A Touchstone Energy® Cooperative

WEST CENTRAL ELECTRIC
JUNE 2026 VOL. 27 NO. 2

COOPERATIVE CONNECTIONS

River Power Renewed

The Fort Randall Dam is retrofitted with new generating units.
Photo by U.S. Army Corps of Engineers

SUMMER STORMS AND POWER RESTORATION

What Members Should Know

Jeff Birkeland
CEO

Summer has arrived, and with it comes the increased risk of severe thunderstorms and tornadoes across central South Dakota.

Ten years ago, West Central Electric experienced the most significant storm in our history. In June of 2016, a powerful derecho moved across our service territory, giving us a firsthand look at just how destructive these systems can be. A derecho is a large, fast-moving complex of thunderstorms that produces intense straight-line winds over a wide area, often lasting for hours.

This storm entered our system west of Hayes and traveled more than 130 miles before exiting near Oacoma. Unlike typical storms, which tend to cause isolated damage, this event maintained its strength across the entire path. The impact was substantial – 235 distribution poles and 28 transmission poles were lost, and some members were without power for up to five days. Due to the widespread damage, we relied on assistance from neighboring cooperatives to help restore service.

That experience serves as a reminder that no matter how much preparation and maintenance we perform, severe weather can quickly challenge even the most resilient systems.

When outages occur, our top priority is to restore power safely and as efficiently as possible. Restoration follows a structured process designed to bring electricity back to the greatest number of members in the shortest amount of time.

We begin by mobilizing line crews and critical staff, while also ensuring all available phone lines are open to receive outage reports. Restoration starts with the largest issues – typically transmission lines and substations – which serve the highest number of members. Addressing these areas can restore power to large portions of the system quickly.

From there, crews move to main distribution lines that supply towns, neighborhoods, and rural areas. Once those are repaired, attention shifts to smaller tap lines that serve individual homes and businesses. If your outage persists after power has been restored in your area, it may be due to damage on one of these lines. In those cases, we encourage you to contact us so crews can investigate further.

While we work year-round to maintain and strengthen our system, there are times when weather conditions are beyond anyone's control. We appreciate your patience and understanding when outages occur.

For updates during major outages, please follow West Central Electric on Facebook, where we share timely information as restoration efforts progress.

COOPERATIVE
CONNECTIONS

WEST CENTRAL
ELECTRIC

(USPS No. 018-988)

Our Mission is to Provide Safe, Reliable Service to our Member Owners.

Call 605-669-8100
24-hour Dispatching

WEST CENTRAL ELECTRIC COOPERATIVE CONNECTIONS is published monthly by West Central Electric Cooperative, Inc., PO Box 17, Murdo, SD 57559. Periodicals Postage Paid at Murdo, SD 57559 and at additional mailing offices. Electric cooperative members devote $1 from their monthly electric payments for a subscription. Nonmember subscriptions are available for $18 annually.
POSTMASTER: Send address changes to: West Central Electric Cooperative Connections, PO Box 17, Murdo, SD 57559; telephone 605-669-8100; fax 605-669-2358; e-mail wcec@wce.coop;
Web site: www.wce.coop;
Facebook: www.facebook.com/WestCentralElectricCooperative

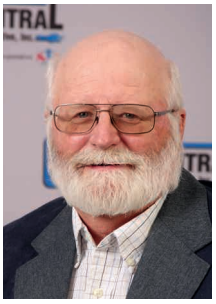
Design assistance by SDREA

DIRECTOR TERMS EXPIRE

All nominating petitions shall be filed with the Secretary of the Cooperative, on or before the 20th day of July 2026, at the headquarters office of West Central Electric Cooperative, Inc., Located in Murdo, SD for parties interested in becoming a member of West Central Electric's Board of Directors.

Directors term vacancies include:

Lyman County
Rural Director
James Smith
Zone 1



Jones County
Rural Director
Paul Patterson
Zone 2

Haakon County
Town Director
Marty Hansen
Zone 4

Stanley County
At-Large Director
Blake Norman
Zone 5

West Central Electric's Board of Directors consists of 10 members representing five zones (one town and one rural director for each zone). All director positions are based on a three-year term.

All nominating petitions shall be in such form as prescribed by the Board of Directors, but shall contain a declaration signed by the candidate, under oath, certifying to the membership that he/she possesses the necessary qualifications and is willing to serve as director.

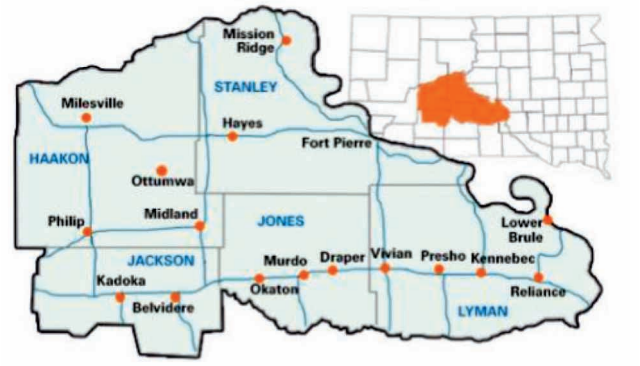
The petition shall be signed by not less than ten (10) members of the cooperative, each of whom shall be required to write their name, address, and the date and time of signing.

In the event that more than one nominating petition is filed in any one Zone, a Zone meeting shall be held in each Zone for the purpose of selecting one candidate for the director to represent the members located in such Zone as their official nominee.

Each Zone Meeting shall be held in August.

Notice of the Meeting shall be sent to all members living in the appropriate Zone by first-class mail or in the West Central Electric Cooperative Connections publication not less than 10 days before the meeting.

WCEC Territory



NATIONAL SAFETY MONTH: PLUG INTO WHAT MATTERS

Safety is a word that shows up in mission statements, meetings and job sites across every industry. At its best, it reflects preparation, awareness and responsibility.

That's where the difference shows.

Electricity doesn't leave room for shortcuts. It demands attention, consistency and respect every day. For your local cooperative, that responsibility is built into the work.

