Lacreek Electric
A Touchstone Energy® Cooperative
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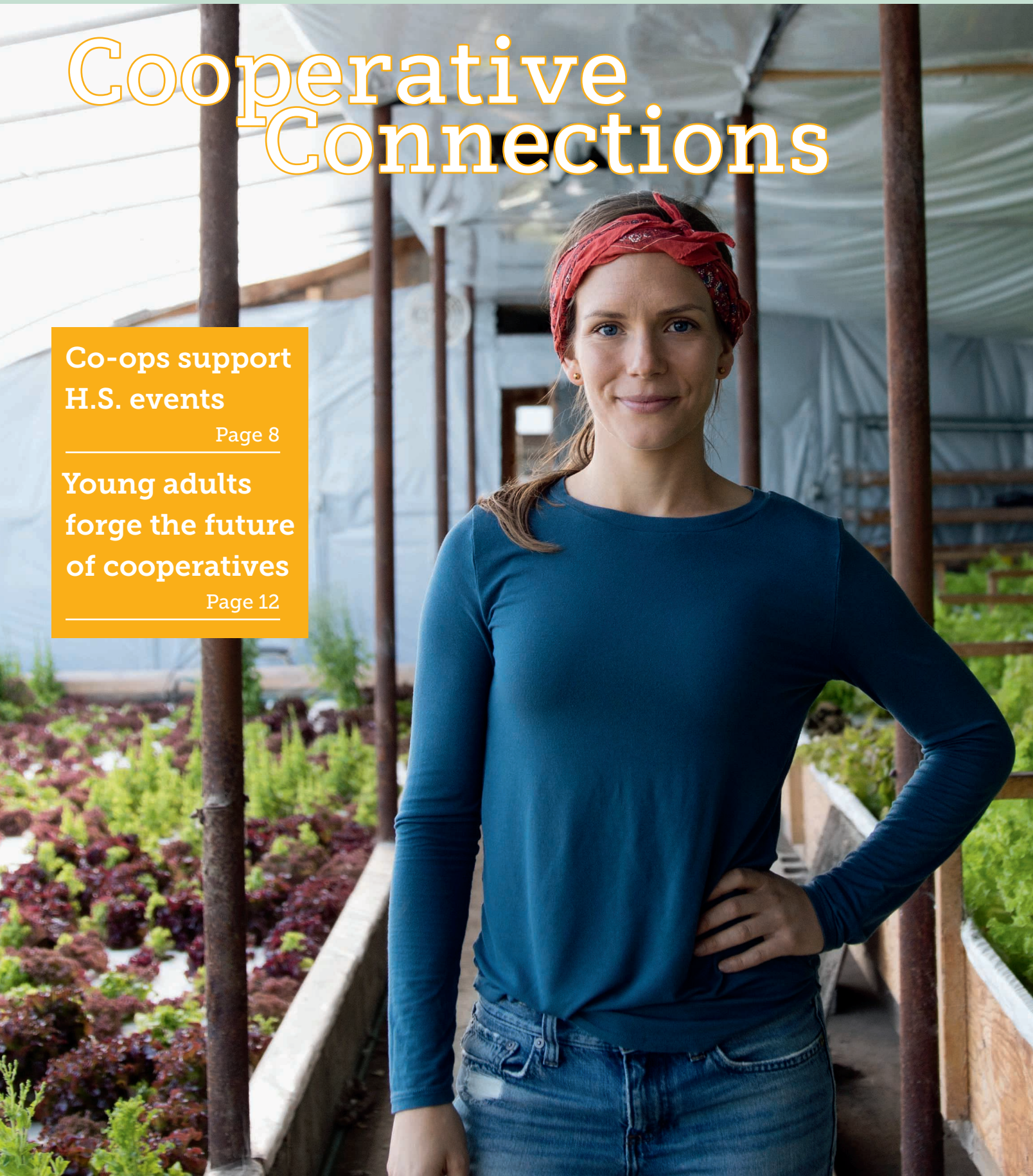
Cooperative Connections



Demand Versus Energy

Josh Fanning
General Manager

Demand can be explained as the capacity that is required to serve a load. As an example, think about the loads that can be on at the same time in your home. The water heater is 4.5 kW, the oven is about 4 kW, the clothes dryer is 5 kW, so you would need a generator with a capacity to handle a demand of 4.5 + 4 + 5 = 13.5 kW. Likewise, we would need to have a transformer at your home sized to meet this combined load also. Overall, higher demand loads require more service from the utility including, generating plant capacity and more expense in lines, transformers and substation equipment.

Energy can be explained as the power delivered to your loads over a period of time. Using the above example, if all the loads were on continuously for three (3) hours, 13.5 kW x 3 hours = 40.5 kWh. If you checked your electric meter before and after, you would see an increase in the reading of 40.5 kWh.

Your home energy bill is typically based on the number of kWh that you consume.

One of the best analogies to help understand the difference between demand and energy is by "filling a bucket." Suppose you want to fill a five-gallon bucket with water. You can use a smaller inexpensive hose hooked to a little faucet that would supply the water at one gallon per minute, and it would take five minutes to fill the bucket. Rather than using the smaller hose you can get a larger more expensive hose and faucet that would fill your bucket at a rate of five gallons per minute. This would only take one minute to fill. In this example, the consumption (**energy**) of filling the bucket with five gallons of water is the same but the flow rate (**demand**) would be much different.

Your home energy bill is typically based on the number of kWh that you consume. Lacreek Electric, on the other hand, must pay a cost for the maximum kW (demand) that we supply during the month, as well as the energy delivered in kWh. A larger kW figure means our power supplier had to have enough generation capacity running to meet our peak load. More kW at the peak means more generators running. The more generators running means more expense and cost to supply the short-term peak load.

Base load or load that is basically continuous, is met with constant running coal plants. Load that rises above that level for shorter periods is met with short-term peaking plants that utilize natural gas or fuel oil. These plants are higher maintenance and greater expense. Therefore, we pay for the maximum monthly peak load. A lower peak means a lower use of more expensive generation sources and a lower cost to meet the load. That means a lower wholesale power cost and the savings pass on to our members!

Lacreek Electric's Annual Meeting to be Held Sept. 25

Lacreek Electric's annual meeting will be conducted as a business meeting only on Friday, Sept. 25, beginning at 1 p.m. at the Old American Legion Auditorium.

There will be no meal or prizes. The capital credit checks were mailed out this past April.

Lacreek asks that their members practice social distancing and if you are sick, please stay home.

