

Cooperative Connections



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Educating Members One Bus Trip At A Time

A Strange Tour



Ben Dunsmoor

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It may seem strange that a power provider would take its consumers on a two-day tour of the power plants that generate the electricity they use every day. Utilities don't often open their doors to take customers at the end of the line 'behind the curtain' so to speak.

A strange tour? Yeah, you could call it that. But, what may seem strange to a customer of a typical utility is simply the way we do business at an electric cooperative.

Every year in June, Northern Electric Cooperative takes dozens of members on a bus trip to North Dakota to tour the power plants and resources that generate the electricity they use. The tour this year was held on June 26-27. We call it the VIP Tour because at a co-op members are very important people and during the tour they get VIP access to all the facilities used to power their homes, farms, and businesses.

The VIP Tour is a prime example of the cooperative principle of education. During this tour, there is an open-door mentality at every facility so members can learn about the operation of their cooperative. Every consumer of a cooperative is a member and every member has the opportunity to run for the board of directors or to vote for their fellow members and neighbors to represent them on the board of directors. Members need to know what it takes to generate their power so they can make important decisions for the co-op.



Members of the 2018 VIP Tour group pose outside Basin Electric's Antelope Valley Station power plant on June 27.

I have the privilege to take our members on the tour every year. This year we went inside the Basin Electric Power Cooperative headquarters in Bismarck, North Dakota, and learned how Basin makes decisions to provide cooperatives like Northern Electric with the most reliable and affordable wholesale electricity possible. Our group of 30 also toured the Garrison Dam power plant on the Missouri River and learned how federal renewable hydropower plays a key role in generating the electricity our members need. The VIP Tour also took us to the Freedom Mine near Beulah, North Dakota, where members saw the resources it takes to mine coal in an environmen-

tally-responsible manner. The tour was capped off with a view of the North Dakota landscape from the 18th floor of Basin Electric's Antelope Valley Station power plant.

Members who take the tour always comment that they did not realize how much labor, technology, and equipment is utilized to ensure electricity is available when they flip on the light switch. The VIP Tour gives members an all-access pass to their power generation resources. I would encourage you to apply for this free trip in the spring of 2019 when we begin taking applications for next year's VIP Tour. After all, it's not a strange tour, it's just the cooperative way of doing business.



(USPS 396-040)

Board President: Donna Sharp

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 Glen Larson – Secretary
 Wayne Holt – Treasurer
 Fran Esser
 Victor Fischbach
 Josh Larson
 Mark Sumption
 Nolan Wipf

CEO/General Manager: Char Hager –
 info@northernelectric.coop

Chief Financial Officer: Cathi Podoll

Operations Manager: Mike Kelly

Manager of Member Services:
 Russel Ulmer

**Manager of Information
 Technology:** Derek Gorecki

Communications Director:
 Ben Dunsmoor –
 bdunsmoor@northernelectric.coop

Executive Secretary: Kay Albrecht

NORTHERN ELECTRIC COOPERATIVE CONNECTIONS is the monthly publication for the members of Northern Electric Cooperative, PO Box 457, Bath, SD 57427. Families subscribe to Cooperative Connections as part of their electric cooperative membership. The purpose of Northern Electric Cooperative Connections is to provide reliable, helpful information to electric cooperative members on electric cooperative matters and better rural living.

Subscription information: Northern Electric 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 Bath, SD 57427.

Postmaster: Please send address changes to Northern Electric Cooperative Connections, PO Box 457, Bath, SD 57427; telephone (605) 225-0310; fax (605) 225-1684

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Northern Electric Cooperative's regular board meeting was held June 22, 2018, at the headquarters in Bath with all directors present. Mark Sumption attended via telephone. As the first order of business, the Board approved the May 24, 2018, minutes and May expenditures. The Board then reviewed and accepted monthly reports by management including details on financial, operations, member services, safety, communications and IT.

Directors viewed the East River Electric Power Cooperative video report. East River Director Mark Sumption reported on actions taken by the East River Board at the June 7, 2018, meeting. General Manager Char Hager reported on the East River MAC Meeting which she attended June 5, 2018, in Madison. The next South Dakota Rural Electric Association Board Meeting will be June 28-29, 2018, in Pierre. Directors Glen Larson, Mark Sumption, Donna Sharp, General Manager Char Hager and CFO Cathi Podoll reported on the CFC Forum in which they attended June 10-13, 2018, in Indianapolis, IN. Director Glen Larson reported on the South Dakota Wind Energy Association Meeting in which he attended June 20, 2018, in White Lake, SD.

Manager's Report

General Manager Char Hager's report to the board included the following items:

- Update and discussion on new and progressing development projects and activities taking place in the community and our service area.
- Update on Rural Electric Economic Development (REED) loan fund activities.
- Legal and Legislative report from General Manager Char Hager on legal issues.
- Reminded the board that nominating petitions are due July 13, 2018.
- Communications Director Ben Dunsmoor

JUNE BOARD REPORT

informed directors that 26 members confirmed they will attend the VIP Tour to Bismarck/Beulah, ND June 26-27, 2018.

- Informed directors they should choose a representative from each district for Election and Credential Committee by the July board meeting.

Board Report

The board considered and/or acted upon the following:

1. Approved date and time of next regular board meeting for 8:30 A.M. on Thursday, July 19, 2018.
2. Approved payment of legal fees for Harvey Oliver in the amount of \$814.73.
3. Approved 10 estate requests for out of order capital credit retirements totaling \$20,697.23.
4. Authorized board attendance to the East River 2018 Annual Meeting, September 5 in Sioux Falls and appointed Director Glen Larson delegate and Director Francis Esser alternate.
5. Authorized a 5% contribution, not to exceed \$500.00 to the CFC Cooperative System Integrity Fund.
6. Authorized limited board attendance to the 2018 NRECA, CFC, RESCO and Federated Regional Meetings, September 17-19 in Minneapolis, MN.
7. Authorized to retire the oldest accounts for the Basin Electric Capital Credit Retirement of \$311,869.22.
8. Authorized board President and Vice President to attend the SDREA Co-op Board Leadership Conference, July 29-30, 2018, in Pierre.

