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Official publication of





Bakken Museum program given at local school

he Bakken Museum presented "War of The Currents" at Holy Trinity School on Wednesday, February 3. Students from Holy Trinity in Winsted and St. Pius in Glencoe enjoyed an assembly show performed by The Bakken Museum and hosted by Great River Energy and McLeod Cooperative Power Association.



The presenters provided students information about electrical generation, transmission, and conservation through the story of Nikola Tesla and Thomas Edison and their historic debate over Alternating Current (AC) versus Direct Current (DC). The presentation provided both visual and interactive discovery with the demonstration of the Tesla coil at the end. Students were encouraged to delve into science. Who knows? Perhaps someday the Bakken will be doing a presentation about them.

Members selected in survey drawing

hank you to all who returned a Member Satisfaction Survey. The Co-op received over 2,000 surveys from our members. The Co-op will be reviewing the survey results in the coming weeks to assess where improvements are needed, what we can do to better meet the needs of our members, and follow up on questions or concerns expressed by members.

The Co-op also appreciates all of the members who shared their updated contact information with us. Having accurate phone numbers in our data base to contact members when issues arise is very important. All members who included their current contact information on their survey were entered in a drawing for ten \$100 electric bill credits. Random winners were drawn by the company tabulating our surveys. The ten members who will each receive a \$100 electric bill credit are:

Karl & Tina Schauer
Delores Strobel
Chad Bandas
Gregory H. Plath
Darron & Tami Alsleben
Greg Bagley
Roger & Judy Lund
Loren Brelje
Stella Rauch

William H. Lucas



Doors open 8:30 a.m.
Old Time Music by Marvin Bulau
& Verne Schlueter 8:45 a.m.
Business Meeting 10:00 a.m.
Roast pork meal
to follow meeting

Candidates vie for director seats

he Nominating Committee met January 27, and February 10, to select the final candidates for director elections in Districts 7, 8, and 9. The Nominating Committee is required to select two candidates to be on the ballot for each district. Additional candidates are only added to the ballot when a member presents a petition to the Cooperative that is signed by at least 20 members from their district.

The persons selected by the Nominating Committee for this year's election are:

District 7: Randy Hlavka and Jonathan Lemke

District 8: Keith Peterson and Glen Jacobsen

District 9: Gerald Roepke and Susan Anderson

See director profiles on page 8.

Looking Ahead- A Quick Glance at What to Expect in 2016

our Cooperative is coming off a very busy year in 2015. Our financial results, although not the best ever, were strong enough to maintain a healthy equity ratio and to amply meet our lenders' debt covenant requirements.

But, 2015 is behind us and it is the time of year we are putting our plans in place for the coming year. The Board approved the 2016 Budget in December and I thought I would share with you some of the numbers and activities we are planning for the upcoming year.

The Board of Directors adopted a 2016 budget with total operating revenue of \$21 million and total cost of electric services of \$20.7 million. Our operating margin is projected at \$300,000 or 1.5 percent. Our non-operating income will add approximately \$700,000 for a total margin anticipated of \$1 million. Non-operating items include capital credits allocated from cooperatives such as our power supplier, Great River Energy, and interest earned on investments.

We project 2016 residential energy sales to increase approximately 3 percent. The increase is greater than our growth rate from new services because we expect more normal weather as

compared to a very mild 2015. Our commercial & industrial class energy sales are projected to decrease overall due to the loss of approximately half of a large industrial load. We project overall sales of 183,000,000 kilowatt hours in 2016.

The cost of the wholesale power we purchase is by far our largest expense at \$13.5 million. This comprises 64% of our total cost of electric services. This year's projected increase of 2% per kWh is included in your energy rate as of March 1. In most years, you would see the increase to power costs in the form of a monthly power cost adjustment on your bill. It is our intention to suspend the power cost adjustment in 2016 unless the actual power cost increases exceed 2%.

With 64 cents of every dollar going toward wholesale power cost, the balance of the revenue we receive provides the cash to pay all our operating expenses, depreciation expense, interest expense, and provide a margin. Nearly \$2.3 million goes to operations and maintenance of the 1,890 miles of line and 7 substations that comprise our distribution system. Included in this amount is payment to vendors of \$400,000 for tree trimming and right-of-way maintenance; \$57,000 for Gopher State One-Call and contractor locates; \$50,000 for pole inspection and treating;

and \$22,000 to outsource our after-hours dispatch services. Our Operations department will be quite busy upgrading lines, building new services and maintaining the system. We plan to build 35 new services, convert 28 miles of overhead to underground line, and replace 200 poles. Speaking of utility plant, our total plant is valued at \$54 million!

In the Member Service Department we have budgeted \$124,000 for member rebates. Our rebates help to make your home, farm or business more energy efficient and reduce your bills with conservation measures. These programs are funded through our rates so take advantage of them.

