

COOPERATIVE CONNECTIONS



(left to right) Rosebud Electric Directors Dennis Purvis and Boyt Young and Butte Electric CEO Matt Sleep serve a homemade meal to legislators, state employees and Capitol visitors in South Dakota State Capitol.

Photo by Jacob Boyko

Co-ops at the Capitol

Every Voice Counts
Pages 8-9

**Easements Bring Safety
and Reliability**
Pages 12-13

Looking Back on 2025 And Forward to 2026



Matt Sleep
CEO

The board of directors made a few changes after the 2025 elections. Cris decided not to run for board President. The board elected James to take his place, as the new board President. The board elected Chandy to be Vice President, Tom to be Secretary, Travis to be Treasurer, and Cris to be the Assistant Secretary.

Kim decided that she would like to retire in 2026. We recently hired Abby to take Kim's place when she retires. Abby brings a lot of financial experience to us. She has a lot of cooperative accounting experience and comes to us from a similar role at a much larger cooperative. It is also helpful that she and her husband have been Butte Electric members for many years. We are pleased to welcome Abby to our team.

On Thursday, November 13th, we had an outage. This outage was a widespread outage that emanated from southern and central Wyoming out in every direction. There has been much speculation as to the cause, ranging from tumbleweeds, to Martians, to the Northern lights, and so forth, all of which were wrong. It's easy to let our minds wonder as to what would cause such a thing. However, like so many things in life, it was equipment failure. Two events occurred, either because of one leading to the other or simple coincidence. A high voltage transmission line around Medicine Bow, Wyoming tripped, and a power plant near Glenrock, Wyoming had

a fire and explosion that impacted two natural gas turbines. These events either singly or jointly caused a high voltage surge to expand across portions of the western grid.

We experienced a little damage from this outage. It was more related to our equipment absorbing and reacting to the front end of the voltage shock and stopping it from rippling across our system. Although it didn't impact on our ability to get your power back on, it did take James and his crew a few days to fix the equipment. This outage brings out two very important points for everyone to think about and prepare for. First, protecting your system, whether residential or business. Make sure that your breakers and surge protectors are in good order. It is your responsibility to protect your systems and electrical equipment. Second, prepare for times when the electricity goes out. Since this outage (and before) we have had some inquiries from members about hooking up generators as back-up sources of electricity.

It is important to know that if you are considering hooking up a backup generator to your system, you need to contact us early in your planning process. An easy way to do that is by using our website, which is butteelectric.com. We have established an interconnection process as a clear and concise way to help our members make sure that they aren't skipping any steps. You



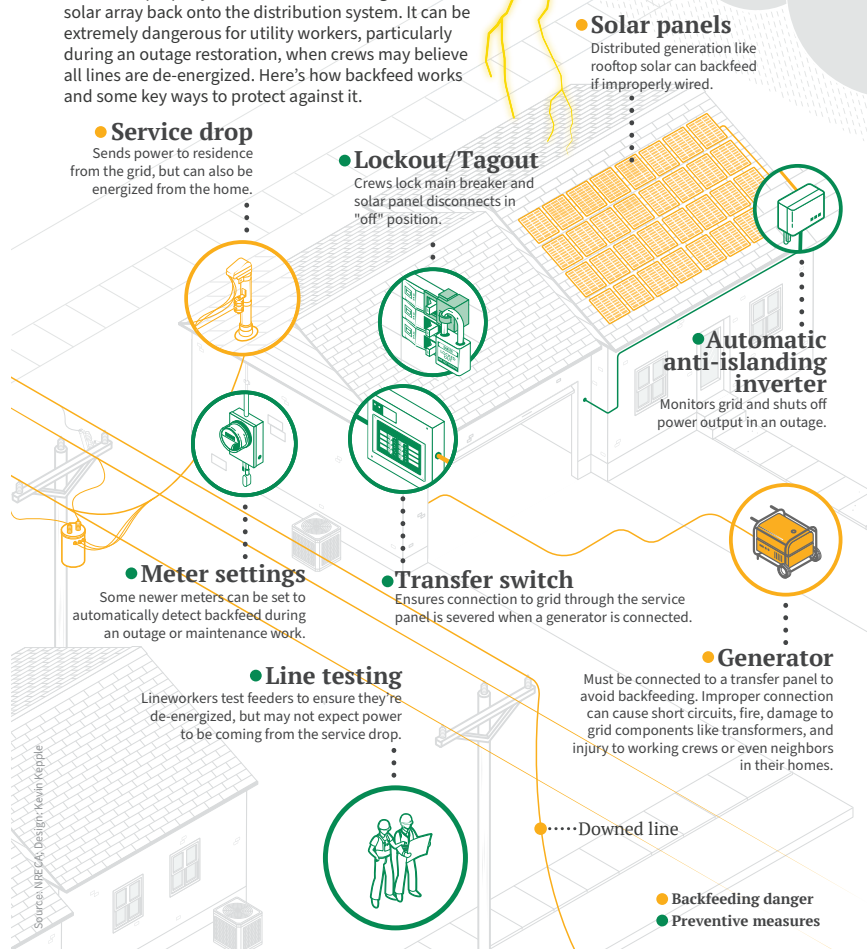
Jeff, Dave, Taten, Jade, and Kyle burying new line along the Arpan Road.

can get to the interconnection page by going to the upper right-hand corner of our homepage and then clicking on the “Interconnection Agreement” tab. This takes you to our nova portal page to deal with interconnections to our system. A generator would fall under our Tier III Interconnection process. If you’re ready to get started, go to the upper right-hand corner and click on the “Start New Application” tab and follow the steps from there. The reason for this process is the same reason that was described above regarding the need for you to take steps to protect your system. We in turn need to protect our system. A generator is used to generate electricity. If a generator isn’t properly wired it can cause electricity to back feed on our system, which in turn can cause damage. If you’re considering this, it is by no means “easy peasy lemon squeezy.” You will also need professional help to do this right.

Happy New Year! Have a great January! Thank you for your membership! Be Safe!

Backfeed

Backfeed on power lines happens when electricity flows in the opposite direction from its intended path, typically from an improperly connected residential generator or solar array back onto the distribution system. It can be extremely dangerous for utility workers, particularly during an outage restoration, when crews may believe all lines are de-energized. Here’s how backfeed works and some key ways to protect against it.



