

COOPERATIVE CONNECTIONS

Mitchell Tech Expansion

**Co-ops Support
New Training Lab**

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Weather Warnings

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*Photo submitted by
Mitchell Technical College*

Join us at area events



Kathy Haas
Editor

As a cooperative, we are closely tied to our community. We continually look for ways to positively affect those around us, whether they are a member or not. Northern Electric accomplishes this through donations, safety presentations, scholarships, school visits, and partnering with other businesses.

Each year, Northern Electric attends, co-sponsors, and hosts a variety of events for and around the communities in our service territories. From homecomings to safety demonstrations and celebrations, there's an event for everyone.

Pancake Breakfast

July 31, 7 a.m. – 9:30 a.m. | Spink County Fairgrounds

During the annual Member Appreciation Pancake Breakfast, anyone can snag fresh off the griddle pancakes and sausages for free if they are willing to mosey over to the Spink County Fairgrounds during breakfast. From the coffee to the sausages, breakfast will be prepared and served by Northern Electric employees and board members.

The breakfast is held during the Spink County Achievement Days so attendees and 4-H kids have a good breakfast before a full day.

The breakfast is free and open to the public.

National Night Out

August 5, 6 p.m. – 9 p.m. | Melgaard Park

National Night Out is a longstanding community event hosted by the local chapter of the Fraternal Order of Police. This will be the 21st year the family-friendly event will be held in Aberdeen. The goal of the event is

to promote camaraderie and safety. A variety of public service and safety organizations will have booths set up, including Northern Electric.

Our lineman will bring the Power Town demonstration to show kids the dangers of power lines. Power Town is a miniature farm site, complete with little farmers and live electrical lines. The linemen will showcase the different hazards of overhead and underground electrical lines. Kids will also have the opportunity to try on lineman rubber gloves for a hand and finger mobility challenge.

The event is free and open to the public. There will be free snacks, prize drawings, and a performance by Magic Joe.

Farm Safety Party

August 14, 10 a.m. – 2 p.m. | Kids' Zone Tent, Brown County Fairgrounds

Since 2019, Northern Electric has teamed up with local cooperatives to educate Brown County fairgoers on farm safety. Agtegra, Avera, FEM Electric Association of Ipswich, Lake Region Electric Association of Webster, East River Electric Power Cooperative and Northern Electric give safety demonstrations to children and their families in the Kids' Zone tent.

Northern and our fellow electric cooperatives collaborate to make sure there won't be duplicate displays. This year, kids will have a chance to see Power Town, try on lineman gear, get a plastic lineman hat and, of course, talk to some real linemen.

The event is free and open to the public. There will also be gift bags, while supplies last.

Stay in the loop

Follow us on Facebook or Instagram to stay in the loop on upcoming events! We also post pictures from the events and safety tips

If there are events you would like us to attend, please let me know! We hope to see you soon!

COOPERATIVE CONNECTIONS

NORTHERN ELECTRIC

(USPS 396-040)

Board President: Nolan Wipf

Board of Directors

Todd Hettich - Vice President
Scott Sperry - Secretary
Josh Larson - Treasurer
Thomas Lambert
B.J. Hansen
Kirk Schaunaman
Bruce Schumacher, Jr.
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CEO/General Manager: Char Hager
info@northernelectric.coop

Chief Financial Officer: Lorisa Rudolph

Operations Manager: Jerry Weber

Manager of Member Services: Russel Ulmer

Manager of Information Technology:
Derek Gorecki

Communications Specialist: Kathy Haas

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.

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JUNE BOARD REPORT

Northern Electric Cooperative's regular board meeting was held June 23, 2025, at the headquarters in Bath with all directors present. As the first order of business, the board approved the May 22, 2025, minutes and May expenditures. The board then reviewed and accepted monthly reports by management. East River Director Kirk Schaunaman reported on actions taken by the East River Board at the June 5, 2025 meeting. The next South Dakota Rural Electric Association Board Meeting will be June 26-27, 2025. Director William (B.J.) Hansen reported on the South Dakota Renewable Energy Association Annual Meeting held on June 20, 2025. Director Todd Hettich gave an update on Rural Electric Supply Cooperative (RESCO) activities.

MANAGER'S REPORT

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

- Update on Rural Economic Development (REED) Board Meeting held on June 3, 2025.
- Report on the East River MAC Meeting held on June 3, 2025.
- Report on FEMA Mitigation Project Awards.
- Report on the employee meeting held on June 10, 2025.

BOARD REPORT

The board considered and/or acted upon the following:

- Approved the date and time of the next

regular board meeting for 8:30 A.M. on Monday, July 28, 2025.

- Approved Work Order Inventory #25-05 for \$346,564.94 to be submitted to the Rural Utilities Service (RUS) for reimbursement from loan funds for electric plant construction already completed.
- Approved 39 estate requests for out of order capital credit retirements totaling \$73,194.31.
- Selected Director Kirk Schaunaman to represent Northern Electric Cooperative on the East River Electric Power Cooperative Board for another term.
- Appointed Director William (B.J.) Hansen authorized representative and Director Michael E. Traxinger alternate representative for the East River Annual Meeting, September 3, 2025, Sioux Falls, S.D.
- Appointed Director Todd Hettich delegate and General Manager Char Hager alternate for the 2025 NRECA Regional Meetings 5 & 6, Madison, WI, September 23-25, 2025.
- Approved the transfer of James Valley Telephone Cooperative RLF Portfolio to Northern Electric Cooperative.
- Approved two loans for considered of the REED Board.
- Held Executive Session.