Technology will continue to help us remain efficient and productive. Replacement of the original Turtle meters with Automated Meter Infrastructure (AMI) should be complete by April or May. The data available from the AMI will be extremely useful in managing our power costs by identifying and therefore managing to avoid peak usage times.

I could go on and on but hopefully I have given you a glimpse into our world and some of what we plan to accomplish this year.

Нарру Retirement to Jan Sanderson,

Manager of Accounting and Finance.

After 27 years of service to McLeod Cooperative Power Association, Jan will put down her pencil in favor of picking up the reins of her horse.

Throughout her career at McLeod Power, Jan has guided us through and toward the financial well-being we enjoy today. For that we will always be grateful, yet another aspect of Jan's presence that we will surely miss is her kindness and wisdom. Oftentimes, when I walk down the hall, I'll see employees from various departments checking in with Jan to chat and walking away with a smile. I suspect it's because we all feel better when we chat with Jan. She has a wonderful way of making us feel better about ourselves.

We all wish Jan the best in retirement and hope she finds time to come in for a cup of coffee and

Sincerely, Carrie

McLeod Cooperative Power office will be closed on Good Friday, March 25.

The Cooperative has a 24 hour payment drop box at the entry to the Glencoe office.

In case of emergency or outage, members may call 1-800-927-5685 anytime 24 hours a day.

Former board member **Dale E. Peters** passes away

e sadly report that Dale E. Peters passed away February 4, 2016. Dale served as a Co-op director for 30 years, from 1984-2014. Dale also served as Secretary-Treasurer on the MCPA Board for 27 years.



Board of Directors

District 1

Oria Brinkmeier, Lester Prairie

District 2

Joe Griebie, Brownton

District 3

Roger Karstens, Vice President

Hutchinson

District 4

Doug Kirtz, Secretary-Treasurer

Hector

District 5

Allan Duesterhoeft, Hutchinson

District 6

Gary Burdorf, Arlington

Randy Hlavka, GRE Representative Silver Lake

District 8

Keith Peterson, President

Hector

District 9

Gerald Roepke, Asst. Secretary-Treasurer **New Germany**

McLeod Cooperative Power News

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The McLeod Cooperative Power News is published monthly for \$4.84 per year for members and \$8 per year for non-members by McLeod Cooperative Power Association 1231 Ford Ave. North, Glencoe, MN 55336-0070

> Editor: Sue Pawelk General Manager: Carrie L. Buckley

The McLeod Cooperative Power News is the official member publication of McLeod Coop Power Association and focuses on our members, programs and events.

All member story ideas and comments are welcome. Send to Sue Pawelk at the address shown.

Office Hours:

Monday - Friday 7:45 a.m. - 4:30 p.m.

Phone: 320-864-3148 1-800-494-6272 24-hour outage: 1-800-927-5685 Fax: 320-864-4850 Web site: www.mcleodcoop.com

Gopher State One Call 811 or 1-800-252-1166

McLeod Cooperative Power Association is an equal opportunity provider and employer.

Ballots and registration tickets to be mailed March 24



Members residing in Districts 7, 8, & 9 will receive a ballot for the director election in their district. They will be mailed on March 24. Members in voting districts will also receive a director candidate profile sheet, notice of annual meeting, and a registration/lunch ticket. If you choose to return your ballot by mail please do not include any payments in your voting envelope. Ballots returned by mail must be received before April 12, 2016.

Members in non-voting districts will have their registration/lunch ticket postcards also mailed March 24.



Standing L to R: Marlin Kohls, Larry Lunow, Gary Krcil, John Mohr and Alvin Huff. Seated L to R: Franklin Schoenke, Karl Lamb, Alvin Knaak, and Curt Burns.

Nominating Committee prepared slate of director candidates for 2016

Members of the Nominating Committee from Districts 7, 8, and 9 met on January 27 and February 10 to select candidates to run for director elections in their respective districts. Serving on this year's nominating committee were: District 7: Alvin Huff, Gary Krcil, and John Mohr, all of Glencoe. District 8: Curt Burns and Alvin Knaak of Stewart, and Karl Lamb of Hector. District 9: Franklin Schoenke and Marlin Kohls of New Germany, and Larry Lunow of Watertown.

