon motion duly made by Director Goodwin and seconded by Director Aakre, a resolution was unanimously adopted that the board of directors do hereby adopt Policy Bulletin 25-1: Electrical Vehicle Charging Program effective Sept. 28, 2021, and that a copy of Policy Bulletin 25-1 be appended to the official minutes of this meeting.

The CEO gave the directors an update on the Angus Electric Compressor Service.

The CEO shared that Rural Development (RD) Apply is our secured web-based Work Plan/Loan intake system. It is like the Data Collection System (DCS), where the Form 7 and Audit are filed. RD Apply needs documentation to grant access for PKM Electric to be responsible for submitting and certifying to the Rural Utilities Service.

Discussion was held to issue one release to Otter Tail

Power Company for an electric service for BNSF Railway. As has been discussed on other occasions, PKM is reluctant to issue releases but, this is a service of minimal usage. Also, requiring member-owners to contribute thousands of dollars to construction when existing Otter Tail line is nearby does not follow our philosophy to gain a new service.

Financials were provided for Carr's Tree Service.

A regular meeting of the board was held Tuesday, Oct. 26, 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 Woinarowicz.

Director Aakre gave his reports on Square Butte. In Director Woinarowicz's absence the CEO gave a report for Minnkota.

Line Superintendent Joe Marcotte provided his report via the emailed monthly board packet as he was unable to attend due to his attendance to Sioux Falls, South Dakota to look at the new truck.

The manager of member services provided an

Problems paying your electric bill?

Energy assistance may be available!

If you are receiving a low income or suffering from a temporary financial shortfall, these agencies may be able to assist you with your electric bill. We urge you to contact them immediately to avoid disconnection if you feel you are eligible for aid.



Northwest Community Action

PO Box 67
Badger, MN 56714-0067
(218) 528-3258 or 800-568-5329
northwestcap.org

Tri-Valley Opportunity Council, Inc.

1407 Erskine Street
Crookston, MN 56716
(218) 281-9080
Toll Free (866) 264-3729

PKM ELECTRIC COOPERATIVE POLITICAL LEADERS

Federal Legislators

President Joe Biden

The White House
1600 Pennsylvania Ave. NW
Washington, D.C. 20500
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
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

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

Senator Mark Johnson

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

Representative John Burkel

309 State Office Building
St. Paul, MN 55155

651-296-9635

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

update to directors regarding recent activities within his department. He received the three-phase meters that had been sent off to get repaired. Larry from Fault Finders was here Oct. 12 to repair cables at a member's shop.

The CFO opened her report with an office update. Sara Wurtzel started Oct. 6, 2021, and the transition has been great. There have been recent changes to the Cold Weather Rule, so we did not do any disconnects for nonpayment in October. The CFO continued with the presentation of the operating and financial report for the cooperative, referencing her written report outlining details.

The CEO referenced his submitted written report outlining recent meetings he had attended.

Upon presentation of the reports from the management staff and CEO, questions and comments from the board of directors 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.

Third quarter financials were reviewed by the board of directors and found to be an accurate representation of the first half financial transactions.

Discussion was held to issue one release to Otter Tail Power Company for an electric service for Polk County Highway Department. As has been discussed on other occasions, PKM is reluctant to issue releases but, this is a service of minimal usage. Also, requiring member-owners to contribute thousands of dollars to construction when existing Otter Tail line is nearby does not follow our philosophy to gain a new service.

Discussion was held to issue another release to Otter Tail Power Company for an electric service for BNSF Railway.

The CEO shared information on the NISC director election to the directors.

Financials will be provided when received for Carr's Tree Service.

This is hockey territory.

We know the more sticks you have on the ice, the stronger your power play becomes.

That's why we start every season with a deep bench of energy resources.

We're all in on all-of-the-above energy.

ALL IN

ALL-OF-THE-ABOVE ENERGY

Normal power line **Lines weighed down by ice** **Top line melted after bottom line**

ICE ON POWER LINES IS A WEIGHTY SUBJECT

When it comes to getting electricity across power lines and into homes, ice can be a force to be reckoned with.

ICE ON DISTRIBUTION LINES

Ice can quickly lead to broken power poles and other pole equipment. Ice can also make falling tree branches 30x heavier and much more likely to break power lines.

ON A 300-FOOT SPAN OF 1-INCH-THICK POWER LINES

- 1/2 inch of ice adds 281 pounds of weight
- 1 inch of ice adds 749 pounds of weight
- 2 inches of ice adds 2,248 pounds of weight

WHEN ICE MELTS

Melting ice can cause power outages. If ice on the bottom (neutral) line melts before the lines above, it can cause the lines to touch.

OTHER ICE FACTS

- Damage can begin when ice exceeds 1/4 of an inch
- 1/2 inch of ice can cause a line to sag up to 12 inches
- Pressure can also be caused by a broken tree limb
- Both ice and melting ice can cause power outages

Safe Electricity.org

Source: Jerri Imgarten-Whitley and Victory Electric Cooperative

+ ELECTRICAL CONTRACTOR CONTINUING EDUCATION SESSIONS SCHEDULED FOR JANUARY, FEBRUARY



Minnkota Power Cooperative, PKM Electric Cooperative and their partners will again provide an opportunity for area electricians to obtain credits for license renewal by attending one of the six continuing education classes being offered throughout eastern North Dakota and northwestern Minnesota.

Tim Pull will instruct the classes, which are scheduled to be held in-person throughout the region. Attendees will be alerted by email if changing COVID-19 requirements impact course dates, times or venues.

This marks the 34th year of the successful program, which is aimed at providing area trade allies with the latest information on electrical code and practices. The classes will be held at the following locations:

Tuesday, Jan. 4

Fargo Holiday Inn
3803 13th Ave South
Fargo, ND



Wednesday, Jan. 5

Fargo Holiday Inn
3803 13th Ave South
Fargo, ND



Tuesday, Jan. 11

Fergus Falls Eagles Club
120 S Peck Street
Fergus Falls, MN

Tuesday, Jan. 18

Bemidji Eagles Club
1270 Neilson Ave SE
Bemidji, MN



Tuesday, Feb. 1

Minnkota Power Cooperative
5301 32nd Ave South
Grand Forks, ND



Wednesday/Thursday, Feb. 2-3

Minnkota Power Cooperative
5301 32nd Ave South
Grand Forks, ND

The registration fee is **\$75 for eight code credits**. Taking the class on multiple days will not qualify for 16 code credits. Registration can be done online at www.minnkota.com. Registration must be completed at least seven days prior to the seminar. For residential building contractor continuing education workshops, contact your local Home Builders Association.

For more information about the program, call (701) 795-4292 or e-mail questions to contractortraining@minnkota.com.

CLASS SCHEDULE

+ 7:15 - 8 a.m.
Sign-in

+ 8 a.m. - noon
Workshop

+ Noon - 1 p.m.
Lunch provided

+ 1 - 5 p.m.
Workshop

\$75 REGISTRATION FEE