

Baudette, Minnesota

Enlightener Volume 62 Number 11, December 2017

Thank you and Congratulations!



to Julian Brzoznowski & Mike Trueman

North Star is grateful for the many years of dedicated service by Julian Brzoznowski, pictured left, 34 years, and Mike Trueman, pictured right, 15 years. These two gentlemen asked tough questions, shared great ideas and were instrumental in moving our cooperative forward. We will miss them in the boardroom and wish them the very best in their new adventures.

Questions on load control?

Check it out on the internet. Visit North Star's website: **www.northstarelectric.coop**.

www.northstarelectric.coop and click on "Off peak control information." This web page contains the current status, today's control log, yesterday's control log, archives, load (continued on page 5)

In this issue:

Board highlights/Offices closed announcement	2
Manager's Report	3
Safely operating your portable generator	4
Electric heat rebates available	5
Unclaimed capital credits given to organizations	6-7
Preparation is power: Weathering winter conditions	8
Snowmobilers: Beware of hazards	9
Electrical contractor continuing education sessions	10
Energy saving comparison/Help with your bill	11
Merry Christmas from all of us at North Star	12



DECEMBER 2017

The Enlightener (USPS 024959), Vol. 62, No. 11 is published monthly by North Star Electric Cooperative, Inc., 441 St. Hwy 172 N.W., Baudette, MN 56623-0719. Subscription price \$1/year. Periodicals postage paid at Baudette, MN 56623. POSTMASTER: Send address corrections to The Enlightener, North Star Electric Cooperative, Inc., P.O. Box 719, Baudette, MN 56623-0719.

OFFICERS AND DIRECTORS					
President Steve Arnesen					
/ice President Michael Hanson					
Secretary-Treasurer Lorraine Nygaard					
Directors Shelley Spears, Randy Bergan, Tom Smith, Bruce Sampson					
General Manager					
Editor Wayne Haukaas					
Office hours: 7:30 a m to 4 n m					

Monday through Friday

For credit card payment, call 855-874-5354. Online billing information available via SmartHub app.

> Electrical after-hours emergencies 1-888-6OUTAGE (1-888-668-8243) or 634-2603 e-mail us at <u>nsec@wiktel.com</u> Visit our website at 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.



BII.

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

One free, easy call

ALWAYS CALL 811 BEFORE YOU DIG.

Highlights from the BOARDROOM

These are the highlights from the board of directors' Oct. 4, 2017, meeting. All board members were in attendance. In addition to routine motions, the board voted to approve the RLF (Revolving Loan Fund) financing for Green Forest, LLC, contingent upon a positive recommendation from the Headwaters Regional Development Commission, to adopt a resolution regarding North Star Electric Cooperative assuming the authority of the Minnesota Public Utilities Commission to become the regulatory commission regarding local democracy, to approve the Distributed Generation/Net Metering Policy, to adopt the cogeneration rules implementing Minnesota statute with North Star as the regulating body, to adopt the Cooperative Agreement for Cogeneration and Small Power Production Facilities, to approve the signing of the statement of the mailing of the official notice of the annual meeting, to accept the annual review of the Safety Policy and to appoint Directors Nygaard, Smith and Hanson as REDLG (Rural Economic Development Loan & Grant) committee members.

Staff reports included the financial report, the completion of the annual financial audit, workers' compensation insurance rates, unclaimed capital credits to be donated, PowerSavers rebates, continued interest in LED lighting rebates, Operation Round Up®, new services, right-of-way maintenance, pole testing out of the Birchdale substation, the cost of service study, cyber security, the Lake of the Woods County broadband survey to be mailed to county residents with their electric bills, the service territory and new employee Dan Fish, who filled the purchasing agent/metering and mapping technician role.

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.





