

COOPERATIVE CONNECTIONS

Great Goats

Goats gaining
in popularity
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Irrigators benefit
from load control
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Bennett and Matea Gordon
of Whitewood are part of a
rising trend in teens choosing
to show goats at youth
exhibits and competitions





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**COOPERATIVE
CONNECTIONS**

**SOUTH DAKOTA
ELECTRIC**

ISSN No. 1067-4977

Produced by the following electric cooperatives in South Dakota and western Minnesota:

- Black Hills Electric, Custer, SD
- Bon Homme Electric Yankton, Tabor, SD
- Butte Electric, Newell, SD
- Cam Wal Electric, Selby, SD
- Central Electric, Mitchell, SD
- Charles Mix Electric, Lake Andes, SD
- Cherry-Todd Electric, Mission, SD
- Clay-Union Electric, Vermillion, SD
- Codington-Clark Electric, Watertown, SD
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- Union County Electric, Elk Point, SD
- West Central Electric, Murdo, SD
- West River Electric, Wall, SD
- Whetstone Valley Electric, Milbank, SD
- City of Elk Point, SD

SOUTH DAKOTA ELECTRIC COOPERATIVE CONNECTIONS is published monthly for \$6 annually for member cooperatives, \$12 annually for non-members by South Dakota Rural Electric Association, 222 W. Pleasant Drive, Pierre, S.D. 57501. Correspondence to: Editor, South Dakota Electric Cooperative Connections, PO Box 1138, Pierre, SD 57501; telephone (605) 224-8823; fax (605) 224-4430; e-mail editor@sdrea.coop.

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**MAY IS ELECTRICAL SAFETY MONTH:
PRIORITIZE SAFETY YEAR AROUND**

South Dakota’s rural electric cooperatives recognize Electrical Safety Month every May, but we also know the importance of practicing safety year-round. From our co-op crews to you, the consumer-members we serve, we recognize that everyone has a part to play in prioritizing safety.

According to the Electrical Safety Foundation International, thousands of people in the U.S. are critically injured or electrocuted as a result of electrical fires and accidents in their own homes. Many of these accidents are preventable. Electricity is a necessity, and it powers our daily lives. But we know first-hand how dangerous electricity can be because we work with it 365 days a year.



Trevor Jones
General Manager

To me, safety is more than a catchphrase. The priority at every electric cooperative in South Dakota is to keep employees and the public safe. Additionally, we want to help keep you and all members of our community free from harm. That’s why you’ll see electric cooperatives across the state hosting safety demonstrations at community events and in schools throughout the year, to demonstrate the dangers of electricity.

We discuss emergency scenarios, such as what to do in a car accident involving a utility pole and downed power lines. We caution students on the dangers of pad-mounted transformers - those big green boxes - and overloading circuits with too many electronic devices.

Electricity is an integral part of modern life. Given the prevalence of electrical devices, tools and appliances, I’d like to pass along a few practical electrical safety tips.

- Frayed wires pose a serious safety hazard. Power cords can become damaged or frayed from age, heavy use or excessive current flow through the wiring. If cords become frayed or cut, replace them, as they could cause a shock when handled.
- Avoid overloading circuits. Circuits can only cope with a limited amount of electricity. Overload happens when you draw more electricity than a circuit can safely handle by having too many devices running on one circuit.
- Label circuit breakers to understand the circuits that run throughout in your home. Contact a qualified electrician if your home is more than 40 years old and you need to install multiple large appliances that consume large amounts of electricity.
- Use extension cords properly. Never plug an extension cord into another extension cord. If you “daisy chain” them together, it could lead to overheating, creating a potential fire hazard. Don’t exceed the wattage of the cord. Doing so also creates a risk of overloading the cord and creating a fire hazard. Extension cords should not be used as permanent solutions. If you need additional outlets, contact a licensed electrician to help.

I encourage you to talk with your kids about playing it safe and smart around electricity. Help them be aware of overhead power lines near where they play outdoors.

Our top priority is providing an uninterrupted energy supply 24/7, 365 days per year. But equally important is keeping our community safe around electricity. Contact your local cooperative for additional electrical safety tips or if you would like us to provide a safety demonstration at your school or upcoming community event.

Budget-friendly efficiency upgrades

There are two ways to measure energy efficiency improvements.

There's the payback period - the amount of time it will take for the improvement to pay for itself. Then there's comfort.

Improvements can often increase the comfort level of a home - not easy to measure but one of the driving forces behind home weatherization efforts. There are several areas of the home that can be improved easily, without breaking your budget.

LIGHTING - There has been a steady decline in the price of LED bulbs for residential consumers. Nowadays, 60-watt-replacement LEDs can be purchased for \$5 or less. LEDs should save 60 percent or more on power costs compared to incandescent bulbs and last for many years. New LED fixtures are also an affordable option. They come with LED bulbs built in so you never need to change the bulbs.

