McLeod Cooperative Power





New high-tech refrigerator technology



2

Generator safety



Coal Creek Tour Aug. 20-22

Official publication of

6



MCPA takes first place award for entry in Glencoe Holly Days lighted parade group of employees of McLeod Cooperative Power and their families participated in Glencoe's Holly Days lighted parade on November 26. The parade, which is sponsored by the Glencoe Lions, has become an annual Glencoe winter event.

anuary 201

Best Investment for your home: *Convert your uncontrolled water heater to the Storage Program*

he average family of four persons can reduce their electric bill \$35-40 a month when they join the Hot Water Storage Program. Twenty percent of Co-op members are already participating in the Storage Program and saving money every month. In other words, more than 1,140 of your neighbors and fellow members have figured out this is a great program. Members who participate pay the halfprice electric rate for heating their water. If they cool their home with central air conditioning or a heat pump, their cooling can be cycled on the halfprice rate also.

To participate, you need an 80 gallon or larger hot water heater. Two 50 gallon or larger water heaters can also be used but one 80 or 105 gallon tank works best. A high efficiency, well-insulated water heater, like a Marathon brand, is



best but not required unless you want to qualify for the following rebates. A rebate of \$100 is available for new construction and gas conversions and a \$200 rebate for uncontrolled electric water heating that converts to the Storage Water Heating Program with a high-efficiency water heater (energy factor of .90 or higher). The Co-op provides a mixing valve to increase the gallons of hot water you can get out of your system daily, as well as an offpeak metering package and radio receiver. Consumers would have their own electrician wire the water heater and metering equipment to the service.

Once on the program, the water heater will heat for 8 hours in the middle of the night (approximately 11 p.m. to 7 a.m. daily). The water heater will be off for 16 hours during the day. That is why members have an extra large water heater, to make sure they have plenty of hot water to use all day. The program comes with a satisfaction guarantee and the Co-op will work with any family that grows over time. (We know that families with teenagers typically use more hot water than families with toddlers.) You have hot water 24 hours a day even though it is actually heated only in the nighttime, when there is a surplus of power available due to wind turbine electricity generation and the low demand for electricity.

McLeod Co-op Power stocks 85 and 105 gallon water heaters for the storage program. We also sell 50-gallon and heavy-duty dairy barn water heaters. An 85 gallon is available for \$975 plus tax and a 105 gallon is \$1,025 plus tax. Free delivery is available for MCPA members.



If you need to replace an old water heater, we encourage you to choose Marathon brand, with its lifetime warranty against leaking. Do the Storage Program at the same time to dramatically reduce your electric bill.

With the savings on the storage water electric rate, most families will see payback in 2- 3 years. If you already have an 80 gallon or larger water heater, and you can join the program without having to purchase a new tank, your payback should be less than six months.

Call the energy experts at McLeod Co-op Power today 1-800-494-6272. We can assist you in getting set up for Storage Water Heating. It is a big financial savings for members and every uncontrolled water heater that goes onto the Storage Program saves money for the Co-op.

Plan to attend annual meeting April 10

ark your calendars to attend the annual meeting of McLeod Cooperative Power on Tuesday, April 10 at the Hutchinson Event Center. This year it is an evening meeting. Doors open at 4:00 p.m. Shredded beef sandwiches and the fixings will be served from 4-6 p.m. for Co-op members. The business meeting will start at 6:30 p.m. Young families are encouraged to participate — attendance prizes for kids too.

Error found on scenic calendars picked up before Dec. 14

If you picked up a 2012 scenic calendar at the Co-op before Dec. 14, you may want to correct two errors that were found inside. There is no May 31. It needs to be added. There are also five extra days listed after October 31. We corrected all calendars once we discovered the error. So those calendars picked up after Dec. 14 should be fine. Sorry for any problems this caused.



ommunity and civic groups, emergency responders and other non-profit organizations are welcome to apply to McLeod Cooperative Power's Operation Round Up Trust for donation assistance. The trust is able to donate funds to worthy local projects in McLeod, Renville, Sibley or McLeod Counties.

Operation Round Up donation applications are being accepted until March 1

Funding is from the generosity of electric cooperative members who round up their electric bills. Application forms are available by calling the Cooperative at 1-800-494-6272. Applications for funding must be completed and returned to the Cooperative by March 1, 2012.