Lacreek Electric

Cooperative Connections

(USPS No. 018-912)

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College Student

Safety Tips

Before heading to college, students need to be equipped with supplies for their dorm rooms and important knowledge for living on their own – including electrical safety knowledge.

Many colleges across the U.S. ban cooking appliances from on-campus housing, such as hot plates, coffee makers and microwaves. Instead, many of these places may already have a designated area for using cooking appliances.

Safe Electricity offers tips for students to help prevent and reduce the risk of electrical fires in student housing:

- Only purchase and use electrical products tested for safety. Some common approved safety labels include UL, CSA, and MET.
- Avoid overloading extension cords, power strips or outlets.
- Use power strips with an over-current protector that will shut off power automatically if there is too much current being drawn.
- Never tack or nail an electrical cord to any surface or run cords across traffic paths or under rugs where they can be trampled or damaged.
- Use the correct wattage light bulbs for lamps and fixtures. If no indication is on the product, do not use a bulb with more than 60 watts. Use cooler, compact fluorescent lamps (CFLs).
- Keep all electrical appliances and cords safely away from bedding, curtains, papers and other flammable material.
- Make sure outlets around sinks are equipped with ground fault circuit interrupters (GFCIs) before use. If they are not, contact the resident assistant, camping housing staff or landlord.
- Unplug small appliances when not in use and all electronics when away for extended periods.
- Always use microwave-safe containers. Glass, ceramic containers and plastics labeled "microwave-safe" should always be used. Metal and aluminum foil can damage the microwave or start a fire. If the microwave is damaged in any way, do not use it.
- Smoke detectors should never be disabled and fire alarms should never be ignored or taken casually as a drill. Every time a fire alarm sounds, residents should calmly and quickly follow practiced procedures and immediately exit the building.

For more fire and electrical safety information, visit SafeElectricity.org.

Find Your Account Number:
It's Worth $30!

A member's account number has been hidden somewhere in this newsletter. If you find your account number, call the office before Sept. 4 and you will receive a **$30 credit** on your next month's billing.

Recreational Boating: Stay Safe on the Water

With more than 11 million recreational vessels registered in the U.S., millions of Americans are enjoying time on and in the water.

Each year, roughly 4,000 boating incidents occur, causing more than 2,500 injuries and about $46 million in property damage. Stay safe by being prepared and using the appropriate equipment, whether enjoying a ride on a motorized boat, paddling a kayak or wakeboarding.

Life jackets are at the core of safe boating, whether using a motorized or non-motorized vessel. The U.S. Coast Guard reports 76 percent of boating deaths in 2017 were due to drowning, and 84 percent of the victims were not wearing a life jacket.

While regulations on life jacket use vary from state to state, the Wear It program of the National Safe Boating Council promotes boating safety by encouraging boaters to wear life jackets any time they are on a boat, motorized or non-motorized.

Good swimmers still need life jackets. When people fall off a boat, they may become disoriented, injured or unconscious. Life jackets can keep victims' heads above water so they can breathe and be rescued more easily. Every child should wear a life jacket at all times when boating.

Choose the right life jacket for the activities you will be doing. Double check to make sure the life jackets are U.S. Coast Guard approved and fit correctly:

- Make sure the jacket is a proper fit for your size and weight
- Make sure the jacket is properly fastened
- Hold your arms straight up over your head, ask a friend to grasp the tops of the arm openings and gently pull up; make sure there is no excess room above the openings and that the jacket does not ride up over your chin or face.

The National Safe Boating Council encourages following these boating safety tips to help minimize risks:

- Take a National Association of Boating Law Administrators safety course
- Be familiar with the boating state laws
- Know the "Rules of the Road"
- When operating a motorized boat, know about carbon monoxide; this odorless, colorless poisonous gas is emitted by all combustion engines and onboard motor generators.

Taggart, Schmidt win Glenn English scholarships

Anneliese Taggart of Vermillion recently landed a $10,000 scholarship award presented by the National Rural Electric Cooperative Association (NRECA).

Carter Schmidt of Colman also won a $1,000 scholarship through the Glenn English Youth Tour Alumni Scholarship program.

Taggart and Schmidt were participants in the 2016 NRECA Washington Youth Tour. Taggart was sponsored by Clay-Union Electric Corp., while Schmidt was sponsored by Sioux Valley Energy.

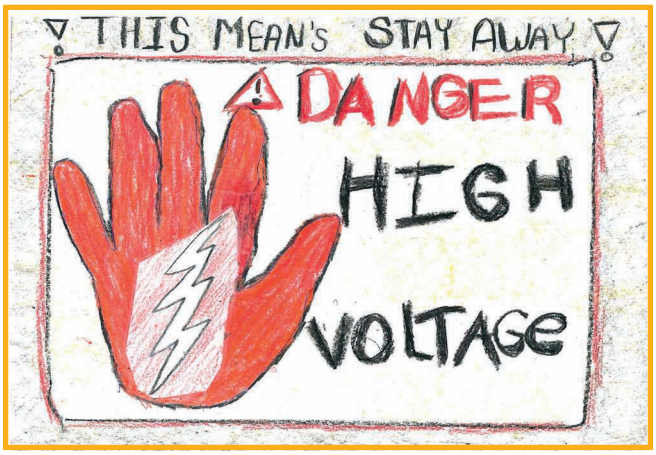
Taggart was elected by her peers to join the Youth Leadership Council. She participated in a grassroots panel discussion at NRECA's Annual Meeting last year and also helped teach a course called "Bridging the Gap" to encourage young adults to vote.

Now in its fifth year, the Glenn English National Cooperative Leadership Foundation has awarded nearly $100,000 in scholarships to NRECA Youth Tour alumni.

The Glenn English scholarships are one of the few sources of private scholarships for college students. Applicants are required to have completed one year of college as a full-time student.

Glenn English, former CEO of NRECA, spent his career championing the co-op business model and fighting to improve the quality of life for all Americans. A native of Oklahoma, he served 10 terms in Congress.

KIDS CORNER SAFETY POSTER



"Danger! High voltage! This means stay away!"

David Biggins, 10 years old

David Biggins is the son of Jessy and Katie Biggins. They reside in Gregory, S.D., and are members of Rosebud Electric Association.

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.

