

Three-phase upgrade

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SPARKS

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Halstad, Minnesota (USPS 509-300)

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Chief Executive Officer

Scheduled Board Meeting

Board meetings are held in Halstad at the cooperative office starting at 8:30 a.m. on the next-to-last Monday of each month.

Outages: 800-788-7784



Rich Whitcomb
CEO

THE CEO'S REPORT

Challenging outside work

This probably comes as no surprise to anyone, but the wet fall conditions have made working outside challenging.

Similar to farmers trying to harvest the crops still standing in their fields, line crews are trying to put the finishing touches on new services, upgrades and system improvements (see front cover picture). The wet and cold weather probably pushed crews back a minimum of three weeks, but they are working hard to make up that time gap while performing those duties safely.

Inside the office, budgeting is underway and preparations are being made for next year. To date, sales have been slightly above projections, but weather and the beet harvest are variables hard to account for at this time. However, Minnkota Power Cooperative projects stable wholesale rates for 2020. That is important because about 67 to 70 cents of every dollar you send to us goes directly to paying wholesale power costs. Your cooperative will know a much more complete picture in terms of estimates for next year in December.

Heat pump and off-peak weather

With colder temperatures settling in, heat pumps and electric off-peak heat are beginning their season of comfort and savings.

The off-peak rate is 6 cents per kWh, about 40% less than the regular rate and heat pumps can provide extreme efficiencies at much lower temperatures than people realize. Combine those savings with great rebates of up to \$500 per ton for heat pumps and \$30 per kW for off-peak resistance heat and you have a system that provides flexibility, savings and comfort.

Thankfulness

As we head into the holiday season, your cooperative is thankful for its members, employees and the interactions we share together. The trust that exists between members and its not-for-profit cooperative remains one of the main reasons I was drawn to this type of work many years ago.

Your cooperative looks forward to maintaining the strong relationships we have and building strong dialogue with our newer members as well.

Have a great Thanksgiving!

On the cover:

Crews convert seven miles of single-phase to three-phase line south and west of Beltrami

While wet conditions caused delays, Red River Valley Co-op Power crews and a contractor will soon finish an important conversion and tie-line between the Ada and Beltrami substations along County Highway 14 and 18 near the Polk/Norman county line (front cover).

The project replaces four miles of underground line that had failed along a field road with poor access and moves it along a paved road and adjacent gravel road. The connection between the two substations is important because it allows crews to feed loads from both points as necessary and provide more efficient restoration services.



Ready to respond

Minnkota and its members prepare for winter demand response, estimate normal control hours

Northerners remember the January 2019 polar vortex unkindly – cars that wouldn't start, wind that hurt the skin and dangerous overnight lows.

Fortunately for Red River Valley Co-op Power, homes and businesses stayed warm as the power stayed on. Energy teams were able to balance overwhelming electricity needs across the region by leveraging the energy market and demand response – a technique that allows a cooperative to temporarily interrupt service to a member's off-peak loads (electric heating, large-capacity water heaters, electric vehicle chargers, etc.) in exchange for a lower electric rate.

"If you have a polar vortex where there's no wind, or the temperatures are so cold that the wind isn't generating, that is going to result in demand response," explained Todd Sailer, Minnkota senior manager of power supply & resource planning. Minnkota is your cooperative's wholesale power supplier and oversees a wide swath of demand response from the Canadian border to

south of Fargo. Sailer added that wind generators start to shut down somewhere between 20 and 25 below zero, temperatures that the entire Midwest experienced for multiple days.

"The cold temperatures were over a wider area of the country, which put additional stress on our system. That led to higher electrical needs, which resulted in higher energy costs across the region," Sailer said. "Our demand response program was very helpful in the ability for us to not only manage our costs, but also our consumer electricity needs during widespread emergency weather conditions."

Every winter is different, but the planning team projects this year will bring a normal 200-250 hours of estimated demand response. Minnkota is typically able to cover its demand with its own energy resources. However, there are times during planned generator outages, extreme weather events or low wind supply that Minnkota must buy power.