New high-tech refrigerator technology

he changes in refrigerator technology so far have been thicker insulation, more efficient motors, and anti-sweat switches, which allow the user to turn off the heaters in the outer walls of the fridge if it isn't "sweating". Improvements to the fan inside the food compartment have been doubly significant because inefficiency there costs twice: once in the motor's energy use, and once in having to remove the waste heat from the food compartment. Further gains in efficiency come from having a microchip control the defrost cycle instead of relying on a timer. Thanks to recent improvements in insulation and compressors, today's refrigerators use much less energy than older models. With an ENERGY STAR qualified refrigerator, you can maximize your energy and dollar savings without sacrificing the features you want.



How it works

Electric refrigerators work on the same principle as perspiration: when a liquid evaporates, it draws heat away from its surroundings. Inside every electric refrigerator are tubes full of refrigerant, a fluid that boils at a low temperature. The refrigerant (formerly Freon, but in new appliances a compound of

hydrogen, fluorine and carbon — an HFC — which has no effect on the ozone layer) is allowed to

evaporate in a coil inside the fridge. This cools the coil. In most refrigerators, a fan blows air across the coil into the freezer and fresh food compartment. In a manual-defrost model, the coils are built right into

the sides of the freezer. Meanwhile, the cold, vaporized refrigerant is piped to the compressor, which increases the pressure on it and pumps it to the condenser coils, typically located behind the refrigerator. There the hot, compressed gas cools off, releasing heat to the surroundings, and turns back into a liquid. The liquid refrigerant passes through a pressure-reducing valve into the evaporator, where the cycle begins again.

Slash your energy bills.

District 1

ENERGY STAR qualified refrigerators are required to use 20% less energy than models not labeled with the ENERGY STAR logo. Choose a new qualified model rather than a non-qualified model and cut your energy bills by \$165 over the lifetime of your fridge.

Replace your old fridge for bigger savings.

If you still have a fridge from the 1980s, replace it with an ENERGY STAR qualified model and save over \$100 each year on your utility bills. Replace a fridge from the 1970s and save more than \$200 each year!

McLeod Cooperative Power News

on our members, programs and events. All member story ideas and comments are welcome. Send to Sue Pawelk at the address above.

> 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 1-800-252-1166

BOARD OF DIRECTORS District 6

Oria Brinkmeier, *Lester Prairie* District 2 Dale Peters, Secretary-Treasurer *Brownton*

District 3 Roger Karstens, *Hutchinson*

District 4 Doug Kirtz, Vice President *Hector*

District 5 Allan Duesterhoeft, *Hutchinson* Lester Ranzau Glencoe District 7 Bill Polchow, Asst. Secretary-Treasurer Silver Lake

District 8 Keith Peterson, *Hector*

District 9 Gerald Roepke, President *New Germany* USPS 2220 Periodicals Postage Paid at Hutchinson, MN POSTMASTER: Send address changes to McLeod Cooperative Power News P 0 Box 70, Glencoe, MN 55336-0070

The *McLeod Cooperative Power News* is published monthly for \$5 per year for members and \$8 per year for non-members by McLeod Cooperative Power Association 1231 Ford Ave. North, Glencoe, MN 55336-0070

> General Manager: Kris Ingenthron Editor: Sue Pawelk

The McLeod Cooperative Power News is the official member publication of McLeod Coop Power Association and focuses

Understanding your electric bill

Ever wonder what makes up your monthly electric bill and how your electric usage is measured?

Your typical electric bill is broken down into three components:

Cost of basic service

That's \$20.00 per month for our residential members. This charge does not change, regardless of how much or how little electricity you use during the month. It covers a portion of the cost of providing safe, reliable electric service. So when you flip the switch you know your lights will come on. This includes not only equipment like meters and poles but also the cost of billing, collections, and administration.

Residential energy charge

This is the charge based on the amount of electricity you use, and it usually varies from month to month. Electricity is measured in kilowatt hours(kWh). For example, if you operate a 2 kW electric heater for five hours, it consumes 2 kW x 5 hrs = 10 kWh. Your bill will include a charge for the energy used by this heater and every other electric-powered piece of equipment/appliance in your home.

Power cost adjustment (PCA)

We use the PCA to handle the annual fluctuations in the price of wholesale power. Depending on wholesale power prices, it is either set at zero or as a surcharge or a credit. It reflects the changes in the cost of fuel and purchased wholesale power since the rates were set.

Nominations by petition for director candidacy to be submitted by March 16

Cooperative members residing in Districts 4, 5, or 6 may petition to have their name added to the slate of candidates for the 2012 director election in their district. To have another name, in addition to the two candidate names selected by the nominating committee, on the ballot, you may file a nomination by petition.

The petition must be signed by 20 or more McLeod Cooperative Power Association electric members residing in your district and it must be submitted to the Cooperative secretary not less than 25 days prior to the Annual Meeting. The last day that a petition can be submitted is March 16, 2012.