Talk to your director or co-op manager if you have questions on these matters.

FINANCIAL REPORT

	May-25	May-24
kWh Sales.....	17,693,307	19,904,137
Electric Revenues	\$2,153,219	\$2,124,121
Total Cost of Service	\$2,276,899	\$2,132,159
Operating Margins.....	(\$123,680)	(\$8,039)
Year to Date Margins.....	(\$32,077)	\$38,842
RESIDENTIAL AVERAGE MONTHLY USAGE AND BILL		
MAY 2025	1,232 kwh.....	\$191.11.....
MAY 2024	1,326 kwh.....	\$176.35.....
		\$0.1551
		\$0.1330

Staying Alert With Kids in Hot Cars

Source: National Safety Council

Since 1998, more than 1,010 children have died from vehicular heatstroke, an average of 37 per year. Parents and caregivers can act immediately to end these preventable deaths.

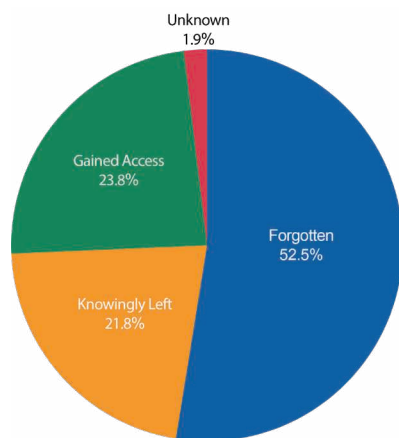
How Does It Happen?

Even on mild or cloudy days, temperatures inside vehicles can reach life-threatening levels. Leaving windows slightly open doesn't help. Children should never be left unattended or be able to get inside a vehicle. Three primary circumstances resulting in deaths of children in hot cars are:

- A caregiver forgets a child in a vehicle - 53%
- A child gains access to a vehicle - 24%
- Someone knowingly leaves a child in a vehicle - 22%

NSC advises parents and caregivers to stick to a routine and avoid distractions to reduce the risk of forgetting a child. Place a purse, briefcase or even a left shoe in the back seat to force you to take one last look before walking away. Keep car doors locked so children cannot gain access and teach them that cars are not play areas.

There is no safe amount of time to leave a child in a vehicle, even if you are just running a quick errand.



NSC
National Safety Council

Child Passenger Safety
Child Passenger Safety Council
VEHICULAR HEATSTROKE PREVENTION



"Never fly a kite by a power line!"

Kasen Tikka, Age 9

Kasen warns readers about the dangers of flying a kite near power lines. Thank you for your picture, Kasen! Kasen's parents are Corey and Marcel Tikka from Lake Norden, 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.

Delicious DESSERTS

STRAWBERRY ANGEL FOOD DESSERT

Ingredients:

1 angel food cake
(baked and cut in pieces)
3.9 oz vanilla pudding
1 3/4 cups milk
3 cups sliced strawberries
1/4 cup sugar
8 oz. Cool Whip, thawed

Method

Put the angel food cake in a 9"x13" pan. In a separate bowl, combine vanilla pudding and milk; whisk together until thick; set aside. In another bowl, combine sliced strawberries and sugar; pour over the cake. Spread pudding over strawberries. Top with 8 oz. Cool Whip. Add more strawberries on top. Chill 1 hour before serving.

Gladys Bauer
Cam Wal Electric

MONSTER COOKIE BARS

Ingredients:

1 stick butter
1 1/2 cups peanut butter
1 cup sugar
1 cup brown sugar
1 tsp. vanilla
3 eggs
2 tsps. baking soda
4 1/2 cups oatmeal
12 oz. chocolate chips
12 oz. plain M&Ms

Method

Mix butter, peanut butter, sugar, brown sugar, vanilla and eggs. Add dry ingredients and mix in chocolate chips and M&Ms. Bake at 350°F for 15 minutes (no longer) in a large jelly roll pan. They may not look done but they are. Enjoy!

Rhonda Tuscherer
FEM Electric

BLUEBERRY TORTE

Ingredients:

1/2 cup butter
1 cup all-purpose flour
1 tbsp. sugar
8 oz. pkg. cream cheese
1 cup powdered sugar
8 oz. Cool Whip (reserve part for topping)
1qt. blueberries (fresh or frozen)
1 cup water
1 cup sugar
3 tbsps. cornstarch

Method

Cut butter into flour and sugar. Press into a 9"x13" pan and bake at 350°F for 20 minutes. Chill. Beat cream cheese and powdered sugar until light and fluffy. Fold in Cool Whip. Spread over crust. Simmer one cup blueberries and 2/3 cup water for five minutes. Blend sugar and cornstarch; add 1/3 cup water and mix until smooth. Combine with cooked berries and boil until thick and transparent. Cool and add remaining berries. Chill thoroughly and spoon over cream cheese mixture. Chill several hours or overnight. Top with Cool Whip.

Janet Lefers
Douglas Electric

Please send your favorite recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2025. All entries must include your name, mailing address, phone number and cooperative name.

THANK YOU, MEMBERS

FOR ATTENDING ANNUAL MEETING

Thank you for attending our 78th Annual Meeting in June! This year, we tried something new and held the meeting in two locations: our Redfield Service Center and Holum Expo Center at the Brown County Fairgrounds. The business meeting was live in Aberdeen and livestreamed to Redfield. There were 201 registered members, between both meetings, with a total of 290 people in attendance. Members who attended the annual meeting were given a gift bag with a meal voucher and entered in our prize drawings, including a special bill credit raffle for those who attended the business meeting.