HEATING AND AIR CONDITIONING - The Energy Information Administration estimates that heating, ventilating and air conditioning systems account for 22 percent of a typical home's annual electric bill. While newer systems can be 20-45 percent more efficient than older ones, the upfront cost is often a barrier to adoption.

But there are still ways to save. Simple solutions such as changing air filters at least every three months will increase airflow to rooms, increase the life of the HVAC unit's motor and improve air quality in the home. Sealing and insulating ductwork can be done in a weekend and results in energy savings of up to 20 percent.

To lessen the amount of work that heating and cooling systems need to do, it is important to find and seal air leaks. Look for leaks around exterior doors and windows, electric outlets, and entrance points for TV and phone cables. Also check dryer vents and any place with an opening in the wall. To seal leaks, apply caulk, spray foam or weather-stripping to these areas.

Simple acts such as cooking outdoors on a hot summer day or keeping curtains closed to keep out the summer sun will keep the interior of your home cooler and reduce the amount of time AC units need to operate.

EV REGISTRATIONS SEE SUBSTANTIAL INCREASE



According to the South Dakota Dept. of Revenue, the state experienced a boom in electric vehicle registrations in 2021.

At year-end, there were 1,313 electric vehicles registered in the state. That compares to just 242 from the year before. EV registrations saw a slight jump from 227 in 2015 to 236 in 2019.

Minnehaha County led the state with 406 registered EVs, followed by Pennington County with 228 and Lincoln with 151. Nine counties had no EVs registered.



Stay away from power lines

Naomi Goldade

Naomi Goldade likes to have outdoor fun in the spring and summer but reminds co-op members to stay away from power lines. Naomi is the daughter of Alex and Rachael Goldade of Timber Lake. They are members of Moreau-Grand Electric Cooperative.

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

SUPER CASSEROLES

CHICKEN AND CHEESE CASSEROLE

Ingredients:
 2 cups uncooked elbow macaroni
 2 5-oz. cans of chicken chunks
 2 cups shredded cheddar cheese
 2 cups milk
 2 cans cream of chicken soup
 4 oz. sliced mushrooms
 1/4 cup chopped onion

METHOD

Preheat oven to 350 degrees. In a large bowl, mix all seven ingredients together. Pour into a 9x13 baking pan. Bake at 350 for 45 minutes or until bubbly and golden brown.

**Jeanette Kleinsasser,
Iroquois**

ONE DISH CHICKEN AND RICE

Ingredients:
 1/2 to 1 cup onion, chopped
 1/4 to 1/2 cup green and/or red bell pepper
 1 can cream of chicken soup (or cream soup of your choice)
 1/2 cup milk
 1/2 tsp. salt
 1/4 tsp. pepper
 1/3 cup mayonnaise
 2 cups chicken, cooked and chopped
 1 cup peas (frozen)
 2 cups cooked white rice
 1 cup shredded cheddar, divided

METHOD

Preheat oven to 350 degrees. Lightly grease a 9-inch x 13-inch baking dish and set aside. Sauté onion and bell pepper in olive oil or butter. Blend soup, milk, salt, pepper, and mayo in a bowl. Add chicken, peas, sauteed onions and peppers, and rice to the prepared baking dish. Mix gently. Pour soup over chicken mixture. Mix gently. Fold in half of the cheddar. Top with remaining cheese. Bake until top is golden brown, about 25 minutes.

Becky Walker, Sioux Falls

TUNA PASTA CASSEROLE

Ingredients:
 4 oz. dried whole-wheat rotini pasta (about 1-1/2 cups)
 Nonstick cooking spray
 16 oz. frozen mixed vegetables, thawed
 1 pouch (11 ounces) low-sodium chunk light tuna
 1 can (10-3/4 oz.) low-fat, low sodium condensed cream of chicken soup
 1/2 cup chopped roasted red bell peppers
 1/2 cup fat-free half-and-half
 1 tsp. all-purpose, salt-free seasoning blend
 3/4 cup crushed low-sodium, whole-grain crackers
 1/4 cup shredded or grated Parmesan cheese

METHOD

Prepare pasta according to package directions, omitting salt. Using colander, drain well. Transfer to large bowl. Preheat oven to 350 F. Lightly spray 2-quart glass baking dish with nonstick cooking spray. Stir mixed vegetables, tuna, soup, roasted peppers, half-and-half and seasoning blend into pasta until combined. Transfer to baking dish. Top with crackers and Parmesan cheese. Bake, uncovered, 25-30 minutes, or until casserole is warmed through and topping is golden brown.

familyfeatures.com

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

Q: What steps can I take this summer to keep my home cool while saving on my energy bills?