Goodies from the Garden

Mashed Potatoes with Kale

- 4 med. potatoes
- 2 Tbs. butter
- 1 Tbs. milk or cream
- 1/4 c. grated cheese (cheddar or Colby)
- 1-1/2 c. chopped raw kale, mid-ribs removed

Peel potatoes if desired, cut into chunks, boil until tender, about 15-20 minutes. Drain, mash and add remaining ingredients. Stir until well combined. Serve with sea salt and pepper. *Mary Jessen, Holabird, SD*

Cabbage Salad Bowl

- 4 cups shredded cabbage
- 1 c. shredded carrots
- 2 Tbs. tarragon vinegar
- 1/4 c. mayonnaise
- 1/2 tsp. salt
- 2 Tbs. sugar
- 1/2 c. light raisins
- 1/4 c. orange juice

Soak raisins in orange juice while preparing vegetables. Combine cabbage, carrots, sugar and salt in a bowl. Add mayonnaise along with raisins and juice. Toss lightly. Refrigerate until time to serve. Serves 8. *Verna Knapp, Waubay, SD*

Balsamic Vegetable Salad

- 3 lg. tomatoes, wedged
- 3 med. cucumbers, peeled, halved and sliced
- 1/2 c. olive oil
- 1/4 c. balsamic vinegar
- 3 Tbs. water
- 1 envelope Italian dressing mix

In a salad bowl combine tomatoes and cucumbers; in another small bowl whisk oil vinegar, water and dressing mix. Pour over vegetables and toss to coat. Yields: 6 servings. *Jane Barthel, Elkton, SD*

Rhubarb Upside Down Cake

- Yellow cake mix
- 4-6 c. rhubarb, chopped
- 3-4 c. sugar
- 1 pint whipping cream

Mix cake mix as directed. Put in a 9x13-inch pan. Mix rhubarb with sugar; pour over cake. Pour whipping cream over mixture and bake at 350 for 30-45 minutes. *Shirley Dreher, Clark, SD*

Zucchini Dish

- 1/4 c. cooking oil
- 1 lb. unpeeled thinly sliced zucchini
- 1 lg. carrot, coarsely shredded
- 1 lg. onion, chopped
- 3/4 c. chopped celery
- 1/2 tsp. garlic salt
- 1/2 med. green, red or yellow pepper cut in thin strips
- 1/4 tsp. dried basil, crushed
- Dash of pepper
- 1/2 c. taco sauce
- 2 tsps. prepared mustard
- 2 medium tomatoes, cut in wedges

Heat cooking oil in a 10-inch skillet. Add sliced zucchini, shredded carrot, chopped onion, chopped celery, pepper strips, garlic salt, basil and pepper. Mix well, cook covered, over medium-high heat 4-5 minutes, stirring occasionally. Combine taco sauce and mustard: stir into vegetables. Add tomato wedges, cook uncovered, 3-5 minutes or till heated through. Makes 4-6 servings. Optional: sprinkle with shredded cheese of your choice. *Rachel Breczinski, Marshall, MN*

Stuffed Cherry Tomatoes

- 24-28 cherry tomatoes
- 1 package (8 ounces) cream cheese, softened
- 2 tablespoons mayonnaise
- 3 green onion stalks, diced
- 1 medium cucumber, peeled and diced
- 2 teaspoons minced dill
- fresh dill, for garnish

Cut thin slice off top of each tomato. Scoop out pulp. Invert tomatoes on paper towel to drain. In medium bowl, combine cream cheese and mayonnaise until smooth. Stir in cucumber, green onion and dill. Spoon mixture into tomatoes. Top with fresh dill. Refrigerate until ready to serve. *www.culinary.net*.

Please send your favorite pasta recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2020. All entries must include your name, mailing address, telephone number and cooperative name.

Winterize Your Manufactured Home

Pat Keegan
Collaborative Efficiency

Dear Pat and Brad: The last few months have been tough, and I'm dreading my manufactured home's high winter heating bills. What can I do to make my home more efficient without spending too much money? – Lance

Dear Lance: In difficult times like these, it's more important than ever to ensure the money we spend yields the results we need. Here are five tips for winterizing your manufactured home, which can help you capture some significant savings. It's worth noting that some of these suggestions are quick, easy and cheap, but some will require more money than you may want to spend. Choose the approach that works best for your home and budget.

1. Furnace

It doesn't cost anything to lower your thermostat. Clean or replace your furnace air filter as often as recommended. If you heat your home with an electric or propane furnace, you can cut your heating costs by installing a heat pump. Ductless heat pumps are efficient and eliminate the problem of leaky furnace ducts. If you don't have the budget to make this investment out of pocket, you may qualify for a loan. It's possible that your energy savings would cover the loan payment.

2. Water Heater

You pay a lot to heat water. Make sure your water heater thermostat is set to medium, between 120° F and 140° F. Energy efficient showerheads can also save energy. Some are equipped with a button or valve that allows you to reduce or stop the flow while you lather up. Another fairly simple fix is to insulate the first several feet of the hot water pipe where it exits the tank. If there is room around your water heater, you could also wrap the tank with an insulation jacket, which you can purchase from a home supply store for about $20. If your water heater uses gas or propane, be careful not to restrict the air needed for combustion or install insulation too close to the exhaust flue.

Make sure your water heater thermostat is set to medium.

3. Ducts

Leaky furnace ducts are often a major source of energy loss. A simple first step is to make sure all supply and return registers are open and are not covered by furniture or rugs. Closed registers can really take a toll on your heating and cooling system. You might also be able to save energy by sealing your ducts at the floor registers. The biggest leaks, however, are likely under your manufactured home and could require the services of a contractor to locate and seal. Check with your local electric co-op to see if they can recommend local contractors who can provide this service.

4. Windows and Doors

That window A/C unit that kept you cool all summer can be a major source of heat loss in the winter. Before the cold hits, cover it up – or better yet, remove it during winter months. Another fairly easy way to cut down on energy loss is to install window insulation kits - these are plastic, disposable sheets that are stretched over window and held in place with double-sided tape. Thick curtains can also do a remarkable job at cutting drafts and adding insulation around a window. The final and most involved step is to fill cracks and holes in walls and around windows and doors with caulk, filler and/or expanding foam.

5. Floors

Cold floors can be costly and uncomfortable. The easiest solution is to lay down area rugs for additional warmth. But to really get the floor comfortable, you may have to venture into the crawlspace and insulate the floor or skirting. If you're not sure how to do this, there are several video tutorials available online.

With these simple steps, you can look forward to a cozier and less-costly winter!

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency.

For more information on winterizing your manufactured home, please visit: www.collaborativeefficiency.com/energytips

John Deere and other manufacturers in the marketplace continue to improve their electric tractor technology.