The Cooperative secretary shall post at the Cooperative office the names of additional nominations and also persons selected by the nominating committee.

District 4 includes: Boon

Lake, Preston Lake, Brookfield, Hector, Osceola, and a portion of Kingman Township, all in Renville County, and a portion of East Lake Lillian Township in Kandiyohi County, served by McLeod Cooperative Power.

District 5 includes: Lynn, Collins and Round Grove Townships in McLeod County.

<u>District 6</u> includes: New

Auburn, Green Isle, Arlington, Dryden and Transit Townships in Sibley County.



This 50 kW generator could power a small farm operation. Larger generators for livestock confinement housing and small portable generators for basic house needs may better serve your requirements. Check with the Co-op if you are looking for a generator. Our electricians can help you with basic sizing and options.

CLeod Cooperative Power Association strives to get your power back on as quickly as possible if an outage occurs, however, we encourage our members to be prepared for an extended outage should something out of our control happen. It could be a regional ice storm that lasts a week. It could be a failure of the electrical grid due to terrorists or solar storms. There could be various scenarios but the possibility exists that power could go out for all of us for more than a few hours. Are you prepared? Do you have a generator?

The Cooperative encourages all farmers, especially those with livestock or confinement housing, to have a properly sized automatic-start generator for their operation. It is a critical device to have when the lights go out.

Even for residential households, a generator that can power your sump pump in a thunderstorm, or an electric heater or two in a ice storm helps protect your home and your family. Even a generator of less than 5,000 watts can be used to power up refrigerators or freezers for enough hours a day to keep food cold and fresh. It can give you minimal lighting or heating. If you have your electrician do the proper wiring and installation of a disconnect switch, you can have your furnace fan or well pump wired to run off of a generator.

We encourage all our members to be prepared for the outage that we hope never happens. Keep your house stocked with the canned goods, water, batteries, flashlights or candles, medicines and whatever else you need to get by for a few days. Have a generator and fuel available. Whether you need a large 50 kW generator (like the one pictured) to power your farm or just a smaller portable unit, it will help you be ready for any outage that could someday occur.



Power Line Worker Scholarships Offered

S tudents accepted into one of Minnesota's three power line technology programs for the 2012-13 school term may apply for a \$500 scholarship. The Cooperative will award up to four \$500 scholarships for local students.

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 Rosemount Technical College in Rosemount, you are eligible to apply.

Applications and informative career brochures are available by calling the Cooperative at 800-494-6272. Applications must be completed and returned by April 16, 2012.

Prepare now for winter storms

s nice as this past December was, we know what January through March usually holds in store! Although we live in the Midwest and are used to snow and ice, we can often be surprised by the ever-changing Minnesota weather.

The most worrisome occurrence during a storm is a power outage. If the outage lasts several hours or days, keeping warm and having enough water and food on hand is crucial. Your Cooperative urges you to be prepared with the following safety tips:

In your Home

Extra supply of water

A normally active person needs to drink at least two quarts of water every day. Children, nursing mothers and ill people need even more. You also will need water for food preparation and hygiene. Store a total of at least one gallon per person, per day.

Food

Store at least a three-day supply of non-perishable food that requires no refrigeration, preparation or cooking, and little or no water. Examples are:

- Ready-to-eat canned meat, fruits and vegetables, including dried fruits
- Canned juices
- High-energy snack bars/nuts
- Extra food for infants
- Comfort/stress foods



If you venture out during or after a snow or ice storm, watch for downed power lines. Don't assume the line isn't energized. Stay away and call your Cooperative immediately.

Medical Supplies

Extra medicine/drugsFirst-aid kit

Don't forget your pets and/or farm animals. They need adequate food and water, too. Animals often die from dehydration during prolonged winter storms. Check pet shelters to make sure they are wind-proof and snug.

Battery-operated equipment

In case the phone lines are down, be sure to have the following on hand for emergencies:

- Extra batteries
- Battery-powered weather and commercial radios
- Cell phone with extra charged battery
- Flashlight

If stranded in your car or pickup

When heading out during the winter, make sure your gas tank is above half full. A winter storm can come up suddenly and you don't want to get stranded with frozen gas lines.



It's always a good idea to

have a winter survival kit stashed in your trunk or cab, too, in case you find yourself stranded for several hours waiting for a storm to pass. Taking a couple of hours now to prepare could save your life later. It's well worth it!