McLeod Cooperative Power Association ANNUAL MEETING SCHEDULE Hutchinson Event Center, April 12, 2016

Registration Begins at Hutchinson Event Center	8:30 A.M.
Entertainment by Marvin Bulau, Verne Schlueter & Friends	8:45 A.M.
Meeting Called to Order	10:00 A.M.
InvocationGerald Roe	pke, Director
Pledge of Allegiance	All
Welcome Carrie L. Buckley, Gene	eral Manager
Establish a QuorumDoug Kirt	z, Sec./Treas.
Reading of Notice of MeetingDoug Kirt	z, Sec./Treas.
Approval of Minutes of 2015 Annual MeetingDoug Kirt	z, Sec./Treas.
Introduction of Director Candidates Dist 7, 8, & 9 Keith Peterso	on, President
Introduction of Directors in Districts 1-6 Keith Peterso	on, President
Financial ReportJan Sanderson, Financial Servi	ces Manager
Closing of Ballots Keith Peterso	on, President
Guest Speaker Jon Brekke, Great	River Energy
Manager's Report Carrie L. Buckley, Gene	eral Manager
Washington D.C. Youth Tour AttendeeRu	by Redekopp
Announcement of Operation Round Up Recipients Operation Round U	lp Trust Board
Introduction of Nominating Committee Keith Peterso	on, President
Election ReportNominating Committ	ee Chairman
Unfinished Business Keith Peterso	on, President
New Business Keith Peterso	on, President
Adjournment	
Table Prayer Joe Gri	ebe, Director
Drawing for Attendance Prizes and Grand Prize (\$300 electric bill credit)	Sue Pawelk
Lunch to follow meeting Catered by La	son Catering



McLeod Cooperative Power Association

1231 Ford Avenue, P.O. Box 70 Glencoe, MN 55336-0070



Co-op's community solar could expand with sufficient interest from members

urrently MCPA members have a Community Solar Garden with 100 solar panels. This first offering sold out in December, however, the Co-op has space within the original array fence to construct one additional 50-panel array. We are currently taking reservations from members interested in participating in the next community solar array. When we get sufficient interest to do another 50 solar panels, we will seek approval for construction. Any member with interest in community solar may contact the Co-op for details.

Members may begin donating to Operation Round Up® any time of the year



Members who sign up for Operation Round Up will have their monthly electric bill rounded up to the nearest dollar. The difference between the billing amount and the nearest dollar goes to the Operation Round Up Trust. Members on the program donate from -0- to \$.99 a month, depending on the amount of their electric bill. The average member donates \$6.00 a year to the program. Many worthwhile charities benefit from the proceeds of the trust each year. If you do not already participate, please fill out the form and return it to the Co-op. We will get you set up as an Operation Round Up participant.

Yes, sign me up for Operation Round Up. I understand that my bills will be rounded up to the next dollar amount and the proceeds will be used for local charitable programs.

Name:	
Address:	
City:	Zip Code:
Account #:	
Signature [,]	

Electricity is the best choice for cost-savings and the environment

Analysis says that national policy and everyday conventional wisdom miss the mark on the benefits of electricity

By Paul Wesslund

eith Dennis says electricity is a good energy choice for the environment. He cites a thought-provoking list of reasons in his peer-reviewed article published in The Electricity Journal in November, titled "Environmentally Beneficial Electrification: Electricity as the End-Use Option."

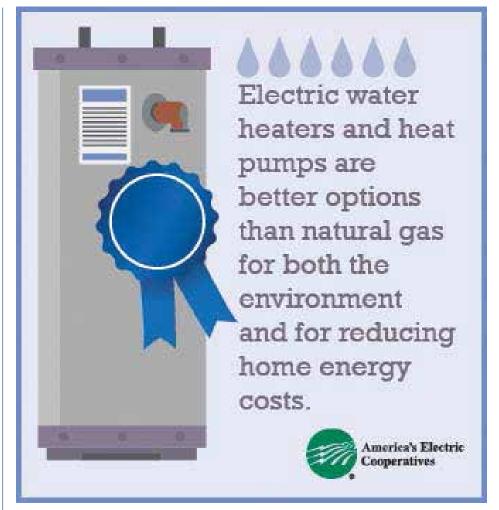
Dennis is the senior principal of end-use solutions and standards at the National Rural Electric Cooperative Association (NRECA). His article challenges basic assumptions about electricity and the environment that make a difference for top-level policy makers, as well as for co-op members. His focus on water heaters and heat pumps is especially significant since heating water and air account for more than half of a home's energy use. Here are answers Dennis gave to questions about the research behind his article:

A central claim in your article is that an electric water heater has less environmental impact than a gas water heater. How can this be true, when burning gas emits less greenhouse gas than burning coal, which generates about a third of our nation's electricity?

Technologies have gotten so advanced that a water heater in your home can be 200 percent or more efficient at converting electricity into heat. It does this by taking some of the energy out of the surrounding air in what's called a heat pump.

- Heat pumps are being used more and more for space heating, and more recently, heat pump technology is being used in water heaters.
- And a gas water heater actually burns the gas in your home. So you need to vent that air out of your home through a flue. To do that, you are essentially making large holes in your home and pumping air in and out, reducing energy efficiency.

Explain the contention in your article that buying a gas water heater locks you out of future



improvements in efficiency.

