

## POWER PLANT TOUR

*June 26-28, 2018*

**W**e are offering all North Star Electric members an exceptional summer opportunity that's fun for all ages. This year's tour is three days, which will make the trip more relaxing.

The tour is scheduled for Tuesday through Thursday, June 26-28. The first day we will tour Minnkota's control center and print shop in Grand Forks, N.D., and then it's off to the Ramkota Hotel & Conference Center at Bismarck, N.D.

On the second day, we will visit the Milton R. Young Station near Center, N.D., where most of our electricity is

generated. This will include a tour of the open pit mines where machines strip the coal and reclaim the land so it can again be used for agriculture. This is where we will see the huge electric dragline Liberty, with its 300-foot boom and 70-cubic-yard bucket, which is used to remove the overburden soil from the coal. Then, it's off to see the Garrison Dam and tour the hydroelectric plant. We will end our day by returning to the Ramkota Hotel.

On the third day, we will drive by the Ashtabula Wind Energy Center near Valley City, N.D., and then visit the Infinity wind turbine by Petersburg, N.D. Some of our energy is generated at both sites. The wind towers at Ashtabula are 250 feet tall with 120-foot blades. After that, we're off to Grand Forks for lunch and then back home.

The cost to members is just \$100 per person or \$175 per couple. This covers your cost of the bus, hotels, tours and most meals. Members who have not been on this trip in the past are encouraged to go.



Milton R. Young Station



Garrison Dam



Ashtabula Wind Energy Center

### 2018 Power Plant Tour Registration Form

Names of Participants \_\_\_\_\_

Address \_\_\_\_\_

Telephone Number \_\_\_\_\_

Account Number \_\_\_\_\_

Number Attending \_\_\_\_\_

Have you enjoyed this trip in the past? N/Y What year? \_\_\_\_\_

*Please print names of participants the way you would like them to appear on your name tags. Your deposit will be refunded if the tour is canceled or if you should find that you cannot make the trip. We will send further details prior to departure. Return with check for \$100 per person or \$175 per couple to:*

**North Star Electric Cooperative, P.O. Box 719, Baudette, MN 56623**

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Visit our website at  
[www.northstarelectric.coop](http://www.northstarelectric.coop)

## North Star Electric Cooperative, Inc. MISSION STATEMENT

To improve the lives of our member-owners and community by responsibly providing clean, affordable, electric energy and other beneficial services while maintaining the very highest standards of performance and member satisfaction.

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

## DIGGING SOON?



One free, easy call gets your utility lines marked **AND** helps protect you from injury and expense. Safe digging is no accident:

**ALWAYS CALL 811 BEFORE YOU DIG.**

## Highlights from the BOARDROOM

These are the highlights from the board of directors' Jan. 3, 2018, meeting. All board members were in attendance (654-30-003-02, Gloyd Spears). In addition to routine motions, the board voted to approve the early but discounted capital credit payments to estates, to approve all North Star board members as delegates to the Minnkota and Square Butte annual meetings, to reschedule the February and April board meetings and to approve the 2018 budget, which includes no increase to the monthly service fee or price per kWh.

Staff reports included the financial report, the conversion to Cooperative Response Center (CRC) for after-hours outage reporting and dispatching, recent ripple voltage testing, load control, Conservation Improvement Plan (CIP) rebates, the 2018 member power plant tour, retirement of idle services, pole changeouts, the upcoming work plan projects, new three-phase

large-power requests, new board member orientation, service territory boundaries, the safety report and no lost-time hours accumulated.

Visiting guests from National Rural Utilities Cooperative Finance Corporation (NRUCFC) included William Edwards, vice president of Regulatory Affairs, and Teri Wallis, regional vice president. Mr. Edwards presented the Cost of Service Study he recently conducted, and Ms. Wallis presented North Star's 2016 Key Ratio Trend Analysis (KRTA).

Board reports included an update from the Minnkota and Square Butte board meetings.

Detailed minutes are available at the cooperative for member review. Regular board meetings are generally held the first Wednesday of every month. If you wish to speak with the board, or have an item that you would like to have placed on the agenda, please contact Manager Ann Ellis at least two weeks in advance to be included on the agenda.