The job goes beyond delivering power. It protects the people who build and maintain the system and the communities who rely on it. Reliable and affordable electricity matters, and so does making sure every crew member goes home at the end of the day.

That outcome takes focus, repetition and a culture where doing things right matters more than doing them fast.

Built on the Right Habits

Linework is demanding and, at times, dangerous. It's also highly structured. Crews follow national standards designed for utility work. Protective equipment isn't optional. Procedures aren't suggestions.

Before a job begins, it's planned. Crews walk through the work, identify risks and make sure everyone is aligned. Communication stays constant.

What happens after the job matters just as much. Near-misses are tracked, reviewed and discussed to understand what happened and prevent it from happening again. Over time, those lessons build a stronger, more prepared workforce.

Everyone is expected to look out for each other. If something doesn't look right, it gets said. That accountability turns policies into habits.

Contractors working alongside cooperative crews are held to those same expectations.

Extending Beyond the Jobsite

The work doesn't stop at the edge of a right-of-way. Because crews live in the communities they serve, that responsibility carries beyond the job.

Your local cooperative shares electrical safety information through schools, events and outreach. It's simple advice that helps prevent accidents.

June is National Safety Month. Most electrical injuries are preventable, and small decisions matter.

Leave electrical work to qualified professionals. Don't overload outlets. Stay clear of downed power lines and report them. If something looks off, whether it's a damaged transformer or an open substation, say something.

Take the Extra Moment

Electricity is easy to take for granted. But the systems behind it, and the people maintaining them, depend on careful decisions.

When a task involves electricity, take a moment. Look twice. Think it through.

That pause can make all the difference.

"Be safe, lineman!"

Renn Ronning, age 8

Renn urges the line crew to stay safe on the job. Thank you for sharing your picture, Renn! Renn's parents are Justin and Katrina Ronning from Elk Point, 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.

Easy & Delicious FAMILY MEALS

Picture by Shutterstock.

TACO SOUP

Ingredients:

1 lb. hamburger, cooked and drained
1 28 oz. can red or Kidney beans
1 28 oz. can petite diced tomatoes
1 14 oz. can corn
1 pkg. taco seasoning

Method

Put all ingredients into bean pot. Microwave for 20 minutes. Serve with shredded cheese and corn chips. Do not drain liquids.

Marla Gilbert
Southeastern Electric

QUICK PORK CHOP DINNER

Ingredients:

4 pork chops
2 tsps. prepared mustard
2 tbsps. flour
1/2 tsp. salt or Mrs. Dash
Dash of pepper
2 tbsps. fat or oil
1 10 oz. can of chicken rice soup or chicken broth
1/2 cup water
Add onion, potatoes, carrots, garlic powder to taste

Method

Spread mustard over pork chops and sprinkle with flour, salt and pepper. Brown thoroughly in fat or oil in pressure cooker. Add chicken soup and water. Add vegetables and cover. Set control at 10 and cook 12 minutes or 35 minutes if you add vegetables. Cool pan for 5 minutes, then reduce pressure.

Ruth Konechne
Central Electric

CARAMELIZED HAM & SWISS SLIDERS

Ingredients:

12 Hawaiian dinner rolls, split
1/4 cup horseradish sauce, optional
12 slices deli ham (or 24 if it's thinly sliced)
6 slices Swiss cheese, cut in fourths (so you have 24 squares of cheese)

Sauce

1/2 cup butter
1/4 tsp. onion powder
2 tbsps. brown sugar
1 tbsp. Dijon mustard
2 tsps. poppy seeds
1-1/2 tsps. Worcestershire sauce
1/4 tsp. garlic powder

Method

Spray a 9x9 or 9x13 glass dish with non-stick cooking spray. Set aside. Preheat oven to 325˚. Spread roll bottoms with horseradish sauce (if using). Fold up pieces of ham to fit the rolls and place them on the bottom halves of the roll. Next, place 2 squares of cheese, replace roll tops and place in a single layer in the prepared pan.

In a small skillet, heat butter over medium-high heat. Stir in remaining ingredients. Pour over rolls. Cover with foil and bake covered for 20 minutes. Remove foil and bake 5 more minutes. *These can also be made ahead of time. Just cover with foil and refrigerate for several hours or overnight. Bake as instructed.

Jerald and Virginia Jensen
Sioux Valley Energy

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 2026. All entries must include your name, mailing address, phone number and cooperative name.

LOW- TO NO-COST WAYS TO SAVE ENERGY

Miranda Boutelle
Efficiency Services Group

Saving energy doesn't have to be expensive or time consuming. You don't need to spend thousands of dollars or get the newest technology to use less energy. There are several steps to lower energy use, even on a tight budget.

Here are some low- and no-cost ways to save energy around your home.

Adjusting the thermostat is an easy way to save. Nudge the thermostat a few degrees closer to the outside temperature, especially on extreme weather days. I often hear people say, "I didn't change anything, and my bill is higher." On the hottest and coldest days, your heating and cooling equipment must work much harder, and use more energy, to maintain the same temperature. Add an extra layer of clothes or some cozy slippers in the winter and lighter layers in summer.

Fix any hot water leaks or dripping faucets. Those tiny drips can add up to big energy waste, not to mention water waste. If you need to hire a pro to fix it, turn the shutoff valve under the sink to stop the leak until you can get it fixed.

Wash clothes in cold water to avoid using the energy required to heat it. Washing on hot or warm settings can really add up, especially if you have a top-load or older washing machine that uses more water.

Adjusting the temperature on your water heater can save energy and money, too. Depending on the water heater, this is either an easy adjustment or something a little more complicated that requires removing access panels. If you don't know how, consult a professional.

