



Thinking about solar? Investigate before signing a solar vendor contract

With most residential solar systems being installed and electrically interconnected with your electric provider, your local electric cooperative should top your list of project contacts when considering such a purchase. Minnesota's electric cooperatives are well-versed in both the pros and cons of solar installations. They can help you make an informed decision and navigate the interconnection process (to connect your system to the electric grid). Your electric cooperative likely has a specific process on how planned solar arrays are approved prior to installation and inspected afterward.

For many homeowners solar installations are considered an investment. As with any investment, you need a clear understanding of your final investment costs, the annual energy production to be expected along with its corresponding value, and the ability to determine how long it will take before you achieve a return on your investment.

Many solar installers provide quotes using national averages for energy prices to calculate your annual savings. These calculations can be wildly inaccurate as energy prices range considerably across the country. The assumption for increases in energy prices over the lifespan of your solar



Follow these guide questions before signing a solar contract

1. Do you plan to stay in the home long term?
2. How much shade does your roof receive?
3. How old is your roof? If old or in poor shape, replace roof first.
4. What are your goals?
5. Will you lease or purchase? Compare quotes from multiple vendors.
6. Talk to BCREA on grid interconnection process or see our website.
7. How long does the process take?
8. What are the co-op's reimbursement rates and fees?
9. Does the contractor show documentation for licensing, permitting, bonding and insurance?
10. Does contractor show safety practices that will be followed?
11. Contractor provide current credentials, referrals and recommendations?
12. Ownership terms make sense/fair?
13. Performance calculations realistic?
14. Terms change if you sell property?
15. Warranty? Maintenance?
16. Who gets renewable tax credits?

array can't be ignored, but is often calculated at a rate that is higher than that experienced over the last 15 to 30 years.

If you're considering solar for your home, use these questions and considerations to help guide your decision before entering a contract with a solar vendor.

To successfully install solar you must first overcome location obstacles. Choosing an unobstructed, sunny location to install solar panels on your property is important. The choice between a roof or ground-mounted system is also important. The cost for roof installations can vary with different roof designs, just as the location of a ground-mounted array can vary based on soil types and the distance an array is from the interconnection site.

Your home's average energy use will be reflected in your bills from the previous year; remember, certain factors may change your use over time. For instance, a growing family will use more energy, but the departure of college-age children would reduce energy consumption. Careful consideration and addressing the energy efficiency of your home may reduce the size of the solar array you need.

Selecting a professional installer, the
— Continued on Page 4

At A Glance



Red light. Green light...

There has been quite a bit of load management on water heaters and cooling loads so far this summer. Learn how the colored lights on your load control receiver indicate whether or not your appliance is being controlled. See the story on Page 2.

This publication focuses on cooperative savings, programs and events. As this is the official member publication, member's story ideas, letters-to-the-editor and comments are welcomed.

Andrea Christoffer, CCC, Editor
 "Owned by those it serves"

POSTMASTER: Send address changes to *Connections*, PO Box 69, Jackson MN 56143-0069.

Printed by Livewire Printing, Jackson, on recycled paper with soy ink.



Just like a stoplight...