*Now you can get the most out of your utility meter by utilizing MyMeter. This online tool or app lets you view, compare and manage your energy*

*usage. With MyMeter you can spot trends, track usage and even receive energy-related alerts. It's your energy, make the most of it.*

- View your daily energy use online from the convenience of your home or smart phone.
- Receive notifications via text message or email regarding unusual energy use, even when you are out of town.
- Track your usage against local weather conditions and see how it compares to previous months and years.
- Better manage your own account by tracking events or upgrades in the home, and monitoring the associated changes in your energy usage.
- Set energy goals and track your progress over time.

### Opening your MyMeter account is easy!

1. With a copy of your electric bill available, go to <https://mymeter.northstarelectric.coop>.
2. In the upper right corner, click on "Create an Account."
3. Enter your account number, name, email address and choose a password.
4. Click on "Create Account" and you're ready to go.

**For more information on how to navigate around MyMeter and how to set up alerts and notifications, view the MyMeter User Guide.**





**Ann Ellis**  
General Manager

# MANAGER'S REPORT

## High electric bills

On my way to work this morning it was 24 degrees below zero – in mid-February. These cold temperatures, along with very few off-peak load control hours, have made for larger electric bills than recent winters. If you think your monthly usage needs closer scrutiny, we do have the ability to send you texts or emails when your daily usage is above (or below) an expectation you determine. You can use our MyMeter app or website to customize alerts, see charts of your daily usage and more. If you would like our help to set that up, we are just a call away. If you are having trouble paying your electric bill, give us a call to work out a solution. If you want to explore ways to lower your bill, our website and articles in our *Enlightener* newsletter should help guide you, plus you can always pick up the phone and talk to us directly. If it is any consolation, we have not raised rates, and we have no plans to make any rate adjustments.



## Legislative work

Directors Steve Arnesen and Mike Hanson and I, along with others representing Minnesota's rural electric cooperatives, met with Senators Klobuchar and Smith, Representatives



From left to right: Ann Ellis, general manager; Steve Arnesen, board president; Mike Hanson, board vice president; and Rep. Rick Nolan.

Peterson, Nolan and Emmer and legislative staff for all but one of Minnesota's delegation in Washington, D.C. in early February to discuss a half-dozen issues important to all rural electric

cooperatives across the nation. One of our issues addressed cooperative exclusion from financial incentives to participate in developing carbon capture and storage technology. The provision we advocated for that day was on the fence that same night during the budget negotiations, and it survived. In addition to carbon capture, the provision will reinstate the tax credit for members installing geothermal heating systems. A day later Rep. Nolan announced his plans to retire from Congress at the end of this term. We appreciate Rep. Nolan's service to his district, the support he has provided to rural electric cooperative member-owners across the state and we wish him all the best.

## What would you do?

What if you unexpectedly ended up sitting in a car with powerlines draped across it? Please check out the safety graphic on page 8 in this *Enlightener* to help you make the right choices and live to tell about it.

## Sneak peek - scholarship test

This month's "Sneak Peek" question on North Star Electric Cooperative's annual scholarship test for members' high school seniors is:

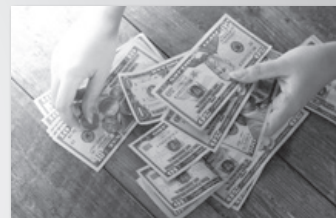
**Question:** Does electricity just hang out on the powerline until you are ready to use it? (True/False)

**Answer:** The answer is **FALSE**. When electricity is generated, it must be almost instantly used. There is no shelf-life for electricity, unless it can be stored in a battery. Affordable, large, utility-scale batteries are a challenge that people have been working on for decades. Once this critical component is developed, intermittent energy resources will become more useful.

With the days getting longer, daylight savings time beginning March 11 and the first day of spring just weeks away, cabin fever should be cured soon. In the meantime, if you need help with energy-related questions, we are here to help. At your service we remain ... *Ann*

## North Star capital credit allocation

Your March bill will show your share of the 2017 margins (revenue in excess of expenses) and your accumulated capital credit balance. Because North Star Electric Cooperative is nonprofit and owned by those who purchase electricity from it, all margins are returned to you and the other members. Current margins are temporarily held in your capital credit account, which is your share of the ownership of the cooperative's assets. Over time, these capital credits are repaid to the members. Payment or bill credit are typically made in September. We have returned more than \$11,900,000 of capital credits to our members.



