

COOPERATIVE CONNECTIONS®



Jessie Ruml pursues a labor of love growing an assortment of fresh-cut flowers at Pixie Acres Flower Farm near Castlewood
Photo by Rachel Clelland Photography

In Bloom

Cut flowers spread summer cheer
Pages 8-9

Addressing power supply and demand
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New ways to use electricity

If you listen carefully, you can hear a *quiet* transformation happening. Electric appliances and equipment are becoming more popular than ever among consumers.

Advancements in technology and battery power coupled with decreasing costs are winning over consumers looking for comparable utility and versatility. A bonus is that use of electric equipment is quieter and better for the environment.

Inside the home, consumers and home builders alike are turning to electric appliances to increase energy efficiency and savings. Whether a traditional electric stove or an induction stove top, both are significantly more efficient than a gas oven. That's because conventional residential cooking tops typically use gas or resistance heating elements to transfer energy with efficiencies of approximately 32 percent and 75 percent, respectively (according to ENERGY STAR®). Electric induction stoves, which cook food without any flame, will reduce indoor air pollution and can bring water to a boil about twice as fast as a gas stove. Robotic vacuums are also gaining in popularity. Fortune Business Insights attributes the growth and popularity of robotic vacuums like Roomba to a larger market trend of smart home technology and automation (think Alexa directing a Roomba to vacuum).

More tools and equipment with small gas-powered motors are being replaced with electric ones that include plug-in batteries. In the past few years, technology in battery storage has advanced significantly. Hand-held tools with plug-in batteries can hold a charge longer and offer the user the same versatility and similar functionality as gas-powered tools. For DIYers and those in the building trades, national brands such as DeWalt, Makita and Milwaukee offer electric versions of their most popular products like drills, saws, sanders and other tools. In addition to standard offerings, consumers can now purchase a wider array of specialty tools that plug in, such as power inverters, air inflators and battery chargers.

Keith Dennis, an energy industry expert and

president of the Beneficial Electrification League notes that, "A few years back, the list of new electric product categories that were making their way to the market was limited - electric scooters, lawn mowers, leaf blowers and vehicles."

Today, the number of electric products available is exploding.

"There are electric bikes, school buses, pressure washers, utility terrain vehicles, backhoes - even airplanes and boats," says Dennis. "With the expansion of batteries and advancements in technology, we are seeing almost anything that burns gasoline or diesel as having an electric replacement available on the market."

By virtue of being plugged into the grid, the environmental performance of electric devices improves over time.

A case in point is the increased use of electric-powered tools and equipment, with more national brands offering a wider selection including lawn mowers, leaf blowers, string trimmers and snow blowers. The quality of zero- or low-emissions lawn equipment is also improving.

Electric equipment also requires less maintenance, and often the biggest task is keeping them charged. In addition, electric equipment is quieter so if you want to listen to music or your favorite podcast while performing outdoor work, you can. On the horizon, autonomous lawn mowers (similar to the robotic vacuum cleaners) will be seen dotting outdoor spaces.

Another benefit of using electric equipment is that by virtue of being plugged into the grid, the environmental performance of electric devices improves over time. In essence, electricity becomes cleaner through increases in renewable energy generation, so equipment that uses electricity will have a diminishing environmental impact over time.

Quite a hat trick - improving efficiency, quality of life *and* helping the environment.



Jeff Birkeland
CEO

COOPERATIVE CONNECTIONS

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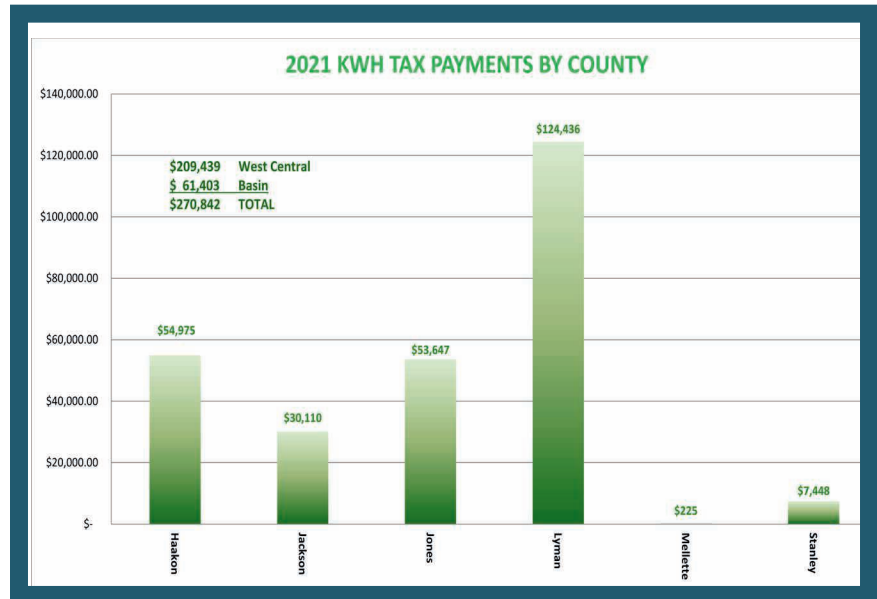
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Area schools benefit from West Central Electric taxes



“We also contribute to our schools by providing donations to programs, offering scholarships, providing electrical safety programs, and providing youth tours to our area schools.”