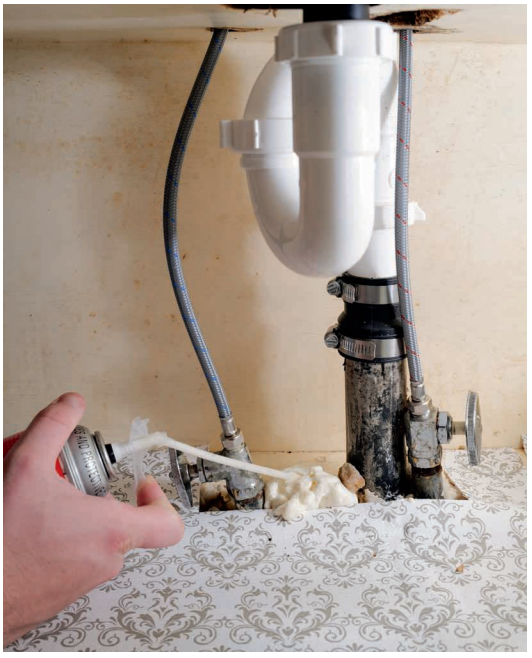
Air sealing is a do-it-yourself, beginner-friendly project that improves comfort and reduces energy waste. For around $20 and a couple of hours of time, you can fill gaps, cracks and holes to prevent air from leaking in and out of your home. From the inside of the home, seal trim on windows and exterior doors with caulk for about $4 a tube. Buy paintable caulk so you can touch it up when it dries, if needed.

A can of spray foam is about $5 and seals gaps around plumbing lines. It's great for sealing gaps around pipes under sinks and in the crawlspace or basement. Cold air can travel up through those spaces, causing drafts and wasting energy. Air sealing these areas gets bonus points for stopping insects and rodents from using these gaps to enter your home.

Spray foam is messy and nearly impossible to get off whatever it touches, so wear disposable gloves and clothes you don't mind dirtying, and use drop cloths to protect finished floors. Be careful if you're working with spray foam overhead. If you get it in your hair, it's not coming out with anything less than a haircut. Move any items and clean surfaces of dust and debris in areas you intend to seal before cracking open a can. Put the can in a cardboard box to carry throughout the house so you don't leave a trail of spray foam.

For $10 to $15, you can buy weatherstripping to improve the seal on exterior doors. If you can see light around doors or feel a draft between the door and the door jamb when the door is closed, weatherstripping will help.

Try these easy, low- and no-cost improvements to reduce energy waste and improve comfort in your home.



CO-OP FAMILY LEGACY

Father and Son Carry Decades of Service at Their Local Cooperative

Frank Turner
frank.turner@sdrea.coop

In 1997, Russ Foster was a 37-year-old producer from Garden City who at the time didn't know much about how the co-op operated. He paid his bill, appreciated reliable power and didn't think much about what happened behind the scenes.

Then a neighbor asked him to step in. The neighbor, a longtime family friend who served on the Codington-Clark Electric Cooperative board of directors, was preparing to leave the position and needed someone to finish out his term. Before stepping away, he approached Foster directly and encouraged him to consider taking his place.

Foster agreed to give it a try, interviewed and was selected for the board.

"I said, yeah, I'd give it a whirl," said Russ. "Went in pretty green."

That decision turned into a nearly three-decade run on the board of directors. In those early years, Russ was learning – not just how the system worked, but what it meant. The deeper he got into the work, the more he understood what sat beneath the monthly bill: the planning, the accountability and the people responsible for keeping the lights on.

"You see there's more to it than just hating that utility bill when it would come every month," Russ said. "You see the dedication of the employees. They're there because it's a good job, but they're also there for the people. When people have a problem, they deal with it."

That perspective changed how he viewed his local cooperative. Unlike investor-owned utilities, decisions made in a co-op boardroom stay close to home, tied directly to the people the system serves.

"We're not regulated by stockholders," Russ said. "We're owned by our members. We are not here to satisfy stockholders. We're here to provide power for somebody who was denied power in the past."

Over time, Russ found his place within a board culture that emphasized consistency and professionalism.

"Codington-Clark is a well-oiled machine," he said. "Previous board members were so dedicated to the board. I would venture to say if somebody misses a meeting all year long, it's rare."

But after more than 28 years of service, Russ began to think about something beyond operations and policy – when it was time to step aside.

In 2025, he chose not to run for reelection as a board member of Codington-Clark, leaving space for the next generation to step forward.

Former Codington-Clark Electric Cooperative director Russ Foster, left, and his son, Jay Foster, who now serves on the board. *Photo by Frank Turner*

"I didn't figure it was a life sentence," Russ said. "There's a time. And I think some guys enjoy it so much they stay a few years too long."

"I didn't quit because I had to," he added. "I quit to give opportunity to the next generation. The older you get, the more you realize there's smarter, more aggressive people who are hungry to learn. You got to give them an opportunity."

As it turns out, that next generation was already close to home. Jay Foster, Russ's son, had grown up alongside the cooperative without realizing it at the time. Annual meetings, summer picnics and youth programs weren't unusual – they were simply part of life.

He got to know the people and understood the culture long before he ever considered sitting at the board table.

"I just grew up with them," Jay said. "It always seemed like you were already involved in it. You just weren't on that side of it yet."

When Russ decided not to run again, Jay took out a petition. The election wasn't automatic. He ran opposed, talked with members and had to make his case. After a short campaign, he was elected in March 2025, joining the board shortly after.

"When he said he was going to run, I said, 'Yeah, that'd be good,'" Russ said. "It'll take some time to learn it, but there's good people around him."

Russ was right, and Jay quickly found his place among fellow community members on the board, and the experience turned out to be more collaborative than he anticipated.

"The board made sure to get me involved from the very first meeting," Jay added. "They definitely made it feel like I've been on the board for 10 years already."

For Russ, watching that process begin again – not just with his son, but with the board as a whole – reinforces the decision he made decades ago to join his local cooperative board of directors.

"I miss it," Russ said. "I'd just soon be on the board, actually. But you got to let the next generation grow."

The rotor is lifted out of the generator unit using two cranes. This component of the generator will be reused once other parts are replaced. Photo Submitted by USACE

RENEWING RIVER POWER

Fort Randall Dam Undergoes Multiyear Renovation

Jacob Boyko
jacob.boyko@sdrea.coop

A 72-year old hydropower dam in southeast South Dakota is the first of the state's four mainstream Missouri River dams to undergo a substantial retrofit to improve the facility's efficiency and reliability.