A: A hot home and high energy bills can take away from summer fun. Here are 10 tips to prepare your home for high summer temperatures.

SERVICE YOUR AC UNIT

Air conditioning (AC) units work by moving air over fins or coils that contain refrigerant. When the coils or fins get dirty, the unit uses more energy.

Whether you have a portable unit, central AC or a ductless/mini-split, get your system ready for summer by cleaning the filter, coils and fins. If you are tackling this yourself, always disconnect power to the unit.

Central AC systems have two sets of coils: one inside and one outside. Both should be cleaned annually. If you hire a professional, they can check refrigerant levels during the process.

SEAL YOUR WINDOW AC UNIT

If you have a window or portable AC unit that vents through a window, seal the area between the window sashes. Water heater pipe insulation is a great way to seal this spot. It's available at your local hardware store and is easy to cut for a snug fit.

THERMOSTAT SETTINGS

Keeping your thermostat at the highest comfortable temperature will save you money. If you aren't home during the day, increase your thermostat 8 to 10 degrees. There's no need to cool an empty house.

KEEP YOUR COOL

Before heading to the thermostat, turn on a fan in the room you're in, change into lighter clothing and drink something cool. This may be enough to make you comfortable without spending more to cool your home. Finding the balance between comfort and savings is key.

LOCK WINDOWS

After opening your windows at night or in the morning to let in fresh air, ensure your

windows are closed and locked. This reduces gaps that cause drafts. If your locks don't form a tight fit, add weatherstripping. Most products are easy to install.

WEATHERSTRIPPING AND CURTAINS

Covering and sealing windows may seem like a wintertime efficiency practice, yet these help in the summer, too. Windows are typically the least-insulated surface in a room. Add weatherstripping to form a tight seal and curtains you can close during the hottest times of the day to block out the sun.

COOK AL FRESCO

Keep your home cool or your AC from working overtime by cooking outside. My grill has an extra burner on the side that lets me do stovetop cooking outside, too.

ADD INSULATION

Even in the summer, adding insulation can keep your home more comfortable and save energy used by your air conditioning system. As a general rule, if you can see the joists in the floor of your attic, you need more insulation.

TURN OFF GAS FIREPLACES

Reducing the amount of heat entering your home can keep it cooler, especially if you don't have AC. If you have a gas fireplace, your pilot light lets off a small amount of heat into the room. Consider turning it off during summer.

ADD SHADE OUTSIDE

Several years ago, we planted a hedge on the south side of our home. I was surprised by how much cooler it made the house in the summertime. Planting trees and shrubs strategically around your home can shade the roof, walls and pavement, reducing heat radiation to your home. According to the U.S. Department of Energy, tree-shaded neighborhoods can be up to 6 degrees cooler in the daytime than treeless areas. Before buying a tree or shrub, check with your city or utility about free tree programs.

Applying a few of these ideas to your home will help keep you comfortable and provide summer energy savings.



Miranda Boutelle
Efficiency Services
Group



Brothers Jonas and Chris Lynch say there's no sibling rivalry operating Howe Seeds in Mahto. *Photo by Billy Gibson*

Lynch brothers meet the need for seed

Billy Gibson

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Failure never crossed Chris Lynch's mind when he decided to pull up the stakes he had set in Huron to take a job three hours away in Mahto.

Newly married to his wife, Kerrie, Lynch was farming a massive 30,000-acre spread in 2004 when he decided to seek greener professional pastures. Responding to an ad that appeared in a statewide ag publication, Lynch became manager of Howe Seeds, a company Charles and Dale Howe launched in 1990.

Today, the business continues to thrive, expanding over the past 18 years from 12 hopper bins of product to more than 70, including enough flat storage space for 60,000 bushels. Groundwork has already started on an 80-by-100-foot building that will house an office facility and apartment space for seasonal help.

Looking back, Lynch never considered that the business would do anything but prosper under his management and stewardship. Soon after arriving in Mahto, he and Kerrie started a family of

their own and have five children they've reared in their home on the Howe Seeds property.

"I was raised on a dairy in Lily and worked on my uncle's farm, and I was managing a pretty large operation in Huron, so I figured I knew the business pretty well," Lynch said. "I think a lot of our success comes from just listening to our customers, figuring out what they want and making sure they get what they need when they need it."

As business became more brisk and Charles Howe inched closer to retirement, Lynch found himself looking for some reliable help and knew just where to go to get it. His brother, Jonas, had been doing civil engineering work in Louisiana and California but was pondering a return to his home state.

Soon after Jonas joined the fold in 2008, he met and married a local gal. Today, he and Lauren also have five children and live nearby in Mobridge.