# Safety for our— **communities**



**Y**ou are the reason we exist, and we are committed to providing you safe, reliable service (121-24-006-01, Janice Haglund). That commitment is not just about supplying the power you need, but continually demonstrating our concern for your safety and well-being.

It's why we have a strong Culture of Safety throughout North Star Electric Cooperative. We devote time and energy to making everyone aware of how to stay safe around electricity: our line workers, utility team members, you and your family and our communities.

We help you prepare for inevitable storms and other natural events season-to-season – sharing what to gather in advance, how to stay safe during prolonged outages and safety precautions when you venture outside. We urge everyone to be alert to the hazards that could be hidden in storm debris and floodwaters, like downed power lines.

We want you to always be safe around overhead power lines, and remind you to look up and stay away from electrical equipment when working with tall ladders,

cleaning gutters, trimming trees or undertaking other projects outside. And if you're planning to dig, be sure to call 811 in advance to get underground utilities marked.

Talk to children about electrical safety. Help them understand the importance of staying away from electric utility equipment and substations, to never climb trees near power lines, and to fly kites in wide open spaces safely away from power lines. These are just some of the safety measures that we want you and everyone to know.

We value your safety and don't want anyone to take a chance. To help, we're a partner in the Safe Electricity program. We encourage you to visit **SafeElectricity.org**, where you will find life-saving information in personal story videos, fun, interactive games for children, teacher and parent resources and much more.

We are proud to be your energy provider, and we will continue working to educate everyone on important energy issues, including safety. Your safety matters to us.

Have a great, safe day!



## Energy Efficiency

### *Tip of the Month*

**Properly seal air leaks, cracks and openings in your home to reduce heating and cooling costs, improve building durability and create a healthier indoor environment.**

**Source: U.S. Department of Energy**

**'LIKE US' ON  
FACEBOOK**



**TO STAY  
UP-TO-DATE!**

Like your cooperative at  
**[www.facebook.com/  
NorthStarElectric](http://www.facebook.com/NorthStarElectric)** for outage  
updates during winter storms  
and other useful information.



NORTH DAKOTA  
CarbonSAFE

# CarbonSAFE Project field work begins near Young Station

A team of six scientists and engineers conducted a low-impact geophysical survey near the Milton R. Young Station in late August to learn more about North Dakota's carbon dioxide (CO<sub>2</sub>) capture and storage potential.

The data gathering near the town of Center is part of the North Dakota CarbonSAFE

Project, which is investigating the feasibility of developing safe, permanent, commercial-scale geologic storage for CO<sub>2</sub> (140-08-027-04, Alan Erickson). The Energy &

Environmental Research Center (EERC) at the University of North Dakota is leading the project in partnership with Minnkota, the U.S. Department of Energy (DOE) and other North Dakota utility and mining companies.

Mac McLennan, Minnkota president & CEO, believes the research being conducted as part of the CarbonSAFE Project is important to North Dakota's lignite industry.

"As Minnkota and others work to explore innovative carbon capture technologies, we also need to understand how we may use or store the carbon dioxide in a way that is safe,

environmentally responsible and economically viable," McLennan said. "We are pleased to work with the energy experts at EERC because of their in-depth understanding of our industry and North Dakota's unique geology."

The two-year project includes the collection of two deep geologic core samples – one in Oliver County and one in Mercer County – to better understand the geology in the area. Once the core holes are drilled and geologic samples are retrieved, the core holes will be filled with concrete and the land restored to its original appearance according to state and federal regulations. The formation of interest is about 6,000 feet below the surface, and one of the objectives of this project is a preliminary look at the geology to see if further study is warranted.