• Once you install a gas appliance in your home, you are stuck with that technology for its 10- to 20-year life. During that time, solar panels and wind turbines will be generating a bigger share of the nation's electricity. Coal power plant efficiency will be improving. The only way to benefit from those trends would be to have an electric appliance.

You make a point that using an electric appliance can make you part of a broad, national solution to improving energy efficiency.

• In addition to the high efficiency of the electric appliance itself, there are electric system efficiencies that can be achieved through the ability to choose the time when you use the electricity. For example, your water heater is able to operate as a type of battery, and better batteries are part of what's needed to make renewable energy more useful. Solar panels only make electricity when the sun shines, and wind turbines only make electricity when the wind blows. A hidden value of water heaters is that they can serve as a storage

technology—the water they heat stays hot for a long time because they are well insulated. An electric car can work the same way—once it's charged, it stores energy for when it's going to be driven. By storing energy when it is available and then using it when it is needed, these technologies are increasing the overall efficiency of our energy resources.

Many co-ops have load-control programs that take advantage of that energy storage ability to more effectively manage the flow of power. Those load control programs return that value to the Co-op member by helping pay some of the up-front costs for these more efficient appliances through rebates or other incentives.

You claim there's a huge flaw in the way we calculate a lot of the leading energy efficiency standards, from Energy Star ratings to construction standards. How do they miss the mark?

• The formulas being used to calculate energy efficiency for these major programs don't take into account several realities. Those include the

increases in renewable energy and natural gas to generate electricity, power plant efficiencies, load management programs and other advantages of electricity we've talked about in this interview. Those metrics for calculating energy efficiency were designed before a lot of these trends. Despite these trends, the metrics still treat all electricity as coming from inefficient coal plants. That's just clearly wrong. These incorrect efficiency metrics lead to bad energy decisions. In my article, I quote the Natural Resources Defense Council as saying that these metrics "have serious deficiencies for the purpose of setting a product standard; they are simply not the right numbers to inform good standards decisions."

NRECA and others have been working with policy makers to change those metrics. What is the status?

Very positive. It's a long bureaucratic process, but we are hoping that the Department of Energy and the Environmental Protection Agency will work with us to address these issues. Along with the environmental community, the renewable energy community and other energy stakeholders, we have begun that process.

You conclude your article with the bold statement that "incentivizing beneficial electrification with appliances available today would immediately reduce carbon dioxide emissions."

For policy makers and co-op members, more and more you are going to see the ability to achieve end-use emissions reductions and energy efficiency improvements by choosing electric end-use options over direct fossil fuel use like oil, gas and diesel. This will achieve energy efficiency, cost savings and environmental benefits.

Paul Wesslund writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

HOW TO CLEAN REFRIGERATOR COILS

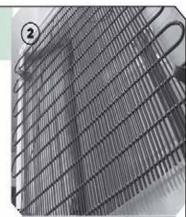
... AND WHY IT MATTERS!

Your refrigerator is one of the largest, most-used appliances in your home. It requires only minimal maintenance - just simple cleaning of the condenser coils, which disperse heat. If the coils are covered with dust, gunk or pet hair, they cannot diffuse the heat properly and will not run efficiently. A bigger problem can result if the compressor burns out from having to run constantly because of the grimy coating. This can be an expensive problem. The bottom line? A minor investment in time once a year can save you cold cash down the line.



MATERIALS YOU WILL NEED

- . Vacuum cleaner with hose . Damp cloth
- Locate the refrigerator's coil, a grid-like structure, or fan that will likely have a covering or grate protecting it. The coil is usually concealed behind the front toe kick or in the back. Some newer models have internal coils, so if you don't find them in the front or back, this may be the case with your fridge.
- If the coil is in the back, slide the refrigerator away from the wall, removing the plug from the electrical outlet when possible. You may also need to disconnect the line to the water dispenser or icemaker to allow enough room to work.
- Gently vacuum and clean the coil. Using the brush or crevice attachment, carefully vacuum the dust and dirt wherever you see it. If you have pulled the fridge out, vacuum and wipe down the sides and back of the fridge and the floor.
- 4. Once the floor is dry, plug in the refrigerator and rearrange the power cord and supply lines so they don't get a kink or stuck under the weight of the refrigerator. Slide the refrigerator back into place. Be sure to replace the toe kick panel if this was removed.







Industry News

CEO says Clean Power Plan puts coal industry in 'mortal danger.'

ome of North Dakota's seven coal-fired power plants will be forced to shut down unless the Obama administration's new rule to curb carbon dioxide emissions undergoes significant changes, an industry official said just hours before the U.S. Supreme Court temporarily blocked the rule. Justices voted 5-4 to grant a request made by North Dakota and 26 other states and various energy and business interests to put the Clean Power Plan on hold while a federal appeals court hears their lawsuit against it.