"We've always gotten along very well as brothers and I think our interests, skills and abilities really complement each other," Jonas said. "We make a pretty good team together, and our kids

help out during school holidays and summers. Our dad (Greg) also comes over during the summers to help out when things get busy."

Chris attributes the success of Howe Seeds to what some might describe as "mixology." Howe Seeds stocks nearly 40 different varieties but offers premium service to growers by providing a custom mix that may be needed for cover crops, pulse crops and other applications. This includes landowners who may have contracts through the Conservation Reserve Program.

"Those contracts include a list of species they have to plant, so we work closely with growers to provide the right mix they need and get it shipped to them on schedule," Chris said.

Chris and Jonas agree that much of their success lies in "watching the neighbors" – but not in a creepy way.

"To be responsive to your customers, you have to be very observant and know what's going on out there, not only with the farmers around you but beyond your local area as well," Chris said, adding that Howe Seeds also distributes across the region and nation.

GOATS STEAL THE SPOTLIGHT



Anna Johnson and Jessemy Sharp groom at the 2021 Brown County Fair. *Photo by Donna Sharp*

Ag students show a fondness for working with goats at youth exhibitions and competitions

Billy Gibson

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Matea Gordon's goats always keep her guessing.

The 17-year-old is one of four Gordon siblings from Whitewood who have been highly active - and highly successful - on the 4-H and FFA competition scenes over the past decade.

She prefers to work with market goats because the animals force her to stay on her toes. She never knows what she's going to get.

"They tend to have big personalities. Sometimes they're shy and cute. Other times they can be pretty stubborn. You just never know," she said. "Plus, it's fun to see how much progress you can make with them throughout the year."

Her younger brother, Bennett, enjoys raising and feeding the goats daily.

"I've learned about genetics, animal health and feed nutrition. The goats kind of become your friend as you bring them up and take care of them."

The brother-sister duo are part of a

trend in ag exhibition circles that finds eager competitors opting to work with goats. Their mom, Kindra Gordon, said all four of her children have been fond of tending to goats.

She said the family started with two goats a decade ago, and their involvement grew from there. Today, they travel and compete at nearly a dozen shows throughout the year. Likewise, she has seen youth participation in goat exhibitions double over the past few years.

"When the kids joined 4-H, they wanted to do a project and the goats just seemed to fit our lifestyle," she said.

Regardless of what animals her children choose, she has found there's much to be gained in participating in the competitions and other opportunities that youth ag programs provide.

"The kids have learned about responsibility, life skills and the agriculture industry. They learn about sportsmanship and how to manage stress. We tell them to be happy for their friends when it's their time to win, and

they'll be happy for you when you win. We've met a lot of people and made a lot of friends along the way."

One of those friends is Tessa Erdmann, a freshman at SDSU from Groton who serves as president of the state FFA. She is long-time friends with Matea and her older sister, Danika, both of them winners of Butte Electric Cooperative's college scholarship program.

Tessa said her choice to work with goats mostly came down to a practical matter. She cites her smallish physical stature as one reason for channeling her focus on the species.

"I'm 5 feet tall and I came to the conclusion that I didn't want to hold on to something way bigger than me," she said.

At age 12, Tessa went with her father, Darrin, to an auction and brought home her first three animals: Buttercup, Sassy and Thunderbolt. She describes the event as "love at first sight." In her first year to show at the Brown County Fair, Tessa won ribbons in the breeding and showmanship divisions and has placed many times since then.

A former gymnast and a member of Northern Electric based in Aberdeen,

Moose sees goat-breeding as a gift



Garret Moose isn't sure if he chose goats or goats chose him. In 2004, Moose received twin Nubian kids – a buck and a doe – as a birthday gift. That gift sparked an interest in goats that has led him to building a top breeding operation in southwest Minnesota.

By 2011, Moose was ready to hit the show circuit with only marginal success in the early stages. It would take a couple of years to make it to the American Dairy Goat Association National Show in St. Paul where Moose-G Foxy was named Reserve Junior National Champion Recorded Grade. He saw it all as a learning process.

“When I started out I didn't win anything but I learned a lot, and not to mention I met so many great people that I now call close friends,” he said. “When Foxy won, that's what really got us excited and dedicated to continue on this path with dairy goats.”

Moose raises and markets Alpines, Lamanchas, Saanens, Toggenburgs and Recorded Grade Seniors and Juniors.

He said he enjoys working with the animals and is especially appreciative of his “goat family.”

“It's a tight community and we're always seeing each other at shows, exchanging information and sharing ideas,” he said. “I couldn't do what I do without my family and friends.”

For more information, Moose can be contacted at 507.530.3175.



Clockwise from top/left: FFA President Tessa Erdmann; Kylee Ellerton of Custer; Taylor, Tate and Tye McGraw of Raymond.