COOPERATIVE CONNECTIONS

BUTTE ELECTRIC

(ISSN 1531-1031)

Board of Directors

James Mortenson, Spearfish – President
Chandy Olson, St. Onge – Vice President
Travis Schenk, Spearfish – Treasurer
Thomas Brunner, Nisland – Secretary
Cris Miller, Spearfish – Asst. Secretary
Daniel Hefner, Whitewood
Steve Smeenk, Newell
Jessica Casteel, Vale
Dan Marrs, Whitewood

Office Personnel

Matt Sleep - Chief Executive Officer
Kim Wince - Chief Financial Officer
Lee Ann Gaer - Staff Accountant
Angie Alexander - Administrative Assistant
Norma Jo Wood - Member Services
Cheyenne Winkler - Office Services Rep.

Operations Personnel

Brett Fosheim - Chief Operations Officer
Bart McLellan - Member Services & Safety
Chuck Even - Operations Manager
Jacob Breidenbach - Work Order Clerk

Foreman:

Adam Zvorak - Spearfish
Jeff Hughes - Newell
James Gyles - Sturgis

Lead Lineman:

Mike Davis - Spearfish
Dave Pietz - Newell
Adam Willuweit - Sturgis

Linemen:

John Branham - Spearfish
Corey Hines - Spearfish
Keaten Benson - Spearfish
Taten Fox - Newell
Jade Lang - Newell
Kyle Nudd - Newell
Dalton Steiger - Sturgis
Ty Sweeter - Sturgis
Nathan McDonald - Sturgis

Butte Electric Beacon Cooperative Connections is the monthly publication for the members of Butte Electric Cooperative, Inc., PO Box 137, Newell, SD 57760. Families subscribe to Cooperative Connections as part of their electric cooperative membership. Cooperative Connections' purpose is to provide reliable, helpful information to electric cooperative members on electric cooperative matters and better rural living. Subscription information: Cooperative members devote 50 cents from their monthly electric payments for a subscription. Non-member subscriptions are available for \$12 annually. Periodicals postage paid at City, SD 57427.

Postmaster: Please send address changes to Butte Electric Beacon, PO Box 137, Newell, SD 57760; telephone (605) 456-2494; fax (605) 456-2496; email butte@butteelectric.com

This institution is an equal opportunity provider

Tree Trimming Safety

Trees are majestic, beautiful and good for the soul. But we also know that our members depend on us to deliver reliable power to their homes and businesses. South Dakota's electric cooperatives strive to balance maintaining the beautiful surroundings we all cherish with ensuring reliable electricity. You might not realize it, but there are several benefits to regular tree trimming.

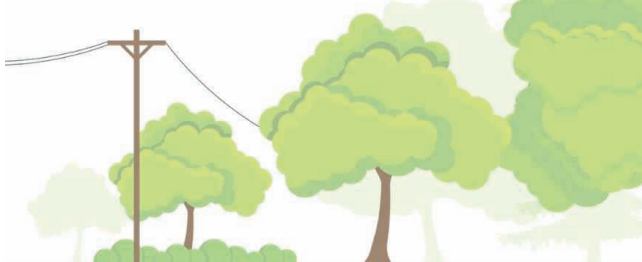
Keeping power lines clear of overgrown vegetation improves service reliability. After all, we've seen the whims of Mother Nature during severe weather events with fallen tree limbs taking down power lines and utility poles. While many factors can impact power disruptions, about half of all outages nationally can be attributed to overgrown vegetation.

Overgrown vegetation and trees also pose a risk to power lines. For example, if trees are touching power lines in our members' yards, they can pose grave danger to families. If children can access those trees, they can potentially climb into a danger zone. Electricity can arc, or jump, from a power line to a nearby conductor like a tree. A proactive approach also diminishes the chances of fallen branches or trees during severe weather events that make it more complicated and dangerous for line workers to restore power.

If trees and other vegetation are left unchecked, they can be-

BENEFITS OF TREE TRIMMING

- ✓ Improves service reliability
- ✓ Speeds up restoration time
- ✓ Keeps crews & communities safe



come overgrown and expensive to correct. A strategic vegetation management program helps keep costs down for everyone.

When it comes to vegetation management, there are ways you can help too. When planting new trees, make sure they're planted a safe distance from overhead power lines. Medium-height trees (40 ft. or smaller) should be planted at least 25 ft. from power lines. Taller trees (over 40 ft.) should be planted at least 50 ft. from power lines. You can also practice safe planting near pad-mounted transformers. Plant shrubs at least 10 ft. from the transformer door and 4 ft. from the sides. If your neighborhood has underground lines, remember to contact 811 before you begin any project that requires digging.

Additionally, if you spot an overgrown tree or branch that's dangerously close to overhead lines, please contact your local electric cooperative.

We have deep roots in our community, and we love our beautiful surroundings. It takes a balanced approach, and our vegetation management program is a crucial tool in ensuring service reliability.



"Watch for overhead power lines."

Jacob Ymker, Age 10

Jacob reminds readers to watch out for overhead power lines. Great job, Jacob! Jacob's parents are Mark and Marion Ymker from Armour, S.D.

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.

Heart-Warming DESSERTS

APPLE BREAD

Ingredients:

1/2 cup brown sugar
1 1/2 tsps. cinnamon
Mix in small dish & set aside.

2 eggs (room temperature)
1/2 cup sugar
1 tsp. vanilla
1/2 cup melted butter or
margarine

Mix together in a bowl and add:
1 1/2 cups flour
1 tsp. baking powder
1/2 tsp. baking soda
2 cups chopped apples

Method

Pour 1/2 of the batter into a greased and floured bread pan. Sprinkle 1/2 of the cinnamon and sugar mixture over it. Add remaining batter and top with remaining cinnamon sugar mixture.

Bake at 350° for 45-60 minutes.

Grace Klein
Sioux Valley Energy

PUMPKIN CHEESECAKE DESSERT

Ingredients:

1 cup heavy whipped cream
8 oz. cream cheese, whipped
1/3 cup sugar
1/2 cup brown sugar
1 can pumpkin puree
1 tbsp. pumpkin pie spice
1 tsp. vanilla
1 pkg. cheesecake pudding mix

Method

Beat 1 cup heavy whipped cream and set aside.

In a separate bowl, mix and beat the cream cheese, sugar, brown sugar, pumpkin puree, pumpkin pie spice, vanilla, and cheesecake pudding mix.