Radio receiver lights indicate status

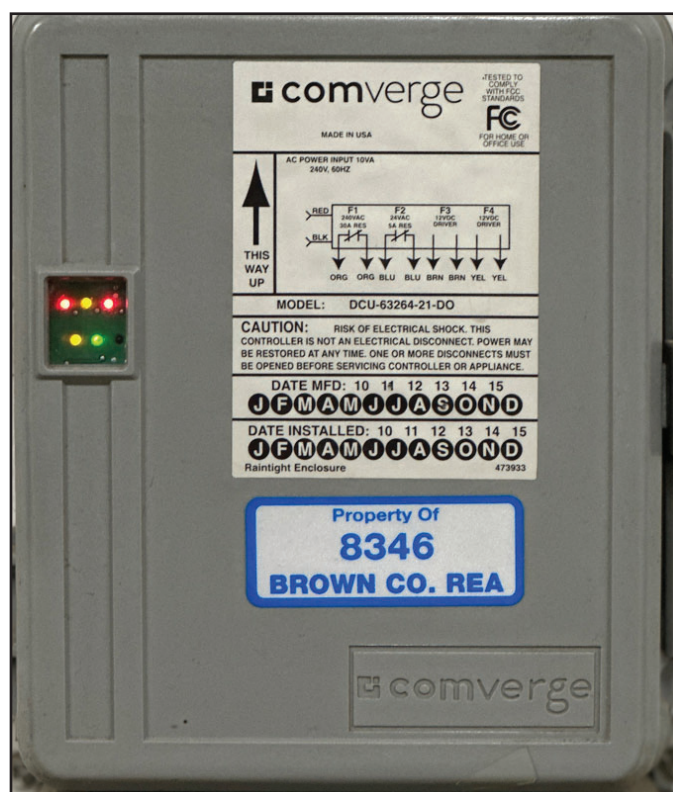
Vehicles stop at a red light and go on a green.

The same principle applies to BCREA's radio receivers. These gray boxes on the side of your house are used in the co-op's load management programs for controlling water heaters and dual heat, plus cycling central air and heat pumps. For commercial accounts, like livestock barns, the radio receiver starts and stops standby generators and irrigators in the cooperative's program.

If you see a green light on your radio receiver, this means the radio control has power and is communicating with the transmitter tower. The top left red light indicates a water heater's status. If the red light is on, it means the water heater is being controlled (the electricity is "stopped" due to the control period). If you signed up for storage water heating program, the red light is on from 6 a.m.-10 p.m. in the winter and 9 a.m.-10 p.m. in the summer. The water is heated at night when the red light is off because electricity costs the cooperative less. If you have peak-shave water heating, the red light is on only during a control event, typically later afternoon to early evening on anticipated high demand days. Early morning control on these water heaters is also possible on cold winter days.

Depending on the time of the year, the top center amber light indicates that summer cooling or dual heat control was activated. In the summer, this amber light means central air and heat pumps' compressors are being cycled 15 minutes on and 15 minutes off. However, the unit's fan continues to circulate the cool air. During the winter, the amber light means your electric heat has switched off and the backup fossil fuel or storage heating source is running.

BCREA appreciates the members' participation in these money-saving programs. If the receiver was removed or is no longer in use, please inform the cooperative. ☎



What is your radio control telling you? The green light means the receiver is receiving a communication signal (middle light of the bottom row). A red or amber light means electricity is stopped or being controlled. The top row's left red light means the water heater is being controlled. The middle light that is amber indicates the status of the cycled air in the summer or the dual fuel in the winter. The top left red light is for a standby generator or irrigation. The bottom row's right light is not used and is always off.

Radio receiver reminders:

- Radio receivers are the property of your electric cooperative. If the house is going to be moved or torn down, please call your cooperative to remove the receiver.
- Do not paint over the receiver; this covers the lights

and slows down access and maintenance.

- If the house will be remodeled or re-sided and you need to remove the receiver temporarily, call to inform the cooperative. Be sure to have the receiver reinstalled immediately after work is finished. ☎

The Furbo Pet Camera offers pet care remotely

The Furbo Pet Camera is a pet monitoring device that allows you to keep an eye on your furry friends when you're away from home.

- **Live high definition video streaming:** the Furbo camera provides real-time, high-definition video streaming, allowing you to see and interact with your pet from your smartphone or computer. You can check in on them at any time and from anywhere with an internet connection.

- **Two-way audio:** the Furbo has a built-in microphone and speaker, enabling you to hear and communicate with your pet.

- **Treat time:** Along with talking to your furry friend, you can even toss them treats remotely using the Furbo app. With a simple tap on your smart device, you can dispense treats for your pet as a reward or to brighten their day. The Furbo can hold up to 100 pieces of small, round treats.