Tessa said she has also experienced a large measure of mutual support within the animal exhibition community.

“Everybody is always so nice and you can count on everyone to help one another,” she said. “We're competitive inside the ring, but outside we're family and we don't hate each other. One year, someone's father was hurt and couldn't make it to the competition. Everyone chipped in to help the family out.”

Becca Tullar is a 4-H advisor in Brown County. She explained what she believes is the reason for the rising interest in goats.

“They're a good starter animal and youngsters get used to them and many of the students stick with them. They kind of grow up together,” she said.

“They're easy to handle. Once you get them halter-broke they'll go wherever you want. They're fun animals to show.

They're almost like pets and they build easy bonds.”

One competitor who has a way with his goats is Tate McGraw, a 17-year-old from Raymond who has Down syndrome. His father, Wade, said Tate has been showing since he was 8.

“It's been a real blessing. He's easy-going and just has a way with the animals. He can get them to do things that other handlers can't,” he said.

His other son Tye, 14, and daughter Taylor, 13, also show goats and other animals and McGraw said they each have their individual strengths.

“The best thing as a father is to see the network of friends they've developed across the state. They all support each other and they've learned to respect one another because they know one day they could be on top and the next day they could be on the bottom.”

SOLAR PANELS IN DISASTER-PRONE AREAS

With careful consideration of installation, maintenance and design, rooftop solar panels can be a reliable backup option for power during emergencies.



Measures can be taken to minimize the risk of damage to solar panels during storms

Katherine Loving

Severe weather and natural disasters often result in extended outages, leaving residents and businesses without electricity. In areas where these events occur regularly, the thought of installing solar panels may seem like an uncertain solution.

Having a source of grid-independent electricity during these times is appealing, especially as technology improves and costs drop. The concerns about a rooftop system being durable enough to withstand severe weather conditions are real. However, careful planning, maintenance and product choice can mitigate some of the risks.

The first step to creating resilient solar is to install a system that can operate without being connected to the grid. It is standard practice for rooftop systems to shut off automatically during an outage to avoid sending power back to the grid, potentially harming lineworkers. Installing a battery storage system can provide emergency power by isolating the home system from the electric grid. A battery, if properly sized, would provide

enough electricity to power critical household loads like refrigerators or medical equipment. A solar inverter and a switch can operate the system without support from the grid and provide limited power when the sun is shining.

Regular maintenance of the rooftop system is also important for disaster-prone areas. The system should be installed in a location that makes it easily accessible for maintenance and repairs. Inspection and maintenance of components, structural connections and generating capacity of the cells can help ensure the system is prepared.

System hardening, or techniques to reduce vulnerabilities, is another step you can take to create resilient solar. One technology that can help protect panels is an axis tracker. This is a computer assisted device that can move the panel to a more vertical position to minimize damage from wind, snow and hail.

Hail - International standards for panels require they withstand hail at sizes up to one inch and speeds up to 50 mph. In places with larger hail, this may not be strong enough. Opting for panels made of fully tempered glass, which are thicker

and more impact resistant, may be a solution, but they are much heavier. A stronger frame is also suggested to make the installation more robust.

Strong Winds - Many panel systems are rated for 140 mph winds. Additional hardening can be achieved by bolting the frame to the roof (instead of clamping) to improve the structural connection. If use of an axis tracker is not an option, manually moving the tilts of the panels ahead of the storm is a possibility.

Wildfires - Rooftop solar is capable of withstanding high heat because the panels need to be functional on a hot summer's day. However, smoke and ash decrease solar generation and can cause damage from prolonged exposure. Inspection after a fire is recommended to identify system damage.

Snow and Ice - In areas with heavy snowfall and ice, consider stronger support structures. Heavy snow piles can put stress on the system. Energy production ceases if the panels are covered but should leave the panels undamaged as the snow and ice eventually melt away.



Battery Tech is booming

The Kansas City Assembly Plant shown here is Ford's first U.S. plant to assemble both batteries and electric vehicles. *Photo courtesy of Ford*

Paul Wesslund

If your smart phone battery has become a large share of your daily thoughts, just wait - the battery market is booming.

Innovators are now developing washable and bendable batteries to heat your gloves or be sewn into athletic wear to help track your exercise routine.

Electric utilities are using batteries for slightly more practical reasons - to make electricity more reliable and more compatible with renewable energy sources. Also, the booming electric vehicle market has been made possible by dramatic advancements in battery technology.

Analysts estimate the world battery market value at more than \$100 billion and project it will grow more than 10 percent annually over the next five years. People need batteries - for their phones, laptops, power tools, watches and electric vehicles - and they want them to last longer. They want them smaller. They want them cheaper. And researchers and entrepreneurs are busy meeting those demands.