VOTE RESULTS

Registered members at both meetings voted on amendments to Northern Electric's Articles of Incorporation and Bylaws. The amendments passed with the required two thirds majority. There were 104 votes yes and 34 votes no.

The amendment to the articles of incorporation authorizes the Board of Directors to set the number of directors in the board policy, provided that the number of directors shall not be fewer than five directors and no more than nine directors. The amendment to the bylaws authorizes the board to set the number of director districts and the number of directors per district. This change was suggested by the Board of Directors policy committee as a way to create more parity among the districts, which have not been changed since 1997. With population shifts and residential growth, member representation is uneven.

Members of the Board of Directors were at each meeting and answered questions about the possible effects of the amendments. The votes were counted and the results announced during the business meeting.

DIRECTOR ELECTION

Incumbent directors, Todd Hettich, Mina (District 2); Scott Sperry, Bath (District 5); and Nolan Wipf, Hitchcock (District 9) were the only candidates to submit qualifying petitions for seats up for election. Therefore, the incumbents were automatically re-elected at the annual meeting.

Thank you to everyone who attended, and we hope to see you next year!

2025 Prize Winners

The winners were chosen at random from the list of registered attendees. The winners were also announced on our Facebook and Instagram page.

Congratulations to:

- **Ralph Roth** - \$100 gift card
- **Scott Thompson** - \$100 gift card
- **Darrell Davis** - \$50 gift card
- **James Gelling** - \$50 gift card
- **Sonia Malsom** - East River lunch bag
- **Tom Tomsha** - East River lunch bag
- **Matthew Dorn** - \$25 gift card
- **Alaina Gauer** - \$25 gift card
- **Mark Vogt** - \$200 bill credit
- **Roger Remien** - \$100 bill credit
- **Tom Klipfel** - \$50 bill credit



At the High Voltage trailer, attendees got a closeup view of what happens if they touch a live wire.

Two sophomores will represent Northern Electric during annual Youth Excursion

Kathy Haas

khaas@northernelectric.coop

Northern Electric Cooperative will send two high school students to the 2025 South Dakota Rural Electric Association (SDREA) Youth Excursion. Owen Sperry and Noah Hubert will join freshman, sophomores, and juniors from across the state to learn “The Story Behind the Light Switch.”

Although both students said they don’t know a whole lot about

electricity, they know they use it every day and are excited for the opportunity to see the process of producing and providing electricity.

This year, the excursion will be July 21- 23 at Bismarck State College, in Bismarck, North Dakota. During the three-day, all-expenses paid excursion, students get an up-close look at where most of the energy they consume is produced. Students will hear from power industry experts as they tour a coal mine (Freedom Mine), a coal-fired power plant (Antelope Valley Station), a synthetic natural gas plant (Great Plains Synfuels Plant), and Basin Headquarters.

“This is the power behind charging up their cell phone or their hot shower,” South Dakota Rural Electric Association Member Services/ Staff Communications and Youth Excursion Director Frank Turner said. “They get to see what is on the other end.”

The trip won’t be all electricity. Students will have the chance to take in the sights of North Dakota’s capital, bond with other students during a game night, and stroll through Dakota Zoo.

“The goal of Youth Excursion is to bring our future co-op members, board members, and employees

together to explore their energy sources,” Northern Electric CEO Char Hager said.

Owen Sperry, a sophomore at Groton High School, wanted to go on the trip because of his job. He works for his uncle’s tree service business that Owen’s grandfather started. Owen has even assisted with tree trimming jobs for Northern Electric.

“I don’t really know a whole lot about electricity, but I am hoping to learn more on this trip,” said Owen.

Owen has a particular interest in becoming knowledgeable.

Due to his work clearing back tree branches encroaching on powerlines, Owen is considering a career as a lineman.

Noah Hubert, a sophomore at Aberdeen Central High School, is most interested in exploring the mines and immersing himself in the electricity experience.

“I’ve never toured a plant like this before. I want to experience how the mining process all works,” said Noah. He’s looking forward to the behind the scenes look at how coal and natural gas are harvested and turned into the power that charges his cellphone.

The learning opportunities don’t stop with this trip.

Students from the Northern Electric service territory who attend the Youth Excursion will also be eligible to apply for the annual Youth Tour trip to Washington D.C. Students from electric cooperatives across the country gather together every June in our nation’s capital. Only youth who have previously attended the Youth Excursion can apply for the all-expense paid trip to Washington DC.

July 21

Travel to
Bismarck, ND

July 22

Freedom Mine tour,
Antelope Valley
Station tour,
Synfuels Plant
tour

July 23

Basin Electric
Headquarters tour,
travel home



Noah Hubert

Sophomore at Central High School



Owen Sperry

Sophomore at Groton High School



FUNDING FUTURES

Rural Electric Cooperatives Support New Training Facility

Jacob Boyko

jacob.boyko@sdrea.coop

Mitchell Technical College is well known among the region's rural electric cooperatives for its industry-leading lineworker training programs.

Now, that program is about to get even better, as MTC begins construction on a new, state-of-the-art underground cable equipment training facility.

The Power Line Underground Lab will allow students to learn how to trench, bore, and connect cables in an environment away from other labs and courses.