Lignite Energy Council President and CEO Jason Bohrer said the state's lignite coal industry has a \$4 billion annual economic impact and contributes \$100 million in tax revenue per year. But the Clean Power Plan, which seeks to cut carbon dioxide emissions from the nation's power sector by 32 percent by 2030, puts the industry in "mortal danger," he said. "I believe what is at stake is the continued prosperity of North Dakota," he told the Legislature's interim Taxation Committee.

Gov. Jack Dalrymple has said it was "a shocker" when the U.S. Environmental Protection Agency released its final rule in August ordering a 45 percent cut in the rate of carbon emissions from North Dakota's existing power plants by 2030, after a draft rule had proposed a smaller cut. State officials argue the EPA is overstepping its authority and violating the state's constitutional rights, and that the rule will cause "irreparable harm" through lost tax revenue and jobs, a less reliable power grid and higher costs for consumers.

-Jamestown Sun

Community storage gives co-ops flexibility

nergy storage—the holy grail of the electric power industry—that will save consumers money and give electric cooperatives new flexibility might be as close as your water heater. So says new research from The Brattle Group, a global economic consulting firm. NRECA, the Natural Resources Defense Council, Great River Energy, and the Peak Load Management Alliance commissioned the study, "The Hidden Battery," to launch a "community storage" initiative to aggregate battery-like features of appliances.

Electric water heaters rank third largest in residential electricity consumption, behind space conditioning and lighting, according to the research released Feb. 10. "The magnitude of this relatively untapped resource is significant."

Great River Energy controls more than 110,000 residential water heaters that can store over 1 gigawatt of electricity. Between 11 p.m. and 7 a.m., 65,000 electric thermal water heaters mass enough hot water for an entire day; 45,000 water heaters are used to shave peak demand.

"We believe there's a battery hidden in basements all across our service territory," said Gary Connett, director of member services at the Maple Grove, Minn., G&T. Community storage also is an important tool for meeting Minnesota's 25 percent by 2025 renewable energy standard that is resulting in more variable generation resources. "When the wind is blowing or the sun is shining, large capacity water heaters can be enabled to make immediate use of that energy to heat water to high temperatures," said Connett. "Water heaters can be shut down when renewables are scarce and wholesale costs are high."

-Electric Co-op Today

Power Line Worker Scholarship Offered

tudents accepted into one of Minnesota's three power line technology programs for the 2016-17 school term may apply for a \$500 scholarship. The Cooperative will award one \$500 scholarship for a local student.

If you are graduating from a high school in McLeod, Renville, Sibley or Carver County or are a resident of one of those four counties, and have been accepted into the line worker program at Minnesota West in Jackson, Minnesota State in Wadena or Dakota County Technical College in Rosemount, you are eligible to apply. Applications and informative career brochures are available on the Coop's website or by calling the Cooperative at 1-800-494-6272. Applications must be completed and returned by April 15, 2016.

MCPA News Ads — Free want ad service for members

Please limit your ad to nine words. Use the coupon printed here or available at McLeod Cooperative's front desk to submit your ad. Ads will be printed for one month only. Please submit a new ad if you want it published more than one month. Include your name and address, which will be used for identification purposes only. Ads must be received by March 28 to be included in the April issue. Thank you!

Please run this ad in the next MC	PA News
Name:	
Address:	Please check
Telephone number:	ad category
Remember to limit your ad to nine words!	Giveaway
Remember to limit your act to lime words:	For Rent
13	For Sale
456	Wanted
789	<u> </u>
Clip and Send to: McLeod Cooperative Power, ATTN: Class P.O. Box 70, Glencoe, MN 55336	ified Ads

For Sale - Miscellaneous

- 16ft deep Lund boat. Sparten trailer, 25hp Johnson tiller, removable floor. 320-328-4150
- Electric clothes dryer. Excellent condition. Never used. \$50/obo. 320-327-2472
- 1997 Arctic Cat ZL440 snowmobile in good condition. \$1,250.320-587-7587
- Kenmore stove works. \$75. 320-587-4446

Cleaning out your garage, attic or spare room? Try listing it for free in the MCPA classifieds.

These want ads are designed to help members buy items from or sell items to other members, or rent their property to members. They are not designed to advertise services or for-profit business pursuits. That is why we do not offer a services column and do not accept advertisements for commercial businesses.

- Tiller \$50, 320-587-4446
- · Lake lots westside of Preston Lake. Priced to sell. 320-582-1576

For Rent

• Weekly rental Branson. One or two bedroom condo.

Disclaimer – McLeod Cooperative Power Association (MCPA) assumes no liability for the content of, or reply to, any item posted. The party posting any advertisement assumes complete liability for the content of, and all replies to, any advertisement and for any claims against MCPA as a result thereof, and agrees to indemnify and hold MCPA harmless from all costs, expenses, liabilities and damages resulting from, or caused by, any advertisement or reply thereto.