Here are some suggestions for a winter car survival kit:

- Cell phone with extra batteries
- Blankets, sleeping bags
- Flashlight with extra batteries
- Flares
- Extra dry clothing for everyone
- Extra gloves, hats, scarves, boots
- Can and waterproof matches to melt snow for drinking
- Energy foods, such as granola bars, nuts, dried fruit, etc., as well as non-perishable canned foods that contain protein, such as tuna
- Non-electric can opener
- Plastic eating utensils
- Sand or cat litter for traction
- Shovel
- Tow rope and booster cables
- Piece of brightly-colored cloth to use as a signal to a search vehicle
- Plastic sheeting as a waterproof barrier
- A tool kit that contains such items as pliers, tape, a compass, aluminum foil
- Contact lens solutions and a pair of glasses
- Games, books, etc., to pass the time

Resources include FEMA, Red Cross and Safe Electricity. For more information, go to www.fema.gov/hazard/winter, www.redcross.org/services/prepare or www.safeelectricity.org

Know your winter storm and extreme cold terms **<u>Freezing Rain:</u>** Rain that freezes when it hits the ground, creating a coating of ice on roads, walkways, trees and power lines.

Sleet: Rain that turns to ice pellets before reaching the ground. Sleet also causes moisture on roads to freeze and become slippery.

Winter Storm Watch: A winter storm is possible in your area. Tune in to Natl. Oceanic & Atmospheric Administration (NOAA) Weather Radio, commercial radio or TV for more information.

Winter Storm Warning: A winter storm is occurring or will soon occur in your area.

Blizzard Warning: Sustained winds or frequent

gusts to 35 miles per hour or greater and considerable amounts of falling or blowing snow (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.

Frost/Freeze Warning: Below freezing temperatures are expected.





Spiritwood Station a valuable long-term asset for Great River Energy

R aced with a strong growth in demand for electricity by its member cooperatives and the need for a long-term asset to provide the generation to meet that growing demand, Great River Energy started construction of Spiritwood Station, a 99 megawatt combined heat and power plant located just east of Jamestown, N.D., in October 2007.

The power plant, built at a cost of \$424 million, will generate electricity for the regional electricity market, and provide process steam to a malting facility located adjacent to the plant. When fully utilized, Spiritwood Station will be about 66 percent efficient. This compares to about 30-35 percent efficient for most coal-based power plants in the United States. Also, the plant will utilize the best available emissions control technologies, making it one of the cleanest power plants in the country.

The plant in-service date is being delayed. During the construction phase, the United States was unexpectedly hit by the recession, and Great River Energy's five-year forecasted growth dropped from a strong 2.5 percent prior, to a marginal 0.5 to 1.0 percent. In addition, there was the loss of a proposed ethanol plant that would have used process steam from the plant. These events resulted in a challenging short-term outlook for Spiritwood Station.

Thus, Great River Energy made a decision in August 2011 to delay the in-service date of Spiritwood Station past 2012. The delay of the in-service date will minimize the cost impact to members and will help to maintain the competitiveness of GRE's rates. Great River Energy's members will again need more baseload electricity in the future, and that will help make Spiritwood Station a valuable long-term investment. This will occur as demand and electricity prices increase via a turnaround in the economy, and as additional markets develop



for the available process steam from the plant.

This fall, Great River Energy finished commissioning activities at Spiritwood Station with successful results. In November, employees immediately started a protect, preserve and maintain mode at the plant. That included drying the boiler and piping systems, cleaning equipment, moving all coal, lime and ash off-site, and site cleanup. Current activities include monitoring preservation of equipment, running lube oil systems, running conveyors to preserve the belts, turning motors, and performing other preventive maintenance activities.

Great River Energy will develop the 2013 operational plan for Spiritwood Station during the fall of 2012.

Source: Great River Energy

Crews complete DC line repairs

hen a late summer storm caused major damage to a vital Great River Energy transmission line, crews quickly found a way to get the line back in service while a permanent solution was completed. Approximately three months after the damage, repairs to the 400-kilovolt (kV) direct current (DC) line were complete.

On Aug. 1, three towers on the transmission line, which connects Great River Energy's Coal Creek Station power plant to Minnesota, were destroyed by straight-line winds up to 120 mph near Glenwood, Minn.

Immediately following the storm, transmission line engineers devised an innovative temporary solution to allow the line to be re-energized as quickly as possible. The solution used 18 wooden structures to keep the line in service and provided time to plan and build a permanent solution.

After the foundations were designed and poured and the new towers were constructed, the final steps in the restoration effort were to attach the wires to the new towers and remove



the temporary structures. Construction crews lifted the wires using a crane and a helicopter to attach them to the new towers.