Watch, talk to and treat your pet remotely with the Furbo Pet Camera!


- **Barking alert notifications:** Furbo uses sound recognition technology to detect when your dog is barking. It sends instant barking alerts to your phone, allowing you to check on your pet and calm them down if needed.

- **Smart dog recognition:** the Furbo camera is programmed to differentiate between humans and dogs. It can notify you specifically when it detects a dog in its view.

- **Cloud recording:** Furbo offers optional cloud recording, which allows you to review the footage from your pet camera for up to 30 days. This feature is handy if you want to keep track of your pet's activities or if you need to review any incidents that may have occurred while you were away.

- **Easy setup:** the Furbo Pet Camera is straightforward to set up and connects to your home's Wi-Fi network. The Furbo app is intuitive and user-friendly, providing easy access to all features.

The Furbo Pet Camera is primarily designed for dogs, but many cat owners find it useful too. The Furbo provides a sense of security and helps alleviate separation anxiety in pets by allowing the beloved animals to see and hear their owners, even if they are not home.

The Furbo Pet Camera costs approximately \$200 online and in various retail stores. 

Safety

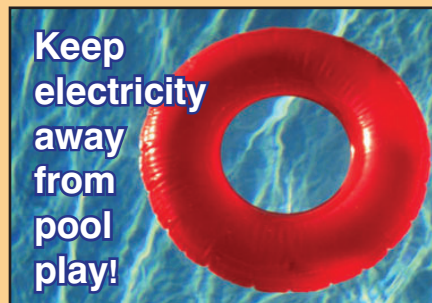
Stay safe around electricity during summer activities

Follow these tips to stay safe with electricity during summer activities.

- When using electrical equipment outdoors, ensure they are specifically designed for outdoor use. Check for any signs of damage or frayed cords before plugging them in.

- Keep electrical appliances and cords away from water sources, such as pools, sprinklers, and hoses. Never handle electrical equipment with wet hands or when standing on wet surfaces. If you have a pool, spa or any water-related activities, ensure all electrical installations are up to code and performed by a qualified electrician. Use ground fault circuit interrupter (GFCI) outlets in areas where water is present.

- If you need to use extension




cords outdoors, make sure they are rated for outdoor use and are in good condition. Avoid overloading extension cords; don't run them under carpets or across walkways where they can be damaged.

- If you have young children, consider installing childproof outlet covers to prevent accidental insertion of foreign objects into electrical outlets.

- If you enjoy outdoor cooking on an electric grill, make sure it is set up on a stable, non-flammable surface and keep it away from any flammable materials. Follow the manufacturer's instructions and use only designated outdoor outlets.

- Regularly clean and maintain your air conditioning unit to avoid any electrical malfunctions or fires. Keep the area around the unit clear of debris and never block the airflow.

- During thunderstorms, unplug electronic devices and avoid using electrical equipment until the storm has passed. Seek shelter indoors and stay away from windows.

By following these tips you can enjoy your summer activities, while preventing electrical mishaps. 

Brown County Briefs

Energy-efficiency tips



Summer is a prime opportunity to enjoy the great outdoors. To reduce home energy use, avoid using your oven and use a grill instead. Not only will cooking outdoors eliminate the electricity used to power the stove, but it will also avoid raising the temperature inside your home, reducing the need for air conditioning. You can also avoid using the oven with tasty no-bake recipes. Get creative in the kitchen or the backyard and find new ways to save energy! Source: energy.gov

Summer maintenance

A reminder that Central Applicators is working to maintain and control vegetation at Brown County REA's substations and along rights-of-way beginning this month.

In addition, Southwood 2000 is inspecting cooperative-owned poles in Milford, Prairieville and Eden townships and may be coming onto members' property either with a pickup or ATV to do so.

Chapman Metering will also perform meter tests in the service area.