Distributed Generation Cost Recovery Fee

s of July 1, 2015, Minnesota Statute 216B.164 allows electric cooperatives and municipal utilities to charge a fee to recover the fixed costs to serve a distributed generation qualifying facility. The recovery of fixed costs through a fee or other charges to recover the cooperative's cost of providing service is part of the rate structure of the cooperative that may change

The Co-op's Distributed Generation (solar or wind) Recovery Fee went into effect March 1, 2016. The additional fee for member's interconnecting DG load on or after March 1 will help the Co-op to recover some of the cost shift that occurs between distributed generators and the rest of the membership. The fee will be listed on the electric bill as "DG Grid Access." DG facilities interconnected before March 1, 2016 are grandfathered in and they will not be assessed the monthly DG Recovery Fee.

Any member considering installation of a renewable system should contact the Co-op for a DG interconnection application form. The Co-op will assist members with calculating their specific DG Recovery Fee based on the capacity of their generation.

Steffes Comfort Plus Furnace

The smart heating solution for new home construction, remodeling or retrofits

By taking advantage of McLeod Co-op's Off-Peak Electric Rate you can enjoy lower heating costs and higher comfort.



- There is no fuel to store or tank to fill
- Pay for electricity after you use it
- No routine maintenance
- No smoke...no chimney
- Safe, clean and reliable
- 100% off-peak electric

• No back-up heat source needed Contact the **EXPERTS TODAY to** find out how you can be Comfort Plus comfortable and save money!

January Outage Summary

anuary had very few outages. McLeod Cooperative Power had a total of nine outages, affecting 17 consumers. The largest outage affected six accounts on Tuesday, January 19 at 5:44 p.m. west of Hutchinson. Members were without power for one hour and 39 minutes. The cause was unknown.

Most outages affect only one or two members. They are frequently caused by small animals, trees in the line, equipment failure, or motor vehicle/ machinery accidents. Larger outages affecting hundreds of members at a time are usually caused by transmission outages, storms, equipment failure to substation equipment, or accidents. Restoration time on weekend and evening outages, when line crews are called out from home, usually take a little longer to get back on than outages when crews are already out working on the project.

The Storage Water Heating Program saves members money in multiple ways

n average family using 450 kWh per month to heat water currently pays \$54.00 per month to supply their hot water needs if their electric water heater is not on the Co-op's storage strategy. After joining the Hot Water Storage Program, that same family using 450 kWh, is now down to paying only \$26.46 per month. That means a savings of over \$27.54 a month or \$330.48 a year. Exact usage and savings will vary depending upon number of persons in the family and their hot water usage habits.

for cooling their home with a heat pump or central air conditioner by letting the Co-op cycle their cooling unit during peak hours on the hottest summer days.

For any member that is not already saving money on the Storage Water Heating program, the Co-op is offering a \$400 rebate when you join the program. This can help offset the cost of your electrician or plumber, or purchasing a larger water heater. Although most installations use one 85 or 105

Persons in Home	Avg kWh/Mo	Uncontrolled Elec	Water Storage	Savings/Mo
2	300	\$ 36.00/month	\$ 17.64/month	\$ 18.36
3	450	\$ 54.00/month	\$ 26.46/month	\$ 27.54
4	600	\$ 72.00/month	\$ 35.28/month	\$ 36.72
5	750	\$ 90.00/month	\$ 44.10/month	\$ 45.90

A majority of the 1,320 MCPA households that participate in the Storage Water Heating Program, also take advantage of cooling their home with off-peak electric rates via the Co-op's Cycled Cooling Program. These members get more than a 50% discount on summer kilowatt-hours purchased

gallon Marathon water heater, you can also utilize two standard size tanks or other high efficiency brands to participate. Call the Energy Management Specialists at 1-800-494-6272. They will answer all of your questions, help determine the right size of water heater for your family, and they can assist you

with delivery of the water heater or load control equipment.

Each member that participates in the Storage Water Heating Program also helps reduce the wholesale demand and energy charges paid by McLeod Co-op Power. Storage loads use energy at night when there is excess power available and they are not operating during peak daytime hours. This helps maintain lower rates for everyone.

Storage water heating also plays a role in improving energy efficiency and utilizing the energy produced by wind. Your water heater is able to operate like a battery. It stores the energy that wind turbines put on the grid at night in the form of hot water, which the member can use all day. By storing energy when it's available and then using it when it is needed, is increasing the overall efficiency of our energy resources.

ed ee

Saving Money on the Farm

Agriculture Pumps and Motors

Every farm uses pumps and motors for activities such as pumping water, transferring grain, ventilation, running feeders, and any other number of farm jobs. Motor efficiency depends on how well a motor converts electrical power into work. An electric motor's efficiency is calculated as the ratio of the output power of the motor shaft over the electrical power needed to turn the motor shaft. This calculation uses power values measured in wattage or horsepower.