Jeff Birkeland, CEO/General Manager

Some people are under the false impression that your electric cooperative- as a non-profit corporation- does not pay taxes.

School districts located within the West Central Electric Cooperative service area will collectively receive \$270,842 in kWh tax in June as a result of electric sales to the members.

Of this total, \$209,439 will be paid by West Central Electric, and \$61,403 will be paid by Basin Electric Power Cooperative.

The kWh tax is allocated to the different school districts through the County Treasurer’s office.

The table above shows tax revenue as it was paid to each school district and paid in each county.

“In addition to providing electric service to our members, we financially contribute directly to our schools through the Cooperative’s kWh tax - we also contribute to our schools by providing donations to programs, offering scholarships, providing electrical safety programs, and providing youth tours to our area schools,” stated Jeff Birkeland, CEO/General Manager, West Central Electric Cooperative, Inc.

Reduce your risk of shock in the home

Contact with electricity can result in something as innocuous (but still painful) as a mild shock to severe injuries like nerve damage and burns. In some cases, it can even cause cardiac arrest and death. Here's a list of some of the most common shock risks inside a home.

1. Appliances. Most shocks from household appliances occur during repairs. It's not enough to turn off an appliance before working on it - you need to unplug it to reduce risk. Large appliances are responsible for 18 percent of household electrical accidents; small appliances account for 12 percent.

There's also danger if your appliance comes into contact with water. Many of these hazards can be avoided by using a ground-fault circuit interrupter (GFCI). A GFCI is a protective device installed on electrical outlets, primarily used where water is present. When the device detects an imbalance in the electric current, it turns off the power to minimize the potential for an electric shock.

2. Ladders. Typically, ladders present a falling hazard, but 8 percent of household shocks are also related to ladders. Electrocutation typically happens when the ladder makes contact with electrical wires. Before you use a ladder, make sure you can clearly see all power lines in the area - including those that may be hidden by tree branches. Ensure that the ladder is 10 feet away and won't contact a power line if it falls in any direction.

3. Power tools. Power tools account for 9 percent of consumer product-related shocks. According to OSHA, when you use power tools that are not double-insulated, are damaged or have damaged cords, you increase your chances of being injured. The chance of danger also increases when you use incompatible cords, use power tools incorrectly or use them in wet conditions. This is another situation in which GFCIs can help.

4. Electrical outlets and extension cords. Inserting anything that doesn't belong - screwdrivers, knives, fingers or toy cars, to name a few - into an electrical outlet can result in a dangerous electrical contact.

Use cover plates that fit properly and safety covers on all outlets. By installing tamper-resistant receptacles, outlets will have permanent security against foreign objects being inserted into the slots.

Any broken, loose or worn-out plugs, switches and light fixtures should be replaced immediately.

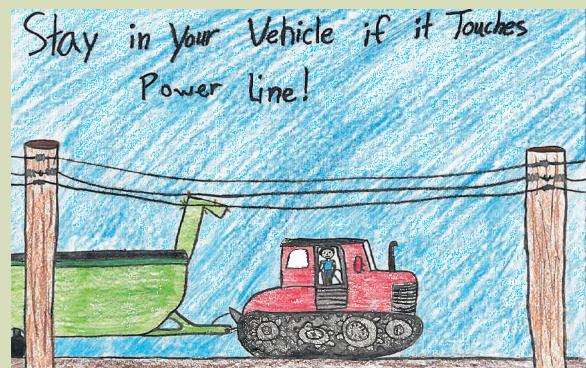
COOPERATIVES RESPOND TO EMERGENCIES



When back-to-back spring snow storms struck Burke Divide Electric Cooperative (Columbus, ND), cooperatives from South Dakota and Minnesota traveled long distances to respond to the call for help.

When a deadly derecho swept through eastern South Dakota in early May, co-op crews worked long hours to restore power to thousands of electric cooperative members. It's what cooperative linemen do.

Find out more about how our line crews respond to emergencies by visiting Cooperative Connections Plus. Simply scan the QR code at right.



Call 811 before you dig

Esmae Beld

Esmae Beld, age 11, offers some sound advice to stay inside your vehicle and call for help if it comes in contact with energized power lines. Esmae is the child of Orlando and Shanna Beld. They are members of H-D Electric Cooperative.

Kids, send your drawing with an electrical safety tip to your local electric cooperative (address found on Page 3). If your poster is published, you'll receive a prize. All entries must include your name, age, mailing address and the names of your parents. Colored drawings are encouraged.