Fort Randall Dam, which began operating in 1954, was built near Pickstown, South Dakota, through the Pick-Sloan Missouri Basin Program. The program was included in the Flood Control Act of 1944 by Congress to dam the Missouri River at multiple points to improve the region's water management, irrigation, flood control and navigation while also generating much-needed hydropower. *(See Pages 12-13 for more on how the program came to be.)* A marvel at the time of its construction, the two-mile-long rolled-earth dam holds back 5.4 million acre-feet of water in Lake Francis Case. The dam's eight turbine generators have a maximum generating capacity of 320 megawatts – enough electricity to power about 245,000 homes.

Now, more than seven decades later, the U.S. Army Corps of Engineers is looking to boost those numbers and revitalize the aging dam with state-of-the-art, 21st-century technology to ensure the facility keeps up with the region's modern energy demands.

Overseeing the multi-year project is Maintenance and Operations Manager Michael Schenkel, who's spent the last 14 years at the Fort Randall Project overseeing the facility's maintenance, operation and planning. Schenkel says while the dam's eight original 72-year-old generators and turbines have served reliably, a renewal will improve the project's operation.

"Like many aging public assets, it's time for reinvestment," Schenkel said. "The turbine-generator units were installed in the 1950s and are beyond their expected service life. We're replacing them to ensure long-term energy and infrastructure resilience."

He pointed out that the USACE got its money's worth with the original generators, saying how rare it is for a generator to last over 70 years without needing a rewind – referring to the process of replacing the stators, or the copper windings and insulation that help convert the turbine's rotation into electricity. Over time, heat, vibration and age can weaken that insulation and increase the risk of failure. Schenkel noted that Fort Randall is the only Missouri River dam in South Dakota that has retained its original stators up to this point.

The scale of the units pose a significant challenge – each unit is 40 feet tall and weighs more than 400 tons, necessitating piece-by-piece transport, assembly and installation. Voith Hydro North America, the company awarded the contract to manufacture and install the new turbine runners and generator stators, began the decommissioning and replacement of the first generator in July of 2025. USACE expects that generator to be offline until November 2026 after installation is complete and engineers can inspect it for any issues. Once the first unit is back online and clears inspection, engineers will give the contractor the green light to proceed.
To keep up with hydropower demand and allow adequate flow downstream, USACE's goal is to keep six units operating and two units offline for renovation at a time until the project is wrapped up in 2031.

Schenkel explained how the upgrade solves two problems at once: it replaces aging components in the dam and provides the opportunity to install new, highly efficient generators and turbines to produce more power with the same amount of water.

Fort Randall's original turbines generate hydropower most efficiently with 103 feet of head – the vertical distance between the water levels above and below the dam, determining the pressure at which water moves through the turbine. At 103 feet of head, each generator will produce about 31 megawatts of electricity.

However, due to the region's fluctuating power demands, water

management and other factors, operating in the efficient middle ground isn't always ideal. Schenkel says USACE often operates Fort Randall at 40 megawatts and 119 feet of head – about 4% below peak efficiency.

To solve this problem of lost efficiency, the new turbines being installed are highly-efficient, rated for 52 megawatts at 119 feet of head. This change raises the facility's total generating capacity from 320 megawatts to about 400 megawatts – enough electricity to power more than 300,000 homes.

"We expect to recover roughly 10% more energy output from the same water volume," Schenkel said. "Essentially free power beyond the capital investment once the upgrade is complete."

As part of the renovation, USACE also completed as-needed updates to the switch yard, which is the infrastructure that routes power to transmission lines for transport across the region.

Electricity generated at the Fort Randall Dam is managed, transported and sold by the Western Area Power Administration under the U.S. Department of Energy.

As a co-op member, part of your utility's energy mix is hydropower from the Missouri River dams, including Fort Randall, "so this work directly affects co-op members," Schenkel added.

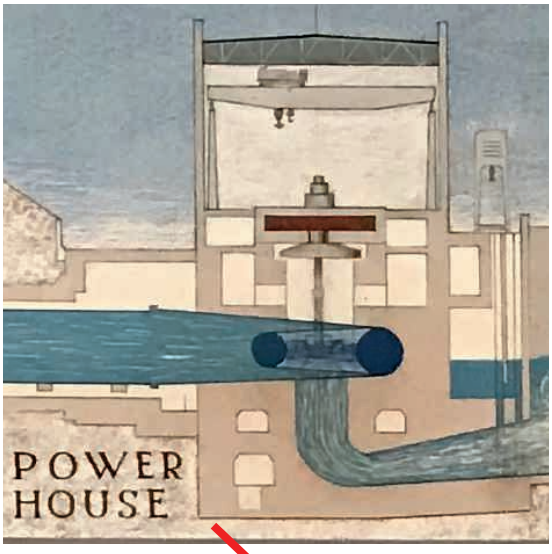
Looking at the dam's age and efficiency profile – and also being the only dam in South Dakota possessing its original stator windings – Schenkel said Fort Randall was the clear priority. The USACE has begun planning a similar renovation project for the Oahe Dam.