Fold the whip cream into this mixture and spread in a graham cracker crust

Refrigerate two hours before serving plus add a spray of whip cream and sprinkle cinnamon on top.

(Optional) add chopped pecans or walnuts.

Susan Forma
Union County Electric

CHERRY COCONUT BARS

Ingredients:

Crust

1 cup flour, sifted
1/2 cup butter
3 tbsps. powdered sugar

Mixture

2 eggs, slightly beaten
1 cup sugar
1/2 tsp. baking powder
1/4 cup flour
1/4 tsp. salt
1 tsp. vanilla
3/4 cup chopped nuts
1/2 cup coconut
1/2 cup red maraschino cherries,
quartered

Method

Mix together flour, butter and powdered sugar. Spread in 8" square pan. Bake at 350° for 20-25 minutes or until it is a delicate brown.

In a bowl, mix in the remaining ingredients in the order given: eggs, sugar, baking powder, flour, salt, vanilla, chopped nuts, coconut, maraschino cherries.

Spread this mixture over the crust and bake again for 25-30 minutes. cool and cut into squares.

Barbara Anderson
Lake Region Electric

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 2025. All entries must include your name, mailing address, phone number and cooperative name.

Wood and Pellet Stove Efficiency Upgrades



Miranda Boutelle
Efficiency Services
Group

There is something special about the heat of a fire. It's cozy, comforting and a heat source for households across the country. Whether it provides primary or supplemental heat, a wood or pellet stove must operate safely and efficiently.

Here are some signs your stove may need to be replaced, according to the United States Environmental Protection Agency (EPA):

- You often smell smoke in the house with all the windows closed. Smoke can harm heart and lung health, especially among children and older adults.
- Smoke comes out of the chimney more than 15 minutes after a cold start or reload.
- Watery eyes and stuffy noses are common in your household when operating the wood stove.
- You must continually feed the stove with wood.

The EPA recommends replacing wood stoves manufactured before 1990 with cleaner, more efficient models. This can save you money and make your home safer by reducing fire risk and improving indoor air quality. It also reduces outdoor air pollution. If the back of your stove doesn't have an EPA label, it's likely more than 30 years old.

Next, start comparing equipment to find the best fit using the EPA Certified Wood Stove Database. It provides a list of wood and pellet stoves with efficiency ratings, sizes, heat outputs and other details. Local retailers can help you, too. Work with a reputable dealer who can explain the features most important to you. Don't forget to ask about the highest efficiency models.

Here are some things to consider when choosing

a new wood or pellet stove.

Modern wood stoves require less wood, produce less ash and emit almost no smoke. They come in catalytic and noncatalytic options. In catalytic models, smoke gases and particles are burned in a coated ceramic honeycomb, thereby increasing burn time and reducing air pollution. The operation of noncatalytic models is more standard. According to the U.S. Department of Energy, new catalytic wood stoves have efficiencies of up to 83% higher heating value – or amount of heat released – while noncatalytic models are typically in the 65% to 75% range.

A pellet stove is another option to consider. It burns compressed pellets made of wood or other biomass materials. Like a wood stove, there are free-standing units or inserts. It can burn cleaner and doesn't require hauling wood. Pellets are loaded into the hopper, which feeds them into the combustion chamber for burning. Most pellet stoves use electricity for the hopper and a fan to push warm air into the room. Plan to power them during an outage, if needed. Some models come with battery backup. An EPA-certified pellet stove has a 70% to 83% higher heating value.

Make sure the wood or pellet stove you select is properly sized for your home and heating needs.

Consider the cost of the fuel source – whether you have to buy wood, harvest it yourself or stock up on a specific type of pellet. Reduce fuel consumption and smoke by burning wood that is dry and seasoned, meaning it is split, covered and aged for at least six months. Do not burn trash or treated lumber indoors. It can create indoor air pollution and damage your wood stove. Burning softwood can lead to creosote buildup, which can cause chimney fires.

Installation by a certified technician ensures the job is done right, preventing chimney fires and indoor smoke. Have the stove cleaned and inspected by a professional annually. Also, install carbon monoxide detectors. Follow the manufacturer's specifications for burning materials and operation.

If your stove is acting up or not supplying enough heat for your home, consider upgrading to a new model to increase efficiency and keep your home comfortable this winter.

KINGBIRD COFFEE

Your Local Coffee Shop

Jocelyn Johnson

jocelyn.johnson@sdrea.coop

Tucked away in the heart of Brandon, S.D., sits Kingbird Coffee – a cozy, vibrant coffee shop built on the foundation of generosity and community spirit. Kingbird Coffee has blossomed from a simple act of love into a cherished gathering place that embodies hometown values and creative flair. It all began as a surprise.

“Technically, my wife, Jessica, owns it,” said Michael Gross, who purchased the coffee shop as a gift to his wife. “It was an impulse buy,” recalled Michael with a chuckle.

At the time, Michael felt his hometown lacked a proper coffee shop – a local hangout where neighbors could linger over coffee, connect and find a sense of belonging.

“Our inspiration is to be able to give back to the community,” Michael said.

True to that inspiration, Kingbird Coffee radiates generosity from its very core. Since opening, every cent of profit has gone directly back into the community – nurturing local events, student activities and charitable causes.

“My wife and I have never taken any money from the coffee shop,” Michael explained. “Everything we have made over the years has gone back into the community to support events or kids.”

Their commitment to fostering community shines through ongoing innovation and engagement. Now, the team is preparing to launch new extended hours, accompanied by themed nightly events – each designed to cultivate connections and celebrate local interests.

“We’re planning on having a different event every night,” Michael said. “Like Monday might be advanced board games. Tuesday might be about meeting a local pastor. Wednesday could be kids’ crafts night.”

This effort signifies Kingbird Coffee’s continual quest to be more than just a coffee shop: it is a place where everyone can find something to enjoy, every night of the week.

The eclectic atmosphere of the coffee shop invites you to stay awhile. Couches and nooks make for perfect reading corners, board games beckon to the playful, and even a whimsical swing under the stairs welcomes imaginative children.

“It’s just a fun little quiet vibe,” Michael described. “We have little hidden nook areas underneath the steps and a little swing where kids can go and hang out... there’s ‘take a book, leave a book,’ and board games. It’s just a fun place.”

Here, creativity isn’t just encouraged – it’s essential. While the owners handle behind-the-scenes work, they credit the employees and a dedicated events manager for shaping the everyday magic that keeps patrons returning.