Electric Equipment Use on the Farm is a Trend on the Upswing

South Dakota's farmers have worked for generations in fields across the state. They have seen first-hand how farming equipment has improved over the decades to increase efficiency and to feed an ever-growing population.

A major new change for farming equipment is the trend of switching fossil fuel-powered farming equipment towards electric equipment. This trend builds on the idea of beneficial electrification, where switching to an electric end-use technology satisfies at least one of the following conditions without adversely affecting the others: saving consumers money over time, benefiting the environment, improving product quality or consumer quality of life, and fostering a more resilient grid.

Historically, the most common form of electrification for farms has been electric irrigation pumping systems. Irrigation systems are crucial for many farmers and can make or break the crop yield for the year. Water heaters are the second most-used forms of electric technology on farms. They can be used for many purposes, like dairy farm processing, sterilizing equipment and general cleaning. Choosing an electric water heater for the right application depends on efficiency, size, recovery speed and peak temperature.

There are many benefits of replacing diesel motors with electric motors. Highly efficient electric motors can operate at 90 percent efficiency, which helps to provide cost savings over time, compared to inefficient diesel motors that only operate at 30-40 percent efficiency. Farmers can simply plug in the electric equipment without needing to refill a diesel tank. Overall, electric motors are cleaner, quieter and easier to maintain. Some farmers are making the switch to electric tractors as companies like John Deere, AgCo and others continue to perfect their own electric models. While electric tractors are more efficient, quieter and better for the environment, they can lack the battery power that many farmers need for a long day of working in the fields.

Electric irrigation pumping systems provide a reliable means of crop maintenance.

But the largest barrier of converting to electric technologies is the cost. Both the price of the electric technology itself and for the wiring to connect it to the entire farm can be extremely costly. Even with savings on fuel costs over time, farmers will be reluctant to replace their farming equipment because of high initial costs

However, there are federal and local government programs that can help lessen the upfront costs. Electric cooperatives can also help farmers in their local territory with energy audits, or with applying for funding from federal programs such as the Rural Energy Savings Program (RESP) or the Rural Business Development Grants (RBDG).

Besides electric irrigation systems and water heaters, the availability of other electric farming technologies is much less common, such as grain dryers, thermal electric storage systems and heat pumps. Many of these electric technologies are still in the early stages of commercialization and have not fully entered the ag market.

The accessibility of these other technologies will depend on a variety of factors, like the type of farm, electricity prices versus fossil fuel prices, and any incentives to decrease upfront costs for buying new equipment. Despite these challenges, there are opportunities for expansion, especially for electric tractors and other electric farm vehicles which are used on many different types of farms. With more time and investment, electric farming equipment will likely become more widespread in the coming years.

Sioux Valley Energy donated food and helped raise more than $3,000 for booster clubs in Brandon, Hartford and Pipestone, MN.

Local Co-op Events Provide Fun, Food and Festivities for Sports Fans

Ben Dunsmoor

Contributing Writer

In northwest South Dakota, clashes on the football field between rival schools are the main attractions on Friday nights. It is where community members can count on connecting with friends and neighbors. It is also a place where high school sports fans can count on seeing employees from Grand Electric Cooperative cooking up a pre-game meal.

"We see people of all ages at the tailgate parties," Grand Electric Cooperative Marketing/Tech Specialist Rachel Eggebo said.

The Bison based cooperative began hosting block parties in the summer months nearly 20 years ago to reach out to the community. In 2009, Grand Electric transitioned to serving up brats, hot dogs, and chips before high school football games to reach families that were busy attending school activities. The co-op says it has been a great way to serve the community and show support for local schools.

"It gives us an opportunity to show our membership that we are there for them. Occasionally, it might be the only time we have to communicate with our busy members," Eggebo said.

Grand Electric is taking a cautious approach to its tailgate parties this year due to concerns surrounding COVID-19. But, if the players are on the field, the co-op is committed to serving up free food at five different games this fall. Grand Electric will make some modifications to the tailgate parties by packaging the food and making it a "grab-and-go" style event for fans.

Grand Electric is not alone in its efforts to partner with local schools and reach out to the community with fun pre-game events. Butte Electric plans to host a tailgate party before the Belle Fourche and Spearfish game this fall. West River Electric holds a tailgating event before the Wall and New Underwood football game and sponsors a basketball tournament in Union Center every November.

Arm wrestling contestants square off during a tailgate party and family fun day hosted by Grand Electric.

Sioux Valley Energy in Colman is also on the tailgating bandwagon. Sioux Valley started hosting events before football games to help its local schools raise money.

"As school funding becomes tighter, booster clubs - and other school organizations run by parents - serve an important purpose," Sioux Valley Director of Communications and Government Relations Carrie Vugteveen said. "Sioux Valley Energy feels that supporting these efforts helps the co-op live out its guiding principle of 'commitment to community.'"

Sioux Valley hosted three tailgate parties in 2019 to raise money for booster clubs in Brandon, Hartford, and Pipestone, MN. Sioux Valley bought all the food and asked for a free-will

Lyon-Lincoln Electric Co-op in Tyler, MN, helped to host a tailgate party where the main attraction was the co-op's Tesla electric vehicle.

donation from fans during the meal. The three events raised more than $3,000 combined for the booster clubs.

FEM Electric Association in Ipswich also partners with local schools to raise money during athletic events. FEM Electric donates 60 cases of bottled water to each school district within its service territory every year. The schools can sell the water in their concession stands and keep all the profits. Each water bottle has an electrical safety message printed on the label which translates into a big win for both the school and the co-op.

The schools can sell the water in their concession stands and keep all the profits.

"We wanted to contribute something to help out the various school programs and at the same time get our safety message out to kids and everyone," Carol Schaffner with FEM Electric Association said.

Lyon-Lincoln Electric Cooperative in Tyler, MN, hosted a "Tailgating with Tesla" party before the Minneota and Canby football game last fall. The co-op partnered with a local youth group to host the event. The co-op bought all the food and the youth group kept all the proceeds from the tailgate party to help pay for a mission trip. It was an opportunity to raise money for a good cause and for Lyon-Lincoln Electric to showcase its Tesla and talk about the benefits of electric vehicles.

"These events are a win-win for the cooperative and the community," Lyon-Lincoln Electric Manager of Marketing and External Relations Brian Jeremiason said. "The co-op is able to deliver a message to a targeted audience and visit about other topics that community members may have. The community benefits by having a face-to-face opportunity to visit with their co-op."