Next Round Up meeting



The Brown County Rural Electric Trust Board will meet again on August 15 at 5:30 p.m. to consider funding applications. Organizations interested in seeking funding may submit an application before that date. The application form is available on the BCREA website www.browncountyrea.coop. ☎

Responding to the needs of the grid

Our homes are outfitted with more devices that require electricity than ever before. As the demand for electricity rises, Brown County REA must continue providing the same affordable, around-the-clock service to its members — regardless of market conditions, or in Minnesota's case — weather conditions.

Demand for electricity regularly fluctuates as people move throughout their homes and businesses on a day-to-day basis. Yet, on extreme weather days when everyone is either trying to keep cool or stay warm, the electric grid experiences periods of high stress while attempting to meet members' comfort needs.

These times are when Great River Energy (GRE), Brown County REA's wholesale power provider, deploys its demand response (DR) strategy to relieve the electric system of this strain. This ability to respond to the needs of the electric system is made possible by members like you.

Brown County REA members have the option to participate in demand response programs, which allow GRE to "control" or "cycle" their air conditioner, water heater, heat pump or other electric devices for a period of hours on high demand days. (See related story on Page 2.) Large commercial members utilize back-up generators or load reduction to help BCREA and in turn, GRE, reduce capacity and energy requirements during peak load conditions throughout the year. Irrigation loads may be controlled over peak times in the summer and early fall. Members are given a reduced rate or price reduction in the case of water heaters for participation in DR programs.

When the time comes for these appliances to be used for DR — typically on hot summer days or during a polar vortex when energy prices increase — GRE flips a switch to alleviate demand. This strategy not only reduces sometimes hundreds of megawatts of electricity demand system-wide, but it also helps the cooperative avoid making expensive purchases from the energy market, ultimately saving you, the members, money.

It takes a collective effort from the cooperative and its membership to maintain a healthy, reliable electric grid. Brown County REA appreciates and thanks all the members who participate in the DR programs. ☎

Solar considerations before signing



— Continued from Page 1

right system and best payment method are equally crucial considerations. Solar installations may be purchased with cash or loans. An upfront purchase will help you save the most money over the lifespan of the solar panels, but you need the cash upfront. With a loan the system is yours, but you make monthly payments, plus interest.

Before signing a solar contract, talk to BCREA and do your homework.

Solar system warranties are important. The solar panel and inverter manufacturer usually provides a guarantee of 20 to 25 years for the panels and 5 to 25 years for inverters. Moreover, installers may provide a labor warranty.

Installing solar is a major decision. You need a reputable energy partner to help you decide. Remember to contact your electric cooperative first. They're ready to answer your questions and help you make an informed decision. ☎

MISO — an electric connection behind the scenes

Each day we live with electricity at our fingertips, rarely thinking about the complex system that brings it to our homes, farms and businesses. The electric grid is all around us — made up of power plants, wind turbines, power lines, substations and communications technology owned and operated by different utilities; we all have one goal — keep electricity reliable and affordable.

While most cooperative members know Brown County REA receives wholesale power from a generation and transmission cooperative called Great River Energy (GRE), another organization is equally important, but lesser known — the region’s grid operator.

Our wholesale power provider, GRE, is a voluntary member of the Midcontinent Independent System Operator (MISO), which operates the power grid across 15 U.S. states and the Canadian province of Manitoba. MISO helps the region’s electric providers deliver reliable, affordable energy in three ways:

It acts as ‘air traffic controllers’

Forty-two million people depend on MISO every day. Think of MISO as the air traffic controller to the region’s electric grid. Using sophisticated technology, processes and procedures, MISO maintains a broad view and control of the grid that goes beyond one utility. This helps maintain reli-