Photo by Kingbird Coffee

Kingbird Coffee’s devotion to local flavor extends to every product sold. Beans are sourced from Parable Coffee Roasting Co., a local roaster in Tea, S.D. But the commitment to homegrown doesn’t stop with coffee. Local honey, jewelry, bison jerky, pizza, even handmade stockings from coffee bags, and flowers from a local florist – each item tells a story of community partnership. Artists hang their work for free, keeping a portion of sales and donating proceeds to local art initiatives. On weekends, the shop welcomes pop-up boutiques, allowing small business owners an affordable, supportive venue.

Signature drinks bring history to the present. The beloved “Billy King” remains on the menu in honor of Billy, the shop’s founder and namesake.

“We kept everything the same as if he’s still at it. Billy created it, and he’s a good friend of mine,” says Michael.

Such continuity gives regulars – and new customers – a sense of belonging and nostalgia.

Cultivating connections goes well beyond commerce. Employees past and present share a special bond, growing from high school baristas into college students and, often, friends for life.

“People don’t quit. They just...love it because they have the freedom to experiment and to make drinks,” he said, noting the murals and memories that fill the walls.

When asked to describe the shop’s personality, Michael laughs, “A crazy, wild teenager...you never know what’s gonna happen.” The unpredictable, energetic spirit is exactly what makes Kingbird Coffee so beloved – a hub that welcomes everyone, surprises often and gives back always.

For Kingbird Coffee, community isn’t a slogan – it’s a way of life, brewed fresh daily for everyone who walks through the door.



CO-OPS AT THE CAPITOL

EVERY VOICE COUNTS

Frank Turner

frank.turner@sdrea.coop

Electric cooperatives carry a wide range of responsibilities to the members they serve. Beyond keeping the lights on, co-ops represent their communities, focus on member needs and help strengthen the places they call home. But behind the scenes, cooperatives also stay actively involved in legislative discussions to stay engaged in the decisions that shape how they serve their members.

According to Steve Barnett, general manager of the South Dakota Rural Electric Association, legislative efforts help protect reliable electricity, keep costs manageable and support rural communities across South Dakota.

“While it’s important that we stay involved in the topics that are relevant to our industry, it’s really about sharing our values and telling our story,” Barnett said. “Being involved means being engaged and aware of the challenges and issues coming up in the 2026 Legislative Session,”

In addition to SDREA’s internal

leadership, legislative efforts are supported by the association’s lobbying team in Pierre, led by Darla Pollman Rogers of Riter Rogers LLP. Rogers and her colleague, Ellie Bailey, have been involved with SDREA’s legislative work for more than two decades.

“A key component of this work involves relationship building with legislators to establish trust and credibility,” Rogers said.

Rogers noted that member engagement strengthens the cooperative voice during session and throughout the year. “The grassroots approach is huge for co-ops,” she said. “Hearing from members across the state and from different cooperatives helps strengthen our overall impact.” Rogers added that one of the best ways members can get involved is by getting to know their local legislators or attending Co-op Day at the Capitol to observe the process firsthand.

With the next session approaching, several topics are already drawing the attention of not only electric cooperatives but utilities across the

state. One of the proposals SDREA is following closely is Rep. Kent Roe’s data center bill, identified as Draft HB 31.

“We’re seeing an increase in interest from large data center developers looking to site facilities in cooperative service territory,” said Chris Studer, chief member and public relations officer at East River Electric Power Cooperative, a wholesale power supply cooperative which serves distribution co-ops in eastern South Dakota and western Minnesota. “We have been providing input on the data center bill to make sure the law would fit within our process and require data centers to invest in generation and transmission infrastructure to serve them, so we can protect our current cooperative consumers from the risk of building generation to serve these large consumers. At the end of the day, we’re not going to put our member-owners at risk, and engaging with lawmakers working on that issue is very important to our cooperative network.”

The association has also been working

with investor-owned utilities on wildfire mitigation legislation, which stands out as another priority for South Dakota cooperatives.

“Wildfire risk is a growing concern, and this proposal gives utilities a clear, consistent way to plan ahead. At its core, this legislation is about preparedness – making sure utilities have a plan and have reviewed it with their governing authority. By strengthening infrastructure, improving vegetation management, and coordinating closely with communities, the framework helps protect public safety while supporting the reliable service South Dakotans depend on,” Black Hills Electric General Manager Walker Witt said.

Cooperative members also have an important role in legislative advocacy. Their engagement helps ensure that rural needs and perspectives reach decision makers. Barnett encouraged members to stay active by reaching out to local lawmakers in their districts and attending local legislative forums and cracker barrels. These are formal town hall style gatherings where legislators answer questions and update the community.

“Members can contact legislators in their respective districts via email or by telephone,” Barnett said. “Attending cracker barrels is also a good way to stay engaged. These opportunities give members a chance to hear updates, ask questions, and share how policy decisions affect their communities.”

Barnett also noted the importance of staying alert during the legislative process, particularly when a bill is significantly amended. He explained that when a bill gets “hog housed,” it means it has been changed so much that the original version is no longer recognizable. “A hog housed bill is changed or amended significantly, to the point where a person may change their position on the bill,” he said. “Tracking these changes is essential to understanding the real impact a proposal may have if it becomes law.”

Barnett said SDREA will continue to represent the interests of both cooperatives and rural communities across the state. At the end of the day, it’s all about providing dependable electricity and keeping the lights on.



Gov. Larry Rhoden takes a picture with members of the electric cooperative network at Co-op Day at the Capitol last February.

Photo by Jocelyn Johnson

STAYING INVOLVED

Co-op Day at the Capitol

Electric cooperatives’ efforts to engage local legislators extend far beyond traditional lobbying. Every February, cooperatives from across the state gather for a light-hearted dinner at the South Dakota State Capitol to break bread with lawmakers, provide attendees industry updates and sit in on legislative committee meetings.

Last year, South Dakota cooperatives continued their time-honored tradition of serving pulled pork sandwiches and cowboy beans prepared by Ken Gillaspie, who formerly served as a director for East River Electric and as board president for Oahe Electric, and Roger Crom, a former loss control manager at SDREA.

The next Co-op Day at the Capitol is scheduled for Feb. 17, 2026.

Legislative Banquets

In addition to Co-op Day at the Capitol, select electric cooperatives across the state host legislative banquets as a means of communicating the latest legislative environment with both their members and local lawmakers. Many times, these events provide a free meal to attendees and include updates on both the successes and challenges for the co-op.