DREAMY DESSERTS



LEMON MERINGUE PIE

Ingredients:

Pie

- 1 cup sugar
- 1/4 cup cornstarch
- 1-1/2 cups cold water
- 3 egg yolks, lightly beaten
- 1/4 cup lemon juice
- 1 tablespoon butter
- 1/2 teaspoon McCormick® Pure Lemon Extract
- 1 baked pie crust (9-inch)

Meringue Topping

- 1/3 cup sugar
- 1/2 teaspoon McCormick® Cream Of Tartar
- 3 egg whites
- 1/4 teaspoon McCormick® Pure Lemon Extract

METHOD

Preheat oven to 350°F. Mix sugar and cornstarch in medium saucepan. Gradually stir in water until smooth. Stir in egg yolks. Stirring constantly, bring to boil on medium heat; boil 1 minute. Remove from heat. Stir in lemon juice, butter and extract. Pour hot filling into baked pie crust. For the Meringue Topping, mix sugar and cream of tartar. Beat egg whites in medium bowl with electric mixer on high speed until foamy. Gradually add sugar mixture and extract, beating until stiff peaks form. Spread meringue evenly over hot filling, sealing to edges of crust. Bake 15 to 20 minutes or until meringue is golden. Cool completely on wire rack. Store in refrigerator.

McCormick.com

Please send your favorite recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2022. All entries must include your name, mailing address, phone number and cooperative name.

CARAMEL STUFFED KRISPIE BARS

Ingredients:

Caramel filling

- 4 oz. caramel Kraft bits, unwrapped
- 4 oz. sweetened condensed milk
- 8 tbsp. butter

Rice Krispie layer

- 12 tbsp. butter, halved
- 10 cup Rice Krispies, halved
- 8 cup mini marshmallows, split in half
- 2 cup additional mini marshmallows for sprinkling

METHOD

Line pan (9x13) with nonstick foil. Microwave caramel bits, butter and condensed milk until melted and smooth when stirred. Microwave 6 tablespoons butter and 4 cups marshmallows just a minute and stir. Stir in cereal and press into pan. Pour on the caramel. Sprinkle on the additional 2 cups marshmallows and place in freezer for 15 minutes. Use the remaining Krispie ingredients and repeat directions. Press this layer on top of the marshmallows and caramel layer and return to freezer. Switch to the refrigerator and let set for a few hours. Cut into big squares and enjoy.

Eric Neville, Milesville

DUMP BARS

Ingredients:

- 2 cups white sugar
- 1 3/4 cups flour
- 1 tsp. salt
- 1 cup vegetable oil
- 1 tsp. vanilla
- 1/2 cup cocoa
- 4 eggs
- 1 cup chocolate chips

METHOD

“Dump” all ingredients except chocolate chips together in bowl. Mix with spoon. Spread in greased 9x13 pan. Sprinkle chocolate chips on top. Do not stir. Bake at 350 degrees for 30 minutes.

Deanna Poppen, Sioux Falls

Q: I'm planning a remodeling project this year. What energy efficiency upgrades should I consider?

A: I write this from deep in the throes of a remodel that, like many remodels, has lasted much longer than planned.

Remodeling is a great opportunity to take care of energy efficiency improvements by adding them to your work. If your home is already under construction, take the extra step to make it more efficient.

Planning for efficiency is the first step. Look at the scope of your project to see what energy efficiency upgrades you can add. There may be cost savings and convenience in tackling both at once. Here are a few examples of efficiency upgrades for common remodeling projects.



Miranda Boutelle
Efficiency Services
Group

KITCHEN REMODEL

If your kitchen remodel includes new appliances, buy ENERGY STAR®-rated models. ENERGY STAR® refrigerators are about 9 percent more efficient than standard models, and ENERGY STAR® dishwashers save both energy and water.

As for kitchen faucets, there are options available with multiple flow-rate settings. You can save water by using a lower flow rate on your faucet when washing dishes, vegetables or your hands, but you can change the setting to quickly fill a pot for cooking.

BATHROOM REMODEL

If you plan to remodel your bathroom, include a high-performance showerhead. Look for the WaterSense logo for showerheads, faucets and toilets, which ensures the product meets performance and water use standards.

Check the fine print on your existing equipment to see how much you can save. The gallons per minute (GPM) is usually printed on showerheads and faucet aerators and the gallons per flush (GPF) is usually on toilets. High-performance showerheads and aerators conserve water and save energy used to heat water. Using less water can lower your water

bill or increase your septic system's lifespan.

BASEMENT REMODEL

This is where I find myself right now. Our basement has gone from a wide-open space with concrete walls to a nearly completed living space with a den, two bedrooms, a bathroom and a laundry room.

We air sealed and insulated the sill plate and rim joist - the framing between the concrete foundation and the main level floor. We built and insulated walls around the basement's perimeter, ensuring a cozy living space and a more comfortable home.

We upgraded our electric storage water heater to a hybrid - or heat pump - water heater, which is 70 percent more efficient than a standard electric model. Also, we ran power for an electric vehicle charger while the walls were open. It is much less expensive to run the power supply while you have access.

NEW SIDING OR EXTERIOR PAINT

The best time to make sure your wall insulation is adequate - or to see if you have wall insulation at all - is when you replace your siding or paint the exterior of your home.

Wall insulation saves on energy costs, makes your home more comfortable and reduces outside noise. Batt insulation, spray foam or foam board are good options if you are removing the siding. If you are painting, you can have a contractor blow insulation into the wall cavities through holes cut into the siding or from inside the house. The holes are then plugged and prepped for paint.

LIGHTING

Whether it's under cabinet kitchen lighting or new can lights in the basement, LED options use less energy than traditional incandescent or CFL bulbs.

ATTIC INSULATION

Often, remodeling requires work in the attic for new lighting or venting bath or kitchen fans, so check insulation levels. Work in the attic can negatively impact insulation by crushing it or removing it to access work areas.