For the best efficiency, motors should be sized to operate with a load factor between 65% and 100%. Oversizing motors, which occurs frequently in agricultural operations, results in less efficient motor operation and can waste energy. For example, a motor operating at a 35% load is less efficient than a smaller motor sized to the same load.

If your operation is considering a pump or motor upgrade, take a moment to assess your energy needs and call McLeod Cooperative's Energy Management Specialists to learn about potential pump and motor rebates:

1-800-494-6272



Variable Speed Drives

Variable speed drives (VSDs) on electric motors can save significant energy for farmers. Also known as variable frequency drives, these drives calibrate the power an electric motor needs according to the work load, ramping up or down as the work load varies. Variable speed drives will save energy on systems with changing loads, such as milking systems and ventilation fan systems. In contrast, a standard motor is either on at 100% or completely off. VSDs are capable of running at the needed power rating for a task and adjusting the speed to match the work load. Using VSDs can reduce a motor's energy use by significant percentages, depending on the use.



Ventilation and cooling fans are common to many agricultural operations, but can vary widely in energy use due to motor efficiency, louvres, shutters, and discharge cones. If you are ready to replace your fans, purchase fans with the highest efficiency (cfm/watt) and air flow ratio (AFR). A high AFR will provide

consistent airflow at a wider range of static pressures as the wind changes direction and speed. Larger fans are generally more efficient, as are fans with discharge cones. Machete or straight and teardrop blade designs accumulate less dust that cloverleaf shaped fan blades and are also more efficient. Illinois State University's BESS Laboratory is an excellent resource to review ventilation fan efficiency: bess.illinois.edu. For grain growers, low-speed centrifugal fans move the most airflow per HP through grain and are the most efficient.



"If it ain't broke, don't fix it" is not always good policy when it comes to pumps and motors. While pumps and motors may be working, they may not be working efficiently. Simple maintenance measures can enhance motor performance and efficiency. Watch for belts that are too loose or not aligned. A worn belt can cause a motor to work harder and drop efficiency by 20%-25%. Replace motor belts with cogged V belts, which reduce slippage and save 2%-5% in energy usage. Clean and oil fans regularly for up to up to 40% in energy savings.

Profiles of director candidates for District 7, 8, & 9

The Nominating Committee is required to select two names in each district to appear on the ballot. Below are the candidates they have selected for Districts 7, 8, and 9.

District 7 includes:

Hale, Rich Valley and Glencoe Townships in McLeod County and part of Stockholm Township in Wright County.



Randy Hlavka

Randy is the current director for District 7. Randy is an "A" Master Minnesota licensed electrician, who has worked with agricultural installations, residential, and large commercial and industrial operations throughout the state. He grew up in Rich Valley Township and currently lives in Hale Township with his wife Jenny, a coater

operator at 3M. They raised three children, Sara, Teri, and Eric. They have five grandchildren, who love to come to the farm, help garden and ride their electric vehicles. He has served as an Elder at Faith Presbyterian Church, as past Commander of the Silver Lake American Legion, and as a member and activity helper with the Silver Lake Sportsman's Club.

Randy said, "I am very appreciative of the MCPA Board's trust in placing me on the Great River Energy Board, to represent McLeod Coop Power." He added, "I take my service to the Board and McLeod Co-op members as an opportunity to reflect their concerns to federal and state government elected officials. The laws, mandates, and EPA regulations they approve, such as distributed generation, net-metering, coal mining restrictions, carbon emissions, wind, solar and natural gas initiatives, affect our member's rates currently and will greatly influence them in the future. I will always keep our member's concerns first and work with the other directors and staff to make the impact of political actions as minimal on our members as possible".



Jonathan Lemke

Jon and his wife Mary have lived in Glencoe Township since 1990. Jon works in the family business, Lemke Welding in rural Glencoe. Mary works as Vice-President of Finance for Thomas H Moore Companies in Shakopee. They also hobby farm: growing crops for Seneca and some cash crops on 400 acres. The Lemke's have three children;

Christopher 19, Paul 16, and Jacqueline 11.

Jon is a graduate of Glencoe - Silver Lake High School and has a Bachelor's degree from Mankato State in Science Education.

Jon and his family are active members of First Evangelical Lutheran Church of Glencoe, having served on various boards and committees. Jon's children attend Augsburg College, GSL High School, and First Lutheran. Jon enjoys spending a lot of quality time attending all of their events.

Jon believes the Co-op has done a good job managing human resources and its physical resources. "Through my welding business, I have worked in many power plants in the 5-state area, and have a broad knowledge in electric generation," said Jon. "I'd like to have the opportunity to expand my knowledge in this area by serving on the board. I could bring a different perspective to the board with the background that I have," he added.

District 8 includes:

Melville, Palmyra, Martinsburg, Bandon, Norfolk, Wellington, and Bird Island Townships in Renville County, and Grafton, Moltke, and Bismarck Townships in Sibley County.