Reach out to your local cooperative to learn more about local Legislative Banquets, Co-op Day at the Capitol or the latest legislative news affecting cooperatives. The co-op network is more than happy to engage.

ENERGY STORAGE ADVANCES

Jennah Denney
NRECA

Not long ago, when people talked about “batteries,” they meant the kind that powered flashlights, phones or watches. Today, batteries are transforming the way we power our homes, farms and even the electric grid that keeps our lights on. Across the country, battery energy storage is helping electric cooperatives keep power more reliable, affordable and resilient.

The journey began with early rechargeable batteries like lead-acid models, which were used in vehicles, tractors and backup systems for lighting or telephones. These systems were bulky, short-lived and required frequent maintenance. Later, nickel-cadmium and nickel-metal hydride batteries became popular in cordless tools, early electronics and hybrid vehicles. While they marked a step forward, they remained expensive and weren’t well suited for large-scale energy applications.

A major turning point came with the development of lithium-ion batteries. These are lighter, longer lasting and capable of storing more energy in less space. Initially used in laptops and mobile phones, lithium-ion technology now powers most electric vehicles and many of the grid-scale systems that can keep thousands of homes running for hours. And innovation hasn’t stopped there. Researchers are now exploring solid-state and sodium-ion batteries, which use safer, more abundant materials and promise to make battery energy storage even more affordable and accessible. Each advancement brings batteries closer to becoming a foundational part of everyday life.

Across the country, electric co-ops are deploying battery energy storage systems

to support grid operations and manage local demand. Batteries can store excess electricity from renewable sources like solar and wind, then discharge it when demand rises, which can help balance supply and demand and improve grid stability. They also provide an alternative to traditional infrastructure upgrades. In areas where energy use is growing, a strategically placed battery can handle short-term peaks in demand, reducing the need for new substations or extended power lines. This can lower capital costs and reduce construction timelines.

More than 70 electric cooperatives in 24 states have installed or are testing battery energy storage systems, according to NRECA. Most systems currently in use are designed to deliver power for two to eight hours. However, long-duration energy storage (LDES) technologies are emerging that can store energy for 10 hours or more, and in some cases, multiple days.

These battery storage systems could help utilities manage extended periods of low renewable generation or respond to prolonged grid stress events, especially in remote or weather-sensitive areas.

Battery storage may also offer benefits to co-op consumer-members. Residential systems can provide backup power during outages, keeping essential equipment like lights, refrigerators and medical devices

running. For homes with rooftop solar, batteries allow excess energy to be stored during the day and used at night. Some cooperatives offer time-of-use rates, where electricity costs less during off-peak hours. Batteries can store low-cost energy and use it later, helping reduce monthly bills.

Your electric co-op can assist in evaluating system size, installation requirements and available incentives or rate options.

Battery innovation is also being driven by the growth of electric vehicles. Manufacturers are working to improve battery performance, extend battery lifespan, reduce charging time and lower costs. These improvements are influencing the broader energy storage market. Some EVs now include vehicle-to-home (V2H) or vehicle-to-grid (V2G) capabilities, allowing a car to supply power to a home during an outage or send energy back to the grid during peak demand.

From early lead-acid batteries to today’s advanced lithium-ion and emerging long-duration systems, battery energy storage has evolved into a practical tool for modern power systems.

These technologies are helping electric co-ops improve reliability, integrate renewable energy and manage infrastructure costs. For co-op members, batteries offer greater control over energy use and added resilience during outages. Together, these developments can contribute to a more flexible and dependable electric system that supports entire communities.



DISTRIBUTION AUTOMATION KEEPS POWER FLOWING

Cathy Cash
NRECA

Staying online uninterrupted by a power glitch seems more important than ever and today it's even more possible, thanks to advanced energy technologies that can instantly rearrange electricity flows to areas hit by storms or other disturbances.

Distribution Automation, also known as DA, refers to a powerful set of tools that includes automated sensors, communications systems and data analytics-enabling electric utilities to monitor power lines, field equipment and generation facilities in real time.

Equipped with these DA tools, electric cooperatives can detect an outage and isolate it in real-time from their control rooms before sending out field crew to

repair the damaged power lines.

"Distribution automation helps electric co-ops deliver reliable, high-quality service to members when today's world demands it most," says Ravindra Singh, senior principal of DA for the National Rural Electric Cooperative Association.

Some call DA a "self-healing electric grid" because its application such as FLISR – fault location, isolation and service restoration – allows the network of power lines and substations to automatically reconfigure in response to disruptions.

Here's a snapshot of how it works.

When power lines are damaged or shorted by storms, critters or some disaster, DA systems can reroute electricity from the power source to unaffected infrastructure. This

allows electric service to continue uninterrupted to a community that would otherwise suffer an outage.

DA not only has a hand in preventing outages, but this suite of technologies can save electric co-ops and their members money by reducing inspection time for field apparatus such as transformers, substations and power lines.

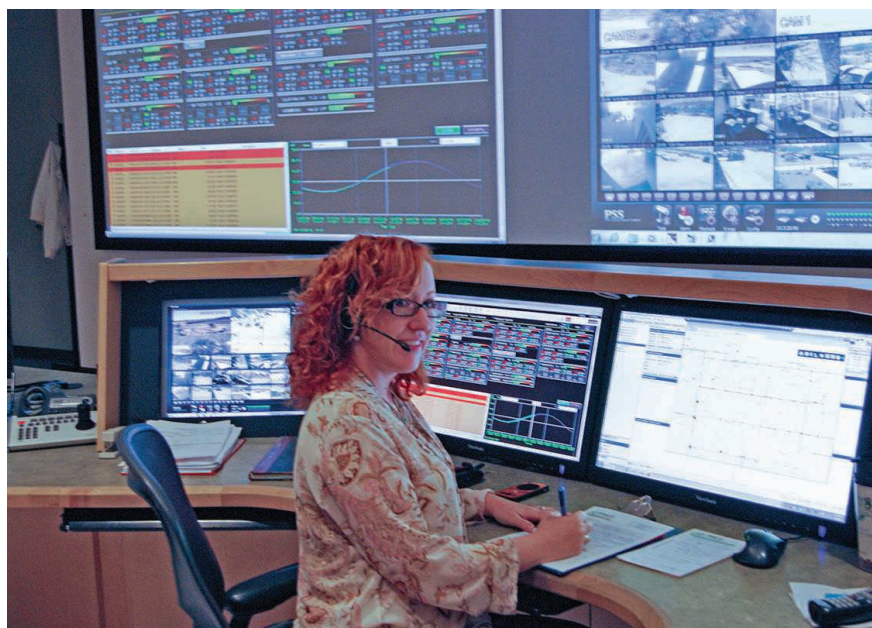
With real-time field measurements from DA technologies, a co-op gains situational awareness of its electricity network and can minimize unnecessary maintenance activities, truck rolls and crew dispatches to examine lines, locate damage and make repairs.