"A number of windy days caused some delays when we were lifting the wires, but overall, the effort went smoothly," said Roger Kiefer, Great River Energy's manager of transmission construction and maintenance. Kiefer said contract crews had to wait for winds to drop below 24 mph in order to be able to control the wires well enough to attach them.

Careful planning while building the temporary solution saved time at this stage by eliminating the need to splice the wires together. "When we built the temporary solution, we built in a loop to equalize the tension. This allowed us to keep the length of the wires the same from the temporary structures to the permanent ones. All we needed to do was remove the loop to bring it back to the original length and tension."

Some of the work was done while the line was energized. A line technician hung from a helicopter to move the line using the "barehanding" method which allowed the technician to handle the energized wire while wearing a special metal fiber suit.

Source: Great River Energy

INDUSTRY News

Energy efficiency will drive utilities in future

Lectricity is at the heart of the U.S. energy economy. And the numbers say so. A report by the Manhattan Institute cites this fascinating statistic: In 1950, 20 percent of the U.S. gross domestic product was directly dependent on electricity. By 2008, that number had tripled to 60 percent. Additionally, the report states that over 85 percent of the U.S. energy growth since 1980 was met by electricity. While the fabric of our energy landscape finds itself dependent on electricity rather than oil, this is favorable for energy supplied by domestic resources and supports growing energy independence and security.

The Alabama State Port Authority electrified a major dredging project in Mobile, Ala., and reported a large fuel and emissions savings as well. The Electric Power Research Institute estimates that more than 28 tons of emissions of pollutants per day were avoided by using electric equipment, rather than diesel equipment, for this project. Projects like this are great for America as well. The United States spends \$1 billion a day on foreign oil, while our electricity is made right here in America.

 \sim EnergyBiz

CapX2020 transmission line between St. Cloud and Monticello energized

he CapX2020 Monticello-St. Cloud 345 kilovolt transmission line was energized just before Christmas. The 28-mile segment between the new Quarry Substation near St. Cloud and the existing Monticello Substation is the first CapX2020 project to be completed and placed in service.

"The project ensures service reliability and provides capacity for new power generation outlets, when needed, and brings lasting benefits to the Upper Midwest," said Will Kaul, vice president of transmission at Great River Energy. "The CapX2020 projects will further expand and enhance the regional grid, giving utilities access to the most affordable electricity in the footprint of the Midwest Independent Transmission System Operator."

Construction will begin in early 2012 on the Fargo, N.D.-St. Cloud 345 kV project between Alexandria and St. Cloud. Construction is scheduled to start in April 2012 on the Brookings County-Hampton 345 kV project. Construction started on the Bemidji-Grand Rapids 230 kV project in mid-2011 and is expected to be complete in late 2012. Regulatory permits for the Hampton-Rochester-La Crosse, Wis., 345 kV project are pending with state and federal agencies.

CapX2020 is a joint initiative of 11 investor-owned, cooperative and municipal utilities in Minnesota and the surrounding region to upgrade and expand the electricity transmission grid to ensure continued reliable and affordable service.

~Press Release



igh school juniors and seniors have until March 5, 2012, to apply for the Cooperative's Washington Youth Tour competition. One local youth will win an all-expenses-paid trip to Washington D.C. June 16-21, 2012, from the Cooperative.

For more than 40 years, electric cooperatives have sponsored the annual Rural Electric Youth Tour by sending their high school students to experience first hand the essence that is our republic. An information packet is available upon request to any high school junior or senior. Just call the Co-op at 800-494-6272. You will have until March 5, 2012, to submit your application. Students complete a questionnaire and application to qualify. Please encourage your child or grandchild to apply. They need only attend a high school in or reside in McLeod, Renville, Sibley or western Carver County.

Coal Creek Tour to include Medora Musical & Pitchfork Fondue in 2012

Creek Tour is scheduled for August 20-22, 2012. Coal Creek



Generation Station, Falkirk Coal Mine and Garrison Dam are again on the itinerary, but added to the tour this year is a trip to Medora. Participants will spend a night in Medora, take in the Medora Musical and eat at the Pitchfork Fondue experience.

Cost will be \$300 per person double occupancy or \$400 per person single occupancy. If any members are interested, we are starting to take reservations. Call the Co-op at 1-800-494-6272 and ask for Katie.

Electricity remains a good value

E lectricity has fueled countless technological advances and consumers use it, either directly or indirectly, at almost all times. However, electricity is so abundant and affordable that it's easy to take for granted.

Recently, much has been made of the rising cost of electricity, now and in the future. While that is true, it's important to understand that electricity remains an undeniable bargain, and one of life's great conveniences.

Power continues to be a bargain, especially when compared to other consumer goods.