Please contact your cooperative manager, staff member or director with any questions.

Financial Report		May 2018	May 2017
kWh Sales		20,789,192 kWh	20,446,287 kWh
Electric Revenues		\$2,024,071	\$2,044,646
Total Cost of Service		\$2,018,961	\$1,967,102
Operating Margins		\$5,110	\$77,544
Year To Date Margins		\$236,726	(-\$32,926)
Residential Average Monthly Usage and Bill			
May 2018	1,394 kWh	\$174.61	.1253 per kWh
May 2017	1,264 kWh	\$153.10	.1211 per kWh
Wholesale power cost, taxes, interest, and depreciation accounted for 82.6% of NEC's total cost of service.			

Home Project Safety

More people are doing their own remodeling, repairs, maintenance, landscaping, and construction projects inside and outside the home. Safe Electricity urges all do-it-yourselfers to take precautions, especially when working around electrical equipment and overhead power lines.



Make sure outdoor outlets have a ground fault circuit interrupter (GFCI). Use a portable GFCI if your outdoor outlets don't have them. It's also a good idea to have GFCIs professionally installed in wet areas of the home, such as the kitchen, bath and laundry.

Safety tips to remember include:

- Look up and around you. Always know of the location of power lines, particularly when using long metal tools, like ladders, pool skimmers, and pruning poles, or when installing rooftop antennas and satellite dishes or doing roof repair work.
- Be especially careful when working near power lines attached to your house. Keep equipment and yourself at least 10 feet from lines. Never trim trees near power lines — leave that to the professionals. Never use water or blower extensions to clean gutters near electric lines. Contact a professional maintenance contractor.
- If your projects include digging, like building a deck or planting a tree, call the national underground utility locator at 8-1-1 before you begin. Never assume the location or depth of underground utility lines. This service is free, prevents the inconvenience of having utilities interrupted, and can help you avoid serious injury.
- Always check the condition of cords and power tools before using them. Repair or replace worn or damaged cords and tools.
- Electricity + water = danger. If it's raining or the ground is wet, don't use electric power or yard tools. Never use electrical appliances or touch circuit breakers or fuses when you're wet or standing in water. Keep electric equipment at least 10 feet from wet areas.

Make certain home electrical systems and wiring are adequate to support increased electric demands of new electric appliances, home additions, or remodeling projects. An older home may be inadequately wired for today's electricity consumption, putting your family at risk for fire and electrical shock. Have a professional replace worn and outdated circuitry and add outlets for appliances and electronics – this is not a job for casual do-it-yourselfers!



The soil on your farm or ranch is rich with nutrients and minerals... AND underground gas, oil and water pipelines.

Excavations, terracing projects, fence post installation, tiling or subsoiling can create safety hazards due to the depth of the excavations.

CALL BEFORE YOU DIG in order to notify utility companies who will be affected by the excavation. This service is FREE.

No one digs more dirt than America's farmers and ranchers. Understanding what is below ground will help you DIG SAFELY above ground. Call before you dig!

KIDS CORNER SAFETY POSTER



"Never remove a plug when your hands are wet."

Aida Mikkonen, 10 years old

Aida is the daughter of Patrick and Carrie Mikkonen, Mt. Vernon, S.D. They are members of Central Electric Cooperative, Mitchell, 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.

Sensational Salads

Tzatziki Potato Salad

- | | |
|---|--|
| 2 lbs. unpeeled Yukon Gold potatoes, cut into 1-inch cubes (about 6 cups) | 2 tsp. McCormick® Garlic Powder |
| 3/4 cup (6 oz.) plain Greek-style yogurt | 1-1/2 tsp. McCormick® Oregano Leaves |
| 1/4 cup reduced fat sour cream | 1/2 tsp. McCormick® Black Pepper, Coarse Ground |
| 2 T. milk | 1/2 tsp. Sea Salt from McCormick® Sea Salt Grinder |
| 1 T. lemon juice | 1 cup diced unpeeled, seeded cucumber |
| 2 tsp. honey | 1/4 cup chopped red onion |

Place potatoes in water to cover in large saucepan. Bring to boil on high heat. Reduce heat to low; simmer 10 to 12 minutes or until potatoes are fork-tender. Drain well. Cool completely. Mix yogurt, sour cream and milk in small bowl with wire whisk until well blended. Add lemon juice, honey and seasonings; mix until well blended. Place potatoes, cucumber and onion in large bowl. Add yogurt dressing; toss gently to coat well. Garnish with crumbled feta cheese, if desired. Cover. Refrigerate until ready to serve. Makes 10 (2/3 cup) servings.

Nutritional Information Per Serving: Calories 97, Total Fat 1g, Sodium 109mg, Cholesterol 3mg, Carbohydrates 18g, Protein 4g, Dietary Fiber 2g

Pictured, Cooperative Connections

Pineapple Pretzel Salad

- | | |
|-----------------------------|---|
| 1 stick butter | 1 (12 oz.) container whipped topping |
| 1 cup crushed pretzels | 1 (20 oz.) can crushed pineapple, drained |
| 1 cup sugar, divided | |
| 1 (8 oz.) pkg. cream cheese | |

Melt butter. Stir in pretzels and 1/2 cup sugar. Spread on 9x13-inch baking sheet. Bake at 350°F. for 7 minutes. Cool. Break into pieces and set aside. Beat together softened cream cheese and remaining 1/2 cup sugar. Stir in whipped topping and pineapple. Add pretzel mixture just before serving.