MANAGER'S REPORT

Ann Ellis General Manager

Economic Development Loan to Green Forest Wood Products

We are pleased to announce that an \$80,000 loan from North Star Electric Cooperative's rural economic

development Revolving Loan Fund (RLF) has been made to Green Forest Wood Products in Littlefork. The new owner, Brandon Andersen, has been a Green Forest customer for 20 years. His company in Pequot Lakes, Fireside Lodge Furniture (*www.firesidelodgefurniture.com*), builds furniture you might see in places like lodges and lake homes, but also in homes with the popular rustic look. They use local native wood species supplied by Green Forest. He has 80 employees in two other locations and has already grown the employee count in Littlefork from 7 to 15. He has also invested in improvements to the Littlefork facility and efficiencies.

North Star's RLF was created from a grant received by the USDA and Lake of the Woods County for the purpose of creating a revolving supply of capital to help boost economic development. As repayments are made from North Star's first two RLF recipients, the money is turned around and loaned to another project. Our three recipients to date are Lake of the Woods County EDA, which is the building leased to M-State for the Line Workers Training Program, Jake's Sawmill Products south of Baudette and now Green Forest Wood Products. We thank the many entrepreneurs of our communities for persevering with their passion to make our communities better.



Green Forest foreman Jason Hauner, North Star REDLG committee chairman Mike Hanson and Green Forest owner Brandon Andersen complete the process to provide an \$80,000 economic development loan from North Star Electric Cooperative.

Outages

About a third of our members experienced outages on Oct. 26 as the winter storm moved in. A transmission pole had gone down on Blueberry Hill, first causing members fed from the substation in Williams to lose power (242-46-017-04, Sandra Maestas). More issues brought down three additional Minnkota substations, and our crews needed to perform manual switching for Minnkota. After those issues were resolved, our linemen could focus on fixing the damages caused by high winds tormenting North Star's lines and equipment, which were laden with the heavy icy snow that tends to cling when temperatures hover around freezing. The final outage was restored about 7 a.m. the next morning. We had a tired crew.

Members in the Williams/Roosevelt area have been hit with three unrelated outage events in the past couple of months, and if you are one of them, we'd like you to know we are working on getting to the bottom of the unexplained blinks. The cause of this intermittent problem has been difficult to trace. Thank you for your patience.

Generator safety

Please review the safety information in this *Enlightener* regarding generators. Plugging them in incorrectly and backfeeding onto a power line could fatally injure a lineman



working to restore your power. Remember that running generators in a garage or outside near an open window could allow carbon monoxide to poison occupants. For those who don't like reading directions and are not a generator expert, please make an exception on this one.

Rates

We are hopeful we will not need to raise the electric rate in 2018, but this mostly depends on sales, which in another way means it depends on you. When you have the choice between electricity and a different fuel, it helps your electric cooperative when you choose electric.

P.S. Have you noticed the increasing price of propane? When we checked today, it was up to \$1.74 per gallon for a smaller fill, and this is more expensive than using off-peak electric.

(continued on page 4) _____

MANAGER'S REPORT (continued from page 3)

Would you like \$1,000 to help your upcoming college/tech student?

Every spring we hold a Co-op Knowledge Scholarship test at our local schools and give 13 awards to high school seniors whose parents/ guardians are members.

- You don't have to be an honors student to win.
- Eight of the awards are random drawings from those who score more than 60 percent correct on the test.
- Most of the test answers are in the brief study materials, which can also be found on the LINKS tab of our website: **www.nse. coop.**
- Every month leading up to the test we will be publishing one of the test questions, as well as the correct answer.

THIS MONTH'S SNEAK PEEK QUESTION IS:

The ONLY electric utilities that return profits (capital credits) to their members/consumers are:

- **A.** Rural electric cooperatives (like North Star Electric Cooperative)
- **B.** Municipal utilities (like the City of Baudette)
- **C.** Investor-owned utilities (like Minnesota Power)

The answer is "A" because rural electric co-ops are non-profit utilities owned by everyone who buys electricity from them, meaning any money left over after the bills are paid goes back to all the memberowners.

As the hustle and bustle of the preparations for Christmas start to heat up, don't forget about the true reason for the season. Wishing you blessings and peace this Christmas season and in the new year.