Consider the cost of a gallon of gas 30 years ago compared to today's price. How about a pound of coffee or a loaf of bread. The cost of electricity is only slightly higher than it was 30 years ago. While this doesn't take the sting out of rising costs, it does show that the cost of electricity has remained relatively flat, despite its increased use and value to our daily lives.

Whether you consider yourself a bargain hunter or not, you are — perhaps unknowingly — taking advantage of one of the best deals around every time you plug in an electrical device. Sure, you pay your power bill each month, but do you know what you're really getting?

For every \$1 you spend on electricity, here's how long you're able to operate common household electronics:

- Refrigerator: 1 week
- Ceiling fan: 30 days
- Lamp: 6 months
- Cell phone: 1.5 years
- Air conditioner: 24 hours
- 40-inch LCD TV: 1 month

Sources: ENERGY STAR, U.S. Department of Energy, Natural Resource Defense Council, Manufacturers information.

Costs are going up

Rising costs are an industry trend $- \mbox{ and } \mbox{ one that won't be ending soon.}$

Electricity remains affordable and a good value, but there are forces driving up the cost of power — and they don't appear to be slowing down. One of the primary reasons the cost of electricity began to rise is simply that

there are more people, and each of them using more electronic devices and more power — than they did years ago. To keep up with this trend, electric utilities increased investments in electrical infrastructure which ultimately ends up on consumers' bills.

Believe it or not, the national cost of electricity today when adjusted for inflation, is less than what it was in 1980. Very few commodities have remained such a good value. Compared to other consumer products and services, electricity is a bargain. Utilities across the country are seeing increases in the cost of generating and transmitting electricity. In 2008, Great River Energy's wholesale power bills to its electric cooperatives were, on average, 10 percent higher than expected. Our rates increased another 6.5 percent for 2009 and 2.3 percent in 2010. On a more positive note, Great River Energy's rate increases are moderating. Approximately 60-70 percent of an average electric bill is made up of wholesale power costs.

What's causing rate increases for Great River Energy?

- We've been in a building phase to add generation capacity and transmission to meet growing consumer demand and maintain reliability.
- A temporary decline in sales to our members, which means wholesale costs are spread among fewer units sold.
- Rising costs for the fuel needed to generate electricity.
- Complying with new regulations and requirements set by the state and federal government adds costs that affect our rate. These regulations include a renewable energy standard and additional environmental controls.
- A reduction in non-member revenue. Because most of the consumers our member cooperatives serve are residential customers, they primarily use electricity in the mornings, as they prepare for their day, and in the evenings when they return home for dinner and other activities. In past years, Great River Energy sold the additional power it produced in the middle of the day or night to the wholesale market. This was a tremendous benefit that significantly off-set the fixed costs of power plants and transmission facilities. In the current economic environment, there has been little need for surplus power in the market which means member cooperatives are now paying a larger share of the fixed costs of the power plants and transmission facilities.



Changes to ENERGY STAR rebate program for 2012

R ebates for high efficiency heat pumps and air conditioners will continue to require installation by a "registered contractor" which has been designated as a quality installer and is listed on the hvacreducation.net web site. A list of all "registered contractors" in Minnesota is on our Cooperative web site at www.mcleodcoop.com.

There will be no rebates in 2012 for dishwashers, clothes washers, or dehumidifiers. Refrigerator/freezer units will require recycling of the old unit to quality for rebates.

2012 Rebates

Ground Source Heat Pumps (controlled or uncontrolled)

Residential	\$400/ton
Commercial	\$400/ton
Air Source Heat Pump	
13 SEER	\$330
14 SEER	\$480
15 SEER	\$580
16 SEER or higher	\$630
Ductless Air Source Heat Pump	\$300
Central Air Conditioner	
13 SEER	\$ 30
14 SEER	\$180
15 SEER	\$280
16 SEER or higher	\$330
Storage Space Heating	\$ 40/kW
ECM Motor	\$100
Uncontrolled electric water heater going on the Storage Water Heating	
with high efficiency water heater*	\$200
New construction or gas conversion to Storage Water Heating*	\$100
Peak shave to Storage Water Heating*	\$100
Heat pump water heater - new construction	\$100
Heat pump water heater replacing non-controlled electric	\$200
ENERGY STAR Refrigerator with recycling of old unit	\$75
ENERGY STAR Freezer with recycling of old unit	\$75
*(Marathon or equivalent energy rated heater)	

Open house prize winner

Roger and Pat Fimon of Hutchinson

were the lucky door prize winners at the Co-op's coffee & cookie open house Dec. 15. They won a flashlight.