Additionally, being indoors and having a dirt floor, instructors have the added benefit of being able to plan courses without worry regarding outside weather and frozen ground during winter.

"The new facility allows us to be able to use our underground curriculum and teach it all throughout the school year, instead of just the beginning and the end when the ground is thawed out," MTC's president, Theresa Kriese said about the space.

"They get more equipment time because we're not trying to

A render showing Mitchell Technical College's new Power Line Underground Lab. MTC says students will practice underground utility work in this new facility, away from other courses' labs to reduce crowding. Submitted Photo



Construction of MTC's Power Line Underground Lab began this spring. MTC expects students beginning in the fall semester of 2026. Submitted Photo

share a lab where we're also planting poles."

Kriese hopes spreading out the curriculum over the semester will allow MTC's instructors to dive deeper into certain course topics with their students, making them overall better candidates for employment when they enter the workforce.

"We're seeing the energy industry making another transformation where underground is really gaining a larger presence than it had in the past", Kriese added, noting the Federal Emergency Management Agency's push to replace downed overhead lines with resilient underground cables after storms.

"We're finding that if we can have our students trained in both (overhead and underground), it opens some opportunities for them, because they may not be able to climb that pole their entire life," she continued. "It gives some flexibility to the employer, because I can hire somebody that can climb but they can also do that underground connection. So wherever I need them, I can have them work in my employment area."

Central Electric Cooperative General Manager Ken Schlimgen agrees, adding that with more and more electric co-ops working to replace their aging overhead infrastructure with underground line, MTC's new underground focus will help alleviate future workforce challenges.

"When we support Mitchell Tech programs, it's an investment into our most important asset: our workforce," Schlimgen said. "Workforce challenges will continue for decades, and having a competent, qualified team of lineworkers to serve our members and keep the lights on is vital to our success."

Central Electric is just one electric co-op providing financial support for the expansion.

At the time of writing, more than 20 electric co-ops in South Dakota have pledged over \$460,000 to MTC in support of the facility.

"Power line personnel are the backbone of our cooperative family, keeping the lights on for our members and being leaders in our communities," said Steve Barnett, general manager for the South Dakota Rural Electric Association.

"Mitchell Technical College is a workforce pipeline for this profession and is vital to cooperatives across our region."

Kriesie said staff and student excitement is growing ahead of the facility's expected 2026 completion and expressed appreciation to electric

co-ops for their support.

"Mitchell Tech is making a statement and a commitment to the energy industry that we are your partner in developing and training employees for you," Kriesie said.

"Without the partnership of the electric cooperatives, we really

wouldn't be able to make this expansion."

The project is slated to celebrate its grand opening in the Fall of 2026, when students and Mitchell Tech faculty will begin using the facility to train tomorrow's electric cooperative workforce.



MTC's current plan for the Power Line Underground Lab shows a 34,000 square foot facility, made up of a 23,500 square foot underground lab, a 7,755 square foot vehicle and equipment storage area and a 1,000 square foot classroom.

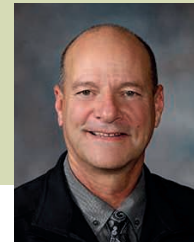
Submitted Photo



Theresa Kriesie
President
MTC



Steve Barnett
General Manager
SDREA



Ken Schlimgen
General Manager
Central Electric



25 years of HAPPY homeowners

HAPI Executive Director Darin Beckius stands in the doorway of a completed and sold HAPI home in the north subdivision.

Homes Are Possible, Inc celebrates anniversary, expanded programs

Kathy Haas

khaas@northernelectric.coop

Homes Are Possible Inc (HAPI Homes) recently celebrated its 25th anniversary. The Aberdeen-based nonprofit began in 2000 as a connection point between income-eligible families and affordable housing programs. What started as a downpayment assistance program has burgeoned in building over 300 houses throughout northeast South Dakota and several subdivisions in Aberdeen.

“HAPI started from the idea that maybe there’s something we can do to help people who are actively seeking to purchase a home. We found that there were people who wanted to buy a house, and they could afford the payment, they just couldn’t come up with the down payment. So, we raised money locally and started offering down payment and closing cost assistance,” said Jeff Mitchell, former executive director of HAPI homes. Mitchell served as executive director from 2006 until 2021.

HAPI very quickly underwent several changes as the needs of the community became more apparent. Mitchell credits the Presentation Sisters as the catalyst for making HAPI what it is today. The Presentation Sisters were scouring Aberdeen for alternate housing options but couldn’t find anything in their price range that was able to be lived in. All the homes would have needed extensive repairs, to the point it would have to be rebuilt room by room.

“It didn’t take too long after to realize people just can’t find a house to buy. The market didn’t have enough supply. The board came up with the idea of building affordable houses. So that was the impetus to get the first subdivision off

the ground,” said Mitchell.

In 2003, HAPI started its first subdivision west of South Fifth Street, building workforce housing -- move-in-ready homes for low- to moderate-income households. The first five houses sold within 11 minutes, HAPI Executive Director Darin Beckius said. The new subdivision, north of 24th Avenue Northeast, is served by Northern Electric Cooperative.

Since its inception, HAPI has built over 330 homes and helped an average of 200 people a year purchase a new home, rehabilitate their current house, or gain an understanding of home buying finances through education programs.

Not every house in the HAPI subdivisions is a HAPI home. About half of the lots are sold to commercial builders and sold on the open market.