If more insulation is needed, air seal and check ventilation. Also, make sure all bath and kitchen fans vent to the exterior of the house.

Photo contest winner: Cows on a bus!

Billy Gibson

billy.gibson@sdrea.coop

Winter didn't easily release its cold, icy grip this year. Just when we thought it was safe to put the parkas away back in April, along came back-to-back blizzards barreling their way through the Upper Midwest.

Though folks in the Black Hills were throwing snowballs at each other in the middle of May, summer is finally here - I think - and we asked you to

share your favorite photos from those seemingly interminable winter months.

We received dozens of intriguing pics from across the state: frozen farms, wintry sunsets, chilly pets,

children playing in the snow and even a family escaping the cold at Disney.

But according to our esteemed judges, the top prize went to the photo of two cows and a calf (a gold star if you can spot the calf) huddled inside a school bus submitted by Kathryn McCoy. We're not sure how those bovines made their way into the driver's seat, but the picture distinguished itself for its bizarre content. Congratulations, Kathryn! To see the top submissions, visit our photo gallery at sdrea.coop/winter-in-july.

Thanks to those who entered, and I hope you enjoy the rest of your summer. Remember, another winter is just around the corner! And be sure to keep reading Cooperative Connections to look for the next photography contest.



Billy Gibson

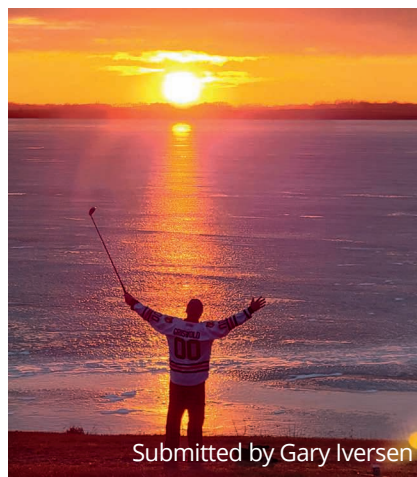
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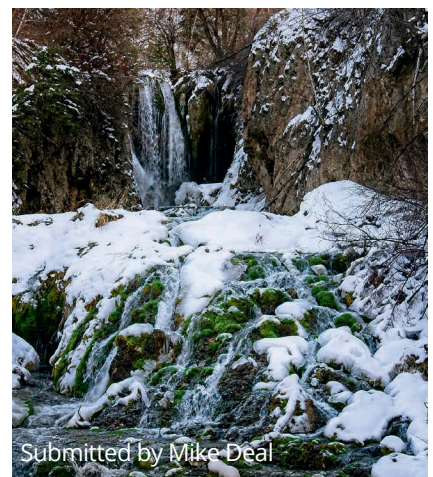
Submitted by Kathryn McCoy



Submitted by Sarah Greeb



Submitted by Gary Iversen



Submitted by Mike Deal



IN BLOOM

Philip and Jessie Ruml raise an assortment of fresh-cut flower varieties on their micro-farm near Castlewood. *Photo by Rachel Clelland Photography*

Specialty micro-farmers raise fresh-cut flowers for weddings, parties and other red-letter events

Billy Gibson

billy.gibson@sdrea.coop

The last time you saw a summer bride carrying a brightly colored floral bouquet down the aisle, it's likely those flowers came from some faraway field in some other part of the planet.

But that's quickly changing as a growing group of intrepid micro-farmers throughout the Upper Midwest are finding their way into the specialty fresh-cut flower business.

Emphasis on the word intrepid: it's not easy raising red roses in a climate more associated with icicles than irises.

Jessie Ruml isn't the least bit intimidated. She's in her fourth year of growing a variety of decorative flowers and reports that the bulbs are blooming and business is booming at Pixie Acres Flower Farm near Castlewood.

After 10 years as a dental hygienist waging a protracted war against plaque, Ruml decided to turn in her stainless steel sickle scaler and look for another occupation that would keep her on the

family farm and close to home with her four spirited daughters.

One afternoon while the children were out playing in the yard, she was swiping through her social media accounts and up popped a picture of a brilliant display of dahlias lying in the bed of an old pickup truck. The scene stopped her dead in her scrolling tracks.

"The colors were so vivid, I immediately felt the hair stand up on the back of my neck. I knew in an instant that's what I needed to do with my life," said Ruml, a self-described farm girl originally from Elk Point and a current member of H-D Electric Cooperative.

It didn't take long for Ruml to realize why South Dakota is not exactly known as the fresh-cut flower capital of the world - at least not yet. She compares growing flowers in eastern South Dakota to 24-hour babysitting. It's a painstaking task to bring flower seeds to full bloom in such a capricious and often harsh climate.

She and her husband Philip, who works full time in the ag industry,

don't even consider taking an extended vacation between the months of March and October when the Rums hold a "fall finale" on the farm to sell off the remainder of their crop or donate it to local charities. Flower plants are high maintenance, sensitive to the elements and require tons of TLC with watering, weeding and fertilizing, she explained: "We can't leave them untended for more than a few hours at a time."

But Jessie keeps a positive perspective when her back and her body start aching from all the hard work.