At your service we remain ... **Ann**

hen you have lost power, a generator can provide the electricity you need to keep your home warm and power your appliances. However, if a generator is not used



properly, it may present serious hazards. Safe Electricity provides tips on using a portable generator safely.

A portable generator is usually gas powered and is movable. Before putting it to use, read and follow all manufacturer instructions. Also, check the cords for damage and ensure that the device is able to handle the wattage or amperage of the appliances that you plan to use. Your generator should have more output than the wattage of the electronics you will plug into it. Make sure there is nothing plugged into the generator when turning it on.

Perform regular maintenance on your generator. It is recommended that a generator be operated once a month for 10 minutes to ensure it is running properly.

Always make sure that the generator is grounded and used in a dry area. Use a generator only when necessary during moist conditions. Protect the generator by operating it under an open, canopy-like structure and on a dry surface where water cannot form puddles or drain under it.

Never connect your portable generator to the structure directly (251-36-107-03, Randy Spicer). This can result in potentially deadly backfeed. Backfeed occurs when electricity gets fed back through the electrical system and meter into the power lines creating a hazard to line workers and others who may be near downed lines.

Remember to shut down your generator and give it time to cool before refueling. Always store your fuel away from the generator in an approved, non-glass safety container with a charged fire extinguisher nearby. Never operate your generator near flame-producing devices, and be sure not to smoke nearby.

Never use a portable generator indoors, and remember that opening a window or door or turning on a fan will not produce enough fresh air to reduce the danger of carbon monoxide emissions. Never run the generator nearby windows or doors that can draw the carbon monoxide back indoors. It is a good idea to clear at least three to four feet on all sides of the generator to allow for ventilation.

Install a battery-operated carbon monoxide detector and test it often, but also know and be on the lookout for the signs of carbon monoxide inhalation. Symptoms include dizziness, nausea, headaches, and lethargy. If you suspect that you or someone you are with is showing these symptoms, get some fresh air and seek medical attention.

For more information on electrical safety, visit **SafeElectricity.org**.

Electric heat rebates available

N orth Star Electric is now offering Powerful Value rebates in addition to the PowerSavers Conservation (CIP) rebate program. These rebates are for the installation of new off-peak equipment or replacement of existing off-peak equipment. This is part of Minnkota Power's Powerful Value campaign.

Members can receive a rebate of \$20 per kilowatt (kW) of electric heat or \$100/\$200 per ton of heat pump equipment installed. The Powerful Value rebates are limited to \$600 total per off-peak meter. **Please note that the Powerful Value rebates can be paired with the PowerSavers incentive to create an even larger rebate total**.

The Powerful Value rebates are designed to assist members adding more off-peak electric heating equipment to our system. The qualifying equipment includes items such as plenum heaters, baseboard, cove, ETS, furnaces, boilers and air-source/groundsource heat pumps. This, in turn, will increase the system utilization or load factor, which is a measure of the efficiency of the electrical system required to meet peak demand. The higher our load



factor, the lower the average cost per kilowatt-hour (kWh) delivered or sold by the system. Minnkota Power Cooperative, our wholesale power supplier, pays out these rebates. The PowerSavers incentives are designed to meet Minnesota legislative mandates to encourage residential and commercial members to save kWh by installing energy-efficient electrical equipment. These rebates/incentives are paid out by North Star Electric. As a member of North Star Electric, you can benefit from both of these programs, which can offset a portion of the equipment cost.

For more information, please contact North Star Electric's member service department at **218-634-2202**. The rebate form for the PowerSavers rebates is available on our website at **www.northstarelectric.coop** or at our office. North Star Electric will complete the paperwork for the Powerful Value rebates when it inspects the new or replacement electrical heating equipment.

Check it out on the internet. Visit North Star's website: www.northstarelectric.coop.

control plans and the last switching cycle for each load group and double order number. On this site you can check the most current information on load control as well as past load control. Your specific load group information is on the lower left hand corner of your electric bill. Please remember this is Minnkota's current estimate for controlling load. Control plans can and do change several times each hour.