Beth Eickman, Salem, S.D.

Chicken Salad

- | | |
|---------------------------------------|---|
| 1 chicken, roasted, deboned and diced | 2 cups diced celery |
| 2 lbs. red grapes, washed and halved | 1 to 1-1/2 cups real mayonnaise |
| 2 cups diced carrots | 1 (9 oz.) can Pik-Nik Shoestring Potatoes |

Mix together first 5 ingredients. Add shoestring potatoes just before serving. This looks lovely on a large leaf of lettuce.

Judy Mendel, Doland, S.D.

Make Ahead Rhubarb Salad

- | | |
|-----------------------------------|-------------------------------------|
| 2 cups diced rhubarb | 1 cup chopped celery |
| 1/2 cup sugar | 3/4 cup chopped nuts |
| 1 (3 oz.) pkg. strawberry gelatin | 1 (8 oz.) container whipped topping |
| 1 (3 oz.) pkg. cream cheese | |

In a saucepan, cook rhubarb and sugar for 10 minutes; remove from heat. Stir in gelatin and cream cheese; cool. Add celery and nuts. Fold in whipped topping. Refrigerate overnight.

Elaine Rowett, Sturgis, S.D.

Fruit Salad

- | | |
|--------------------------------------|--|
| 1 can peach pie mix | 1 pint fresh strawberries, sliced or diced |
| 1 small can chunk pineapple, drained | 1 (16 oz.) container whipped topping |
| 2 bananas, sliced or diced | |

In a large bowl, fold together all ingredients.

Shirley Thedorff, Centerville, S.D.

Please send your favorite salad, garden produce and pasta 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 2018. All entries must include your name, mailing address, telephone number and cooperative name.

The Cooperative Difference

Capital Credits Represent Your Share Of The Co-op

Ben Dunsmoor

bdunsmoor@northernelectric.coop

Northern Electric members were reminded in July why electric cooperatives are different than other organizations or power providers. Consumers received a message on their July bill notifying them about their share of the co-op's revenue for 2017. This is known as a capital credit allocation notice.

Cooperatives were formed with the sole purpose of delivering safe, reliable, and affordable electricity which means consumers who purchase electricity from Northern Electric are members of the co-op and share in its revenues. Every year consumers are notified about the portion of the co-op's revenues which have been set aside – or allocated – for them from the previous year.

Consumers received a message on their July bill notifying them about their share of the co-op's revenue for 2017.

Capital credits are set aside for members every year and are paid back over a period of time as the financial condition of the cooperative allows. The Northern Electric Board of Directors votes annually to pay back – or retire – a portion of the capital credit allocations. Members usually receive a bill credit for a percentage of their share on September bills.



Below are some frequently asked questions about capital credits:

Q: What are capital credits and how do they work?

A: Capital credits represent a consumer's share of the revenues for the cooperative. Consumers are members of an electric cooperative simply by using the services of the co-op. Capital credits consist of any revenues in excess of actual operating costs of the cooperative.

Members are notified every year about their share – or allocation – of capital credits from the previous year. Only a portion of a member's allocation is paid back – or retired – in the form of a bill credit as the financial condition of the cooperative allows.

Q: When are capital credits returned to members?

A: Capital credits are paid back – or retired – at the direction of the Northern Electric Cooperative Board of Directors. The Board of Directors votes every year to decide if a percentage of the capital credit allocations can be paid back to members. If capital credits are paid back it will appear as a credit on September bills.

Q: What should a member do if they move out of the Northern Electric service territory?

A: If a member discontinues service with Northern Electric it is important to notify the co-op of any address changes so capital credit payments can continue to be made to that member in the future. Members will not receive a 'lump-sum' refund check when they discontinue service with Northern Electric but will continue to receive a check based on the annual decisions of the Board of Directors.

Q: What happens to the capital credits of a deceased member?

A: Northern Electric also needs to be notified by a legal representative when a member of the co-op passes away. The legal representative of the deceased member should contact the cooperative office for further instructions on possible payment and/or the transfer of an account.

For further questions on capital credits please call the Northern Electric office at **605-225-0310**.



Instead of paying a bill once a month, members can make smaller payments for their electricity throughout the month.

Northern Electric Now Offering Prepaid Billing

Northern Electric Cooperative is rolling out a new prepaid option for members who would like an alternative to the traditional method of billing. Prepaid allows members to pay for their power up front with the funds being withdrawn from their account as they use energy.

“Prepaid is a new concept which gives members the flexibility to pay for their power before they use it,” Northern Electric Chief Financial Officer Cathi Podoll said.

A member enrolled in the new prepaid billing option will have money withdrawn from their account every day following a daily bill calculation. The funds that are withdrawn will cover the energy and flat costs associated with providing electricity to that member along with any additional taxes and fees.

How Prepaid Works

1. Load Your Account: Northern Electric members who wish to enroll in prepaid billing can load their account with money online via SmartHub or over the phone 24 hours

a day using a credit card or checking account number. Funds can also be loaded onto an account in one of the co-op offices in Bath or Redfield using cash, check, or credit card.

2. Use Electricity: Money will be withdrawn from a prepaid account following a daily bill calculation. Once a member’s account reaches the low credit balance threshold of \$25 they will receive a daily email, text message, or automated phone message notifying them that they need to load more money on their account.

3. Reload Account: Members who have a prepaid account which is below the low credit balance threshold of

\$25 should reload their account with funds to continue electric service. If an account reaches a \$0 balance that member’s electricity will be automatically disconnected until more money is loaded on their account.

“This billing option allows members to pay for electricity in a way that fits their lifestyle,” Podoll said. “Instead of paying a bill once a month, members can make smaller payments for their electricity throughout the month.”