"Power distribution grids are evolving from being a passive network to a more active network," says Singh. "With DA technology and its analysis of network data, co-ops can see their system's assets, how they are operating and what energy resources are on their power lines to support better quality service and reliability."

Without DA, a co-op may not know where electric vehicles, rooftop solar, residential batteries, generators and other distribution resources are being added or operated on its system by its members. This can be a challenge when it comes to managing peak demand and having to curtail energy to sustain reliability.

Electricity demand is only going to grow because of new types of loads such as data centers, crypto mining and EVs, according to any industry forecast. So, it makes sense for utilities to optimize the use of their existing infrastructure or equipment to keep costs in check.

With DA, electric co-ops can better manage and grow their systems and respond to crises safely and efficiently while their members enjoy reliable electricity without hiccups.





South Dakota law allows electric cooperatives to place poles along public rights-of-way without needing an easement. Shown here, East River Electric's transmission lines north of Pierre are built within the right-of-way. In cases where the rights-of-way are crowded, have obstacles, or are otherwise not suitable for poles or line work, a co-op may seek an easement outside of the right-of-way.

Photo by Jacob Boyko

EASEMENTS BRING SAFETY, RELIABILITY

Why More Room Makes Sense for Co-ops, Line Crews & Members

Jacob Boyko

jacob.boyko@sdrea.coop

Serving rural members means maintaining thousands of miles of power line – and finding the space to safely build and access it. At your local electric cooperative, building, maintaining and repairing thousands of miles of infrastructure is a logistical challenge, but each and every piece of the system has its role in a functioning and reliable electric grid.

That's why easements, or agreements to use and access private land, are essential for co-ops and their members. At East River Electric Power

Cooperative, the generation and transmission co-op serving 25 member distribution systems in South Dakota and Minnesota, Engineering and Planning Services Manager Jon Aus works directly with co-op members to get easements for power lines.

In 2025, most cooperatives prioritize building lines along the public right of way – the area between the road and fence lines along roadways – instead of along quarter lines like they have historically, back when rights-of-way were cluttered with telephone and other overhead lines.

“That’s where we like it from an access and maintenance perspective,”

Aus said of rights-of-way. “Nowadays, when we develop a route for a line, we pick the roads we want to zigzag down to get from Point A to Point B.”

Placing infrastructure along roads improves accessibility for crews and speeds up outage response time, especially when mud or snow are a factor, Aus added. But the trade offs are a workspace limited to the shoulder and ditch and overall limited access to the infrastructure.

That’s where easements make all the difference. When a co-op member allows an easement, the co-op will set poles back just several more feet away from the road right-of-way onto private land, and crews can cross behind the fence when they need to access the poles. The impact on private land is minimal, but it’s a massive benefit for the line crews.

“Having an easement allows crews to work on the backside of the structures,” Aus said. “If you don’t get an easement and you don’t have any access rights, they’re stuck working everything from the ditch and the roadside.”

Engineers are meticulous when mapping routes for new lines, Aus added, noting the lengthy process for engineers as they consider pole placement, obstacles, hazards and community impact.

“At the onset of any project, we’re evaluating the impact of our routing,” Aus continued. “Public impact is right up there on our priorities along with reliability and maintenance. We don’t go down routes we foresee to have challenges with public impact.”

Distribution cooperatives see similar challenges on the ground. In southwest South Dakota, Black Hills Electric Cooperative System Coordinator Jesse Sorensen aims to manage a system that’s not only reliable and affordable, but also built on cooperation with members.

“Very rarely do we have someone reject giving an easement,” he said. “We’ve had very good luck sitting down with members and explaining everything to them that there are hundreds – if not thousands – of landowners that allowed easements so we could get electricity to this property.”

He continued, “The biggest concerns from landowners are about losing their trees or the aesthetic value of their property, and we’ll work with landowners by rerouting lines to prevent cutting prize trees or installing lines in prime views.”

At East River Electric, Aus’ team fields similar questions from landowners, usually concerning specific pole placement and whether poles will interfere with field access, an approach or operation of large machinery. He says it’s usually something the engineers can accommodate because ultimately, co-ops want to leave members’ land as good or better than they found it.

“We’ll even work with landowners to pay to replace any trees we have to remove if we obtain an easement from them,” Aus said.

As the co-op steadily grows and expands its transmission system, East River Electric General Counsel Danny Brown stresses that the co-op relies on voluntary easements, and in its 75-year history has never used eminent domain to obtain an easement.

“Eminent domain is not something we ever want to use,” Brown explained. “We try to educate and work with the property owners the best we can. At the end of the day, an easement is voluntary, and if we can’t make it work from the right of way, we have to start thinking about changing our route.”

But opting for alternate, less-efficient routes is a concession that can severely impact system reliability and leads to a higher price tag for co-op members to pay. Fortunately, Aus and Sorensen said most landowners understand the value of working with their cooperative for themselves and their community.

“There have been several times when landowners have said, ‘Absolutely, bring that line through here,’” Aus recalled. “They want to improve their reliability, or they know that they just need more electricity in that area for whatever they might be doing on their property. Most of the time we’re welcomed with open arms.”

That willingness helps keep cooperative power moving across the countryside.



When a co-op obtains an easement to build a line along a road right-of-way, the line is placed several feet away from the right-of-way border. In this photo, the right of way border is about at the fence line, with the poles placed several feet behind the fence.

On this route, East River Electric has an easement for 30 feet behind the fence line for when line crews need to maintain or repair the line, giving crews more room to work and better access to the structures.

Photo submitted by East River Electric.

WORKING TOGETHER IS POWERFUL



Understanding the Three-Tier Co-op Structure

Jacob Boyko

jacob.boyko@sdrea.coop

What Is an Electric Cooperative? (Tier 1: Distribution Co-ops)

An electric cooperative is a non-profit, member-owned utility governed by a member-elected board of directors. Co-ops are different from a typical utility because they don't report to shareholders; a co-op's responsibility is solely to the people it serves.