Electric co-op participation in school events is widespread across South Dakota. Northern Electric Cooperative in Bath, Dakota Energy in Huron, Charles Mix Electric in Lake Andes, and Central Electric in Mitchell all participate in local homecoming parades. Lacreek Electric in Martin sponsors a t-shirt toss during basketball and football games. Dakota Energy also hosts "co-op night" during local basketball games. And, Central Electric hosts free popcorn nights at high school basketball and football games to promote electrical safety and give back to the school and community.

So, whether it is a tailgate party, a fundraiser, or a t-shirt toss, it is likely that electric co-ops will be supporting their local schools and communities this fall and winter.

"High school sports are wonderful opportunities to reach out to our communities," Jeremiason said. "Young and old all attend and we can communicate with families as a unit which can be difficult sometimes with the busy lives most families are living."

FEM Electric Association donates bottled water with unique labels to raise funds for schools in the co-op's service area.

Visit Co-op Connections Plus

Take a moment to visit our new online companion to Cooperative Connections. Co-op Connections Plus is a YouTube channel that features a more in-depth treatment of stories appearing in this publication as well as other subjects of interest to rural South Dakotans.

Search for "Co-op Connections Plus" and you'll find videos on human trafficking, the State High School Rodeo finals and grain bin safety. Be sure to "like" and "subscribe."

June 2020 Board Meeting

The regular meeting of the board of directors of Lacreek Electric Association, Inc., was held in the office of the cooperative, located in the Town of Martin, S.D., June 16, 2020, beginning at 4 p.m.

The meeting was called to order by President Allen and the following directors were present: Tom Schlack, Brent Ireland, Wade Risse, Connie Whirlwind Horse, Scott Larson, Marion Schultz, Wade Risse, Troy Kuxhaus, Jerry Sharp via WEBEX and Donovan Young Man via Conference Call. Absent: Neal Livermont and Clifford Lafferty. Also present were General Manager Josh Fanning, Operations Manager Mike Pisha, Finance & Benefits Manager Anna Haynes, Work Order and Billing Manager Sherry Bakley and Member Services Representative Manager Stacey Robinson.

The Pledge of Allegiance was led by President Allen.

A motion was made, seconded and carried to have Member Service Representative Manager Stacey Robinson record the board minutes.

A motion was made, seconded and carried to approve the May 2020 board minutes.

There were no additions to the agenda.

A motion was made, seconded and carried to approve the Operating Report for April that was presented by Finance and Benefits Manager Anna Haynes.

A motion was made, seconded and carried to approve the checks and disbursements for May. (Brent "chairman" Clarence and Wade) The July Check Audit Committee will be (Donovan Young Man "chairman," Connie and Jerry).

A motion was made, seconded and carried to approve the May Analysis of Investments that was presented by Finance and Benefits Manager Anna Haynes.

A motion was made, seconded and carried to approve the list of new members, attached hereto.

Sherry reported that the RUS Audit is still in progress.

Stacey reported on the upcoming Annual Meeting; that the Line Patrol Charity Ride is canceled, however, still doing t-shirt sales and Trigger grill raffle and about the Youth Excursion/Washington D.C., trip that was canceled this year due to COVID-19.

A motion was made, seconded and carried to approve sending two students to the Youth Excursion/Washington, D.C., trip for 2021, which will include this year's 2020 winner Tyler Ring.

Mike gave a safety report.

Mike reported on storms that came through Lacreek's territory; on work in progress; that Kody Hagen has been hired as a 1,000-hr. apprentice lineman and Chandler Bakley has been hired as a 1,000-hr. laborer.

Mike gave a presentation on Tire Boss. A motion was made, seconded and carried to purchase a tire boss that includes a 30-day free trial. 1153202802

Josh reported on the RUS Audit; on COVID-19 testing; about amendments to the workplan; on a solar well spreadsheet; and about TWACS and Meter Demand issues.

A motion was made, seconded and carried to approve amendments #5 – Martin Rural to Weinmaster, #6 – Niobrara West 3 Phase, Kyle Sub Recloser and Scada, Kyle Sub Reinsulate, Shannon Sub 34.5 Breakers and Battery, and #7 – Simmons URD replacement, Allen to Batesland.

Discussion was held on the NRECA Region IV meeting which is held each September; however, the meeting this year will be held virtually online due COVID-19 with a date not yet determined. A motion was made, seconded and carried to have Wade Risse as the delegate and Scott Larson as the alternate.

Discussion was held on the Conflict of Interest forms that are required to be signed yearly.

A motion was made, seconded and carried to approve the 990 Audit form received from Eide Bailly.

Discussion was held on the SDREA Board Leadership Summit in Pierre, S.D., with Clarence planning to attend.

The staff was excused and the board and general manager went into executive session at 6:04 p.m. and came out of executive session at 6:43 p.m.

A motion was made, seconded and carried to approve the Wage and Salary Committee's recommendation for the annual raises to employees.

A motion was made, seconded and carried to appoint Cole Lange to fill the vacant Zone 9 director position to serve until the next annual meeting is held.

No further business was brought before the board and the meeting was adjourned.

Next Board Meeting – July 21, 2020 at 4 p.m.

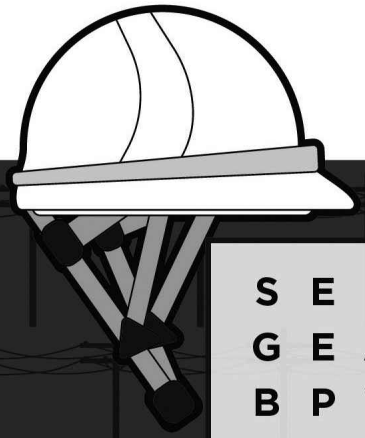
LINEWORKER GEAR WORD SEARCH

Energy Explorers

Did you know lineworkers wear special protective gear to keep them safe while working on power lines and other electrical equipment?

Read the descriptions to learn about a lineworker's gear and find the bolded words in the puzzle below.

- **Safety goggles** keep debris away from lineworkers' eyes while on the job.
- **Hard hats** protect lineworkers from head injuries and falling debris.
- **Work boots** provide extra protection while lineworkers work with heavy materials that could fall near their feet.
- **Flame-resistant** clothing keeps lineworkers safe from electrical hazards.
- **Insulated gloves** protect lineworkers from electrical shock while working on power lines.
- **Equipment belts** hold several tools that lineworkers need to get the job done.