"When the market prices are high, that's when we initiate demand response. We're doing it to

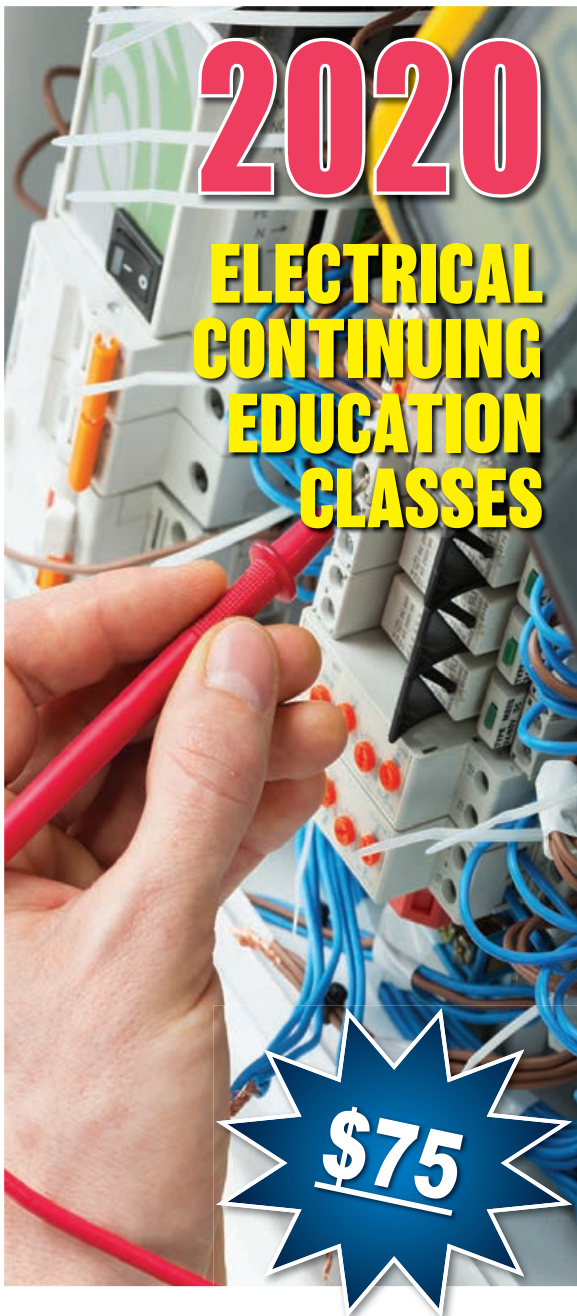
keep costs down," Sailer said.

The demand response system was established to avoid building more generation facilities for peak need that only comes a few times a 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.

Prepare for the heating season

Sailer says those on the off-peak program need to check their backup heating sources to make sure their fuel tanks are full and functioning. Minnkota will run a demand response test in early December, and members should reach out to Red River Valley Co-op Power with any questions or concerns before extreme weather hits.

"The polar vortex showed that you need to make sure your systems are working properly so that when we end up in those events, everybody is able to get through it safely and without too much inconvenience," Sailer said.



Electrical contractor continuing education sessions set

Minnkota Power Cooperative and Red River Valley Co-op Power 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 the region.

This marks the 32nd year of the successful program, which is aimed at providing area trade allies with the latest information on electrical code and practices.

The electrical workshops will be held Jan. 8 and Jan. 9 at the Holiday Inn in Fargo. The training then moves to the Bigwood Event Center in Fergus Falls on Jan. 14, and the Eagles Club in Bemidji on Jan. 23. The workshops conclude with classes Feb. 4 and Feb. 5 at Minnkota Power Cooperative's headquarters in Grand Forks.

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 email questions to contractortraining@minnkota.com.