"You have to get on your hands and knees because there's not a lot of mechanical equipment like in larger scale farming," she said. "But all the effort only makes it that much more special to bring somebody joy, to see the happiness on their faces when you give them a bouquet of fresh flowers. It's hard on your body, but I'm grateful for each day I get to put my hands in the dirt."

She breaks up the monotony and the grind of flower farming by conducting floral design workshops, which she describes as a "girls' night out" where there's lots of laughs and perhaps some light spirits flowing in the

ZONE 4 FLOWER VARIETIES

Here are the top five flower varieties most suitable for USDA Hardiness Zone 4 planting:

1. Petunias
2. Daisies
3. Dahlia
4. Zinnia
5. Tulips



Christy Heckathorn, owner of Fleurish Flower Farm and Design near Elk Point, shows Union County Electric General Manager Matt Klein how she uses soil blocking to grow hardier seedlings and increase production. *Photo by Billy Gibson*

studio. Participants learn how to make arrangements and fill vases and tour the fields to see how the operation works.

She also looks for opportunities to support the community, like donating a portion of her sales to assist families whose homes were destroyed by a tornado that severely damaged much of Castlewood on May 11.

Over the past few years, more growers are taking on the challenge of Zone 4 flower farming and have entered the market in places like Belle Fourche, Vermillion, Lake Preston, Sioux Falls, Mitchell, Wolsey, Artesian and others. Many are members of the South Dakota

Specialty Growers Association based in Yankton. The group held a virtual “member meet-up” on June 14 to collaborate, educate and exchange ideas.

One floral designer who jumped into the fresh-cut flower business two years ago is Christy Heckathorn, owner of Fleurish Flower Farm and Design in Ruml’s native Elk Point. In point of fact, it was Heckathorn - a family friend - who designed the floral arrangement for Ruml’s bridal bouquet 15 years ago.

Heckathorn got involved in the industry when she went to work at Pioneer Drugs, a local pharmacy that also had a flower shop and a soda fountain

inside. She spent five years there serving customers and also working on the side to help brides select arrangements for their big day.

While Heckathorn has gathered an wealth of training and experience over the years, she said she delights in using flowers to elicit smiles and positive reactions in her clients and other people she meets – especially those who could use a laugh when battling through personal challenges.

“A lady once came with her family and I could tell she had a lot on her mind,” she recalled. “I talked with her and found out she was going through cancer treatment and they had come here just to get away for awhile, enjoy the flowers and forget about things. My mother just went through cancer treatment. So I told them to come back any time and they would always be welcomed.

“One of the reasons I love flowers is because they bring joy to other people. If you can grow flowers and put a smile on someone’s face as a result of your labor, that’s a good life recipe.”



Jessie Ruml uses a pair of high tunnel greenhouses on her farm near Castlewood to shelter her flower plants from often unpredictable South Dakota weather patterns. *Photo by Rachel Clelland Photography*



REPORTING AN OUTAGE

Advanced technology enables consumers to keep in touch with their electric co-op



Kit Talich

With the lightning-fast pace of technology, there are more and more ways to keep in touch with your Cooperative.

Most folks these days use Facebook at least once a day to keep up with friends and family and follow or like other things that interest them. West Central Electric

loves to interact with our Members via these new technologies, but it is not necessarily the best way to report an outage.

To understand why, we need to look at how things have changed at your Cooperative over the last decade or so. The biggest difference when it comes to outages are the meters. Modern meters are a totally different “animal.” Today the meter communicates back to the office over the powerlines themselves and ‘talk’ a few times a day. The most important reading happens sometime

shortly after midnight. This is the reading that is used to show a total used for the day. The meter also sends back hourly data three times a day. This data is stored and is mainly used by the Member. This hourly data allows us to provide you with the ability to view your usage via SmartHub on your phone, tablet or computer.

With these new meters, your Cooperative also has the ability to “ping” a meter. This ping happens in a matter of seconds and can tell us if a meter has power or not. However, this ping does not happen without first being initiated in the Outage Management System, or OMS for short. The OMS does a lot of handy things, but when an outage is entered the system will first ping the meter that is believed to be out and from there will ping other meters around that meter

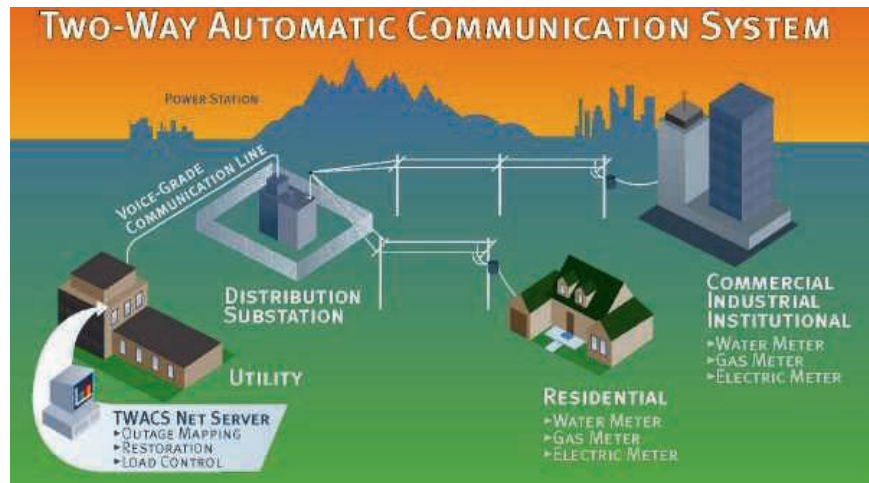
Reporting an outage, *continued*

and so on, and so on to quickly identify which meters are affected by the outage. This tells us which protective device is open, so we can get the line crew to the problem area in a timely manner. To accomplish the same thing 10 years ago it used to be done by looking at the map and calling folks to see who was on and who wasn't, obviously a lot longer process! The Outage Management System is a time saver indeed!