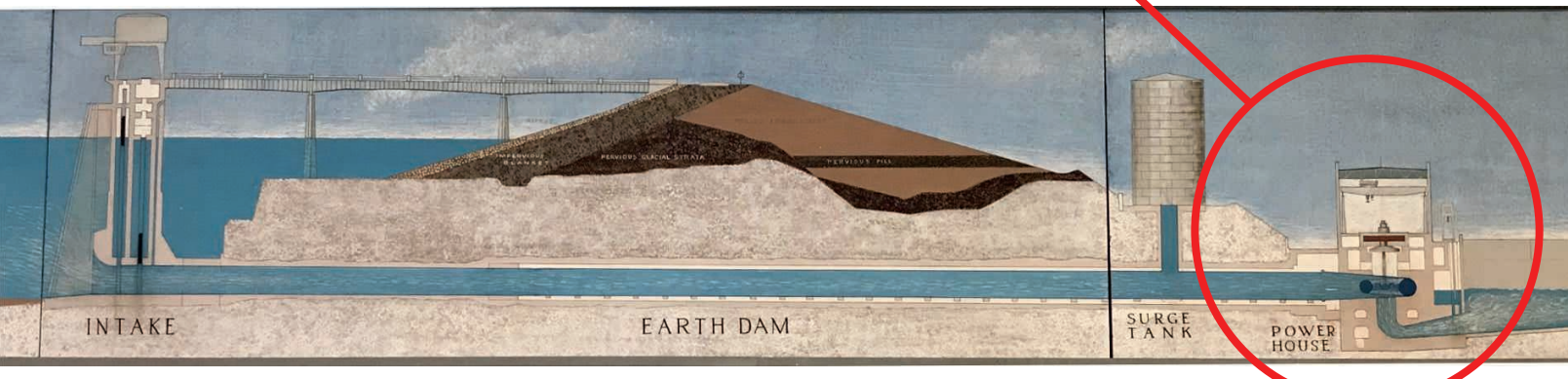
Work at the Fort Randall Project is scheduled to wrap up in 2031 once all eight generating units are replaced.

Above: The Fort Randall Dam is equipped with eight turbines. Unit 6 turbine is shown being removed for the first time since it went online in 1955.

Below & Right: A visual of Fort Randall Dam. Water flows into the powerhouse via the intake tunnel. As the water passes through, it spins the turbine. The rotor, connected to the turbine, spins inside the stator. As the rotor spins inside the stator, its magnetic field passes through copper windings and produces electricity.

Photos Submitted by USACE

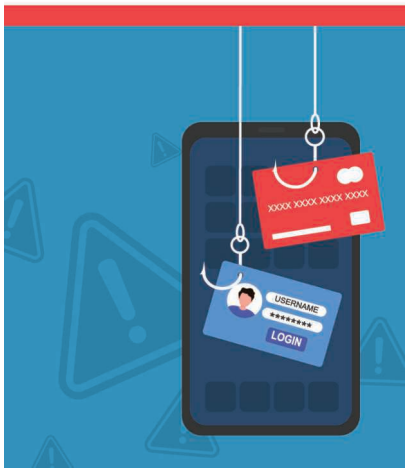




TIPS TO AVOID ENERGY SCAMS

Protect your accounts by enabling multi-factor authentication (MFA) wherever possible. MFA adds an extra layer of security by requiring a second step—like a code sent to your phone or an authentication app—beyond just your password. Even if a scammer steals your login information through phishing or data breaches, MFA can stop them from accessing your account. Choose app-based authentication over text messages when available, as it's more secure. Taking a few minutes to turn on MFA for email, banking and additional online accounts can significantly reduce your risk of identity theft and financial loss.

Source: staysafeonline.org



YOUTH TOUR PARTICIPANTS

West Central Electric announces that three area high school juniors will represent the cooperative on the 2026 Rural Electric Youth Tour to Washington, D.C. This year's Youth Tour winners, Molly Harty of Philip, Jacey Jensen of Murdo and Sunny Valburg of Draper will travel with other South Dakota teens to Washington, D.C., in June. While there they will spend a full week touring the nation's capital and learning about cooperatives, rural electrification, and the process of government.

Meet your 2026 Rural Electric Youth Tour Winners:

Molly Harty – Philip

My name is Molly Harty, and I live on my family's ranch north of Philip, S.D., with my parents, Jim and Adele Harty, and my brother, Owen. I am a junior at Philip High School where I participate in volleyball, rodeo, student council and FFA. I am currently serving as the Philip FFA Chapter Vice President and the FFA District 8 President. I have qualified for State Leadership Development Events and State Career Development Events in FFA for the past three years. I am a 9 year member of Haakon/Jackson County 4-H. Outside of school I enjoy photography, shooting/hunting, playing volleyball, and spending time around the ranch.

Jacey Jensen – Murdo

Hi my name is Jacey Jensen, I am 17 years old and live in Murdo, South Dakota. My parents are Lenae and Jessie Tucker, and Jon Jensen. I love to travel, play sports, and hang out with friends and family. I am a junior in high school and participate in basketball, volleyball, golf, NHS, band, and student council.

Sunny Valburg – Draper

My name is Sunny Valburg. I am the daughter of Barry and Missy Valburg. I have one older sister named Mallory. I am a junior at Jones County High School. I have participated in various activities including, volleyball, basketball, track, and Student Council. I currently work at the Circle E Drive-In, help my dad on the ranch, and hopefully I will become a lifeguard at the city pool this summer. I enjoy working with my dad, hanging out with friends, and being on the water. I am very excited to learn new things while on this trip.

THE MODERN SUBSTATION POWERING COMMUNITIES

Jeff Groenewold
NRECA

Electric substations sit at the center of power grids and are essential to keeping the lights on in our communities. You've seen them – those tall fenced-in areas filled with metal structures, wires and heavy equipment. They may not look flashy, but they're one of the most important behind-the-scenes components of the grid.

Substations take power from high-voltage transmission lines and convert it to the lower voltages that get distributed on the last-mile power lines you see every day. These lines provide power to your home, farm or business. Every light switch you flip, every well pump you operate and every device you charge depend on a substation doing its job without interruption. These facilities work quietly in the background, yet they shape the comforts of daily life.

Substations began as simple switching points that handled basic voltage changes. Early designs used bulky equipment and manual controls. As communities grew, electric demand on the grid grew with them.

Today's substations utilize advanced sensors, automated controls and digital communication systems, allowing cooperatives to better manage the grid. These tools help co-ops respond faster to outages, monitor equipment health and manage energy with more precision.

A modern substation protects your community from disruption. It isolates problems, keeps dangerous faults from spreading and supports important line equipment across long distances. When a substation faces a major issue, such as from a storm or wildlife contact, the impact is immediate. Communities lose power and Wi-Fi, businesses stall, farms lose time-sensitive operations and emergency service communications can face added strain. These events remind us how central substations are to modern life.