Members interested in prepaid billing should call the Northern Electric billing department at 605-225-0310 to see if their account is eligible for this new billing method.

prePaid



On a previous visit to the Rushmore State, the Touchstone Energy® Cooperatives balloon made a stop near the Crazy Horse Memorial, pictured in the background.

UP, UP AND AWAY

Cooperative Brand takes to Southern Hills Skies

Brenda Kleinjan

editor@sdrea.coop

Look to the skies above Hot Springs in late August and you'll likely see a familiar sight, albeit in a slightly unfamiliar location.

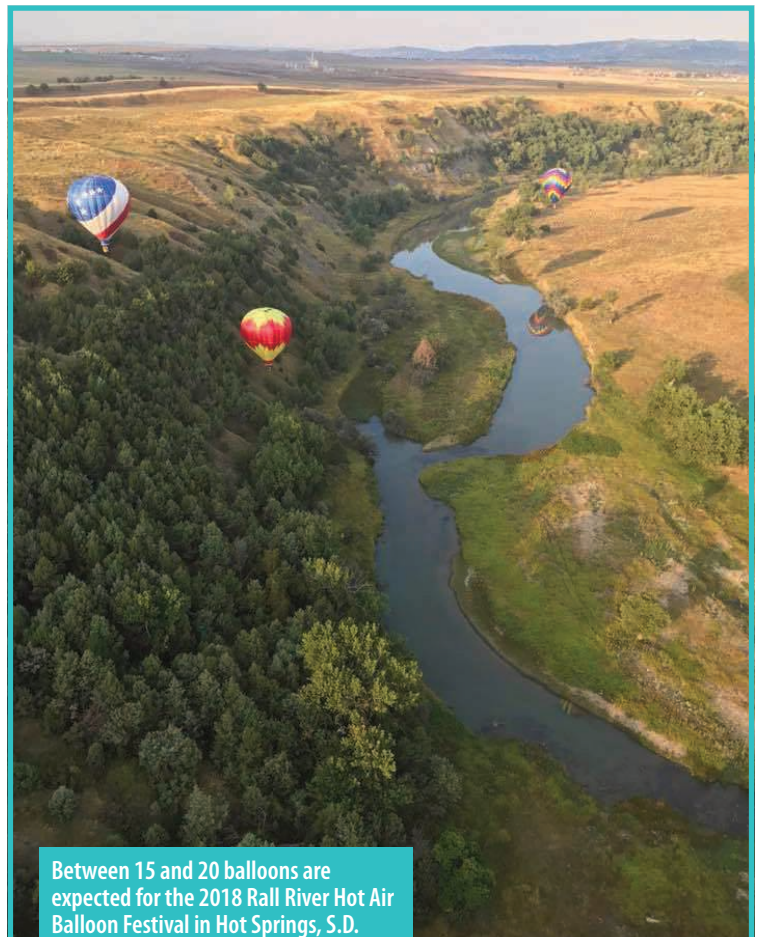
The Touchstone Energy® Cooperatives brand will be wafting above the Southern Hills when it takes part in the Fall River Hot Air Balloon Festival Aug. 25 and 26 in Hot Springs.

The Touchstone Energy® Cooperatives balloon is one of five operated by the Illinois-based Cooperative Balloon Associates. CBA was organized in 1999 to help promote the newly launched brand of America's electric cooperatives. Two decades later, the brand ambassador continues its journey.

The Touchstone Energy Cooperative balloon is just one of about 20 hot air balloons scheduled to appear at the third annual Fall River Balloon Festival.

Weather-permitting, balloons will launch at 6 a.m. both Saturday and Sunday mornings at the Hot Springs Municipal Airport. A night glow – where the balloons inflate their envelopes and illuminate their craft with their burners – is set for 8:30 p.m. Saturday at the airport.

Throughout the day, visitors to Hot Springs can



Between 15 and 20 balloons are expected for the 2018 Fall River Hot Air Balloon Festival in Hot Springs, S.D.

take part in ballooning inspired activities.

A Plein Air arts event is scheduled for downtown and organizers are seeking 15 artists to participate. Those registering prior to Aug. 15 have a chance to win a hot air balloon ride.

On Saturday morning, visitors can walk on the inside of a balloon envelope from 9 a.m. to 11 a.m. at the Mammoth site.

A vintage car show and an art walk and chalk are also planned.

For more information about the festival, visit their Facebook page at [facebook.com/FallRiverHotAirBalloonFestival](https://www.facebook.com/FallRiverHotAirBalloonFestival) or go to the Hot Springs Chamber of Commerce site at HotSprings-SD.com.

About the Touchstone Energy Balloon

The Touchstone Energy® Hot Air Balloon serves as a goodwill ambassador for Touchstone Energy® Cooperatives and its member cooperatives. The fleet's two newest balloons are 77,000 cubic foot hot air balloons that stand over 77 feet tall and are 60 feet wide when fully inflated. Each are built of hyperlife fabric panels and boast a 14 cubic foot ascot basket. They carry a pilot and two average size passengers. The balloons are fired by dual propane burners and fueled by two 15-gallon propane tanks. The balloons

were built by Lindstrand Balloons of Hanover, Ill., in 1999, 2002, 2005, 2007, 2009 and 2014. The first two balloons have been retired.

The balloons have the Touchstone Energy® Cooperatives logo in bold letters on three sides. Everywhere the balloons go,

Everywhere the balloons go, they promote the brand and the values of Touchstone Energy Cooperatives.

they promote the brand and the values of Touchstone Energy Cooperatives... providing service with integrity, accountability, innovation, and commitment to community. These values are demonstrated through the presence of the balloons at national competitions and special events, and the team's interactions with spectators. These values are also conveyed in local philanthropic fundraising activities which the Touchstone Energy Hot Air Balloon program supports whenever and wherever the balloons are flying.