Currently, there are only two ways to initiate this pinging process in the OMS software. The first is via SmartHub. Not only can you view and pay your current bill, you can also view past bills and usage, view the interval data I mentioned above and report an outage right there in one app! The other way to start the process is manual entry. The only people with access to the system to manually enter outage reports are the folks in the Murdo office and the after-hours dispatch center. Reporting outages to the Facebook page or by calling one of the outside crew may

work, but ultimately that message needs to be passed back to the office or the dispatch to get the process rolling in the OMS software and thus another step that only slows restoration time. Facebook is not typically manned 24-7 and we would hate to delay restoration, due to someone not calling in an outage.

I know that this is a lengthy technical description of how your Cooperative manages and reports outages, but I hope it helps explain why the best way to report an outage is by using the SmartHub app or by calling 669-8100. No matter the time of day someone will answer and get the process rolling to get the lights back on!





SUMMER POWER

Local co-ops are prepared to meet peak demand for electricity this summer

You may have seen articles recently about the potential for rolling power outages across the West and Midwest that could be triggered by a combination of insufficient generation, increased demand for power and warmer than normal temperatures expected this summer across the region. While no one can predict what extreme weather could be coming our way, or unexpected issues with power plants and renewable resources, electric co-ops in South Dakota and western Minnesota are confident that we will have enough generation to meet our electric needs.

The following questions and answers aim to provide background on Regional Transmission Organizations (RTOs), the role RTOs play in serving consumers, potential power supply impacts to this region throughout the summer,

and some lessons learned from the February 2021 energy emergency.

WHERE DOES MY ELECTRICITY COME FROM?

Decades ago, when electric cooperatives were created to bring power to rural America, there were few electric generation options available. In our region, electric cooperatives worked together to access hydropower from the dams on the Missouri River and later created East River Electric Power Cooperative, Rushmore Electric Power Cooperative and Basin Electric Power Cooperative to fulfill their power needs.

These generation and transmission cooperatives provide transmission services and construct regional power plants and transmission infrastructure. In the past, when co-ops needed

more electric generation because of economic growth, we built it.

Co-ops still own and build generation units today, but the operation of the grid that serves our region changed significantly about seven years ago. In 2015, East River Electric, Rushmore Electric, Basin Electric and the Western Area Power Administration (WAPA), which sells hydropower from the dams, all entered the Southwest Power Pool (SPP). SPP is an RTO that operates throughout the central portion of the United States and allows utilities to work together to provide the most efficient and cost-effective generation and transmission services to control costs.

DOES THE SOUTHWEST POWER POOL (SPP) EXPECT TO HAVE ENOUGH GENERATION TO MEET DEMAND THIS SUMMER?

SPP operates like the “air-traffic controller” of the bulk electric grid from Canada to Texas. It oversees the grid and the wholesale power markets serving most of the electric cooperative consumers in South Dakota. According to a May 12 press release from SPP, the organization said it “expects to have enough generating capacity

to meet the regional demand for electricity through the summer season.” SPP anticipates that demand for electricity will peak at 51.1 gigawatts during the summer season, which runs June to September 2022. According to SPP, a diverse fleet of generation units, including cooperative-owned power plants and renewable resources, will be prepared to serve at least 55.5 gigawatts of demand.

WHAT IS THE MIDCONTINENT INDEPENDENT SYSTEM OPERATOR (MISO) AND WHY DOES IT EXPECT TO HAVE AN ENERGY SHORTFALL THIS SUMMER?

The Midcontinent Independent System Operator (MISO) is similar to SPP – it is an RTO responsible for matching generation resources with power demand from consumers throughout the Midwest in states like Minnesota, Wisconsin, Iowa, Michigan and Illinois. Each RTO serves different areas of the country and has a different mix of generation resources. Some consumers in South Dakota are served from the MISO system, but most cooperative consumers are served through SPP. MISO raised alarms in April when the organization said it projects “insufficient firm resources” to supply the summer demand for electricity.

In 2005, MISO’s total generation mix was 76 percent coal, 13 percent nuclear, 7 percent natural gas and the rest came from a mix of other resources. By 2020, the amount of coal-based generation fell to 33 percent while natural gas grew to 34 percent, nuclear reached 17 percent and wind and solar accounted for 13 percent. It has been a drastic change in a short amount of time. With a higher amount of variable generation resources, less

SPP “EXPECTS TO HAVE ENOUGH GENERATING CAPACITY TO MEET THE REGIONAL DEMAND FOR ELECTRICITY THROUGH THE SUMMER SEASON.”

firm generation available and the anticipation of increased electric usage because of higher than average temperatures, it sets up the potential for rolling power outages across the MISO footprint this summer.