Communities add new homes, businesses, irrigation systems and commercial buildings every year. Each addition increases the load on the grid. That's why co-ops build new substations and upgrade older ones to keep pace with growth, technology changes and safety needs.

Modern substation designs use equipment that requires less strenuous maintenance while improving system protection. Smart-enabled protection devices reduce the time needed to identify and isolate faults. These advanced monitoring tools give co-ops better visibility into real-time grid conditions. For the surrounding community, these investments lead to stronger service and reliability. You experience fewer outages. Your farm or business gains resiliency. Your home appliances run on steadier voltage.

Modern substations also help cooperatives manage costs. Instead of building miles of new line, a well-placed substation can support growing neighborhoods or rural industries with less construction and lower long-term investment.

Substations also support the changing energy landscape. Renewable energy systems, electric vehicles and electrified commercial and industrial operations need modern control points. Modern substations allow co-ops to integrate these resources without sacrificing reliability. They help manage energy across widespread areas and keep the grid balanced during peak conditions.

Substations serve as the quiet backbone of the electric system. When they operate well, communities thrive. When they falter, everything from daily chores to essential services feel the impact.

Electric cooperatives will continue to invest in these facilities to support safe, reliable and affordable service for every member in every community we serve.

THE PICK-SLOAN PLAN

Taming North America's Longest Waterway

Jacob Boyko
jacob.boyok@sdrea.coop

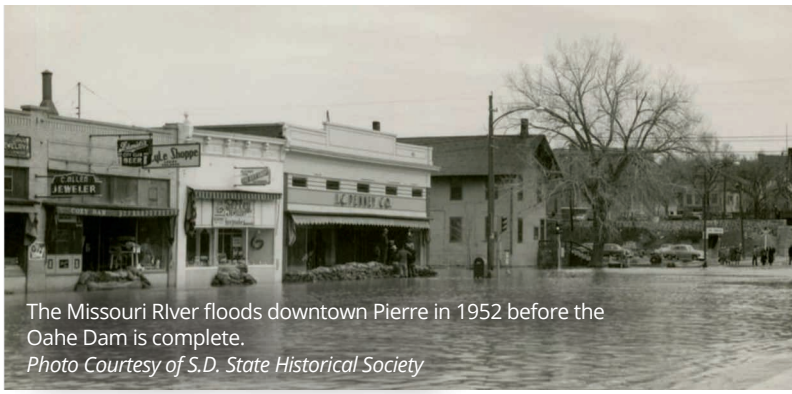
In the 1930s, both the upper Missouri River and its home in rural America looked notably different than they do today.

That was a period in which electricity was still a luxury enjoyed by townsfolk lucky enough to have a municipal or investor-owned utility serving the community. As rural neighbors founded electric cooperatives to serve their homes, the once-primitive prairie quickly began to light up. And with that step into the modern age came the growing need for more electricity.

At this same time, the 2,300-mile-long Missouri River passing through seven states in the region was proving to be an untamable, destructive force for the communities and agriculture producers on its banks.

The floods would wreak havoc on riverside cities like Omaha, Kansas City, St. Louis, and Mississippi River communities like Memphis and New Orleans during swells, disrupting economic activity and trade. During low-flow years and toward the end of summer, the low water levels made navigation extremely difficult for barge traffic.

These problems had been ongoing. All the way back in 1933, President Franklin D. Roosevelt's New Deal constructed the Fort Peck Dam near Glasgow, Mont. There, the nearly 4-mile-long and 250-foot high rolled-earth dam created Fort Peck Lake, stretching 134 miles across eastern Montana and generating up to 185 MW of electricity. Even so, the federal government understood more work was needed to fully rein in the power of the Missouri.



The Missouri RIver floods downtown Pierre in 1952 before the Oahe Dam is complete.
Photo Courtesy of S.D. State Historical Society

Competing Visions: Pick vs. Sloan

Lewis A. Pick, an officer with the US Army Corps of Engineers, and William G. Sloan, an official with the Bureau of Reclamation, each had a vision for the future of the Missouri River Basin.

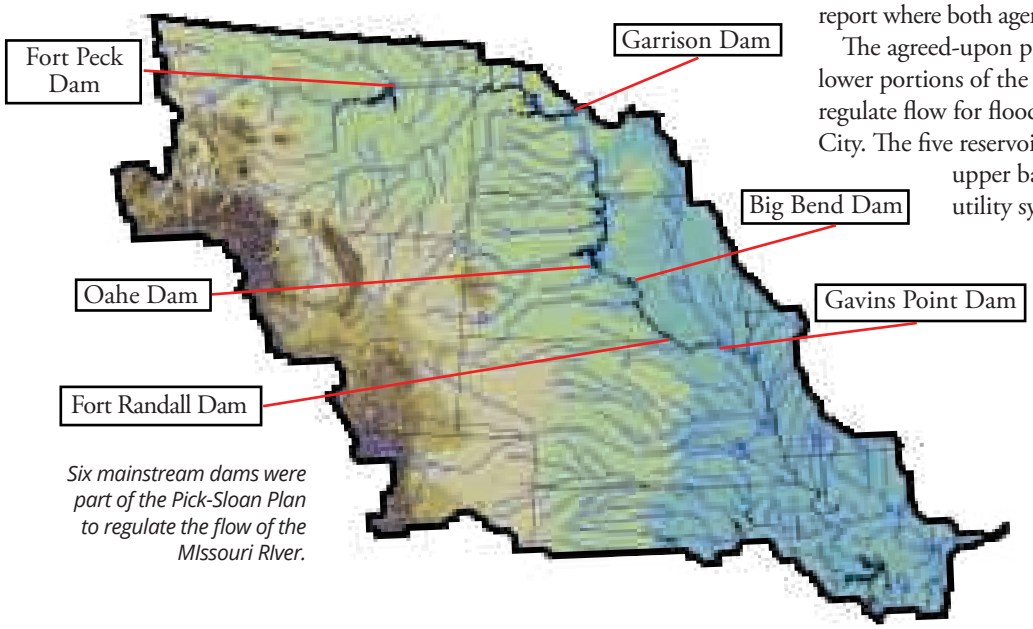
Pick envisioned large dams on the main channel of the Missouri River with a focus on flood control and navigation downstream in the lower Missouri River basin. His plan included five main-channel dams with levees from Sioux City, Iowa, to the river's confluence with the Mississippi River in St. Louis, Missouri.