Illustrated below is what Minnkota's website looks like for the current state of the load management system. All of load group 2.01 is controlled and double order 12, 13, 19, 20 and 24 of load group 2.02 are also controlled.

Status Today's Log Ye	Contraction of the local division of the													Last T	ransmission: 16-N	ev-2017 15
is at 15:40 CST - Las	et Suitching O															
Load Group	DD 9	DO 10	DO 11	00 12	DO 13	00 14	00	80 15	00 17	00 18	DO 19	DO 20	00 21	DO 22	00 23	DO 24
1.01	ON	ON	ON	12 CN	13 ON	14	15	15 ON	CN CN	ON	ON	00/	ON	CN CN	23	24 ON
1.02	-		ON	CN	ON	ON	04	ON	ON	ON	ON	CN	-	-		ON
2.01	OFF	OFF	OFF	OFF	CFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2.02	ON			OFF	OFF					ON	OFF	OFF				OFF
2.03	ON	ON	ON	CN	ON	ON	CN	ON	ON		ON	CN	ON	CN	ON	ON
2.04	-		-			-							-	-		ON
2.66	ON	ON	ON			ON	ON	ON	ON				ON	ON	ON	ON
3.01	ON	ON				ON	ON	ON					ON		-	ON
2.06	ON	ON	ON	CN	ON	ON	ON	ON	ON	ON	ON	-	-		ON	ON
3.67	ON	ON	ON	CN	ON	ON	ON	ON	ON	ON	ON	CN	ON	ON	ON	ON
2.68	ON	ON	ON	CN	ON	ON	ON	ON	ON	ON	ON	CN	ON		ON	ON
3.69	ON	ON	ON	CN	ON	ON	ON	ON	ON	ON	-	-	-	-	-	ON
6.01	ON	ON	-			-	-	-	-		-		ON		ON	ON

Unclaimed capital credits given to local charitable organizations

I n 2017 North Star Electric Co-op had \$19,344 of unclaimed capital credits. This money either has to be sent to the state of Minnesota or be donated to charitable organizations. These are the charitable organizations that North Star donated the money to this year: City of Big Falls, playground fencing; Kabetogama Volunteer Fire/EMS; Lakewood Regional Healthcare Foundation; Baudette Fire Department; Falls Hunger Coalition; Lake of the Woods Food Shelf; Koochiching County Historical Museum; Lake of the Woods Historical Society; Indus School District #363; Rainy Lake Medical Center Foundation; Williams Senior Citizens Center; LSS Senior Nutrition Program; Koochiching County Senior Center; Lake of the Woods Humane Society; Roosevelt American Legion Auxiliary; and River Valley Development Association.



(Above) Mike Hanson, board member from District 4 (left), presents a check to Laurie Bitter, principal for the Indus School District #363.



(*Above*) Mike Hanson, board member from District 4 (left), presents a check to Ashley Lavigne, administrative assistant for the Koochiching County Historical Museum.



(Above) Randy Bergan, board member from District 3 (left), presents a check to Amy Ballard and Erik Tange representing the LSS Senior Nutrition Program.



(Above) Randy Bergan, board member from District 3 (left), presents a check to Velma Lund, representing the Williams Senior Citizen Center.





(Above) Bonnie Erickson, administrator of the International Falls Hospital (left), receives a check from Mike Hanson, board member from District 4.





(Left) Karina McLellan from the Falls Hunger Coalition (left) receives a check from Mike Hanson, board member from District 4.

Extremely cold temperatures will affect the operation of your rented security light

If you notice a problem with your security light this winter, such as intermittent failure or it remains dimmer than normal, you're not alone. Severe cold weather, specifically – 10 degrees or colder, may seriously affect the operation of security lights.