Mount Rushmore was another stop on a previous visit of the Touchstone Energy® Cooperatives Balloon. The 2018 Fall River Balloon Festival will make the balloon visible in the southern foot hills.



Great Plains Balloon Race

Look to the skies over Sioux Falls Aug. 10-12 and you will likely see a colorful display.

The Great Plains Balloon Race is set to launch from Kenny Anderson Park near Sioux Falls Washington High School in the city's northeast corner. About 10 or 11 balloons are expected for this year's race.

Among the balloons scheduled for the race is the Call811.com balloon which will be promoting the importance of calling before you dig. The balloon's appearance coincides with national 8-1-1 Day on Aug. 11.

Schedule

All launches at Kenny Anderson Park

Aug. 10 – Founders Cup Challenge
Balloon Launches at 7 p.m.

Aug. 11 –
Launches at 6:30 a.m. and 7 p.m.
Balloon Glow at 8:30 p.m.

Aug. 12
Balloon Launches at 6:30 a.m.
All activities are weather-permitting.

Also on the Calendar

Balloons over DTSF on Aug. 3. and Sept. 7 at 7 p.m. – Downtown Sioux Falls

Sept. 1 – Balloons and Beer at A Homestead Brew at Valley Springs.

For more information, contact the Sioux Falls Ballooning Association.

Co-ops Donate To Mellette Community Center

Donations Will Be Matched By Community Development Block Grant

Ben Dunsmoor

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A \$2,000 donation from Northern Electric Cooperative, East River Electric Power Cooperative, and Basin Electric Power Cooperative will assist organizers of a new community center project in Mellette in reaching their goal of breaking ground this fall. The Mellette Community Development Foundation began the fundraising effort for the 6,600 square foot facility in 2016. The new community center will replace the old American Legion building and be available for town meetings, graduations, family reunions, weddings, and large community gatherings.

The fundraising effort got a boost earlier this year when the Mellette Community Development Foundation was awarded a matching Community Development Block Grant from the state of South Dakota. The block grant matches every dollar raised for the community center project. The goal is to raise \$236,000 which will then be matched by the block grant and result in a \$472,000 project.

Northern Electric Cooperative partnered with its power suppliers, East River Electric Power Cooperative and Basin Electric Power Cooperative, to donate \$2,000 to the community center project on June 8. The cooperatives had previously partnered to give the group a \$1,600 donation in December 2016 before the grant was announced. The two co-op



A \$2,000 donation is presented to members of the Mellette Community Development Foundation on June 8. (From L to R): Foundation member Ryan Brick, Northern Electric Communications Director Ben Dunsmoor, Foundation member Kathy Larson, Foundation President Don Stahl, Northern Electric Director Vic Fischbach, and Northern Electric General Manager/CEO Char Hager.

donations will result in a \$7,200 donation when matched by the Community Development Block Grant.

The Mellette Community Development Foundation has held several fundraisers to assist in financing the new community center. Jark/Worlie Auction has donated it's time for two consignment auctions. Portions of the proceeds from the items auctioned go to the owner of those items and the rest of the money is donated to the fundraising effort. Two consignment auctions have already been held and a third is planned for September 9 in Mellette.

Organizers hope the community center will offer a new space for area families to enjoy events for decades to come.

"This will be something for the future," Mellette Community Development Foundation President Don Stahl said.

A total of \$180,000 has already been donated to the community center project. Organizers plan to continue the fundraising effort as construction of the building begins this fall.

The new community center will replace the old American Legion building and be available for town meetings, graduations, family reunions, weddings, and large community gatherings.

Donations Send SPURS Riders To Special Olympics

Donations from local electric cooperatives assisted in sending 40 riders from SPURS Therapeutic Riding Center to the annual Special Olympics Equestrian event in Huron. The event was held July 16-17 and featured riders from across the state.

SPURS is an Aberdeen area nonprofit riding center focused on assisting people with disabilities from Brown, Spink, Day, Faulk, Edmunds, Marshall, McPherson, Roberts and surrounding counties in northeastern South Dakota. The Special Olympics Equestrian competition is one of the main events for the organization.

"It's probably the highlight of their (the riders) summer," SPURS Fundraising Coordinator JoAnn Williams said.

The event is also a big expense for SPURS which is the reason Northern Electric Cooperative, East River Electric Power Cooperative, and Basin Electric Power Cooperative teamed up to give the nonprofit a \$2,000 donation.

"We have a lot of people to feed, we have a lot of horses to feed, and travel expenses,"



Northern Electric Cooperative Board of Directors Treasurer Wayne Holt (center) presents SPURS Fundraising Coordinator JoAnn Williams (left) and SPURS Director Becky Fischbach (right) with two donation checks for the annual Special Olympics Equestrian event.

SPURS Director Becky Fischbach said.

The riders trained for ten weeks before the competition. Organizers say the riders enjoy preparing, competing, and being successful.

"When they get a medal it's like 'woohoo,'"

Williams said. "Getting a medal is exciting."

SPURS has taken riders of all ages to the Special Olympics competition in Huron for around 25 years. This year, SPURS had an 80-year-old rider competing in the equestrian events.

Northern Electric Welcomes New Employee

Megan Spears Hired As An Accountant



Megan Spears
Accountant

Northern Electric Cooperative welcomed a new employee to its accounting and billing department on June 14. Megan Spears was hired to fill an open accountant position in the department.

Spears was born and raised in Webster but is now moving to Aberdeen as she transitions into her new role at Northern Electric. Spears previously worked in the accounting and payroll departments of a

manufacturing business in Webster.