Member-ownership keeps the co-op focused on serving the interests of the community and maintaining low costs to members. Co-ops employ democratic principles; each member has one vote, which keeps control local and shields the co-op and members from outside interests.

Your local electric cooperative owns and maintains distribution power lines to serve members throughout its territory. While electric cooperatives' territories cover almost all of South Dakota, most of the state's population lives in cities and small towns and purchase electricity from a city-owned municipal power system or a for-profit investor-owned utility.

Most of the electric distribution cooperatives in South Dakota were organized by members beginning in the 1930s and 1940s to serve the rural areas that investor-owned utilities determined would not be profitable enough to be worth serving.

Rural residents formed co-ops, going

door-to-door collecting \$5 sign-on fees – a lot of money at the time – from their neighbors to kickstart the fledgling co-ops. They applied for loans from the Rural Electrification Administration to begin construction, and by the early 1950s, most rural South Dakotans were enjoying amenities made possible by electricity.

Who Supplies My Co-op's Power? (Tier 2: Regional G&Ts)

East River Electric Power Cooperative in Madison and Rushmore Electric Power Cooperative in Rapid City are generation and transmission (G&T) cooperatives that sell electricity to a total of 27 distribution systems in South Dakota.

East River sells electricity to 19 member systems located in eastern South Dakota and six member systems in western Minnesota, while Rushmore sells electricity to eight member systems: seven located in western South Dakota and Cam Wal Electric Cooperative serving Campbell and Walworth counties in eastern South Dakota.

Both East River and Rushmore are governed by a board of directors comprised of directors from the distribution co-ops. Therefore, each distribution co-op receives one vote on its respective G&T's board.

Beyond selling electricity, East River and Rushmore assist their member systems in other areas; East River builds and maintains transmission systems to serve its member systems and offers support for information technology, marketing, public relations and economic development. Rushmore also offers marketing, PR and IT support, along with engineering services.

Two co-op systems in South Dakota are affiliated with neither East River nor Rushmore. Rosebud Electric Cooperative, based in Gregory, and Grand Electric, based in Bison, are part of District 9 – a collection of other distribution cooperative systems in Minnesota and North Dakota that purchase their energy from multiple sources rather than from a single supplier.

Who generates my electricity? (Tier 3: Basin Electric)

Rushmore Electric, East River Electric, and District 9 systems including Rosebud Electric and Grand Electric purchase energy from Basin Electric Power Cooperative, a G&T cooperative based in Bismarck, North Dakota.

Just like the regional G&Ts it serves, Basin is governed by a board of directors representing its member systems. There are 11 directors on Basin's board, and they know the energy industry inside and out – after all, to serve on the Basin board, the directors must also serve on their local co-op's board as well as the regional G&T's board, and are elected by their colleagues to represent the co-op, board, and its members.

Currently, Mike McQuiston of the Fort Pierre area represents his local co-op, West Central Electric Cooperative, on Rushmore's board, and represents Rushmore on Basin's board.

Kermit Pearson of the Lake City area represents his local co-op, Lake Region Electric Association, on East River's board, and represents East River on Basin's board.

The cooperative systems that comprise District 9 also elect a director from

a District 9-affiliated co-op to represent them on Basin's board. Wayne Peltier from Minnesota Valley Electric Cooperative in Montevideo, Minn., represents Rosebud, Grand and the other District 9 co-ops on Basin's board.

Basin Electric was formed in 1961 by electric co-ops in the upper Midwest to generate and transmit electricity exclusively for cooperative systems to purchase. The system has grown to serve North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Montana, Wyoming, Colorado, and New Mexico.

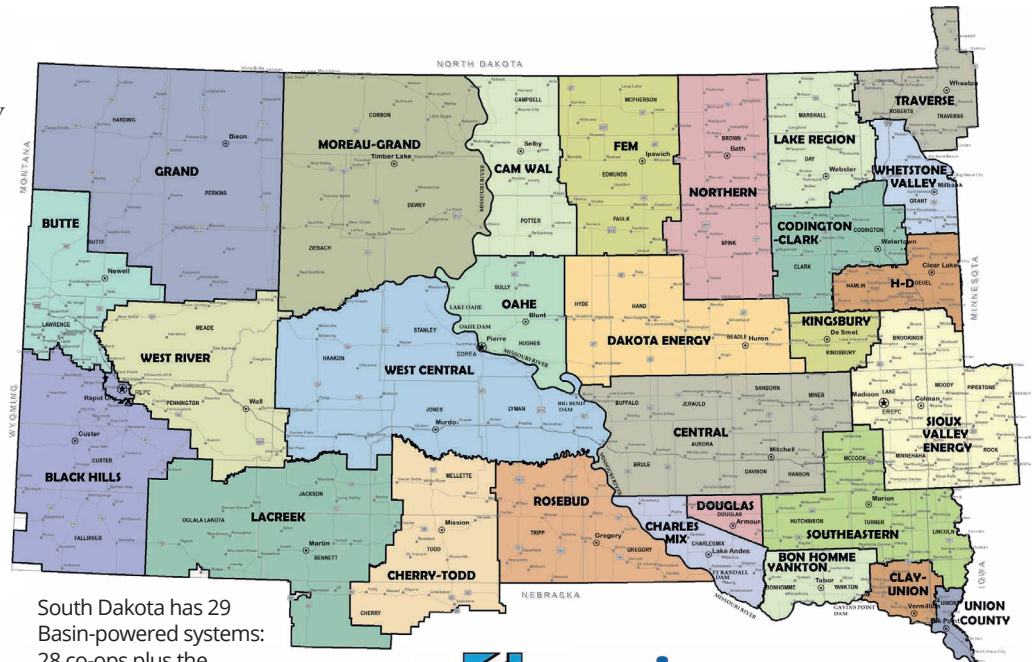
Basin Electric generates electricity using its owned and leased generation assets, which include coal, natural gas, solar, wind, oil and waste heat, with a maximum generating capacity of about 8,500 megawatts.