Dates and Locations

Fargo - Wednesday, Jan. 8

Holiday Inn, 701.282.2700
3803 13th Ave South
Fargo, ND 58103

Fargo - Thursday, Jan. 9

Holiday Inn, 701.282.2700
3803 13th Ave South
Fargo, ND 58103

Fergus Falls - Tuesday, Jan. 14

Bigwood Event Center, 218.739.2211
925 Western Ave
Fergus Falls, MN 56537

Bemidji - Thursday, Jan. 23

Eagles Club, 218.751.9985
1270 Neilson Ave SE
Bemidji, MN 56601

Grand Forks - Tuesday, Feb. 4

Minnkota Power Cooperative, 701.795.4292
5301 32nd Ave South
Grand Forks, ND 58201

Grand Forks - Wednesday, Feb. 5

Minnkota Power Cooperative, 701.795.4292
5301 32nd Ave South
Grand Forks, ND 58201

You have the power to

- View daily and monthly energy use.
- View and pay your bills online.
- Go paperless and receive an email notice when your bill is ready to view.
- Compare energy use to changes in temperature.



SmartHub
Online Bill Pay
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If you have questions regarding SmartHub, call us at 218-456-2139 or send an email to info@rrvcoop.com.

Is electric the transportation trend of the future?



RESEARCH AND DEVELOPMENT GOING TOWARD ELECTRIC PICKUPS, SUVs, SEMI-TRUCKS AND BIKES

The headlines are everywhere – Sales of electric vehicles rose 81% in 2018; General Motors teaming up with EV charging networks; Electric Ford F-150 is in the works....

Many in our region are taking a “wait and see” approach to electric vehicles as the technology matures. Yet, billions of dollars are being invested by many companies into research and development, so it may be only a matter of time before electric vehicles start making serious inroads.

Here is some basic information to help members interested in research coming trends in electric vehicles:

Can save money

At the standard electric rate, most electric vehicles can be fully recharged for about \$3. If your 240 level 2 charger is hooked up to an off-peak program, it costs about 65 cents to drive an electric vehicle the same distance that an average car can go on a gallon of gasoline. Plus, rebates of \$50/kw are available if put on off-peak.

Less maintenance

Electric vehicles don't require oil changes, because no oil is used to run the engines. They don't require air filters, spark plugs, timing belts or many other parts that need occasional replacement in a gasoline car.

A smooth ride

Electric vehicles are known for their silent motor and smooth acceleration. Gas engines vibrate and get louder as they rev up, and transmissions add noise as well. With electric, those elements aren't involved, leaving a quiet ride.

Back to those headlines

- U.S. electric vehicle sales in 2018 – 361,307
- Electric bikes are gaining in popularity; both Fargo and Grand Forks have authorized dealers for electric bikes which allow you to either use your body power or engage an electric motor to further your biking enjoyment. The batteries are plug-in rechargeable.
- Ford has announced an all-electric F-150 pickup coming and recently teased this truck by having it pull a train.
- \$90 billion – estimated investments in electric vehicles worldwide according to Reuters.



For more information on electric vehicles, go to www.energizeyourdrive or www.driveelectricmn.org.

Closed Thanksgiving Day

Red River Valley Co-op Power will be closed Thursday, Nov. 28 for Thanksgiving

In case of an electrical outage or emergency, call 800-788-7784.



Load control questions?

Check it out at

www.rrvcoop.com

If you are one of the more than 2,000 Red River Valley Co-op Power members who participate in the money-saving off-peak program, there is an easy way to see when your electric heat or water heater is being controlled.

Just go to www.rrvcoop.com and click on Current Off-Peak Status to see if that load is being controlled.

You will need to know your load group and double order to understand the chart. To see if you are being controlled, just look for the group number on the left and the double order number on the top and match those two up. You are controlled if the box says OFF. Load group and double order numbers are usually listed on your load management receiver for each relay on the upper left or on a label placed on the unit. If you are unsure of your load group and order number, please give Member Services a call at 800-788-7784.

Energy Efficiency

TIP OF THE MONTH

Trim your holiday energy costs by choosing energy efficient LED lights! LED holiday lights use less energy and can last up to 40 seasons. They're also easier to install – you can connect up to 25 LED strings without overloading a wall socket!