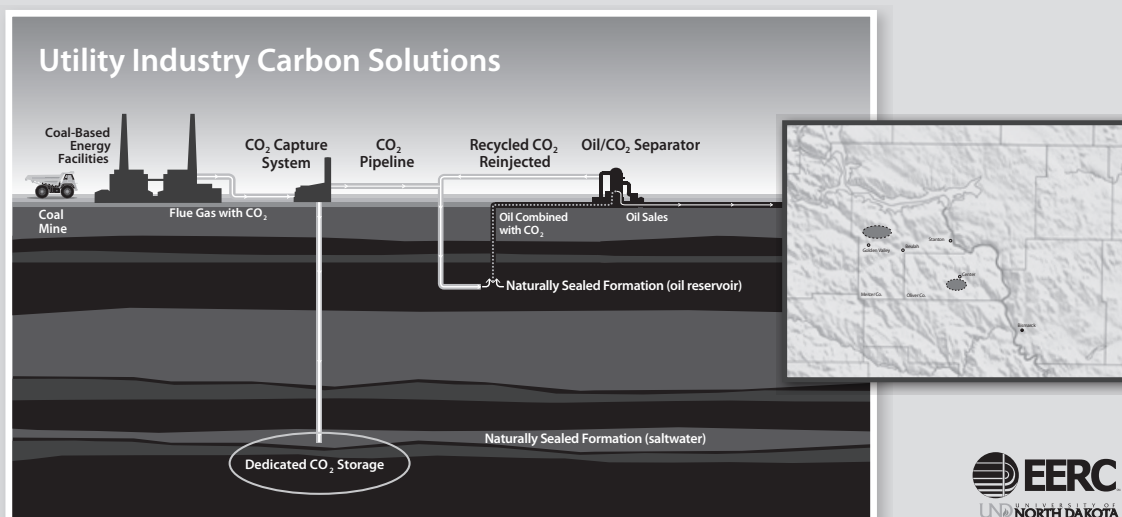
The project partners have been active in educating the public about the CarbonSAFE initiative. Meetings have been held with state, local and federal officials. Public open houses were conducted in Center and Beulah, N.D., in October to communicate the details of the project and gather public input.

The project is one of several under DOE's Office of Fossil Energy CarbonSAFE initiative and is scheduled for completion in the summer of 2019. More information about the project and DOE's initiative is available at <https://undeerc.org/NDCarbonSafe>.



Scientists and engineers from the Energy & Environmental Research Center complete a geophysical survey near Center, N.D., as part of the CarbonSAFE project.

(Photo credit: Annette Tait)



The two-year project has two study sites (shown in dark gray) in western North Dakota near existing coal-based energy facilities.





# Ways to SAVE energy & money

*Save some green by going green. The Energy Education Council provides a checklist for those who want to make their home a green one with no-cost, low-cost and higher-cost options.*



## ***There are many ways to make your home more efficient that do not cost a dime:***

- Turn off lights when you leave a room.
- Set ceiling fans to rotate clockwise in cold months and counterclockwise in warmer months.
- During the winter, open up curtains on sunny days to let the warm sunlight in. At night, make sure to close the curtains. In the summer, keep your curtains closed.
- Set your water heater temperature to no more than 120 degrees Fahrenheit.
- When cooking, match the pot size to the burner size. Also, do not unnecessarily open the door to the oven while cooking or baking. Heat escapes, and the oven will have to reheat.
- For laundry, wash clothes in cold water. Hang clothes to dry when you can.
- Only start the washing machine or the dish washer when loads are full.
- Turn off electronics and unplug chargers when they are not in use.



## ***Here are some low-cost ways to boost your home's efficiency that will quickly pay for themselves:***

- Replace old incandescent light bulbs with more efficient and longer-lasting LED bulbs.
- Install a programmable thermostat to make automatic changes to your home's temperature.



- Replace furnace and air conditioning filters on a monthly basis.
- Caulk cracks between windows/doors and walls.
- Purchase an insulating blanket to use on your hot water heater.
- Install motion sensors, dimmers and timers for indoor and outdoor lighting.
- Plant trees to shelter your home from the elements.
- Invest in low-flow showerheads to save water.
- Fix leaky faucets.



## ***Here are some suggestions that cost more up front, but will pay for themselves over time:***

- Upgrade an older furnace, HVAC system, water heater and other large appliances to updated high-efficiency models.



- Invest in double-pane windows with low e-coating to reflect thermal radiation.
- Upgrade insulation in the attic, exterior walls, basement and crawl spaces.