The co-op's newest employee enjoys spending time with her daughters who are nine and six years old. Spears assists in coaching her daughters in softball. Spears also likes to spend her free time baking and taking on home restoration projects.

Spears is excited for her new role at the cooperative.



Basin Electric Cooperative's Dry Fork Station is home to the Wyoming Integrated Test Center, where conversion methods turning carbon dioxide waste into useful materials are tested. (Photo By: Ryan Hall/Rural Montana)

INNOVATIVE

Carbon Test Center Opens at Basin Electric's Dry Fork Station

Derrill Holly

NRECA

Research getting under way at an electric co-op power plant in Wyoming could lead to game-changing breakthroughs diverting carbon dioxide from the power generation waste stream to manufacturing processes for use in new products.

"This is not a lab; it's a facility where testing will take place in 'real world' conditions," Gov. Matt Mead told an audience of about 150 attendees during a dedication ceremony for the Wyoming Integrated Test Center on May 16.

Mead's comments topped a nearly decade-long quest for creation and development of a facility designed to advance technologies that expand the use of CO₂ as a marketable byproduct with commercial value.

Bulk Waste to Useful Products

The facility, which takes on its first tenants this summer, is located at Basin Electric Power Cooperative's Dry Fork Station. The 385-megawatt power plant commissioned in 2011 is one of the most modern coal-based generation facili-

ties in the electric cooperative fleet.

Bismarck, North Dakota-based Basin Electric is majority owner and operator of the plant, which is co-owned by the Wyoming Municipal Power Agency.

With the encouragement of electric cooperative officials, including representatives of Basin Electric, Tri-State Generation and Transmission Association and NRECA, Wyoming legislators approved \$15 million for the project. The investment is seen as a way to preserve and support coal production as the state's top industry by reducing or eliminating concerns about CO₂ emitted through fossil fuel use.

"This is about saving coal and making coal viable for America," says Paul Sukut, CEO of Basin Electric, adding that even as renewable energy and natural gas use expands, coal remains an abundant and reliable resource. "We need in America an 'all of the above' energy solution."

Emissions from up to 20 MW of energy production will be diverted to a ported vent system feeding five small test bays and one larger working facility at the ITC. Researchers will be able to draw CO₂ from that waste stream for industri-

al-scale production use.

The nonprofit XPRIZE Foundation, headquartered in Culver City, California, is using the Dry Fork Generation Station as one of two test sites for the NRG COSIA Carbon XPRIZE. Participants have been competing for a total of \$20 million in prize money since 2015.

Westminster, Colorado-based Tri-State G&T began developing the concept for a carbon inducement prize and test center eight years ago and has contributed \$5 million to the ITC project.

“Early on, we identified promising activity in the nascent field of carbon utilization and the need to provide venues for innovators to bring new technology forward,” said Ellen Connor, Tri-State senior vice president and chief technology officer.

“The technology acceleration from the XPRIZE and creation of a test center at an operating coal plant will make an impact on both the speed and scale of development and demonstration of these important technologies,” Connor said.

NRECA has also contributed \$1 million to development of the ITC in support of the association’s commitment to a national energy policy recognizing electric generation diversity that includes fossil fuels and renewables.

“If there is a carbon constraint in the future, it’s going to hit natural gas as well,” says Jim Spiers, senior vice president of NRECA’s Business and Technology Services department.

Spiers, formerly Tri-State’s senior vice president of business strategies and chief technology officer, worked to identify institutions, companies and individuals committed to the carbon waste issue and found 135 entities worldwide are studying the issue.

According to the Energy Information Administration, coal-based electricity generation produced more than 1.2 million metric tons of CO₂ in 2016. That number accounts for 68 percent of the total CO₂ emissions from the energy sector.

Forty-one percent of the power used by electric cooperative members is produced through coal-based generation. Co-ops also rely heavily upon natural gas to operate peaking plants, run primarily

This project is poised to crack the carbon code and create a new future for managing carbon dioxide emissions.

during periods of high demand.

“As co-ops across the nation work to meet tomorrow’s energy needs, this project is poised to crack the carbon code and create a new future for managing carbon dioxide emissions,” Spiers added. “The Wyoming ITC is proof that public-private partnerships spur innovation.”

Facilities related to the ITC project now occupy 226,000 square feet of space at the Dry Fork site. While the five test bays used by the Carbon XPRIZE finalists will share access to flue gas produced by 1.5 MW of generation capacity, a separate large test center can use up to 18.5 MW of flue gas flow.

Promising Paths

The 10 teams in the juried research competition designed to advance clean energy technologies are divided equally between the coal-based ITC test site and Canada’s Shepard Energy Centre in Calgary, Alberta, where the Alberta Carbon Conversion Technology Centre is fueled by natural gas.

The five teams conducting research at ITC include:

- **Breathe:** Based in Bangalore, India, they will combine hydrogen compounds, extracted from water, with CO₂ to produce methanol. Researchers will use a variety of catalysts, including copper, nitrogen and iron to gauge the economic viability of commercial scale production.
- **C4X:** The Suzhou, China-based team will use CO₂ extracted from flue gas to develop new foam-based bio composite plastics for potential use as insulating and building materials.
- **Carbon Capture Machine:** The team, headquartered in Aberdeen, Scotland, will dissolve CO₂ in a mixture of brine, calcium and magnesium to produce

carbonate solids as an additive for building materials, replacing other carbon-based feedstocks in the manufacture of concrete.

- **CarbonCure:** The team, led by researchers from Dartmouth, Canada, will use CO₂ to produce materials described as “greener concrete” using current manufacturing processes and modified chemistry to reduce water and CO₂ use in concrete fabrication.
- **Carbon Upcycling UCLA:** The Los Angeles-based team will attempt to scale up production of a concrete material that absorbs CO₂ during the production process, bonding with limestone for use in construction.