Source: energy.gov



IDEA Competition registration for homegrown innovators now open

BEMIDJI, MINN. – November 1, 2019 – Registration for the IDEA Competition, a program of the Northwest Minnesota Foundation, is open from Nov. 1 until Jan. 6, 2020.

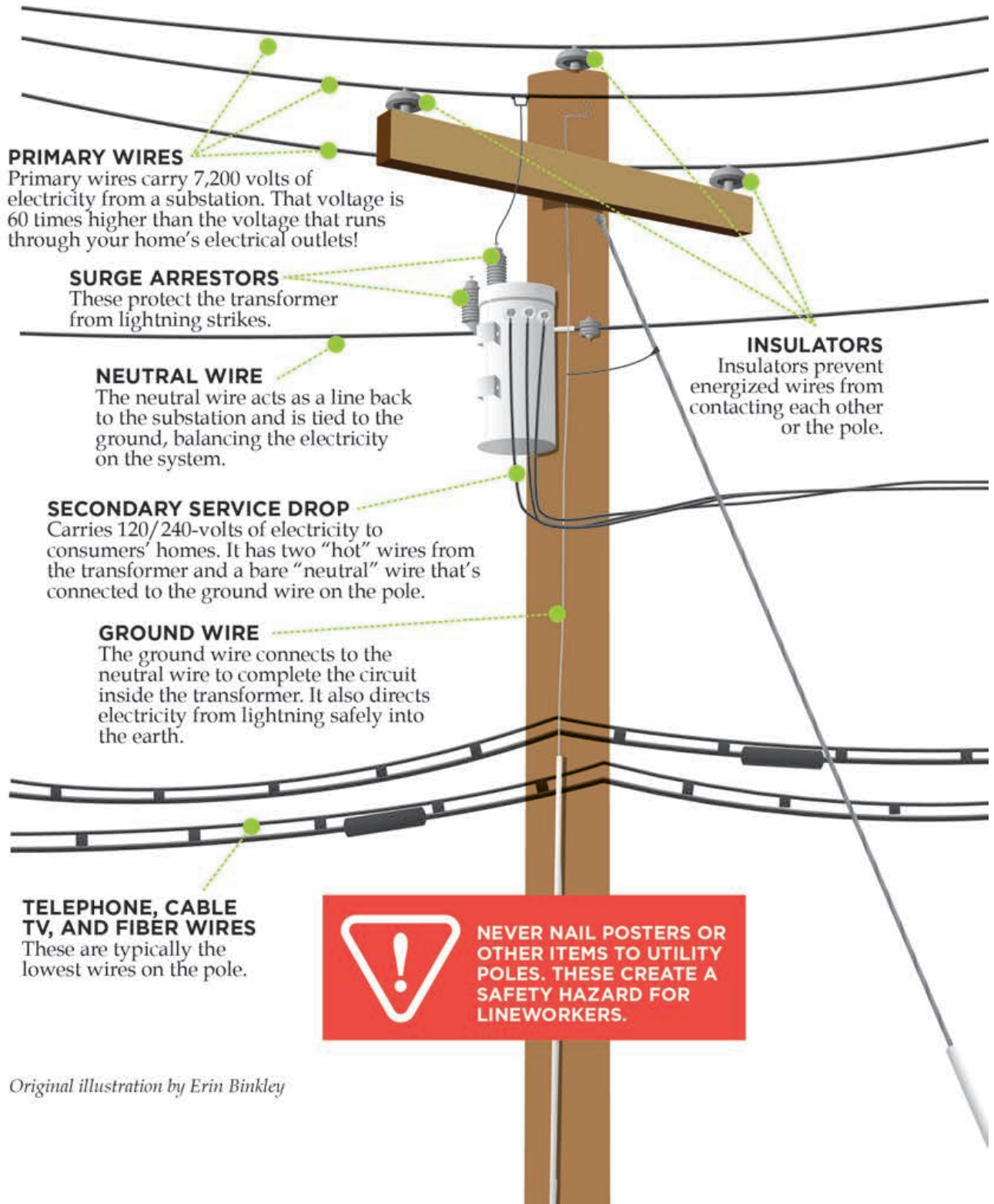
If you have an innovative business idea and want to turn it into a profitable business, the IDEA Competition can help. The IDEA Competition will add momentum to your business strategy, whether you've never started a company or you're already in business and generating revenue.