EV Super Bowl Ads - Electric vehicles

(EVs), which run on large, rechargeable batteries are a leading example of the trend. Ten years ago, there were hardly any EVs on the road. But in 2020, EV sales hit 3 million, and now there are 10 million on the road worldwide - that growth is expected to continue.

Six of this year's Super Bowl ads featured EVs. Manufacturers around the world plan to spend more than half a trillion dollars on EVs and batteries in the next eight years. Just in the U.S., 13 EV battery manufacturing plants are expected to open in the next five years.

The battery bandwagon brings strong incentives for investments to make them even stronger - so EVs can go farther and phones can hold more apps and feature fancier cameras. This cycle of innovation is cutting battery costs too. The price of the most popular type of rechargeable battery is down more than 90 percent from 10 years ago.

Batteries Aid Renewable Energy Use - Utility use of large batteries is adding efficiency and reliability to the nation's electric grid. In 2019, the number of large-scale battery systems in the U.S. increased 28 percent.

Utilities, including electric

cooperatives, use these batteries in several ways. They can smooth-out voltage and frequency differences that damage equipment and affect power quality. Batteries can also make better use of the intermittent nature of renewable energy sources. By storing excess solar energy produced during the day when electric demand is low, batteries can make that sun power available for use at night when demand is high.

Utility-scale battery capacity jumped 35 percent in 2020, tripled in the past five years, and by 2023, the U.S. Energy Information Administration (EIA) reports utilities will have 10 times the battery capacity they had in 2019.

Much of that increase comes from battery systems located near large solar projects, making it easier to store electricity produced by solar panels.

Homeowners can even supplement their electric service with their own backup batteries. Tesla and other companies make suitcase-sized batteries designed to hang on your wall for reserve power, in case of a storm or to pair with rooftop solar panels to store sun power for later use.

THE POWER OF LOAD MANAGEMENT

Chris Danielski monitors an irrigation pivot control panel from his phone app. Photos by Billy Gibson

Load control program reaps big rewards for both residents and large energy users

Billy Gibson

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Danielski Farms didn't become a blue chip producer over the past four decades by making boneheaded business decisions.

In 2013, the company was invited by Cherry-Todd Electric to participate in the cooperative's irrigation load management program. Load management is a term used to describe a co-op's ability to balance the system's electrical load by adjusting or controlling network demand.

Better balance brings greater efficiency and lower costs for all consumers on the system.

Len Danielski recalls pulling the leadership team together and weighing the pros and cons. The proposal included installing specialized equipment that would allow Cherry-Todd to temporarily interrupt power - when warranted - to any of roughly 200 irrigation pivots across 18,000 acres.

While different electric co-ops have their own load management policies, Cherry-Todd's guidelines call for a lower irrigation rate for participants and the right of the consumer to withdraw and return to the regular rate at any time.

The deliberation process was helped along by the fact that Danielski's General Manager Gary Garvin previously served as a board member at Cherry-Todd. He was aware the cooperative business model was designed and intended to produce "win-win" situations for both the co-op and its owner-members.

Danielski Farms ultimately decided to place all of its irrigation system under load management and Len Danielski reports the results have exceeded expectations.

"We found it was a winner all the way around. We have the choice to place one pivot, two pivots, or all pivots on the load control program, or none," he said. "We've analyzed the benefits over time and found that the company wins,

the cooperative wins and the co-op members win. It's a great partnership."

Chris Rahn, Cherry-Todd's primary key account contact, said load management is a tremendous benefit for members because it allows the cooperative - working in concert with both the member and the co-op's wholesale supplier Rushmore Electric - to distribute power more efficiently.

Rahn explained that one of the best ways to deliver power at the lowest possible cost is to "shave the peak" or to make sure supply and demand stay in a constant state of equilibrium as conditions such as weather, member consumption and market forces change constantly. Utilities are able to control supply but can find it challenging to project what consumer demand will be at any point in time.

Educated projections are important, but there are occasions when it helps for the co-op to have some control over demand. In the end, everyone benefits.

"We've had a residential water heater load control program for quite a while and it's been well-received by our

members,” Rahn said. “It enables us to get a better handle on the demand side and that’s a benefit for all the members on our lines.”

Garvin said another mitigating consideration for Danielski Farms is the fact that Cherry-Todd has done its part by making significant improvements to its infrastructure over time.

“We used to joke that we were always under load management because the power would go out a lot, but things have changed dramatically for the better and we hardly ever get bumped these days,” Garvin said. “I’ve also got load management on my water heater at home and it works for us.”

Len Danielski said that under the load control program power to his pivots rarely gets disrupted and typically only for a few hours when it does. He said the company is pleased to participate in a program that will ultimately benefit all co-op members across the system.