Residential electricity use expected to drop

b espite an increase in the number of appliances and electronic gadgets at home, residential electricity use per person is projected to decrease between now and 2020, according to an analysis of U.S. Energy Information Administration data by the Electric Power Research Institute (EPRI).

"The main drivers behind the decrease are new efficiency codes and standards, technological innovations, and more spending on efficiency by states and utilities," EPRI Senior Project Engineer Sara Mullen said.

Overall residential electricity use climbed by a relatively steady rate of between 2 percent and 2.5 percent per decade between 1980 and 2010, according to EPRI. Between 2010 and 2020, use is expected to drop by 0.43 percent a year with advancements in space cooling, lighting and appliance energy use contributing to the decline.

For example, between 2010 and 2030, the electrical intensity (measured in

kWh per square foot) of light is expected to drop by 47 percent. The electrical intensity of refrigeration is expected to drop by 29 percent, televisions and computers by 22 percent, and other appliances by 18 percent, according to EPRI.

The breakdown of how energy is used in homes is expected to remain relatively unchanged between 2010 and 2030, although lighting is expected to drop from 15 percent of a home's energy use to 10 percent.

New smaller gadgets — such as video game consoles and chargers for portable units — will largely make up the difference.

"We're still looking into broader implications of the data, particularly how use may change on a per-person basis," Mullen said. "New trends in household formation – how many individuals form a household — may also prove to be a contributor to projected reductions."

-CFC Solutions

Walk back in time: REA Two-Day Farm Show in 1940

he Hutchinson Leader reported in July of 1940 that REA would have a free show for two days. Large tents would house displays of farm appliances.

Plans have been completed for the big REA Farm Equipment show which opens Monday evening and continues through Tuesday. The show is sponsored jointly by the McLeod Cooperative Power Association and the Scott County Association. The show will take place on the Orlando Wuetherich farm, near Plato, on Highway 212. The first evening program opens on Monday at 7:30 p.m.

As the big tent is going up, the smaller tents will be pitched tents for the lunch stand, for a workroom, and tents to hold manufacturer's exhibits. House trailers will pull into place, open exhibits prepare for demonstrations while the tour's feed mills, shellers, elevators, ensilage cutters, pumps and motors, and other equipment is being uncrated and put in readiness for operation.

The big Farm Electric Equipment Show, with its tents and its truckloads of equipment and its skilled personnel, has followed the season from South to North. It is brought to this area through the cooperation of the Extension Service, the Rural Electrification Administration, farm electric equipment manufacturers, the McLeod Cooperative Power Association and neighboring cooperatives in Scott County.

Show Water Systems

Since running water on the farm and modern plumbing for the farm bathroom and farm kitchen, are the foundations of modern living and perhaps the greatest single benefits brought by electricity, a complete automatic pressure water system and farm bathroom have been built on one trailer, and a complete farm kitchen on another. The two can back together, hook up to the tour's portable power cable, and hot and cold water will spurt from the faucets in the traveling kitchen. The water is carried in tanks on the trailer and heated by a standard electric water heater.

Demonstrations showing how running water may be used to increase poultry production, its value in the dairy, in the pigyard, for fire protection, for the effortless filling of stock tanks, and for many other purposes, will be conducted by Ray Hugus, of REA, and Mr. Norton C. Ives, of the Extension Service.

Meals large enough for a half dozen hungry harvest hands will be prepared in the exhibit kitchen by Miss Evelyn Bloome, REA Home Economist, as a part of the evening program. Miss Thelma Voils, McLeod County Home Demonstration Agent, will share the program in addition to supervising the all-electric lunch tent in which the Evangelical Ladies Aid of Plato will be on the job all day and evening, serving up hot meals. The whole family can come to the show prepared to stay all day without troubling to pack a lunch. The first evening's program includes a cooking contest, discussions of electrical costs, and a demonstration of the new low-cost package lighting fixtures, and discussions of various electric-powered farm equipment.

Programs for all

Starting off at 1:30 p.m. the next afternoon and until late afternoon, the men will see local grains, sorghums, hay, and fodder ground, elevated, and cut or chopped. Many of the new smaller mills especially designed for electric operation will be set up to run automatically through a number of processes. The women, in the meantime, may attend extensive programs in the big tent where there will be groups to study kitchen planning, electric cookery with the range and with small appliances, a laundry demonstration, discussions of the farm refrigerator, and points on the care and selection of household appliances.

Late in the afternoon when all of the grain has been ground, all the machinery operated, and the tanks or the well pumped dry, the men join the women in the tent for discussions of water heating for stock and poultry, and electric cookery contest, discussions of electrical dairy and farm equipment, and computations of electrical costs.