“If we built just HAPI houses, there wouldn’t be enough increase in property value to pay for the roads and the infrastructure needed. So, we partner with the contractors to build \$300,000 to \$600,000 homes,” Beckius said.

The partnership keeps the lot prices as low as possible and promotes a healthy housing cycle. The blended neighborhoods mean there are available homes for the different needs of the residents: smaller, less expensive homes for new homeowners, starting families, people looking to downsize, or returning retirees, as well as midsize and larger homes for people looking to upsize or expand their families, all in the same subdivision.

Because HAPI is not trying to make money off the houses, each house has to carefully planned out in order to keep it in the potential homebuyers’ budget. For every \$1000 increase, around 250 South Dakotans can no longer afford the house, Beckius said.

“When your mission is affordable housing, your goal is to keep the houses as low cost as possible,” Beckius said, “And especially over the last few years with inflation and supply chain issues, material costs

\$3,678,255
granted in closing cost
assistance

\$5,155,715
granted for home repairs



HAPI home boards are marked and packaged together room by room in order to speed up the framing process have skyrocketed.

Homes are balanced between function and design. Some modern trends, such as tray ceilings, as easier to incorporate than others. While they would like to offer the homeowners more options for customization, such as color for siding, soffits, and flooring, HAPI gets a discount when ordering in bulk. Beckius said HAPI has found ways to save money, even if it costs a little more upfront. The framing is precut, marked, and bundled room by room, which increased the cost, but saves a week of labor. HAPI spend money where it makes sense, Beckius said.

By building affordable housing, HAPI helps people start building and growing their wealth.

“A house is a significant asset for pretty much everybody. The hope is that they will take the equity out of our house and move to the next house, a contractor-built house in our subdivision, because that helps HAPI too. The house they sell is going to stay affordable, which takes the pressure off trying to keep up with demand for affordable housing,” said Beckius.

HAPI’s work also has economic benefits across the region. HAPI pays the general contractor, who hires subcontractors, who live and shop in the region. The homeowner then does business with lenders, insurance agencies, and home goods stores. Contractors, subcontractors, and area businesses are then able to grow. Economists say that for every dollar that is spent building a new house gets cycled through the local economy seven times, Beckius said.

“If you do the math, we’ve developed 600 new lots and rebuilt 100 houses. That’s 700 houses. If they average \$200,000 in costs, that’s \$140,000,000 in building costs, times seven, approximately \$980 million going into the community” Beckius said.

HAPI also acquires building sites or lots with unlivable, dilapidated buildings, and revitalized the spaces. These are called In-Fill lots. Some of the lots are donated to HAPI, while others are purchased by the organization. The old buildings are demolished, and a new house is built in its place. These homes are then for sale to qualifying HAPI applicants.

Building a new house in old neighborhoods can have a spinoff effect, Mitchell said. The whole neighborhood benefits. Once a new house is built, the neighbors start sprucing up their own houses.

Looking to the Future

HAPI is excited for another 25 years of helping potential homeowners fulfill their dreams. In the future, HAPI hopes to advise other communities on how to set up their own version of HAPI homes programs. For now, HAPI will only build in the surrounding area. The logistics are too hard and too expensive for HAPI to build in other towns.

“If we can share our mistakes, save them time and money, and jumpstart them maybe 10 or 15 years, we are happy to do that,” Beckius said.

There has already been traction in surrounding towns, such as Mitchell, Ipswich, and Mobridge. Some of the towns haven’t had a new house in 30 years, Mitchell said, but they don’t have the population to support a subdivision. Those towns will need to start at HAPI’s roots – providing downpayment and rehabilitation assistance with In-fill lots when funding allows. HAPI is able to help a little with the financing.

Having affordable housing available means there will be places for workers to live. Beckius said a majority of the calls he receives are from economic development corporations who have had to start developing housing. The corporations want to help an existing business expand or a new business open but can’t because there is no housing for the workers, he said.

“You can’t have economic development without housing,” Mitchell said. “If you don’t have housing, you’re not going to have people stay in your town.”

HAPI PROGRAMS

Home Repair Grant

Part of HAPI’s mission is to help homeowners rehabilitate their current homes. The Home Repair Grant helps homeowners who meet the income criteria pay for large and expensive repairs, such as roof, plumbing, electrical, or foundation repairs. Part of the grant is specifically for elderly homeowners who need accessibility accommodations, such as converting a tub shower into a step-in shower. The changes could be the difference between being able to stay in the house or not, Beckius said.

Emergency HVAC Repair

In collaboration with United Way of Northeastern SD, Inc and Aberdeen Development Corporation, the Emergency HVAC Repair Grant offers help with heating, ventilation, and air conditioning (HVAC) repairs to those with financial challenges or urgent heating issues. This grant provides a smaller monetary amount, but faster funding for homeowners who might not have time to wait for the Home Repair Grant to be reviewed and approved.

Closing Cost Assistance

After gathering money for the purchase price, would-be homeowners still need to find a little more for closing costs. HAPI offers up to \$5,000 as a non-forgivable, interest-free loan that must be paid back when the house is sold, refinanced, or the title is transferred. The funds can be used to cover the origination fee, title search, insurance, survey, appraisal and closing fees.

Silent second

While the organization tries to keep the building costs as low as possible, qualifying applicants can also apply for a silent second mortgage. This is a noninterest bearing loan of \$20,000 to \$30,000. It is only paid back when the house is sold.