The problem involves the formation of a gas in the bulb, which can be hampered by the cold. Usually, when the weather warms up, the light will return to normal operation



and will not have to be replaced. If your security light is owned by North Star, we would appreciate it if you could bear with us during the coldest spells. If the light does not return to normal operation when the weather warms up, please notify our office and we will repair it for you (**Baudette 634-2202 and Littlefork 278-6658**).

Preparation is power: WEATTLEBING WINTER CONDITIONS



Anyone who has weathered prolonged outages due to an ice or winter storm will tell you it is more than inconvenient. Such an outage during very

cold weather creates an additional set of challenges and safety requirements. Prepare now to ensure you're not left in the cold when the next one happens.

Safe Electricity recommends assembling an emergency "kit" with essential items and more, such as:

- Flashlight, portable radio and extra batteries
- First aid kit and essential medicines
- Non-perishable food
- Bottled water
- Basic tools and related materials
- Extra blankets and clothing to dress in layers
- Outerwear at the ready, including hats, gloves and scarves
- Rags or duct tape to seal air leaks

If you have a wood stove or fireplace, have plenty of extra wood on hand; and if you have a fuel-based heater, have extra fuel and the means to vent the fumes.

Know how you can get area weather updates, such as a weather radio, mobile notification system you can enroll in, mobile app, etc. Visit state and local websites for emergency outage plans in your area. Develop an emergency plan with your family so everyone knows what to do in an outage. Keep your mobile devices fully charged and ready to use when a storm is headed your way.

Additional tips for weathering a cold weather outage:

- Dress in several layers of warm clothing. Wear a hat to avoid the loss of heat from your head.
- Reduce the amount of wasted heat during an outage by closing doors to rooms not being used and securing curtains and blinds to reduce heat loss from windows.
- Never use an oven or charcoal grill to heat the home!
- Reduce the risk of spoiling food during an outage by lowering the temperature of your refrigerator as low as possible, and avoid opening the refrigerator doors unless it becomes necessary. By doing so, you can keep your food cool for up to 24 hours.
- Protect your sensitive electronics by unplugging devices such as televisions and computers. Use surge protectors to protect electronics when power comes back on.
- Be alert to the signs of frostbite, which can include loss of feeling in the extremities and hypothermia, such as shivering, memory loss, incoherence or drowsiness.
- Use caution when going outside. Downed power lines could be hidden by snow or ice. If you see a downed power pole or line, stay far away and report it to your electric utility.

A portable generator can provide power in the event of an outage. Have an electric cord long enough to keep the generator at least 20 feet from any door, window or vent to keep carbon monoxide out of the home. Read your instruction manual before use and operate your generator in well-ventilated areas.

Never use a portable generator in the home or garage –and never plug it into a home wall outlet or connect it directly to the home's electrical system. Install batterypowered or battery backup carbon monoxide detectors near floors on each level of the home.

For more information on electrical safety, visit **SafeElectricity.org**.

SNOWMOBILERS

Beware of hazards! Respect property rights!

As snowmobiling becomes more popular, accidents are increasing. Very few accidents occur on Minnesota's trail system. Most accidents occur along roads and ditches. Obstacles encountered along roads and other cleared rights of way can be very dangerous, especially in lowvisibility conditions.

North Star Electric Cooperative and other Minnkota Power Cooperativeassociated systems have poles, guy wires, metal enclosures and pedestals installed on hundreds of miles of rights of way. When snowmobiling, be aware of these obstacles. Guy wires need special attention as they can be difficult to see.

Some snowmobilers are mistaking the private property where electric

transmission lines are located for snowmobile trails. North Star Electric and other Minnkotaassociated

systems have been granted easements to build and maintain lines in these cleared areas, but the land still belongs to the landowner. Be sure to check with the landowners before snowmobiling on their property.

Enjoy snowmobiling in Minnesota, but keep safety in mind. Slow down, don't drink and stay alert for obstacles.