Researchers working the natural gas track in Alberta will conduct production scale testing on plastics, concrete alternatives, new building compounds and nanoparticles for use in bioplastics and other products. The 10 semifinalists shared \$5 million awarded in April.

Beyond Research

After 10 months of production, XPRIZE judges will consider factors including operational costs, total production and net reduction of CO₂ waste as factors in awarding \$20 million in prize money. Winners from the two test sites will split the proceeds.

Kawasaki Heavy Industries, working with the Japan Coal Energy Center on a solid sorbent-based carbon capture technology, is the first tenant for the larger space at the ITC. Up to \$9 million will be spent on the project, which will use sorbent as a low-cost carrier to absorb CO₂ for later use as manufacturing feedstocks.

“The work of JCOAL and Kawasaki, along with the other Carbon XPRIZE teams, positions the Wyoming ITC as a world-class facility for testing carbon management technologies,” said Mead.

“We continue to move the needle forward on advanced carbon technologies and find real-world solutions to capturing carbon emissions,” said Jason Begger, executive director of the Wyoming Infrastructure Authority. While Basin continues to operate Dry Fork Station, the authority is serving as the managing entity for the ITC.

Derrill Holly is a staff writer for NRECA.

SEE YOU THERE!

Heading to the Fair or Fest?

Stop by and see
your co-op!

Brenda Kleinjan

editor@sdrea.coop

**Those attending
county and state fairs
in the region will
likely find their local
electric cooperative
there as well!**

Whether your August plans take you to Minnesota's FarmFest, South Dakota's DakotaFest, the Sioux Empire Fair, Brown County Fair, South Dakota State Fair or any of several other gatherings this month, be sure to check in with your local electric cooperative.

Those heading to FarmFest Aug. 7-9 near Morgan, Minn., will find Touchstone Energy® Cooperatives in the large ag tent. At DakotaFest, visitors can stop in for the air-conditioned comfort of the Touchstone Energy® Cooperatives building on festival's second street. DakotaFest is held near Mitchell, S.D., each August. This year, the event is set for Aug. 21-23.

If you're in western South Dakota on Aug. 2, you will find Butte Electric Cooperative in Newell partnering with West River Cooperative Telephone of Bison to serve barbecued beef during the Butte County Fair in Nisland.

And, Black Hills Electric is making the rounds at area fairs when it serves dinner at the Fall River County Fair on Aug. 2 and then the Custer County Fair on Aug. 9.

Those heading to the Sioux Empire Fair in Sioux Falls in August will want to be sure to check out Ag Appreciation Day Aug. 8. Several cooperatives in the southeastern part of the state have tickets available for free admission and a free meal that day.

And, if experiencing the magic of the South Dakota State Fair is on your agenda for Aug. 30 to Sept. 3, be sure to visit the Touchstone Energy Cooperatives of South Dakota booth in the Expo Building throughout the week. Sign up for a drawing and visit co-op employees from across the state to learn about electrical safety, energy efficiency and more!



Visitors to DakotaFest in 2017 were reminded to look out for overhead power lines when moving equipment.



**Find your local electric
cooperative in the
Expo Building on the
fairgrounds all week!**

We'll see you there!

Location:
1060 3rd St. SW,
Huron, SD 57350

WHAT TO DO: IF YOUR CAR CRASHES INTO A UTILITY POLE

Accidents happen. Would you know what to do if your car crashed into an electric utility pole? Knowing what to do could be the difference between life and death.

Always consider power lines and other electrical equipment to be live and dangerous!

IF A POWER LINE FALLS ON YOUR VEHICLE AND THERE IS **NO** FIRE:

Your safest option is to stay inside your vehicle until help arrives. The vehicle acts as a path for the electrical current to travel to reach the ground. You are safe inside the vehicle, but if you get out, you could be electrocuted.

Call 911 or your local electric utility for help.