Homebuyer Education

HAPI offers free Homebuyer Education courses to everyone, regardless of experience in home-buying. The informative sessions cover everything potential homebuyers need to know, from understanding credit history and money management, to securing financing and recognizing predatory lending.



WEATHER WARNINGS

Storm clouds gather near Nunda, S.D.
Photo by Jacob Boyko

Getting Ready for Severe Summer Storms

Jacob Boyko

jacob.boyko@sdrea.coop

Midwest summers have a certain notoriety for their extreme summer weather events.

South Dakota is no exception. Between May 2015 and June 2025, the National Oceanic and Atmospheric Administration (NOAA) reported more than 200 tornadic events in South Dakota.

The Recipe for Severe Weather

According to Peter Rogers, warning coordination meteorologist for the National Weather Service (NWS) Office in Sioux Falls, there are four foundational components for the specific type of thunderstorms that produce tornadoes called supercells.

The first component is moisture – it's needed to form clouds. The second component, lift, refers to an upward motion of the air. In places without mountains like eastern South Dakota and western Minnesota, that occurs when a cold or warm front moves into the area and the laws of physics force warm air upward.

The third component, instability, is the

difference between the two air masses.

"If you have pockets of air that are hotter than the air around them, they'll continue to rise," Rogers explained. "And the instability is the extent to how far those parcels will rise."

The final component, wind shear, is how the wind speed and direction changes with altitude.

"Here, at the surface, we're normally only concerned about what the wind speed is doing at the surface," Rogers explained.

"But as meteorologists, we want to know what's happening at 5, 10, 15 ... feet and so on. The more changes you have with wind speed and direction ... with height increases your chances of going from just your garden-variety thunderstorm to a severe thunderstorm that's more capable of producing strong winds and tornadoes."

Over the last 10 years, South Dakota has seen tornadoes mostly ranking EF-0, EF-1 and EF-2 on the Enhanced Fujita scale.

The scale, named for its developer, meteorologist Ted Fujita, ranks tornadoes on a scale from 0 to 5 based on recorded wind speed and the damage observed that can be attributed to the tornado, with an

EF-5 being the most severe.

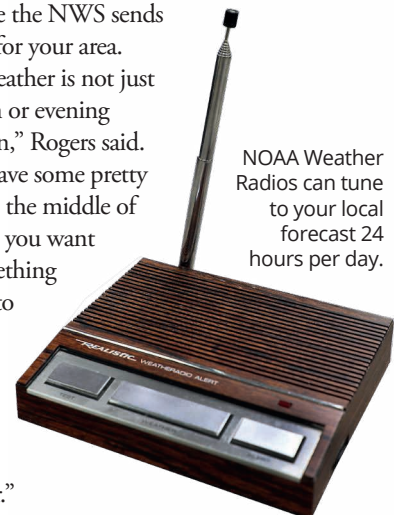
An EF-0 tornado will leave behind damage indicators showing wind speeds between 65 and 85 mph, while an EF-1 tornado will show damage indicating wind speeds between 86 and 110 mph, an EF-2 111-135 mph, an EF-3 136-165 mph, an EF-4 166-200 mph and an EF-5 being anything over 200 mph.

But weak and strong tornadoes alike can be deadly without proper action.

Working at the National Weather Service, it's part of Roger's job to get severe weather alerts out to the public.

Weather radios are particularly helpful in severe weather scenarios, he explained, because you can set them to alert you any time the NWS sends out an alert for your area.

"Severe weather is not just an afternoon or evening phenomenon," Rogers said. "We often have some pretty big events in the middle of the night, so you want to have something that's going to wake you up in the middle of the night so you can get to shelter."



As any Midwest resident knows, there's far more summertime severe weather than just tornadoes.

Derechoes, which decimated much of eastern South Dakota and Western Minnesota in 2022, produces a wall of strong, fast gusts of wind that can be just as dangerous as a tornado.

According to the NWS, for a storm to be classified as a derecho, it must extend 250 miles with gusts of at least 58 mph and produce several gusts of at least 75 mph.

In western South Dakota, the Black Hills help create the optimal conditions needed for severe hail.

"What you need is a really strong thunderstorm that has a really strong updraft," explained Kelly Serr, warning coordination meteorologist for the National Weather Service Office in Aberdeen.

"When that updraft is really strong, it reaches the very coldest levels of the atmosphere where tiny droplets of rain start to freeze."

The stronger the draft, the longer the frozen rain drop will remain in the atmosphere. And the longer it's stuck in the updraft, the more water it collects, growing in size until finally the hail stone is too heavy to be suspended by the updraft anymore, and it plummets to the ground.

In western and central South Dakota, that process is exacerbated by the Black Hills, which help force the air up even higher and create fast-developing thunderstorms.

During severe weather events like thunderstorms, tornadoes and hail, the NWS encourages those in the pathway of the storm to seek shelter in a basement or a room without windows away from outside walls, as hail and other debris can shatter windows.

"Something we always tell people is to pay attention to the forecast," Serr said. "Know before you go: 'Are we expecting severe storms?' And then have a safety plan in plan for wherever you are."

Looking Back at Summer Storms

Delmont Tornado – May 5, 2015

At about 10:45 a.m. on Mother's Day, an EF-2 tornado struck Delmont. The tornado's path began in Charles Mix County, making its way north into Douglas County where it reached Delmont and damaged numerous homes, including Delmont's famous Onion House, and destroyed the Zion Lutheran Church and fire station. The NWS reported a peak wind speed of 130 mph, with the tornado covering 17.3 miles and reaching a width of 400 yards.