Glen Jacobsen

Glen has lived in Palmyra Township, in Renville County, for 14 years. He and his wife Donna run the Jacobsen Tortoise Farm, LLC. They keep and attempt to raise and reproduce threatened and endangered species of turtles and tortoises from around the world. They are called 'assurance colonies' and are an effort to ensure that there is sufficient genetic diversity in the captive population so that the species can be kept

viable, if ever we were able to return them to their native, wild areas. In addition to taking care of his animals, Glen enjoys riding motorcycle and bicycle, gardening, swimming, fishing and reading.

Glen is employed as an Assistant Renville County Attorney. He has been an attorney for 29 years, virtually all of it as a prosecutor and public servant in one form or another. Previously he worked as a contract city prosecutor in the Twin Cities metro area and in Mower County, Austin, MN. In addition to criminal and juvenile $\,$ prosecution, he is familiar with land use, property tax and zoning law. Glen is a graduate of St. Olaf College and William Mitchell College of Law.

He serves on the Board of Directors for CURE, (Clean Up our River Environment), whose mission is to work toward cleaning the water and environment of the Minnesota River Valley, having served as board chairman and vice-chairman.

Glen has owned a Jacobs wind turbine for over 8 years now. He said, "It produces approximately \$250 worth of electricity each month and produces absolutely no pollution or carbon footprint."

Glen stated that if elected, "I would do everything that I could to encourage the Coop to go from a business that buys power and then sells it on to its membership, to one whose membership not only generates sufficient power for all the members of the Coop, but could also make money for the entire Coop membership by selling excess power into the Grid."

When asked why he would like to be a director, Glen replied, "I see a need for a strong voice for a new direction in the Cooperative. We can no longer sit idly by while our electricity is generated by coal fired power plants. We must take action, and we must do it sooner than later." He added, "Global climate change is real and is happening around us. Each and every one of us must do more to reverse the current trends that will so drastically change the world our children and grandchildren will know and live in."



Keith Peterson

Keith is the owner of E & K Farms, Inc. in Martinsburg Township, south of Hector. He is a graduate of Hector High School and the University of Minnesota with a degree in agronomy and animal science. Keith is a grain farmer growing corn, soy beans and sweet corn.

Keith's wife, Sandy, is a nurse and they had five daughters and six grandchildren. Keith currently

serves on the Martinsburg Township board. He is an active member of the Hector Lions and formerly served on the Hector school board and the local elevator board. In his spare time, Keith enjoys hunting and doing things with his family.

Keith is currently the incumbent director and serves as board president. He would like to continue to serve as your director and continue to keep electricity both economical and reliable, while keeping abreast of the ever-changing industry and its challenges.

District 9 includes:

Hollywood, Camden, Watertown and Young America Townships in Carver County, and parts of Woodland and Franklin Townships in Wright County.



Susan Anderson

Susan Anderson attained her bachelor's degree and Juris Doctor (JD) degree from the University of Illinois. Most of her career Susan worked as a corporate lawyer; where working with the banking and railroad industries gave her good

experience in regulatory environments. About 5-6 years ago she retired from practicing law.

Susan is now semi-retired. She is currently employed part-time by Harvest Moon Natural Food Co-op in Long Lake, in the retail grocery business. Previously, she was employed by Lakewinds Food Co-op in Chanhassen, where she ran a 17-person department.

Susan and her husband Keith, have lived south of New Germany, in Camden Township, for 20 years. Keith is a retired auto mechanic and is now a part-time farmer. They raise sheep and chickens, and have a few other animals. Susan enjoys beekeeping, gardening, and cooking. She has a passion for visiting food co-ops. Their family includes one daughter and two grandchildren.

Susan said, "I like the direction the Co-op has been going, promoting growth of businesses in the area and the development of a community solar project, and I want to be a part of it." She added, "I am interested in alternative energy and affordability issues, and have seen it from varying consumer, business, and farm perspectives." The Anderson's are participants in MCPA's Community Solar Garden.



Gerald Roepke

Gerald Roepke is the incumbent candidate for District 9. He previously served as president and is now assistant secretary of McLeod Co-op's Board of Directors.

Gerald and his wife Karen have been married for 52 years. They

have four children and six grandchildren. Gerald has been in the plumbing and heating business for the past 49 years. The Roepkes are active members of St. Mark's Lutheran Church in New Germany.

He serves as Region 7C Baseball Commissioner for Minnesota State Amateur Baseball and serves on the Selection Committee of the Minnesota State Baseball Hall of Fame.

Gerald said, "I like to work for people and I'm very interested in the rural electric industry, so I would like to continue serving as a director. We must keep an open mind with the many issues that are facing us today in the electric industry and we must continue to provide good, reliable service to our customers at the lowest possible price. I would be honored to serve another term."