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U	T	K	U	E	H	M	A	O	A	O	U	G	O	S
K	O	Q	N	L	Q	W	L	S	T	K	O	S	U	Q
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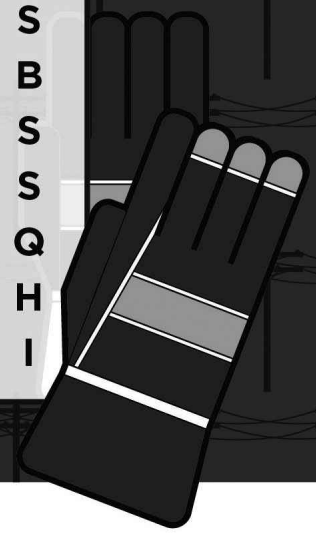


South Dakota's Rural Electric Cooperatives are adapting to the expectations of the next generation of co-op members.

NEXT GENERATION

Young adults figure prominently in the future of the rural electric cooperative movement

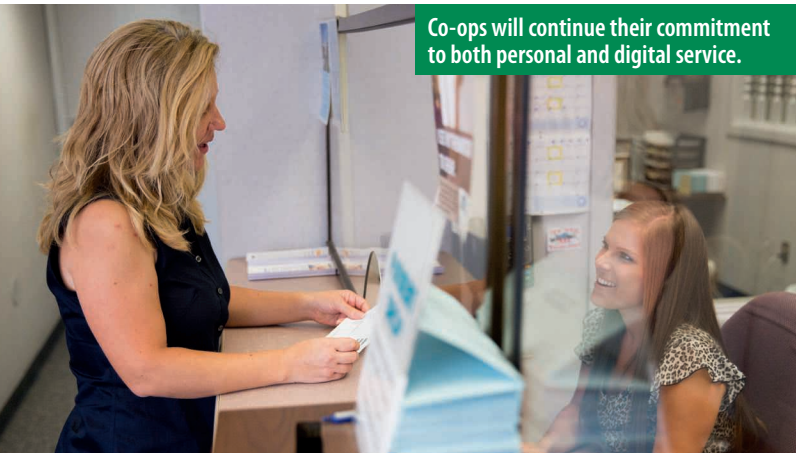
Billy Gibson

Contributing Writer

It's getting harder and harder to find people who can provide a first-person account of what it was like when electrical power came to their communities.

The nation's rural electric program sprang to life more than 80 years ago when an executive order by President Franklin Roosevelt created the Rural Electric Administration (REA). The REA issued low-cost loans that gave local communities the ability to build out power delivery systems to serve their own farms, homes and businesses.

But relatively few of the members served by those cooperatives today actually witnessed the transformation that took place when thousands of small towns and hamlets across the country began enjoying the benefits made possible by electrical power.



Co-ops will continue their commitment to both personal and digital service.

Though many characteristics of electric co-ops have stayed the same – democratic control, focus on quality service, accessibility, commitment to community – other elements have certainly changed over the decades. For instance, some cooperative service areas that were once rural have become suburban as population centers have expanded into spaces that were once sparsely populated farms and fields.

Cooperatives are also taking advantage of modern technology to broaden their menu of services available to members, such as online account management systems, energy audits, pre-pay programs, automated meter reading, renewable power and more.

Yet another change is the generational shift taking place as older board directors, managers, employees and consumers are being replaced with younger folks who have different ideas, different approaches, different plans and different expectations.

In South Dakota, co-op leaders say the changing dynamics present an opportunity to bring innovative ideas and new concepts to the table – all centered around the ongoing mission to deliver power that is safe, reliable, affordable and accessible.

Evan Buckmiller is manager of Kingsbury Electric Cooperative (KEC) based in DeSmet. He is part of a group of younger general managers who have taken the reins at various electric co-ops in the state. He said that over the past decade KEC has seen a 100 percent turnover in personnel and that every current employee

is under the age of 35. The result is a prevailing mindset that's not averse to searching for new ways to "work smarter."

"Our employees are constantly exploring new avenues to operate more efficiently and effectively," Buckmiller said. "They understand that the money people pay for power doesn't grow on trees. Our members expect value, and it's our job to make sure we're using the latest technology to minimize operating costs while improving service and convenience."

He said one advantage of having a younger work force is a greater acceptance of change, more flexibility and being open to new approaches to addressing issues.

"We've made wise investments in new equipment that we never would have considered in the past," Buckmiller said. "Our employees don't mind trying something new. They don't mind going through the training process. Having grown up in the internet age, they adapt well to learning things like new computer-based applications and software."

Some of those changes include a new barcoding program to track inventory, using iPads for preparing timesheets and taking service orders online.

Jay Spaans, manager of Douglas Electric in Armour, echoed Buckmiller's observations regarding younger employees. Two of his seven staff members are expected to retire in the not-too-distant future. They represent a combined 96 years of service.

"That's a lot of institutional knowledge

Kingsbury Electric Co-op Manager Evan Buckmiller leads a staff of young employees who understand the co-op's mission.

walking out the door, and as a manager you wonder if the next generation will be as dedicated to the co-op as them," Spaans said. "I'm sure that whoever we hire will have grown up with technology and will have new ideas. I see that as a benefit."

When it comes to engaging younger consumers, co-ops across the state maintain social media platforms such as Facebook, Instagram, Twitter and others. West River Electric based in Wall, is representative of many South Dakota co-ops that use an array of digital tools to track the organization's member engagement.

Public Relations Manager Robert Raker said diversity and the strategic use of various social media channels is the key to making sure the lines of communication remain open across the age spectrum.

Younger members expect their cooperative to provide information through social media platforms.

"We use Facebook and our printed newsletter to appeal to our older members," he said. "We use Instagram and Tik Tok to reach our younger members, and we're beginning to deploy Linkedin to interact with our technology and business accounts."

There's even a specific approach to communicating internally, Raker said.

"We're using Snapchat to communicate with some of our crews in the field because

One advantage of having a younger work force is a greater acceptance of change, more flexibility and being open to new approaches.

we've found that our young linemen prefer to use Snapchat rather than a conventional email account."