Derechos – May 12, July 5, 2022

In the afternoon, a wall of straight line wind known as a derecho moved northeastward through eastern S.D. and Western M.N., with wind speeds reaching over 100 mph. The storm brought with it numerous tornadoes, including an EF-2 tornado with wind speeds up to 120 mph in Castlewood. According to the NWS, the derecho was the "most extreme example on record in terms of the measured significant wind gusts." The National Centers for Environmental Information categorized the storm a billion-dollar disaster event. Less than two months after the May event, a derecho moving southeastward produced wind gusts reaching 99 mph in Howard and 96 mph in Huron. In Sioux Falls, the sky turned green – a rare phenomenon caused by refraction, or the bending of light when passing through and being warped by the water and ice contained within the storm system.

Black Hills Hail – June, 2, 2019

In the morning, a supercell thunderstorm moved through Rapid City, Hermosa and Fairburn, producing golf ball-sized hail that damaged vehicles, homes and crops.

Tripp Tornado – May 8, 1965

The strongest tornado ever recorded in S.D. was in Tripp County. The storm produced snow over the Black Hills, with Lead reporting 36 inches of snow. The Tornado touched down east of Wewela, with a maximum observed width of 1,760 yards, and moved northwest 30 miles. The tornado was classified an F-5.

Source: Event Summaries, Weather.gov

Pierre Hail – July 18, 2023

An afternoon warm front heading east across central S.D. developed into a supercell. Around 6:20 p.m. in Pierre, there were reports of softball-sized and larger hail, with one setting a Hughes County record at 5 inches in diameter.

Dupree Tornado – June 16, 2010

In the afternoon and evening hours, a thunderstorm over Dupree produced damaging winds, torrential rainfall and flooding, and at least 16 tornadoes, with multiple tornadoes being simultaneous. The storm damaged roofs, mobile homes and grain bins. The damage observed indicated an EF-2 tornado.

Vivian Hail – July 23, 2010

A S.D. and U.S. hailstone record was set in Vivian after an evening thunderstorm formed a supercell moving southeastward. The NWS reported numerous hailstones exceeding 6 inch diameters as well as a record-setting 8 inch diameter, 18.625 circumference and 1 pound, 15 ounce hailstone. NWS estimates the hail stone fell at about 100 mph.

Sioux Falls Tornado – Sept. 11, 2019

In the late evening hours of Sept. 10 into the early morning hours of Sept. 11, severe thunderstorms moved across southeast S.D. into M.N. and I.A., bringing 80 to 100 mph straight line winds and three brief EF-2 tornadoes in Sioux Falls. The Avera Health Complex, several commercial spaces, and a neighborhood were damaged.

Jerauld Tornadoes – June 18, 2014

In the evening, a thunderstorm over Jerauld County produced an EF-4 tornado that traveled over 11 miles from Lane to Alpena. The tornado measured 880 yards at its widest. The same storm produced several more tornadoes, including an EF-2 that ravaged Wessington Springs.

Bowdle Tornado – May 22, 2010

A supercell in north central S.D. produced multiple tornadoes, including an EF-4 and golf ball-sized hail near Bowdle. NWS reported nearly 100 downed utility poles.



A West Central Electric Cooperative drone flies over distribution lines so employees can inspect.
Photo by Jessie Tucker

TAKING FLIGHT

Electric Co-ops Utilize Drones

Jacob Boyko

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Across South Dakota, electric cooperatives are turning to unmanned aerial vehicles to improve safety, speed up outage responses and enhance day-to-day operations.

Better known as drones, these high-tech, lunchbox-sized robots offer co-ops a birds-eye view of infrastructure – no risky climb or airplane flight necessary.

“Our main goal is to use them (drones) during storm situations,” explained Jessie Tucker, manager of member services at West Central Electric Cooperative and an advocate for electric co-ops’ drone integrations.

“Typically, we have to charter a plane from Pierre, and they will pick up an employee from West Central and we have to fly the lines when we have severe damage. What we’re hoping to be able to do is get

the drone in the air and patrol the line to see what we have for damages and how extensive everything is.”

Tucker is a certified remote pilot, having passed the Federal Aviation Administration’s Part 107 exam on the rules and regulations for operating unmanned aircraft vehicles. While hobby drone operators don’t need a license for recreational use, federal law requires commercial operators be licensed, meaning all electric co-op drone operators have studied for and passed the rigorous exam.

“It was surprisingly tough,” said Moreau-Grand Electric’s JJ Martin, who is also a licensed remote pilot. “There’s a lot of stuff in there and understandably so. Flying a drone is like playing a video game – it’s pretty easy. But when it comes to all of the safety, like knowing how to read a map, knowing what airspace you’re in, what all of the codes mean, there’s a lot to it.” Martin, who is the member services

director, champions drones for the convenience they bring to the co-op’s communication efforts. He says using the drone for aerial photography and videography helps him get “out of the way” of busy lineworkers and gives him a vantage point that highlights the beauty of the landscape.

There are also benefits for the co-op’s substation workers, Martin continued. Hovering the drone over the equipment allows some inspections to be made more quickly and without cutting power.

“We’re able to just fly the drone over the top, zoom in and take pictures,” Martin explained. “The resolution is so high you can zoom in quite a ways and inspect a little bit without putting anybody in harm’s way or shutting power off for anybody.”