> Special thanks to Ron Pulkrabek of Glencoe for sharing this old newspaper article with us.

Director candidate applications accepted until January 19

ny member from Districts 4, 5 or 6 that would like to submit their name as a director candidate to the nominating committee, should submit a completed director application form to the Cooperative by January 19, 2012. Director application forms were published in the November and December newsletters and are also available upon request.

				Ellsworth	Collin- wood		Victor	Wood- land	Franklin
	East Lake Lillion			Acoma	Hutch- inson	Hale 7	Winsted	Holly- wood	Water- town
Kingman	Oscoola	Brook- field	Boon Lake	Lynn	Hassan Valley	Rich Valley	Bergen	Camden	
Bird Island	Melville	Hector	Preston Lake	Collins	Sumter	Glencoe	Helen	Young America	
Norfolk	Palmyra	Martins- burg	Grafton	Round Grove	Penn	New Auburn	Green Iste		
	Bandon	Welling- ton	Moltke	Bismarck	Transit	Dryden	Arlington		

Putting electric heat in a garage or shop?

Talk to the Co-op first to make sure your design qualifies for the off-peak rate

f you are planning to add electric heat to your garage or shop, please call the Co-op early in the designing process and definitely before you pour the floor! For the past several years the Dual Fuel rate has only been allowed for conditioned living spaces with full back-up. Garages and shops can still get on the lower off-peak rate but it must be on a stored heat strategy. This applies to both attached and detached garages.

The Storage Heat Program electrically heats up bricks, the ground below the cement slab, or some other storage medium from 11 p.m. to 7 a.m. and is then off for 16 hours during the daytime, even though it heats the slab and area above 24 hours a day. A storage heat system requires more insulation, increased size heating units or tubing, and a larger heat sink is needed. So the half-price off-peak electric rate is available, but you must plan to operate it as a storage system.

The good news is that the Co-op has some significant rebates of \$40 per kW available for storage installations. And a properly sized storage system requires no fossil fuel backup. So you only need one heat source and it is always at the lowest cost off-peak rate.

Call the energy experts at McLeod Co-op Power to find out the details at 1-800-494-6272.

Why electric bills go up in the winter

When if you don't use electric heat, you may notice that your electric bills are higher during the cold winter months. Below are several factors that can contribute to those higher bills as well as some ideas to lower your energy costs:

- Warm baths feel great on cold days, but extra water heating will increase your electric bill — if you have an electric water heater. To reduce your water heating bill, consider converting your electric water heater to a more efficient off-peak or storage water heater.
- Winter brings holidays, which often means additional cooking and baking — and, of course, those bright holiday lights.
- Shorter days and longer nights mean lights stay on longer both inside and out.
- Most heating systems use electricity for some functions, such as operating the fan, and many run almost continuously when

it's very cold.

- You may be using space heaters in garages, basements or other unheated spaces.
- Electric blankets and heating pads feel cozy on cold nights but will add to your electric bill.
- Engine block heaters on your cars or equipment, or heating wraps on exposed plumbing will increase the amount of energy you use.
- Most families use the clothes dryer more often in winter.

Even if your bills are higher during winter, electricity remains one of the best values around. However, it's important to know what behaviors are having a significant impact on your energy usage, so there are no surprises when you get your bill.

Is your pet adding to your electric bill?

embers who need to plug in an electric space heater to keep warm in one room, and they only use that heater an hour a day, should not notice a big increase in their electric bill. A space heater on for only one hour a day, each day of the month, would use a maximum of 45 kWh/month or \$4.95 in electricity. Now put that same 1,500 watt space heater out in the garage or a shed and leave it run 24 hours a day, for the entire month, and you could now owe for 1,080 kWh or \$ 118.80 in energy. What a significant difference!

Other electric heating appliances operate the same way. A stock tank heater for cattle or horses will run much of the time when it is located out in the cold. A 1,000 watt heater will cost 11 cents per hour to operate. A 1,500 watt heater will cost 16.5 cents per hour to operate. This sounds low, until you multiply it by the number of hours it is used per month. In the colder months of winter, the average stock tank heater will cost \$71 to \$118 a month. If you have multiple tank heaters in use, just start adding that amount for each heater.

Other appliances like warm doggie beds, dog water bowls,



a heat lamp for kitties, heated bird baths, etc. will all consumer energy when used in cold weather. However, most of these appliances have much smaller wattages of 15 to 250 watts each. They would use a fraction the amount of energy per hour that a stock tank heater uses. Check individual appliance wattages for your individual energy use or call the Cooperative for