The IDEA Competition was designed for one purpose – to grow the economy of northwest Minnesota by outfitting the next generation of homegrown innovators for success in the global marketplace. To accomplish its purpose, the program identifies the most promising ideas and entrepreneurs through a competitive process, awards cash to winners, and provides intensive follow-up assistance. Since inception, 27 winners have been selected, and more than \$420,000 has been awarded to help these entrepreneurs commercialize their ideas. Some previous participants have come from Red River Valley Co-op Power's service territory, including recent recipient Vertical Malt, Crookston.

Anyone who has ever considered starting a business or has an innovative new product or business model is encouraged to learn more. Early Bird registration is just \$99 during the month of November. Price increases to \$150 on Dec. 1. For more information, visit www.ideacompetition.org.

WHAT'S ON THAT POLE?

This illustration shows the basic equipment found on electric utility poles. The equipment varies according to the location and the service they provide.



PRIMARY WIRES

Primary wires carry 7,200 volts of electricity from a substation. That voltage is 60 times higher than the voltage that runs through your home's electrical outlets!

SURGE ARRESTORS

These protect the transformer from lightning strikes.

NEUTRAL WIRE

The neutral wire acts as a line back to the substation and is tied to the ground, balancing the electricity on the system.

SECONDARY SERVICE DROP

Carries 120/240-volts of electricity to consumers' homes. It has two "hot" wires from the transformer and a bare "neutral" wire that's connected to the ground wire on the pole.

GROUND WIRE

The ground wire connects to the neutral wire to complete the circuit inside the transformer. It also directs electricity from lightning safely into the earth.

INSULATORS

Insulators prevent energized wires from contacting each other or the pole.

TELEPHONE, CABLE TV, AND FIBER WIRES

These are typically the lowest wires on the pole.



NEVER NAIL POSTERS OR OTHER ITEMS TO UTILITY POLES. THESE CREATE A SAFETY HAZARD FOR LINEMEN.

Original illustration by Erin Binkley



**RED RIVER VALLEY
CO-OP POWER**

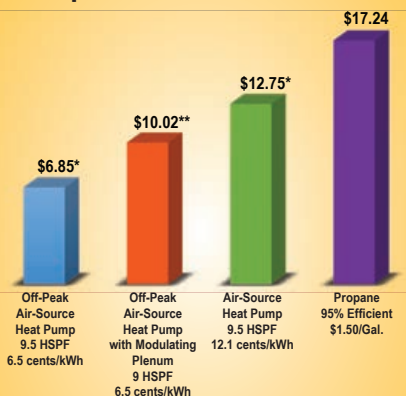
Snuggle Up to Savings

*with an
Air-Source
Heat Pump*



An air-source heat pump and/or a modulating plenum heater is a great way to achieve comfort and super efficiency year-round. Heat pumps make perfect cents, especially when coupled with up to \$500 per ton in rebates from Red River Valley Co-op Power!

**Price difference in heating fuels
per million Btus of heat**



* Outside temperatures fluctuate, affecting the heat pump's efficiency. Efficiency and price per million Btus is estimated at 47 degrees F. Need additional heat like plenum heater in winter.
** Heat pump with modulating plenum assumes a coefficient of performance of 1.9 at 10 degrees F using information provided and reviewed by Electro Industries, Monticello, Minn.

For information on great rebates of up to \$500 per ton for heat pumps and \$30 per kW for off-peak resistance heat, please call Member Services at 218-456-2139.



**RED RIVER VALLEY
CO-OP POWER**