Back at West Central Electric, lineworkers use a thermal energy camera on a drone to fly over towns and other infrastructure to find “hot spots,” or bad

connections on power lines where a component is beginning to fail.

"We check out substations at least once a year, usually on the coldest days or one of the heaviest loaded days," Tucker explained, noting each year they typically find at least several hot spots.

Basin Electric Power Cooperative, the member-owned generation and transmission utility powering South Dakota's electric co-ops, uses its fleet of drones to build fully three-dimensional renders of land sites and infrastructure.

According to Robert Kohler, a certified federal surveyor, licensed remote pilot, and geomatics supervisor at Basin Electric, the utility accomplishes this using drones equipped with cameras and LiDAR scanners.

LiDAR, which stands for light detection and ranging, is a focused array of laser pulses. The mounted sensor emits the lasers and the light travels until it meets a solid object. The lasers are then reflected by the object back into the LiDAR sensor, with the system measuring the length of time it took for the laser to return and using that to calculate the distance between the sensor and the object.

Kohler says the sensor he uses collects 400 data points per square meter at 190 feet of elevation while traveling 11 feet per second. Each of those points – billions of them, Kohler pointed out – are recorded and precisely mapped to a location on an XYZ coordinate plane.

"Imagine you have a flash light and you're walking along the ground. Anything the light touches, it illuminates," Kohler explained. "You can create a three-



Moreau-Grand Electric Cooperative linemen in north central South Dakota.
Photo by JJ Martin

dimensional map and some of the features of those maps would be the conductors of the transmission line, the structure itself, the vegetation and plants growing along the sideline of the transmission corridor, or even a vehicle or person."

Back at the office, Kohler's computer processes the data – file sizes often reaching into the hundreds of gigabytes – into a fully three-dimensional model.

Basin Electric's fleet doesn't stop at aerial drones. When working beneath the surface of a body of water, hydro drones like the utility's TriDrone pontoon craft measure the surface at the bottom of a water body using sonar to capture points beneath the surface that LiDAR can't see.

Despite the noted conveniences, Kohler cautioned that using drones for high-intensity data-driven tasks isn't as hands-off as it seems. Sometimes it's a more practical option – sometimes it's not.

"I've got four to six hours of pre-flight

planning to just program the software and drone for the specific area that I want it to map out," he explained. "Then I have potentially eight to 40 hours of processing time to reduce the data into what I need. In that regard, there's a lot of extra time involved."

Kohler also said important small measurements need to be double-checked by workers since the drone sensor's measurements are sometimes affected by a margin of error that varies with the craft's proximity to the site.

Even so, many electric cooperatives agree the advancements in unmanned aircrafts vehicles and sensing technologies offer an exciting path forward for utilities.

"Everytime I use it (the drone), I'm getting such a cool angle and I can travel such distances," Moreau-Grand Electric's Martin said. "I'm able to stay out of the guys' way. I'm safe, they're safe."



A TriDrone uses sonar to map terrain beneath the water's surface.
Photo by Robert Kohler

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Photo courtesy of Travel South Dakota

AUG. 27-SEPT. 1
South Dakota State Fair
Huron, SD

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.

SATURDAYS UNTIL SEPT. 13

Buggy Museum

Free Buggy Rides, Concerts,
Chuckwagon Foods + More
10 a.m.-4 p.m.
Stockholm, SD
605-938-4192

JULY 26

South Dakota Chislic Festival
Freeman, SD
www.sdchislicfestival.com

JULY 26

**Richmond Lake Association's
Annual Pontoon Poker Run**
Richmond Lake
Aberdeen, SD
605-225-0609

JULY 26

Fort Sisseton Lantern Tour
11907 434th Ave.
Lake City, SD
605-225-0609

JULY 31

Pancake Breakfast

7-9:30 a.m.
Spink Cty Fairgrounds
Redfield, SD

JULY 31

SPURS Grand Classic Horse Show

9 a.m.-4 p.m.
SPURS Therapeutic Riding
Center
1006 130th St.
Aberdeen, SD
605-226-1099

AUG. 1-3

Fort Sisseton Escape Room

11907 434th Ave.
Lake City, SD
605-225-0609

AUG. 7

Family Fun Fest

5:30-7:30 p.m.
Downtown Main Street
Groton, SD

AUG. 7-10

South Dakota Senior Games

Huron, SD
605-295-2039
southdakotaseniorgames.org

AUG. 9

Day of Honor

End of WWII 80th Anniversary
10 a.m.
Battleship South Dakota Memorial
12th Street & Kiwanis Avenue
Sioux Falls, SD

AUG. 9

2nd Annual Celebration in the Park/Rib Cook-off

1-9:30 p.m.
Groton City Park
Groton, SD

AUG. 9

Raise 'Em Rank Bull Riding and Breakaway Roping

Geddes, SD
605-680-2763

AUG. 10

Czech Heritage Festival

Bechyn, MN
320-522-1218

AUG. 14

Farm Safety Party

10 a.m.-2 p.m.
Kids' Zone Tent
Brown County Fairgrounds
Aberdeen, SD

AUG. 23

McCrossan Boys Ranch Xtreme Event Challenge Rodeo

4 p.m. Gates Open, 6 p.m. Rodeo
Sioux Falls, SD

SEPT. 4-6

DKG Used Book Sale

Wylie Park Pavilion
Aberdeen, SD

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