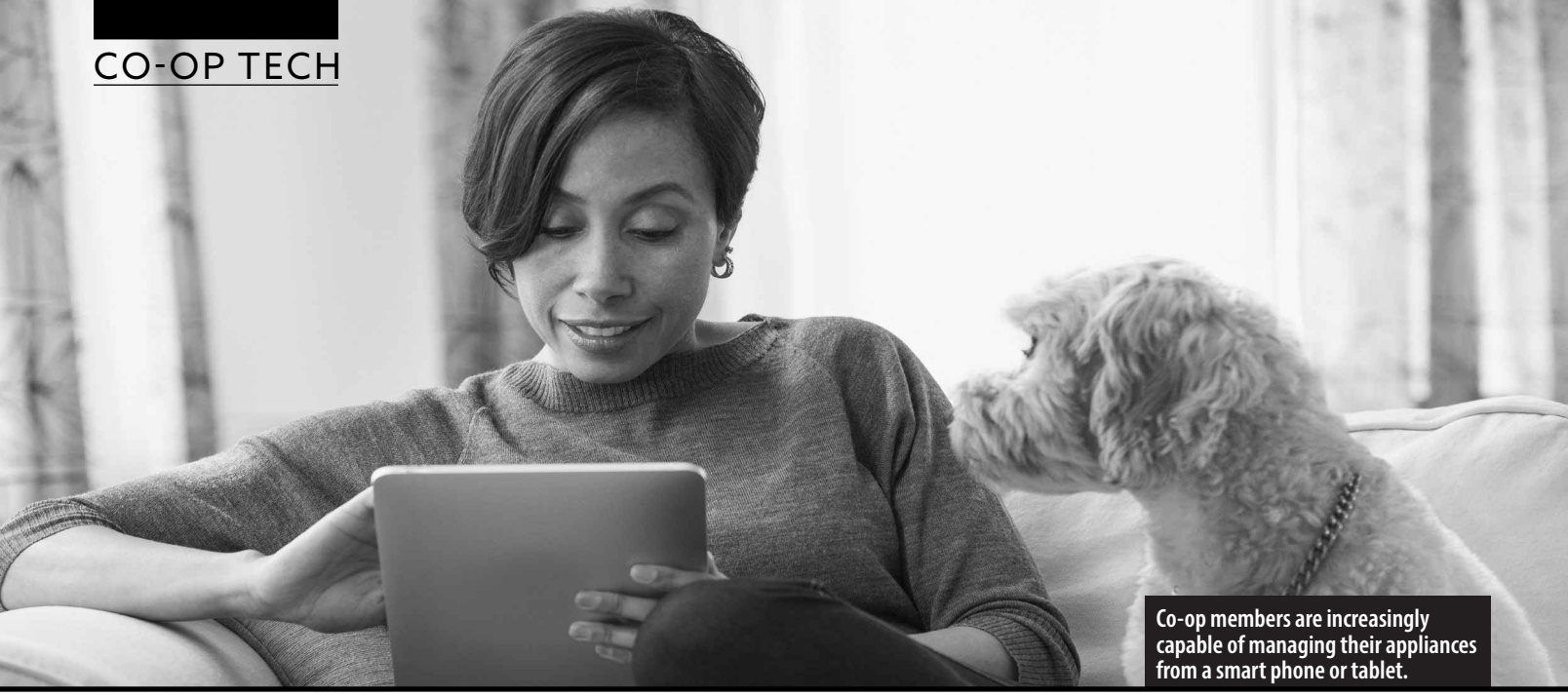
Chad Felderman, CEO/General Manager at Dakota Energy in Huron, said it's important for co-ops to balance their approach so that the interests of all age groups are taken into account.

Part of that strategy of fostering connectedness across generations is to get out of the office and meet members at events that attract a cross-section of people.

"In order to interact with all age groups, we have been present at sporting events, parades and event booths. It's more difficult due to the pandemic, but this is our goal," Felderman said. "This has allowed us to engage with members of all ages and creates an overall increase in knowledge of who we are and what services we provide. Utilizing Facebook, the website and text messaging has been a great way to inform members and makes us more visible in our communities."

Matt Klein, General Manager at Union County Electric in Elk Point, said he has noticed the older generation has been receptive to change, albeit at a more measured pace.

"In general, our older members want to come to the office and pay by check and get a receipt, while our younger members are more comfortable paying online, having us withdraw directly from their back account, or setting up recurring charges to their credit card," Klein said. "Now that we offer these other payment options, we are seeing more of the older generation using them. So they are clearly becoming more comfortable with this, but are a bit slower to adopt the change."



Co-op members are increasingly capable of managing their appliances from a smart phone or tablet.

CO-OP TECH

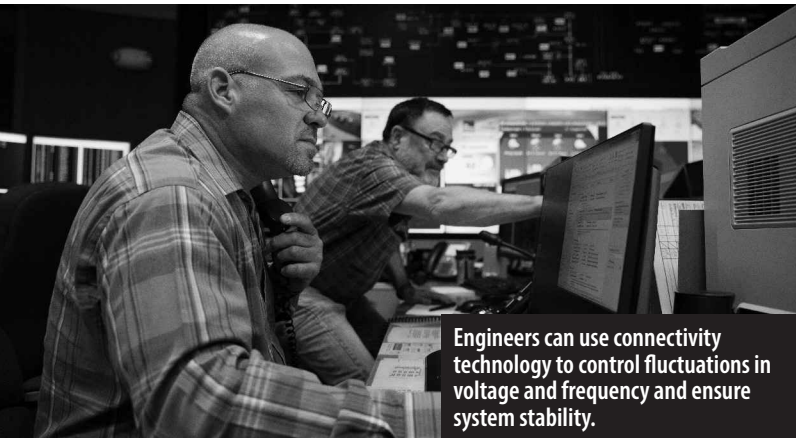
Electric Co-ops Adopt High-Tech to Improve Service

By Billy Gibson

Contributing Writer

The terms "rural" and "technology" may appear to be contradictory concepts.

However, rural electric cooperatives all across the country are adopting advanced scientific techniques and methodologies while leading the charge to discover bold new ways to deliver power that is safe, affordable, reliable and accessible.



Engineers can use connectivity technology to control fluctuations in voltage and frequency and ensure system stability.

For instance, more than 100 cooperatives nationwide are working behind the scenes to build out high-speed broadband networks in their service areas. Many others are involved in developing clean energy sources, implementing automated meter-reading systems, applying state-of-the-art cybersecurity safeguards, adding convenience to the bill-paying process, exploring ways to use energy more efficiently and much more.

South Dakota's rural electric cooperatives are among the prime-time players in this high-tech game.

H-D Electric Cooperative, which is based in Clear Lake and serves 3,600 meters, recently completed a pilot project in collaboration with the National Rural Electric Cooperative Association (NRECA).

The goal of the research program funded by the U.S. Department of Energy was to field test the effectiveness of an automated load management mechanism called GridBallast.