Sloan, on the other hand, wanted the projects to benefit the upper Missouri River basin, with a focus on water storage for irrigation and agricultural development. Sloan recommended dozens of smaller dams with hydro-electric power plants.

The battle between the USACE and DOR was contentious, but it became clear that no side could garner enough support on its own to pass a project with price tags of about $1 billion each.

Finally, in 1944, USACE and DOR released a joint engineering report where both agencies' goals for the basin were represented.

The agreed-upon plan would benefit both the upper and lower portions of the basin, with five hydro-power dams to regulate flow for flood control and navigation past Sioux City. The five reservoirs would store water for uses in the upper basin, including irrigation, recreation, utility systems and hydropower generation.



Six mainstream dams were part of the Pick-Sloan Plan to regulate the flow of the MIssouri RIver.

Oahe Dam during construction in 1958.
Photo Courtesy of S.D. State Historical Society

Fort Randall Dam (1946-1954)

Location: Pickstown, S.D.
Length: 10,700 feet long – over 2 miles!
Height: 165 feet at highest point
Generating Capacity: 8 hydroelectric generating unites producing up to 320 MW. (See pp. 8-9)

Completed in the 1950s, Fort Randall was the first of South Dakota's mainstream Missouri River dams to come online, generating hydropower for the region and changing the river from a threat into a resource. The Fort Randall Dam creates Lake Francis Case, named for South Dakota's US Senator and Pick-Sloan advocate Francis Higbee Case. The reservoir can store about 5.3 million acre-feet of water (enough water to flood 5.3 million acres at a depth of 1 foot).

Garrison Dam (1947-1955)

Location: Riverdale, N.D.
Length: 11,300 feet long – over 2 miles!
Height: 210 feet at highest point
Generating Capacity: 5 hydroelectric generating unites producing up to 583 MW.

Garrison Dam creates lake Sakakawea, which stretches across western and central North Dakota. The reservoir is the largest on the Missouri River, holding more than 23.5 million acre-feet of water. The dam is named after the nearby town, Garrison. Controversially, the lake flooded the homes of the Mandan, Hidatsa and Arikara tribal nations.

Oahe Dam (1948-1963)

Location: Pierre/Fort Pierre, S.D.
Length: 9,360 feet long – about 1.8 miles!
Height: 245 feet at highest point
Generating Capacity: 7 hydroelectric generating units producing up to 786 MW.

Oahe Dam sits north of Pierre and Fort Pierre, forming Lake Oahe. The reservoir can hold about 23 million acre-feet of water. Oahe Dam has the highest generation capacity, producing enough electricity to power about 600,000 homes.

The dam and lake's name came from the Oahe Indian Mission established more than 70 years before. The mission's site, as well as other communities and tribal lands, were submerged beneath the resevoir.

Gavin's Point Dam (1952-1957)

Location: Yankton, S.D.
Length: 8,700 feet long – about 1.6 miles.
Height: 74 feet at highest point
Generating Capacity: 3 hydroelectric generating unites producing up to 132 MW.

The farthest downriver dam on the Missouri, Gavin's Point is a dam essential for controlling the water levels for downstream barge traffic starting at Sioux City on the Missouri River and all the way down to New Orleans on the Mississippi River. The dam creates Lewis and Clark Lake on the South Dakota-Nebraska border, with a storage capacity of 492,000 acre-feet of water.

Big Bend Dam (1959-1966)

Location: Fort Thompson, S.D.
Length: 10,570 feet long – about 2 miles.
Height: 95 feet at highest point
Generating Capacity: 8 hydroelectric generating unites producing up to 439 MW.

The final mainstream Pick-Sloan dam to be completed on the Missouri River, Big Bend Dam creates Lake Sharpe, holding about 1.7 million acre-feet of water.

The Good and the Bad

A lot of good came from the Pick-Sloan Plan: affordable hydropower for communities throughout the region and water storage to mitigate drought and reduce flooding.

However, a project of such magnitude will also naturally have downsides. University of South Dakota Professor David Swanson says the disruption of natural patterns has affected ecology for riverside habitats.

Cottonwood seedlings need wet, sandy soil to germinate – without spring floods, it's hard for new trees to establish. Today, there are fewer young cottonwoods growing.

In addition, birds like the least tern that nest on sand bars struggle to find suitable ground, affecting populations.

The reservoirs also flooded more than 1 million acres of land along the Missouri River, some held by private landowners and tribes, and displaced about 6,000 people from land where their families had lived for generations.

In South Dakota, several former communities lay beneath Lake Oahe, including parts of Polluck and Forest City.

Between Chamberlain and Oacoma, American Island was once a statewide destination for boy scouts, with its miles of forest, camp with cabins and bathhouse, racetrack. Today, it sits below dozens of feet of water in Lake Francis Case.

American Island's locally-famous animal statues were moved before Lake Francis Case flooded the island.
Photo Courtesy of the Cozard Memorial Library

Tribal leader George Gillette wipes tears as land is seized for the Garrison Dam.
Photo Courtesy of National Archives

BUILT ON SAFETY

Members of SDREA's Loss Control team, from left: Joe Denison, Josh Risty and Travis Schroeder. Photo by Frank Turner

SDREA's Loss Control Program Prioritizes Safety in the Field

Frank Turner
frank.turner@sdrea.coop

June marks National Safety Month, a time to recognize the systems and decisions that keep people safe on the job. For electric cooperatives, that responsibility extends far beyond a single month. It is built into the daily operations and of an electric cooperative. In South Dakota, SDREA's loss control program promotes up-to-date safety standards through trainings, jobsite guidance and resources aimed at preventing accidents before they happen.