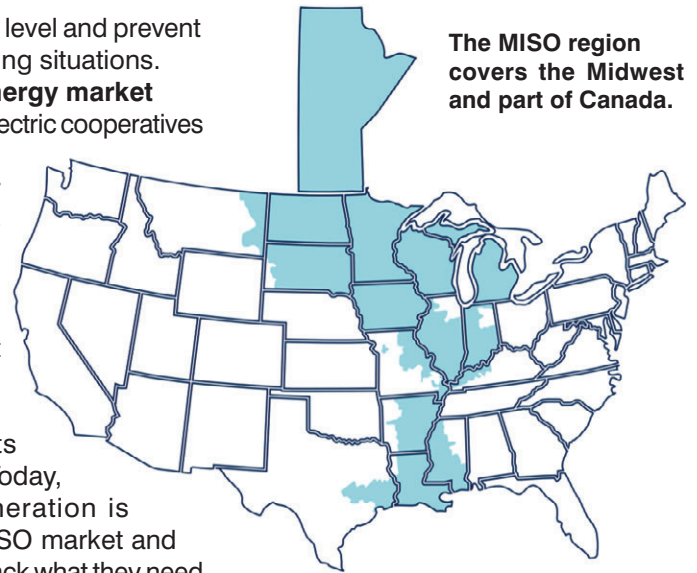
ability on a regional level and prevent emergency-operating situations.

It manages the energy market

In past decades electric cooperatives would generate power and deliver it via power lines to their members. Coordinating the power flows and transactions at that time was a manual process requiring many agreements between utilities. Today, all electricity generation is offered into the MISO market and cooperatives buy back what they need to serve their consumers. The MISO energy market helps keep electricity affordable by ensuring the lowest cost generation available is used first to supply consumers and minimize flow constraints across the grid. MISO also provides improved price transparency with energy market price changes occurring every five minutes.

It plans transmission

Maintaining a reliable high-voltage transmission system requires ongoing planning efforts. Utilities conduct their own transmission planning and they collaborate with MISO, which plans the transmission system that serves the entire region. MISO ensures the system is prepared to meet future needs from a regional perspective. It



works with the region’s electric utilities to minimize the cost of transmission, generation and the energy on the system. Using advanced modeling and research, MISO helps ensure reliable and efficient electricity transmission in the region and beyond.

GRE works closely with MISO to make sure when it designs a plan for the region’s electric system, it will serve cooperative members well in terms of both reliability and affordability.

Visit misoenergy.org to learn more about MISO. It takes a collective effort from the cooperative and its membership to maintain a healthy, reliable electric grid.

Cool efficiently! Go with air source heat pump for efficient heating too

Air Conditioner	VS	Air Source Heat Pump
<p>Cooling during warm summer days.</p>	← CAN I USE IT YEAR-ROUND? →	<p>Heating and cooling through every season.</p>
<p>Absorbs inside heat and expels it from your home, then creates chilled air to push back into your home.</p>	← IS IT VERSATILE? →	<p>Works like an air conditioner in the summer, but offers the versatility of the reverse process to heat your home in the winter.</p>
<p>Wall units lack efficiency, as they only provide spot cooling and air can leak through window seals. Central air units are comparable to ASHPs in summer.</p>	← IS IT EFFICIENT? →	<p>Super energy efficient, as the unit moves both cooled and heated air throughout the home. ASHPs are up to 300% more efficient.</p>
<p>Smaller upfront cost, but does not offer heating. No installation rebates offered.</p>	← CAN I SAVE MONEY? →	<p>Rebates available for unit installation. Sustained savings through energy efficiency.</p>

Keep the BCREA rebates in mind if your central air dies. A heat pump works year-round and with a greater efficiency. Visit our website for rebate details. Keep in mind the tax incentives available too! Call BCREA with any heat pump questions. See heat pump rebates listed on Page 6.

Electricity — everyday value


As the cost of everyday items continues to rise, you can rely on Brown County REA to continue working toward making electricity one of the best values for your dollar.

Electricity powers our quality of life and its uses have only expanded over the years. From powering the appliances that help run your household to more simple tasks like charging your cellphone, your electric bill covers much more than it did before.