When it comes to properly managing grid-scale electrical power, load control is paramount for both safety and efficiency reasons. Engineers vigilantly monitor and control any differences detected in voltage and frequency along power grids that can stretch for many miles. Excessive fluctuations in voltage and frequency can cause damage to devices all along the grid and present a safety hazard to members.

These fluctuations have always been a chief impediment in the development of renewable energy sources such as wind and solar. Renewable power sources are often described as "intermittent" because of the variation in their productivity. The task of load management is made more challenging when clouds block the sun and the wind changes speed and direction.

GridBallast is a technology that can detect changes in the flow of energy and quickly and automatically adjust the load on the demand side by switching on or off water heaters or other connected devices and circuits in the home. It was a severe and persistent frequency imbalance that led to the historic blackout that occurred throughout the Northeast region in 2003.

H-D Electric CEO and General Manager Matt Hotzler got the co-op involved in a pilot program testing the GridBallast device.

GridBallast, developed in collaboration with Carnegie Mellon University, Eaton and SparkMeter, also has the potential to reduce a system's dependence on its communications network while protecting against cyberattack.

H-D Electric CEO and General Manager Matt Hotzler expressed reservations about how autonomous load control would be received by the co-op's consumers.

He invited 15 H-D Electric members to participate in the pilot program over a span of three months. After the study was concluded, Hotzler reported that the results were promising.

"We didn't see any problems at all," Hotzler said.

Paramount to this load management approach, Hotzler pointed out, is that it opens up a plethora of new possibilities regarding the types of loads that can be managed in the future.

The ability to control demand has been an effective means of managing peak load.

Hotzler said that the co-op is always eager to explore new ways to promote a more stable system while maintaining affordable rates.

"With our current load management system that we have in place, it is certainly important right now for our rates and our members. I think that's why we have such a good buy-in from our membership," Hotzler said.

Hotzler noted that H-D Electric has 2,150 water heaters on its existing load management program that can be controlled by the co-op's wholesale supplier, East River Electric. H-D Electric is one of 250 other co-ops in 35 states that have similar programs.

That ability to control demand has been an effective means of managing peak load. But as more renewable power sources enter the grid, automated control performed through a device like GridBallast may take on greater importance in years to come.

"As distributed generation starts to come on a bit more, and possibly becomes majority renewable, it probably will have a real role in stabilizing the system," Hotzler said. "The Department of Energy projects that renewable power will be the single largest generation source on the North American grid by 2045. That will require finding new ways to manage the grid."

Intermittent sources of electricity will make automated load management more important than ever.

East River Electric has also been involved in another research partnership with NRECA and Dakota State University in Madison. The Connected Home Research Project based at the university's Madison Cyber Labs center was designed to create a "home hub" that would enable smart devices in the home to communicate with the cooperative.

East River Electric is a generation and transmission entity that provides wholesale power to 25 distribution member systems in eastern South Dakota and western Minnesota.

Chris Studer, chief member and public relations officer for East River Electric, said, "While current technologies can help manage electricity usage and benefit consumers, we noticed a gap between the capabilities of those technologies and the needs of our utility network to connect to those technologies. We hope to close that gap through this project."

Studer said cooperative consumers have demonstrated their eagerness to adopt smart-home technology to exercise more control over their energy use, save money and add convenience.

While consumers can use their smartphone devices to adjust thermostats and lighting, many apps designed for this purpose are produced by different companies. Home Hub is an effort to develop an integrated dashboard that would allow these programs to communicate through one centralized source.

East River invested roughly $14,000 on appliances, cabinets and technology at the lab facility. The research space at Madison Cyber Labs resembles a kitchen equipped with smart products and appliances such as lighting, window coverings, a water heater, security system and a washer and dryer. Plans include adding an electric vehicle charger and smart locks.

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

South Dakota's Touchstone Energy® Cooperatives will not have a booth this year at the state fair due to COVID-19 safety concerns.

August 26-30
Corn Palace Festival, Mitchell, SD, www.cornpalace.com
605-995-8430

August 27
PRCA Xtreme Broncs Finals
7-9:30 p.m., Central States Fair, Rapid City, SD
www.centralstatesfair.com

August 27-30 CANCELED
Annual Steam Threshing Jamboree featuring John Deere, Madison, SD
605-256-3644

August 28-29
Pioneer Museum Excess Sale
9 a.m. to 4 p.m. Pioneer Museum, Hot Springs, SD
605-745-4616

August 29-30
Fall River Hot Air Balloon Festival, Municipal Airport, Hwy 79, Hot Springs, SD
605-745-4140

September 3-5
South Dakota State Fair: Perfect Vision of Fun,
1060 3rd St. SW, Huron, SD
800-529-0900
www.sdstatefair.com

September 6
Studebaker and Packard Car and Truck Show, 10 a.m. to 3 p.m., Custer, SD
605-718-7431

August 29-30
Fall River Hot Air Balloon Festival

September 7
Hidewood Valley Steam Threshing Show, 1 p.m., 47326 183rd Ave., Clear Lake, SD, 605-881-8405

September 12
Central Valley Struttin' Gobblers NWTF Banquet, Dakota Plains Event Center Hartford, SD, 5:30 p.m.
605-941-4297

September 12-13
Fall Harvest Festival, Delmont, SD, 605-928-3792, www.twinriversoldiron.org

September 13
20th Annual Antique Tractor and Car Parade, 1 p.m., Farmer, SD, 605-239-4498

September 19
Health Connect's Human Race, Elmwood Park, Sioux Falls, SD, 8 a.m. 888-761-5437

September 19
Health Connect Fair, Sanford Pentagon, Sioux Falls, SD, 11 a.m. to 5 p.m., free lunch, door prizes and flu shots
888-761-5437

September 25-27
Coal Springs Threshing Bee Featuring Massey Harris Tractors, Meadow, SD,
605-788-2229

September 26 CANCELED
10th Annual ROCS Fall Festival, 9 a.m.to 2 p.m., Springfield, SD, 605-464-7379

September 26
Wheelin' to Wall, Wall Community Center, Wall, SD

October 3 CANCELED
Hobo Marlin's Pumpkin Train
11 a.m., Madison, SD
605-256-3644

October 7-8 CANCELED
Energize! Explore Innovative Rural Communities Conference, Milbank, SD, https://extension.sdstate.edu

October 31-November 1
Dakota Territory Gun Collectors Assn. Sioux Falls Classic Gun Show, 3200 W Maple St. Sioux Falls, SD, 605-630-2199

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.