AVE

Celebrate with savings

Buy energy efficient Christmas lights and decorations LED Rebate

How to apply:

- 1. Purchase LED Christmas plug-in (not battery operated) lights and decorations in 2017.
- 2. Complete this rebate form and submit it to North Star Electric Cooperative by Dec. 31, 2017, with a copy of your sales receipt and the packaging showing the number of lights per string. ENERGY STAR* LEDs recommended.
- 3. Select appropriate rebate in the box below. Rebate cannot exceed 75 percent of cost. Maximum of 5 strings per customer.

Name ____ ___ City/Zip _

Account # _____ Phone # ____

Address

Number of Strings	Rebate per String	Total Rebate
Humber of Strings	Resulte per etiling	Total Result
Less than 99 lights	\$3	
100-199 lights	\$6	
200-299 lights	\$9	
Greater than 300 lights	\$12	

Mail to: North Star Electric Cooperative • P.O. Box 719 • 441 St. Hwy. 172 NW • Baudette, MN 56623

Fixing up your home? Housing We can www.mnhousing.gov



help.



Minnesota Housing partners with Border State Bank and Citizens State Bank to provide loans for repairs, remodelina. installation of electric off-peak

heat and energy-saving improvements. The Minnesota Housing Fix Up loan program offers affordable fixed interest rates with loan amounts up to \$50,000.

Go green and save! Make energy-saving improvements to your home with a loan up to \$15,000. This loan has no income limit and no equity required. Plus, you'll save money with low interest rates.

Looking for energy-saving ideas? Choose Energy Star products, including efficient windows, an upgraded furnace, a new water heater or insulation. Contact your local bank to apply for a Fix Up loan today!



For additional information: /ww.borderstatebank.com

Anna Stewart NMLS# 1003973 Roseau - 463-3888 Christine Modahl NMLS# 530663 Brady Hjelle NMLS# 1584905 Badaer - 528-3255

Lisa Bergsnev NMLS# 504770 Greenbush - 782-2151 International Falls - 283-5556



118 Main Ave. S., P.O. Box 160 Roseau, MN 56751 463-2135

Stuart McFarlane NMLS# 677574 Paul LaPlante NMLS# 677575

'LIKE US' ON FACEBOOK TO STAY **UP-TO-DATE!**



Like your cooperative at www.facebook.com/ NorthStarElectric for outage

updates during winter storms and other useful information.

Electrical contractor continuing education sessions set for January, February



Minnkota Power Cooperative and the associated systems 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 Minnkota's service area.

The registration fee is \$75 for eight code credits. Taking the class on multiple days will not qualify for 16

code credits. Registration is online only at **www.minnkota. com**. Registration should be completed by **Jan. 12**.

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 <u>contractortraining@</u> <u>minnkota.com</u>.

JAN. 23-24 DoubleTree Inn 825 E Beaton Dr West Fargo, N.D.

JAN. 31 Bigwood Event Center 925 Western Avenue Fergus Falls, Minn. JAN. 30 Eagles Club 1270 Neilson Ave SE Bemidji, Minn.

FEB. 6-7 Minnkota Power Cooperative Headquarters 5301 32nd Ave. South Grand Forks, N.D.



Led and old-fashioned strings of Christmas lights don't mix

Stringing the above two types of lights together could cause a fire or ruin the lights. They can be plugged into the same surge strip, but they should not be mixed together in one long string.

Did you buy some new LED Christmas lights? We have rebates for them plus many other rebates! Check them out at www.nse.coop.

Beware of salespeople pitching energy savings from radiant barriers



The Minnesota Department of Commerce issued a consumer alert, encouraging Minnesota homeowners to think twice before installing radiant barriers in their

attics. The Department's Division of Energy Resources (DER) has received reports of salespeople pitching radiant barrier products in flyers and at free dinners throughout Minnesota (241-09-007-08, Glenn Delude). The Commerce Department wants all local consumers to know that radiant barriers are not an effective means to reduce heating or cooling loads in Minnesota homes.

"Many Minnesota consumers have been duped into installing radiant barriers based on false promises of substantial energy saving," said Commerce Commissioner Mike Rothman. "We strongly urge all consumers to be cautious, ask questions and explore other reputable means to make their homes and businesses more energy efficient."