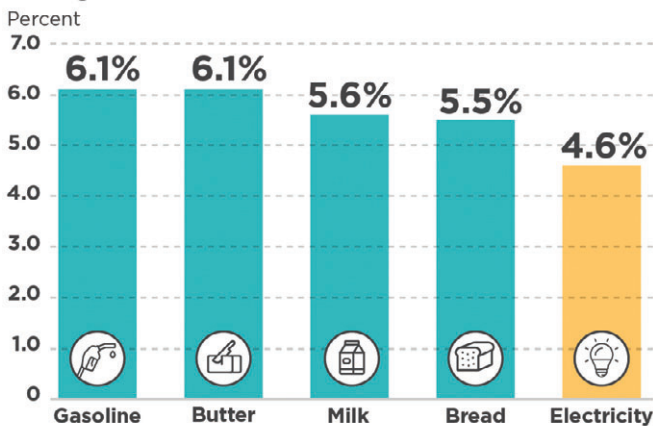
Even though electricity is powering more of our lives, the cost remains remarkably stable. The price of electricity has increased, but at a slower pace than other common expenses. Brown County REA, along with its wholesale power provider Great River Energy, keeps rates affordable by only charging its members an amount that reflects the cost to build, maintain, finance and operate the facilities and assets necessary to provide electric service — nothing more.

According to the U.S. Energy Information Administration, Minnesota’s average price for residential electricity remains lower than the national average. BCREA’s current rate of 9.5 cents/kilowatt hour (kWh) is below the state and national average of 13.5 cents/ kWh for Minnesota in 2021 and 13.7 cents nationally in 2021.

For the average Minnesotan household, which uses 25 kilowatt-hours per day according to data from the Environmental Protection Agency, electricity costs equal about \$3 per day. When put against the price increase of other common expenses like gasoline, milk and bread — and considering all the ways we depend on electricity — it’s easy to see why it remains such a great value.


Brown County REA understands that electricity is more than a service — it’s a necessity for our members. That’s why we will continue working to power your life reliably and affordably. 

Average Annual Price Increase 2017-2022



Although inflation led to increasing costs in many areas of our lives, the cost of powering your home rises slowly when compared to other common goods. Electricity remains a good value when compared to other price increases, according to the U.S. Bureau of Labor and Statistics and the Consumer Price Index.

BCREA offers bonus summer rebates

Brown County REA offers residential rebates on load-controlled heat pumps with a non-electric backup, ranging from \$1,000 to \$2,000, depending on the Heating Seasonal Performance Factor (HSPF). For homes without ductwork, a ductless mini-split heat pump is an economical and efficient option. During June, July and August, BCREA offers bonus rebates on Energy Star residential Ductless Air Source Heat Pumps. Receive a \$750 rebate if electricity is your home’s primary heat source and \$450 if you heat your home with fossil fuel. Contact the co-op with any questions. 



August 1-3, Redwood Falls

Visit the Touchstone Energy Cooperatives’ booth



Bring this coupon. Enter the grand prize drawing for battery-powered electric tools.

Brown County REA 2023 Farmfest Drawing at the Touchstone Energy Cooperatives’ Booth #2301 

Name _____

Address _____

Town/state/zip _____

Phone # _____

Clip this coupon & put it in your wallet now!

Do not pout! It's time for sauerkraut recipes! Share yours today!

Summer is going strong so it's great for topping your hot dogs and brats. How else do you use sauerkraut? Share your sauerkraut recipes for dips, sandwiches, hot dish and anything else. Share these sauerkraut recipes with us. Mail to Editor, Federated Rural Electric, PO Box 69, Jackson MN 56143-0069 or e-mail to christoffer@federatedrea.coop by July 26. Add your name and phone number. Thanks! 📧

BCREA rebates help you with yard work



Looking to buy a battery-powered electric leaf blower, chainsaw, trimmer/weed whip or lawn mower?

Brown County REA is offering a rebate of \$25 for a minimum \$150 pre-tax priced leaf blower, chainsaw, edger, trimmer/weed whip and \$50 on a \$399 or higher-priced pre-tax priced electric push lawn mower purchased during May, June, July and August. You can receive a \$100 for purchasing an electric riding lawn mower with a minimum 36-volt battery.