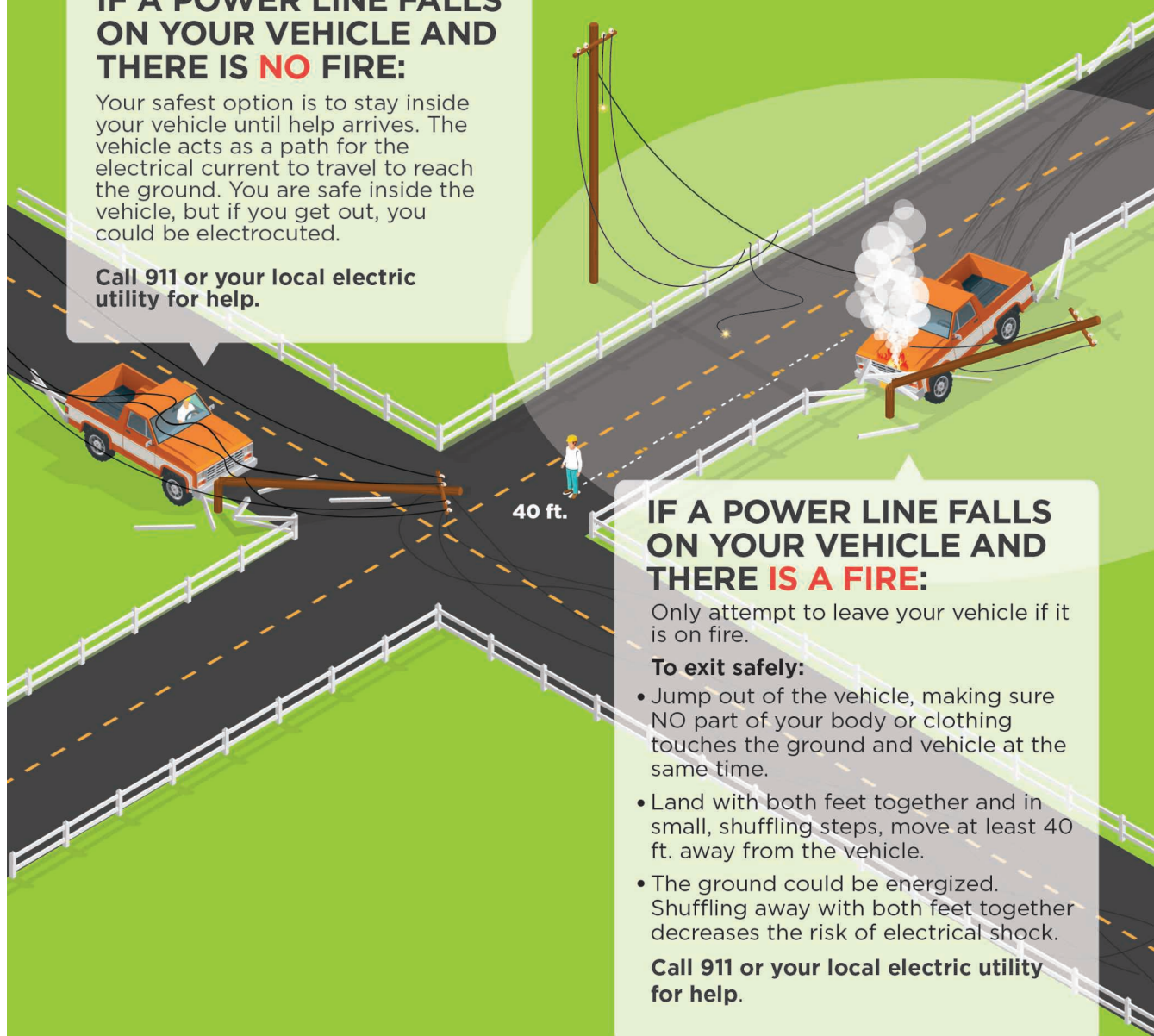
IF A POWER LINE FALLS ON YOUR VEHICLE AND THERE IS **A FIRE**:

Only attempt to leave your vehicle if it is on fire.

To exit safely:

- Jump out of the vehicle, making sure NO part of your body or clothing touches the ground and vehicle at the same time.
- Land with both feet together and in small, shuffling steps, move at least 40 ft. away from the vehicle.
- The ground could be energized. Shuffling away with both feet together decreases the risk of electrical shock.

Call 911 or your local electric utility for help.



July 20-21

Senior Games, Brookings, SD, Contact Traci Saugstad at 605-692-4492

July 20-21

Gumbo Ridge Bronc Ride and Ranch Rodeo, Murdo, SD, 605-669-3031

July 20-21

JazzFest, Sioux Falls, SD, 605-335-6101

July 20-21

Storybook Land Festival, Aberdeen, SD, 605-626-7015

July 20-22

Laura Ingalls Wilder Pageant, 8 p.m., Pageant Site, De Smet, SD, 800-880-3383

July 20-22

Annual Gem & Mineral Show, Rushmore Plaza Civic Center, Rapid City, SD, 605-269-2015

July 20-22

Stampede Rodeo, Burke, SD, 605-830-0304

July 21

Annual Heritage Music Fest, Elk Point, SD, 605-366-9466

July 21, Aug. 25, Sept. 8, 22

Lawn Mower Races, Pukwana, SD, 605-680-1718 or 605-682-9781

July 21-22

41st Annual Festival in the Park, Spearfish, SD, 605-642-7973

July 22

Summer Fest/Car Show, City Park, Groton, SD, Topper Tastad at 605-397-7337, Facebook: Groton SD Lions Club



August 2-5: 33rd Annual Oglala Lakota Nation Wacipi Rodeo Fair, Pow Wow Grounds, Pine Ridge, SD, 605-867-8420

Photo courtesy: travelad.com

July 25

Stockyard Ag Experience - Local Foods Fair, 3 to 8 p.m., Free, Sioux Falls, SD, Contact 701-883-4304

July 28

Growing Ancient Grains and Greenhouse Tomato Tours, Local Foods Potluck, 1 to 5 p.m., Free, Bring a dish to share, Newell, SD, 605-681-6793

July 28

Make-A-Wish South Dakota Poker Run, On the Road to Wishes, Aberdeen, SD, Contact Lorren and Jan Weber at 605-225-7262, www.facebook.com/bieglers

August 3-4

Senior Games, Yankton, SD, Contact Kristi Hauer at 605-665-4685 or Brittany Orr 605-668-5238

August 4

Growing Nuts and Hops Tours, 9 a.m. to 5 p.m., Free, Food truck offering meals for sale, Yankton, SD, 605-681-6793 or SDSPAinfo@gmail.com

August 10-11

Senior Games, Huron, SD, Contact Laron Clock at 605-353-8533

August 18

Senior Softball Tournament, Huron, SD, Contact Scott Mckaskell at 605-354-2237

August 19

Small-Scale Farming and Honey Extraction Tours, 9 a.m. to 3 p.m., Free, \$12 meal available, must pre-register, Belle Fourche and St. Onge, SD, 605-681-6793 or SDSPAinfo@gmail.com

August 23-25

Senior Games, Watertown, SD, Contact Jeremy Herrboldt or Josh Maag at 605-882-6260

August 23-26

56th Annual Steam Threshing Jamboree featuring the Minneapolis Moline National Show, Prairie Village, Madison, SD, 800-693-3644

August 25

McCrossan Boys Ranch Xtreme Event Rodeo, 4:30 p.m. - Pre-show entertainment, 5:30 p.m. - Rodeo Show, McCrossan Boys Ranch Campus, 605-339-1203

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.