HOW DO THE ENERGY MARKETS WORK?

Basin Electric owns generation and sells it into the SPP and MISO markets. Basin Electric buys all the power they need from those same markets to serve their membership, including your local electric co-op. It helps control costs throughout our co-ops by allowing us to sell generation into the markets when it is economically advantageous, or to access cheaper generation from the market when we need it. It was a critical strategic step taken by electric cooperatives to save their members money. But it also means that we can be subject to SPP directed rolling outages if demand exceeds generation across the entire SPP footprint like we saw in February 2021. Although electric cooperatives in the Dakotas are required to have enough generation to serve our own consumers, because co-ops are integrated in the grid we must share in any potential outages due to an energy emergency.

DID UTILITIES LEARN ANYTHING FROM THE FEBRUARY 2021 ENERGY EMERGENCY?

In February 2021, record-low temperatures and record-high electricity use across a region stretching from the Canadian border to Texas created what SPP called “the greatest operational challenge in its 80-year history.” Yet, even in

the extreme conditions, SPP had about four hours total of rolling outages across its 14-state region. That included South Dakota and cooperatives served by East River Electric and Rushmore Electric. East River was required to drop about 83 megawatts of demand over a short time on Feb. 16, 2021. Rushmore Electric was required to drop 22 megawatts on Feb. 16, 2021. After the emergency, SPP commissioned a comprehensive report and conducted an in-depth analysis of what happened. The report produced 22 actions, policy changes and assessments related to fuel assurance, resource planning and availability, emergency response and other areas.

Joining SPP was a strategic step that our cooperative network took several years ago to capture the benefits of being in an RTO. We have experienced immense financial and operational benefits over the past several years from our membership in SPP which have helped to keep electric rates stable. Looking ahead to this summer, most electric cooperatives in South Dakota are not within the MISO footprint and are not expecting an impact from any potential MISO rolling power outages. However, a few local co-ops in Minnesota and northern South Dakota may be called upon to take a rolling outage. Those co-ops will communicate with members if this becomes a possibility and will work to minimize the impact of these potential outages.



FAIRS AND FESTIVALS

There are more than 25 fairs and festivals on the schedule in South Dakota and southwestern Minnesota. *Photo by Billy Gibson*

Electric co-ops support the mission of fairs and festivals to educate and entertain

Billy Gibson

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When Scott Wick was a boy growing up in western Sioux Falls, he set upon a clandestine quest to find a way of sneaking into the Sioux Empire Fair without having to spring for a ducat.

Like a well-trained but cash-starved recon platoon, he and his mischievous chums used to probe for breaches in the site's perimeter, lured by the music, lights and laughter emanating from the other side of the fence.

Things have come full circle. Today, Wick serves as president and CEO of the Sioux Empire Fair. Now he spends his time looking for ways to prevent people from weaseling their way inside the gates.

Wick gets a chuckle out of the irony of those memories and is careful to note that he quickly became a reformed juvenile trespasser. He went on to not

only participate in the fair as a volunteer worker but also became a contributing part of the entertainment.

From third grade through his freshman year in high school, Wick and his compatriots rode their bicycles down to the fair site and went through the front gates - legally - to help hired hands set up the carnival rides, tend to livestock and prepare amusements for thousands of giddy fair-goers.

He even playd his interest in the fair into a profitable enterprise. He shares an old dog-eared Argus Leader newspaper photo of his 11-year-old self selling rides to patrons on the back of a Brown Swiss steer for 50 cents a pop at the Old McDonald's Farm exhibit.

Aside from his present-day security detail, Wick stays busy not only preparing for the Sioux Empire Fair but also staging more than 130 events held annually at the W.H. Lyons Fairgrounds throughout the calendar year with a full

range of activities such as weddings, flea markets, arts and crafts shows, a Renaissance festival, livestock events and more.

"The Sioux Empire Fair and these other events have a long history and people always come up to me and talk about the old days, back in the 50s and 60s when they used to come here as a kid," Wick said. "The size of the steers and the heifers have changed drastically over the years, but people still come here for the same reason as always - to have some good family fun. For a lot of people, this serves as an annual family gathering or a kind of reunion."

The 83rd event will be held Aug. 5-13 and will feature nine nights of musical entertainment on the Billion Automotive Main Stage with headliners like .38 Special, Old Dominion, Sawyer Brown, Justin Moore and more.

The Sioux Empire Fair is considered to be the top event among fairs and festivals in terms of attendance from visitors across the region, but there are many county and local events that



Fairs and festivals offer opportunities for fun, education and games to test your skills. *Photo by Billy Gibson*

are annual attractions throughout the summer and fall.

The Heartland Association of Fairs, Festivals and Events lists 25 programs taking place across South Dakota.

Electric cooperative organizations serving members in South Dakota and Minnesota have a long tradition of supporting local fairs and festivals through employee engagement and both financial and in-kind contributions.

Sonje Oban, a representative of FEM Electric based in Ipswich, joined the cooperative after working for the Brown County Fair for several years. She sees a similarity in the local roles of electric cooperatives and the organizations responsible for making sure county fairs provide opportunities for education and entertainment for families.