Other Generation: Western Area Power Administration

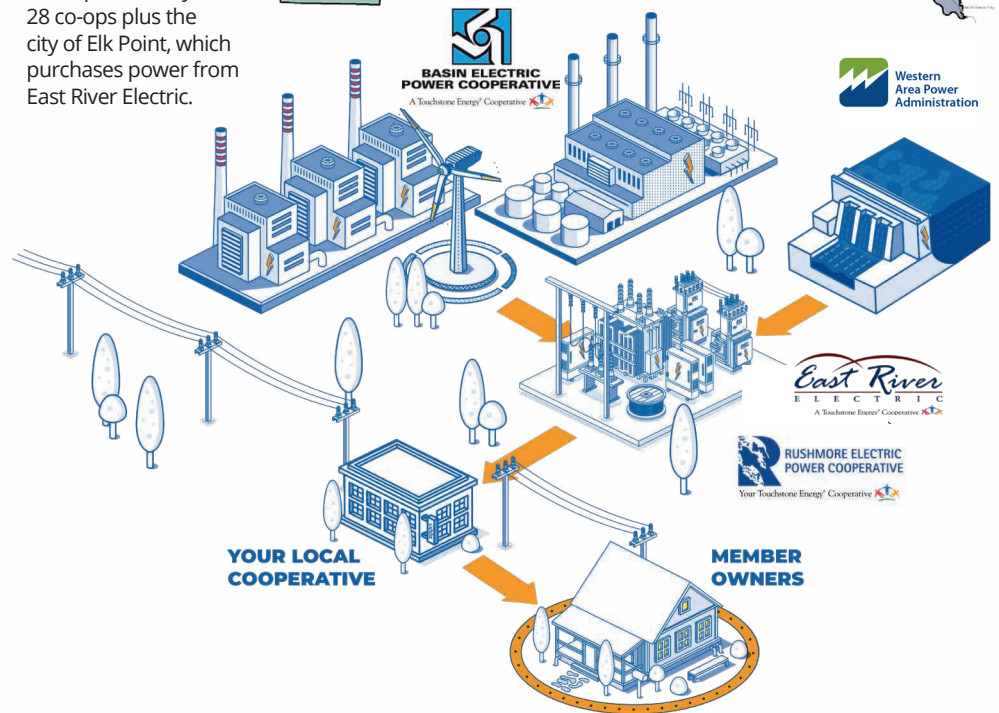
East River, Rushmore and the District 9 systems also purchase an allocated amount of electricity from the Western Area Power Administration. WAPA is the power marketing administration under the U.S. Department of Energy that markets and transmits power from the U.S. Army Corps of Engineers-operated Missouri River dams and other generators in the western U.S.

WAPA purchases make up about 18% of East River Electric and 12% of Rushmore Electric's purchases, respectively. District 9 systems also purchase some of their electricity directly from WAPA.

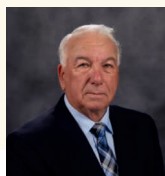
Each year, WAPA transmits about 25,000 gigawatt hours of electricity across its 17,000-circuit mile transmission system. WAPA serves a 15-state region that includes North Dakota, South Dakota, Minnesota, Iowa, Wyoming, Montana, Nebraska, Kansas, Colorado, Utah, Texas, New Mexico, Arizona, Nevada and California.



South Dakota has 29 Basin-powered systems: 28 co-ops plus the city of Elk Point, which purchases power from East River Electric.



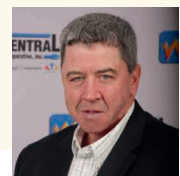
Basin Electric Directors Representing South Dakota



Kermit Pearson
East River, Lake Region
Submitted Photo



Wayne Peltier
District 9, Minnesota Valley
Submitted Photo



Mike McQuiston
Rushmore, West Central
Submitted Photo

REGISTER TO WIN!

Bring this coupon and mailing label to the Touchstone Energy® Cooperatives booth at the Black Hills Stock Show & Rodeo to win a prize!

Your Phone Number: _____

Your E-mail Address: _____



UNTIL JAN. 6

Garden Glow

5-9 p.m. (Closed Dec. 24-25, Jan. 1)

SDSU McCrory Gardens

Brookings, SD

www.sdstate.edu/mccrory-gardens

Photo Courtesy of Travel South Dakota

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.

DEC. 24

Candlelight Christmas Eve Service

4 p.m.

Rapid Valley United Methodist
Rapid City, SD

UNTIL DEC. 26

Christmas at the Capitol

8 a.m.-10 p.m. (Holidays Included)

South Dakota State Capitol

Pierre, SD

605-773-3178

christmasatthecapitol.sd.gov

DEC. 20-21, 23-24, 27-28

1880 Train Holiday Express

Hot Chocolate, Santa

Hill City, SD

www.1880train.com

605-574-2222

DEC. 31

New Year's Eve Bash

Doors Open at 5:30 p.m.

American Legion

Sioux Falls, SD

Tickets: 605-336-3470

JAN. 10

Knights of Columbus Coats for Kids Bowling Tournament

1 p.m.

Meadowood Lanes

3809 Sturgis Rd.

Rapid City, SD

JAN. 20

Prohibition & the Pig

Lake Cty. Museum Fundraiser;

Prohibition-Era Bootlegging

6 p.m.-7:30 p.m.

\$60 per ticket

The Office Bar & Grill

Madison, SD

JAN. 22

Gentleman's Quartet: Instrumental

7 p.m.

Johnson Fine Arts Center

Aberdeen, SD

JAN. 23-24

Pro Snocross Races

Deadwood, SD

605-578-1876

JAN. 30

Box Elder Ball

6 p.m.-8 p.m.

Box Elder Events Center

Box Elder, SD

605-390-9341

JAN. 30-FEB. 7

Annual Black Hills Stock Show

Central States Fairgrounds

Rapid City, SD

www.centralstatesfairinc.com

605-355-3861

FEB. 1

The Great Lake County Hotdish Competition

11:30-1:30 p.m.

St. Thomas School Gym

Madison, SD

605-256-5308

FEB. 7-8

The Black Market/Formerly Benson's Flea Market

Sioux Falls, SD

605-332-6004

FEB. 13-16

12th Annual Frost Fest

Brookings, SD

605-692-7444

FEB. 20-22

Winterfest

Fireworks, Parade of Lights,

Bonfire, Snowshoeing

Lead, SD

www.leadmethere.com/winterfest

605-584-1100

FEB. 21

Bellator Titans

Casino Night Fundraiser

6-11 p.m.

City Lights Bar & Event Center

Aberdeen, SD

Note: We publish contact information as provided. If no phone number is given, none will be listed. Please call ahead to verify the event is still being held.