Radiant barriers consist of a reflective film, usually aluminum, installed over the top of attic insulation in existing homes. They are sold as an energy-saving product, with claims of significant reductions in both heating and cooling costs. However, their potential benefit is primarily in reducing air-conditioning cooling loads in warm or hot climates – particularly in southern states.

A report compiled by the Oak Ridge National Laboratory for the U.S. Department of Energy shows that the benefits of radiant barriers decrease significantly in northern climates. In southern cities like Miami, Florida or Austin, Texas, radiant barriers could reduce a household's utility bill by as much as \$150 per year using average residential electricity prices. But in colder climate states such as Minnesota, where annual air-conditioning loads are considerably less, savings drop to only \$10 to \$40 a year.

"The price to install a radiant barrier can be as much as \$2,000 or more," Commissioner Rothman said. "But if the average household saves only \$20 per year, it would take 100 years to pay back your investment."

It's also important to note that radiant barrier products have negligible benefit in reducing heating costs. It is unlikely that most Minnesota consumers would realize any measureable energy saving from radiant barriers in attics.

The U.S. Department of Energy (DOE) and the Minnesota Department of Commerce agree that, in Minnesota, implementing air sealing and adding conventional attic insulation is a cheaper and more effective means for saving energy than installing a radiant barrier. In fact, as attic insulation levels increase, the potential benefits from a radiant barrier decrease.

Sources: Minnesota Department of Commerce

LED lighting rebate form

ENERGY STAR[®] bulbs highly recommended (*Rebates will not exceed 75 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:	(<i>\$4/bulb rebate)</i> Number of bulbs:			
Replacing 75-100W bulb:	(<i>\$8/bulb rebate)</i> Number of bulbs:			



Current electrical ínspectors

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**) and go to the electrical page.

- Lake of the Woods, St. Louis and Koochiching counties: Curt Collier (cgcollier67@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.)

Energy saving comparison

(Incandescent vs. LED light bulbs)

DE L

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					
Equals \$ <u>3.23</u> per month	Equals \$ <u>0.48</u> per month					
Savings per b	ulb per month					
with LED	with LED = \$ <u>2.75</u>					
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.



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 8th 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 5th St. International Falls, MN 56649 283-7000

Kootasca Community Action, Inc. 2232 2nd 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 3rd Ave. S. Virginia, MN 55792 800-662-5711



Merry from all of us at Christmas North Star Electric!

Board Members

Steve Arnesen, President	District 1
Mike Hanson, Vice President	District 4
Lorraine Nygaard, Secretary-Treasurer	District 6
Shelley Spears	District 2
Randy Bergan	District 3
Tom Smith	District 5
Bruce Sampson	District 7

General Manager

Ann Ellis General Manager

Office Personnel

Robyn Sonstegard	Manager of Finance &
	Administration (B)
Patsy Olson	Billing Coordinator (B)
Susan Williams	District Office Supervisor (L)
	Bookkeeper Coordinator (B)
Jessica Groll	Billing Clerk/Administration
	Assistant (B)
Brittany Hanson	Work Order Clerk (B)

Compliance & Member Services

Wayne Haukaas	Manager of Compliance
	& Member Services (B)
Kevin Holen	Member Service Electrician (B)
Jim Kuehl	Part-time Groundskeeper/
	Handyman (B)

Line Crew

Marty Mollberg	Manager of Operations (B)
Todd Thydean	Line Foreman (L)
Tim Pelach	Line Foreman (B)
Glen Marcotte	Line Sub-Foreman (L)
Todd Higgins	Line Sub-Foreman (B)
Dan Fish Map	bing & AMI Metering Technician/
	Purchasing Agent (B)
Darren Koschak	Lead Lineman (B)
Jesse Huot	Journeyman Lineman (B)
	Lead Lineman (L)
	Apprentice Lineman (L)
Cody Stuhaug	Apprentice Lineman (B)
Nathan Zortman	Journeyman Lineman (L)