“FEM is community-oriented and community-driven. We wouldn’t exist if it weren’t for the members that we serve and who own the cooperative,” she said. “Having worked with the fair and now with the co-op, I see that in many ways my priorities and goals are the same: to make a positive contribution to the community and to enhance the lives of both our members and the public at-large. There’s also a big similarity in the educational component. The fair

has lots of exhibits and demonstrations relating to the ag industry, while here at FEM one of our goals is to educate our members on how to use power wisely, safely and economically.”

Carrie Vugteveen is vice president of public relations at Sioux Valley Energy based in Colman. The co-op serves east-central South Dakota and southwestern Minnesota and is involved in many local events throughout the calendar year.

One of those events is the Rock County Fair held in Luverne, Minn., each July. SVE brings a high voltage trailer, a bucket truck and an electric vehicle to educate and inform fairgoers about how electric grid systems function, how they’re maintained and how renewable resources are changing the industry.

For the Sioux Empire Fair, SVE joins several other distribution cooperatives, along with transmission provider East River Electric, in

serving lunch for Ag Appreciation Day.

“County fairs are an important part of our communities, which is why the co-op is involved,” Vugteveen said. “A good example is our partnership with the Rock County Fair. A few years ago we worked with organizers to bring attendees safety demonstrations with a high-voltage trailer, examples of equipment we use to work on lines such as personal protective equipment and bucket trucks as well as our electric vehicle ‘EVie.’ To get everyone involved we had Sioux Valley Energy ‘passports’ that could be stamped if they visited our demonstrations. If fairgoers filled their passports, they would receive a prize.”



Electric cooperatives are involved in making sure local events are fun for everyone. *Photo by East River Electric*



JULY 2-4
Fourth of July Holiday Weekend

To have your event listed on this page, send complete information, including date, event, place and contact to your local electric cooperative. Include your name, address and daytime telephone number. Information must be submitted at least eight weeks prior to your event. Please call ahead to confirm date, time and location of event.

To view the publication's master event calendar, scan the QR code below:



Or visit <https://sdrea.coop/cooperative-connections-event-calendar> to view more upcoming events.

JUNE 24-26
Black Hills Bluegrass Festival
Rush No More RV Resort & Campground, Sturgis, SD, blackhillsbluegrass.com

JUNE 24-26
Main Street Arts & Crafts Festival
Centennial Park, Hot Springs, SD, mainstreetartsandcrafts.com

JUNE 24-26
Scavenger's Journey
Various Locations, SD, scavengersjourney.com

JUNE 25
Zippity Zoo Day
805 S. Kiwanis Avenue, Sioux Falls, SD, 605-367-7003

JUNE 26
Prairie Village Variety Show
Prairie Village, Madison, SD, 605-256-3644

JUNE 30-JULY 4
Annual Black Hills Roundup
300 Roundup Street, Belle Fourche, SD, blackhillsroundup.com

JULY 2-4
Sitting Bull Stampede Rodeo
Various Locations, Mobridge, SD, 605-845-2387

JULY 3-4
Custer's Old Time Country Fourth of July
Various Locations, Custer, SD, 605-673-2244

JULY 4
4th of July Parade & Celebration
Kemp Avenue, Watertown, SD, 605-886-5814

JULY 9-10
10th Annual Native POP
Main Street Square, Rapid City, SD, nativepop.org

JULY 9-10
Brookings Summer Arts Festival
Pioneer Park, Brookings, SD, bsaf.com

JULY 13-16
Black Hills Corvette Classic
Various Locations, Spearfish, SD, blackhillscorvetteclassic.com

JULY 14-17
Corn Palace Stampede Rodeo
Various Locations, Mitchell, SD, cornpalacestampede.com

JULY 14-17
Danish Days
Various Locations, Viborg, SD, danishdays.org

JULY 15-16
Murdo Ranch Rodeo/Gumbo Ride Bronc Ride
Murdo, SD, facebook.com/Murdo-Ranch-Rodeo-Gumbo-Ridge-Bronc-Ride-212320249168184/

JULY 15-17
Laura Ingalls Wilder Pageant
43379 Rose Lane, De Smet, SD, desmetpageant.org

JULY 23
Bierbörse
Main Street Square, Rapid City, SD, 605-716-7979

JULY 23
Yankton Rock-N-Rumble Motorcycle Rally
3rd Street, Yankton, SD, 605-299-9734

JULY 25-30
Days of '76 Rodeo and Parades
18 Seventy Six Drive, Deadwood, SD, daysof76.com

JULY 29-31
Badlands Astronomy Festival
Ben Reifel Visitor Center, Interior, SD, 605-433-5243

JULY 29-31
Meghan Newsam Community Celebration
Murdo, SD, facebook.com/MeghanNewsamCC

JULY 30
South Dakota Chislic Festival
Prairie Arboretum, Freeman, SD, sdchislicfestival.com

AUGUST 5-13
Sioux Empire Fair
W.H. Lyon Fairgrounds, Sioux Falls, SD, siouxempirefair.com

AUGUST 5-14
Sturgis Motorcycle Rally
Main Street, Sturgis, SD, sturgismotorcyclerrally.com

Note: Please make sure to call ahead to verify the event is still being held.