Provide a copy of your dated receipt with the purchase price and model number. Rebate will be paid as a credit on your electric bill. Limit one rebate per member. 📧

BCREA's nondiscrimination statement is posted annually



This institution is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the

USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing_cust.html or at any USDA office or call 866-632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Ave SW, Washington, D.C. 20250-9410, by fax 202-690-7442 or e-mail program.intake@usda.gov. 📧



Verify your visitors.

One in four homeowners has had a package stolen.

SEE WHAT'S HAPPENING ON YOUR DOORSTEP.



SECURITY AUTOMATION VIDEO MEDICAL ALERTS

888-264-6380 heartlandss.com



Make the call before digging: 1-800-252-1166

Call Gopher State One Call before doing any digging more than 12" deep — 48 hours before digging.

Staff Notes



Marcia Solie, Member Services Manager & Youth Tour chaperone

Nothing can make a chaperone prouder than to have strangers make a point to tell you how courteous and respectful the young men and women in your group are, while on a visit to the Capitol or one of the museums.

BCREA offers this all-expense-paid opportunity each year to high

Start as strangers, part as friends...

Often, I refer in promotional materials to the Rural Electric Youth Tour as a once-in-a-lifetime opportunity. This year I was fortunate to chaperone the trip to Washington, D.C. for a second time. While the names and faces change yearly, the incredible experience and top-notch group of young Minnesotans is constant. Rural electric co-ops serve some great kids!

Unlike young people traveling with a school group, Youth Tour participants come from different schools and various parts of the state not knowing anyone. As the trip ends, they say goodbye to many new friends.

We traveled with 34 of Minnesota's best and brightest; hockey players, those on the dance, football, basketball, volleyball, track, baseball and cross country teams. Some participate in school plays and speech; there were future engineers, aspiring political leaders, medical professionals, computer specialists and more.

BROWN COUNTY REA

Brown County Rural Electrical Assn.
24386 State Hwy 4, PO Box 529
Sleepy Eye MN 56085

E-mail address: bcrea@bcrea.coop
Website: www.browncountyrea.coop
Phone: 507-794-3331 or 800-658-2368
Office hours: 7:30 a.m. to 4 p.m. Monday-Friday

Mike Heidemann, Chief Executive Officer

Board of Directors

Thomas Hayes, President — 228-8954
William Berg, Vice President — 766-1497
James D. Hanson, Sec.-Treasurer — 829-6756
Brad Sprenger — 317-5576
David Wendinger — 276-3166
Greg Mages — 794-3540
Joel Christensen — 828-4550
James Mickelson — 794-6298
Landon Sletta — 439-6559

The Board of Directors meets the last Thursday of each month.

school sophomores and juniors whose parents/guardians are members of the cooperative. We will begin the application process for the 2024 trip in December through high school guidance counselors and teachers, our newsletter and website. Encourage a young person in your life to apply.



Grace Mages, Sleepy Eye, represented BCREA on Youth Tour. (Top) At Vietnam Wall. Detailed story in the August Connections.

Help children in need succeed, donate school supplies

Brown County REA is a drop-off site for the United Way of the Brown County Area's *Stuff the Backpacks* school supply drive & we need your help.



Please consider donating any of the following items :

- *4 oz. Elmer's Glue *24 -count crayons *Broad tip markers
- *12-pk. colored pencils *Glue sticks *#2 Pencils
- *Large pink erasers *Pencil top erasers *Facial tissue
- *Pencil bags & boxes *Fine tip Sharpie markers
- *Dry erase markers *Spiral notebooks *Highlighters
- *Kids scissors *2-pocket folders *Hand sanitizer
- *Composition notebooks *Scotch tape rolls
- 1" 3-ring binders Post-it notes

Please drop off donations before July 28th.

Collected donations will be distributed to children in Brown County. Thank you!