From left, Gary Garvin, Len Danielski, Chris Danielski and Chris Rahn discuss Cherry-Todd Electric’s load management program.

“We’ve found interruptions are usually during times when we don’t need to be irrigating anyway, like in the heat of the day when a lot of the water will only get evaporated,” he said. “And if it helps the cooperative and saves every member on the system some money, that’s great.”

Another element that makes the program work for Danielski Farms is the installation of a remote irrigation control system. All of Danielski’s pivots



All of the roughly 200 irrigation pivots at Danielski Farms are under Cherry-Todd Electric’s load management program.

are connected to the Ag Sense phone app that enables a user to turn the pivots on or off individually or in groups, and receive an abundance of electronic data.

Chris Danielski manages the app and said the telemetry allows him to track exactly when load control is being implemented, though he usually receives information from the co-op as well. He said efficiencies gained through both programs have resulted in net savings.

“If we have an hour or two of load management, once we get the notice that we’re back on I can restart the pivot from inside the office,” he said. “It used to take several hours to get someone to go out and restart the system.”

East River Electric, based in Madison, is a power supply cooperative that delivers wholesale electricity to 24 distribution co-ops in eastern South Dakota and western Minnesota. East River has offered its co-ops a load management option since 1985 and has saved members roughly \$260 million in avoided wholesale power costs.

More than 75,000 different electric loads in homes, farms and businesses are connected to the system, including water heaters, air conditioners, irrigation systems and other big energy users.

Chris Larson, general manager of Clay-Union Electric, said the co-op based in Vermillion offers end-use consumers a load control program for

water heaters, irrigation systems, grain bins and other commercial processing equipment.

The cooperative has 320 irrigation systems under load management with requests for 10 more in the near future as drought conditions show no signs of abating.

Larson emphasized that every cooperative has its own unique rate structure and load management policies when it comes to discounts, demand charges, time-of-use, system peaks and other variables. He said it’s important for consumers to contact their local co-op for details and to work closely with staff to find the best solutions for the member.

He said co-ops are obligated to capture their costs of providing power but are also responsible for finding ways to accommodate their member-owners and helping them achieve their individual goals.

“Load management really is essential to maximizing system efficiency,” Larson said. “It’s a sophisticated process that ultimately leaves the member with plenty of choices. If we’re controlling irrigation or commercial operations at a time that’s not good for them or complicates their workflow, they need the ability to override the control system so they can make a good business decision that’s best for them.”



NATIVE SPECIES GARDENING

Southeastern Electric member Sue Nipe of Sioux Falls puts in a lot of work tending to her native species garden but also receives many rewards for her efforts. *Photos by Brett Snyders*

Native species gardens are good for the environment, diet and soul

Billy Gibson

billy.gibson@sdrea.coop

If you're a big fan of grass, you might not be too impressed with Sue Nipe's yard. That's because there's isn't a blade of grass to be found.

Nipe lives in a conventional middle-class subdivision in southeast Sioux Falls, but there's nothing conventional about her yard. She's a huge proponent and practitioner of native species gardening and her property stands out prominently from all the rest.

Diagnosed with celiac disease in 2013, Nipe decided to focus on eating healthy and growing much of her own food right there on her own plot of

suburban ground. She decided to pull out all the grass and weeds by their roots, plant some vegetables and herbs - along with a smattering of ornamentals - and before long her corner lot was bursting with native species from porch to curb.

Her key to maintaining a thriving native species garden? Well, there are several, but mulch appears somewhere at the top of the list. Ecologically friendly wood mulch, she explained, is necessary to keeping the weeds out and locking in the moisture.

"I put mulch around everything," Nipe said, noting that she purchased 150 bags of wood mulch last year and had just one weed-pulling session over

the entire spring and summer seasons

"Some try to use small rocks but most of the time they have them removed because during the summer they heat up and burn the plants from the bottom up," she cautioned.

Nipe said native species gardens are in many ways easier to maintain than exotics and are better for the local ecosystem because the plants have adapted to the climate and soil conditions over many generations, are largely resistant to pests and fit into the natural landscape both ecologically and aesthetically.

They are also better at preventing soil erosion, they help reduce air pollution in the local area, use less water, and they provide nectar, pollen and seeds for native butterflies, insects and birds to munch.



A visitor would be hard-pressed to find a blade of grass in Nipe's home landscape.

Moreau-Grand Electric member Doug Hofer is a horticulture teacher at the Cheyenne River School System in Eagle Butte. He said teaching students about the benefits of cultivating native species is important to the preservation and conservation of the landscape.

He uses the school's well equipped greenhouse to teach his students about the fundamentals of horticulture, including vegetables, ornamentals,

succulents and herbs. Toward the end of each semester, the students are instructed to choose a native species that they can find and identify on the prairie, conduct some research and produce a slide show on the topic. They also sell their plants at local markets in the spring and donate their proceeds to their FFA chapter.