***For more information on home efficiency, visit [EnergyEdCouncil.org](http://EnergyEdCouncil.org).***



## LED lighting rebate form



ENERGY STAR® bulbs highly recommended

**(Rebates will not exceed 50 percent of purchase price)**

Complete this form, attach a copy of your purchase receipt and mail to: North Star Electric Cooperative, P.O. Box 719, Baudette, MN 56623 Attn: Wayne

**(Rebates will be in the form of a credit on your electric account)**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone #: \_\_\_\_\_ Other Phone #: \_\_\_\_\_

North Star Electric account number: \_\_\_\_\_

Name of retailer: \_\_\_\_\_

Replacing 40-60W bulb: (\$4/bulb rebate)

Number of bulbs: \_\_\_\_\_

Replacing 75-100W bulb: (\$8/bulb rebate)

Number of bulbs: \_\_\_\_\_



## Problems paying your electric bill?

**Energy assistance may be available!**

If you are receiving a low income or suffering from a temporary financial shortfall, the following 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.

### Lake of the Woods County Social Services

206 8<sup>th</sup> Ave. SE, Suite 200  
Baudette, MN 56623  
634-2642

### Northwest Community Action Council

P.O. Box 67  
Badger, MN 56714-0067  
800-568-5329

### Koochiching County Community Services

1000 5<sup>th</sup> St.  
International Falls, MN 56649  
283-7000

### Kootasca Community Action, Inc.

2232 2<sup>nd</sup> Ave. E.  
P.O. Box 44  
International Falls, MN 56649  
283-9491 or 800-559-9491

### Kootasca Community Action, Inc.

Grand Rapids, MN 55744-3984  
Toll free 877-687-1163  
Direct 218-999-0800  
Fax 218-999-0220

### Arrowhead Economic Opportunity Agency

702 3<sup>rd</sup> Ave. S.  
Virginia, MN 55792  
800-662-5711

## Energy saving comparison

*(Incandescent vs. LED light bulbs)*



Incandescent	LED
100-watt	15-watt
8 hours/day	8 hours/day
31 days/month	31 days/month
Equals 24,800 watts (24.8 kWh)	Equals 3,720 watts (3.7 kWh)
At 12.2 cents/kWh + 6.875% sales tax	At 12.2 cents/kWh + 6.875% sales tax
<b>Equals \$3.23 per month</b>	<b>Equals \$0.48 per month</b>
<b>Savings per bulb per month with LED = \$2.75</b>	
Cost of LED bulb after rebate = \$4 (at either North Star Electric Cooperative office)	

*If you know of any other energy-saving device that will pay for itself this quickly, please let North Star know about it and we will have it in a future Enlightener.*

## Current electrical inspectors

State law requires that every new electrical installation in any construction, remodeling, replacement or repair shall file a certificate for inspection and be inspected by a Minnesota electrical inspector. For more information, go to Minnesota Department of Labor and Industries website ([dli.mn.gov](http://dli.mn.gov)) and go to the electrical page.

### • Lake of the Woods, St. Louis and Koochiching counties:

Curt Collier ([cgcclier67@gmail.com](mailto:cgcclier67@gmail.com))  
Phone: (218) 966-5070  
Call to set up an appointment between 7 a.m. - 8:30 a.m. (Mon. thru Fri.)

### • Roseau county:

Bryan Holmes  
Phone: (218) 686-1413  
Call to set up an appointment between 7 a.m. - 8:30 a.m. (Mon. thru Fri.)



## WHAT TO DO: IF YOUR CAR CRASHES INTO A UTILITY POLE

**Accidents happen.** Would you know what to do if your car crashed into an electric utility pole? Knowing what to do could be the difference between life and death.

**Always consider power lines and other electrical equipment to be live and dangerous!**

### IF A POWER LINE FALLS ON YOUR VEHICLE AND THERE IS **NO** FIRE:

Your safest option is to stay inside your vehicle until help arrives. The vehicle acts as a path for the electrical current to travel to reach the ground. You are safe inside the vehicle, but if you get out, you could be electrocuted.

**Call 911 or your local electric utility for help.**

### IF A POWER LINE FALLS ON YOUR VEHICLE AND THERE **IS A** FIRE:

Only attempt to leave your vehicle if it is on fire.

#### **To exit safely:**

- Jump out of the vehicle, making sure NO part of your body or clothing touches the ground and vehicle at the same time.
- Land with both feet together and in small, shuffling steps, move at least 40 ft. away from the vehicle.
- The ground could be energized. Shuffling away with both feet together decreases the risk of electrical shock.

**Call 911 or your local electric utility for help.**