Leading that effort is SDREA Loss Control Manager Josh Risty, who stepped into the role earlier this year working alongside fellow loss control professionals Joe Denison and Travis Schroeder as part of SDREA's loss control team.

Although new to SDREA, Risty brings years of experience as a lineman and lessons about safety from his time working in the field.

While attending line school at Mitchell Technical College in 2010, Risty was selected as one of a small group of students sent to assist with restoration efforts at Moreau-Grand Electric Cooperative after a major winter storm. The storm was severe enough that cooperatives called on line school students to help, bringing in crews from across the region to restore widespread outages.

"It was eye-opening in every way," Risty said. "It was a great experience, and it really helped me build some knowledge for the job. It actually fueled my drive to become a lineman even more."

Just as memorable was the response from the community. Crews were fed, supported and taken care of by people who understood what was at stake. The experience also underscored a broader responsibility – restoring power not just as a service, but as something essential to the people who rely on it.

That lesson carried forward as Risty continued his career. After line school, he gained experience at Sioux Valley Energy before moving into roles with FEM Electric Association and later H-D Electric Cooperative, where his understanding of safety continued to develop in the field.

"The job has its dangers and its risks, but how you manage that risk to get the job done is a big part of safety. There's a safe way of going about it," Risty said.

Working alongside experienced linemen, he learned to focus on the details – how conditions, equipment and environment could change the outcome of a job. One moment from

that time continues to stand out.

Risty and a fellow lineman were preparing to transfer a residential service from overhead to underground. Normally, the job would require shutting off power. In this case, the resident depended on medical equipment and could not lose electricity.

Instead of postponing the work, the crew worked through another option. By testing and identifying matching electrical conditions, they completed the transfer without interrupting service.

"We were able to make the change without shutting them off," Risty said.

Experiences like that reinforced the level of responsibility that comes with the job – not just for the crew, but for the people relying on that service.

As his career progressed, Risty was exposed to different crews and approaches, but the same core principles continued to surface: communication, attention to detail and taking the time to do the job right. Over time, those lessons shifted into leadership, shaping how he now approaches training and safety across the state.

That philosophy now shapes the work of SDREA's loss control team.

"You can't just check a box and say you covered safety," he said. "It has to connect. It has to be something that guys can take with them and use every day."

It's a lesson that the cooperative network knows well. Risty said that safety across the system has continued to move in the right direction. From improved equipment to more consistent training and stronger communication in the field, he has seen a clear shift over the course of his career.

"I think the culture of safety has really improved over the last 20 years," Risty said. "There's more training, more opportunities to learn and a stronger focus on why it matters."

That progress, he said, is built on accountability and looking out for the people working alongside you.

"It's not just about yourself," Risty said. "It's about the guy next to you and making sure everyone goes home safe."

That focus now drives how SDREA's loss control team approaches training, emphasizing real-world application and situations crews may encounter in the field. Risty said the work is collaborative, with Denison and Schroeder helping shape how the program continues to evolve.

Looking ahead, the goal for SDREA's loss control team and the broader cooperative network remains the same:

"You want everyone to go home at the end of the day, the same way they showed up," Risty said.

SDREA Loss Control Manager Josh Risty is pictured with his family. *Photo submitted by Josh Risty*

JUNE 19-20
77th Annual Tabor Czech Days
Food, Dancing, Parade
Tabor, SD
taborczechdays.com

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.

JUNE 4-6
Black Hills Quilt Show
Thurs. 5-8 p.m.
Fri. 9 a.m.-5 p.m.
Sat. 9 a.m.-4 p.m.
Rushmore Hall
at the Monument
Rapid City, SD

JUNE 5
Northern Bull Riding Tour
Prairie Village
Madison, SD

JUNE 6
Bulls 'n' Pulls
Antique Tractor Pull
Prairie Village
Madison, SD

JUNE 10
BFest Concert Series & Farmers Market
Landree Wilson Performing Museum Park
Bruce, SD
605-627-5671

JUNE 12-14
South Shore 125th Anniversary Celebration
South Shore, SD
605-756-4130
www.southshore-sd.com

JUNE 13
Journey Into Uncovering Historic Pickstown
9 a.m.-5 p.m.
Pickstown, SD
605-487-7299

JUNE 13
SGT Colton Levi Derr Foundation Charity Golf Tournament
7:30 a.m. registration
8:30 a.m. start
Elks Golf Course
Rapid City, SD
www.sergeantderrfoundation.org

JUNE 13
Luce Pioneer Day
10 a.m.-3 p.m.
Rope & Candle Making, Butter Churning, Dutch Oven Cooking
Lake Herman State Park
Madison, SD
605-880-5077

JUNE 18-21
Hartford Jamboree Days
City Park
Hartford, SD
605-941-0809
www.hartfordjamboreedays.com

JUNE 19-20
Estelline Rodeo Days
5:30 p.m. Mutton Bustin'
6 p.m. Rodeo (Both Days)
Estelline, SD
www.estellinerodeo.com

JUNE 19-20
Farley Fest
Milbank, SD
605-432-6656
www.FarleyFest.com

JUNE 24-26
Bruce Honey Days
Bruce, SD
605-627-5671

JUNE 24-27
Crystal Springs Rodeo
Clear Lake, SD
605-874-2996

JUNE 26-27
Buckhorn Rodeo
Britton, SD
605-880-5077

JULY 2-4
USA 250th Celebration at Mount Rushmore
Rapid City, SD
www.nps.gov

JULY 4
Philip Volunteer Fire Dept. Annual Fireworks Display
Celebrating 250 Years
Dusk
Philip, SD
605-685-3082

JULY 8
Tracy Area Gardens & Quilts Tour
2-7:30 p.m.
Lakes Area – Shetek, Sarah, Gavin
Rain Date: July 9
Tracy, MN
507-629-3252
tracy.area.garden.quilts@gmail.com

JULY 11
40th Annual Spearfish Canyon Half Marathon & 5K
Start: 7 a.m., Savoy, SD
End: City Park, Spearfish, SD
Register: www.nhcasa.org

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.