Hofer also teaches a class on wildlife and fisheries at the school.

"Everything with the environment and landscape all tie in together," he said. "I think students need to learn about native species and working with those plants that have adapted to our climate and thrive in our part of the world. We also talk about how these plants and herbs have been cultivated and used by people who have inhabited the Great Plains for hundreds and thousands of years."

Studer named winner of TSE's Distinguished Service Award



East River Electric's Chief Member and Public Relations Officer Chris Studer has been named the 2022 Touchstone Energy® Cooperatives Distinguished Service Award recipient. Touchstone Energy Board President Deb Mirasola presented Studer with the award at the National Rural Electric Cooperative Association's annual meeting in Nashville.

Studer was honored for promoting the cooperative difference and helping Touchstone Energy evolve into a strong brand with more than 650 members in 46 states.

"Chris exemplifies the values of our brand and provides unwavering support to his member systems and local community," Mirasola said.

PHOTO CONTEST: WINTER IN JULY

By the time the summer heat sets in, many South Dakotans will be looking back with fond memories of the winter season.

Readers of Cooperative Connections are invited to send us a photo of your favorite experience from the winter of 2022. The top selected photos will be published in the July edition. A \$50 gift certificate will go to the winning photographer.

Send your photo to billy.gibson@sdrea.coop with the subject line "Winter Memories." File format should be jpeg, PNG or PDF.

The deadline to enter is May 20. Good luck to all contestants.

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MAY 14-15
Ellsworth Air & Space Show
1940 EP Howe Drive, Ellsworth AFB, 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.

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



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

APRIL 27-30
45th Annual Kingswood Rummage Sales
Southwest Sioux Falls, SD,
kingswoodrummage.com

APRIL 28
MercyMe: The Inhale (Exhale) Tour
Denny Sanford Premier Center,
Sioux Falls, SD, 605-367-7288

APRIL 28-30
26th Annual Black Hills Dance Festival
The Monument, Rapid City, SD,
blackhillsdancefestival.com

APRIL 29-MAY 1
State USBC Women's Bowling Tournament
Village Bowl, Mitchell, SD,
605-336-5583

APRIL 29-MAY 1, 5-7
Ordinary Days
Grand Opera House, Pierre,
SD, pierreplayers.com

APRIL 30
SDSO Centennial Finale
Washington Pavilion, Sioux
Falls, SD, sdsymphony.org

MAY 3-8
Come From Away
Washington Pavilion, Sioux
Falls, SD, www.washingtonpavilion.org/event/come-away

MAY 7
Cinco de Mayo Fiesta
131 E Falls Park Drive, Sioux
Falls, SD, 605-274-3735

MAY 8
Mother's Day Tours
Historic Adams House and
Days of '76 Museum,
Deadwood, SD, 605-578-3724

MAY 14-15
AMA Coins and Sports Cards Show
Denny Sanford Premier
Center, Sioux Falls, SD,
605-321-9195

MAY 14-15
Ellsworth Air and Space Show
1940 EP Howe Drive, Ellsworth
AFB, SD, ellsworthairshow.com

MAY 15
PAW Patrol Live!
Swiftel Center, Brookings, SD,
www.swiftelcenter.com

MAY 17
Norwegian Independence Day
Main Street, Vivian, SD,
605-222-3296

MAY 20-22
Annual Sound of Silence Tesla Rally
615 Washington Street, Custer,
SD, 605-673-2244

MAY 20-22
Open House and Free Fishing Weekend
Statewide, SD, 605-223-7660

MAY 21
Booth Day
D.C. Booth Fish Hatchery,
Spearfish, SD, dcboothfishhatchery.org

MAY 21
Frühlingsfest & Spring Market
Main Street, Rapid City, SD,
605-716-7979

MAY 28
Deadwood Live: Hank Williams Jr.
Outlaw Square, Deadwood, SD,
www.deadwoodlive.com

MAY 28
Memorial Weekend in Mitchell
Main Street, Mitchell, SD,
605-292-4444

MAY 28-29
Black Hills Renaissance Faire
Manuel Brothers Park, Lead,
SD, www.blackhillsrenfest.com

MAY 29-30
Back When They Bucked Rodeo
Days of '76 Arena, Deadwood,
SD, 605-718-0810

MAY 30
Prairie Points Quilt Guild Show
Harding County Memorial Rec
Center, Buffalo, SD,
605-641-5591

JUNE 2-5
Wheel Jam
South Dakota State
Fairgrounds, Huron, SD,
www.wheeljam.com

JUNE 3-5
Lake Andes Fish Days
Citywide, Lake Andes, SD,
605-487-7694

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