

# COOPERATIVE CONNECTIONS

## Invasive Species

**Zebra Mussels  
on the Missouri**  
Pages 8-9

**Drone Spraying**  
Pages 12-13

# Touchstone Energy® Cooperatives: Adding Value to Local Co-ops



**Tim McCarthy**  
General Manager/  
Chief Executive  
Officer

Tim.McCarthy@  
siouxvalleyenergy.  
com

Sioux Valley Energy is a Touchstone Energy® Cooperative. The co-brand is part of our logo. But many times, members ask, “What does that mean?”

A touchstone is an actual stone that was used to determine the purity of gold – it essentially establishes the gold standard. And that is what Touchstone Energy is to us – it’s a commitment that we will work harder, live up to higher standards, and always put our members first because we are striving to be that gold standard in the electric utility industry.

Touchstone Energy is a national network of electric cooperatives across 46 states providing research, communications resources, and employee training programs that help its member cooperatives better engage and serve their members. Being a member of a Touchstone Energy cooperative, like Sioux Valley Energy, means you are served by a not-for-profit cooperative committed to the core values of integrity, commitment to community, accountability, and innovation and puts members first setting it apart from other utilities.

This year, Touchstone Energy chose Sioux Valley Energy to be part of its national ad campaign focused on safety and community service (photo below). We are humbled by their recognition of our commitment to both of these important topics as they are ingrained into our cooperative culture. As part of this campaign, you will see many of our employees featured in the ads. We anticipate the ads to begin running throughout the country in January.

Locally, Sioux Valley Energy utilizes a significant number of resources from Touchstone Energy. As an electric cooperative, we can tap into trainings and other assets that bring value to our members and employees. A great example is the Service Excellence program

that our employees took part in and certified Sioux Valley Energy as a Four-Star Cooperative, a distinction very few hold in this industry. We also have access to the Touchstone Energy WebBuilder program which provides web design, security, and hosting services. Our new website was developed through the WebBuilder program. The list of resources goes on and on including the Co-op Connections Card, creative member engagement assets, and energy efficiency, renewable energy, beneficial electrification educational information, etc.

On the national level, Sioux Valley Energy is actively involved in the governance of Touchstone Energy. I serve as the President of the national Touchstone Energy Board of Directors. Carrie Vugteveen, our Vice President of Public Relations, is a past board member and now chairs the organization’s Brand Strategy committee. Additionally, Ben Pierson, our manager of Beneficial Electrification serves on the Cooperative Performance and Research committee. In these roles we are able to provide input and develop strategy for the organization, ensuring that Touchstone Energy continues to add value to its member cooperatives like Sioux Valley Energy.

Finally, I just wanted to say thanks to all our members who have stopped by to visit at summer events, waved at us in parades, and much more! It’s been a busy, but fun summer and we hope to see you at some upcoming events like



## COOPERATIVE CONNECTIONS SIOUX VALLEY ENERGY

(USPS No. 497-440)

**Board President:** Gary Fish

**Board of Directors**

Dan Leuthold - Vice

President

Don DeGreef - Secretary

Dave Daniel - Treasurer

Rodney DeMent

Dr. Leslie Heinemann

Gregg Johnson

Mark Rogan

Lucas Roskamp

Ann Vostad

Allan Weinacht

**CEO/General Manager:** Tim McCarthy

**Chief Financial Officer:** Jason Maxwell

**V.P. of Engineering & Operations:** Ted Smith

**V.P. of Human Resources**

**& Member Services:** Kimberlee Hansen

**V.P. of Public Relations:** Carrie Vugteveen, Editor

**V.P. of Technology:** Justin Moose

**Executive Assistant:** Brenda Schelhaas

*Sioux Valley Energy Cooperative Connections* is the monthly publication for the members of Sioux Valley Energy, PO Box 216, Colman, SD 57017. Families subscribe to *Sioux Valley Energy Cooperative Connections* as part of their electric cooperative membership. The purpose of *Sioux Valley Energy Cooperative Connections* is to provide reliable, helpful information to Sioux Valley Energy members on electric cooperative matters and better living.

**Subscription information:** Sioux Valley Energy members devote 50 cents from their monthly electric payments for a subscription. Non-member subscriptions are available for \$12 annually. Periodicals Postage Paid at Colman, SD 57017 and at additional mailing offices.

POSTMASTER: Please send address changes to *Sioux Valley Energy Cooperative Connections*, PO Box 216, Colman, SD 57017; telephone 605-534-3535; toll free 800-234-1960.

How to contact us: Phone: 1-800-234-1960  
e-mail: sve@siouxvalleyenergy.com  
Website: www.siouxvalleyenergy.com

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its agencies, offices and employees, and institutions participating in or administering USDA programs are prohibited from discriminating on the basis of race, color, national origin, age or disability. Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g. Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found on-line at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed complaint form or letter to USDA by:

- (1) mail: U.S. Department of Agriculture  
Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, S.W.  
Washington, D.C. 20250-9410
- (2) fax: (202) 690-7442; or
- (3) email: [program.intake@usda.gov](mailto:program.intake@usda.gov)

**Sioux Valley Energy is an  
equal opportunity provider and employer.**

# LET'S TAILGATE!



**Sioux Valley Energy is providing the tailgate meal  
before several area high school football games this fall.**

**Free will donations for the meal  
go to the host school's booster club.**

*Unless otherwise noted, all games have the meal  
served from 5:30 p.m. to 6:45 p.m. with a 7 p.m. kickoff.*

**Friday, Aug. 25**

**Colman-Egan Hawks at Deubrook Dolphins**  
Deubrook Athletic Complex • West Fifth Street, White, SD

**Saturday, Sept. 2**

**PIGSKIN CLASSIC:**

**Harrisburg Tigers at Brandon Valley Lynx**

**Meal: 4:30 p.m.-5:45 p.m. • 6 p.m. kickoff**

Brandon Valley Outdoor Complex  
301 S Splitrock Blvd., Brandon, SD

**Friday, Sept. 29**

**Tri-Valley Mustangs at West Central Trojans**  
West Central High School • 705 E Second St. • Harford, SD

**Friday, Oct. 6**

**Hills-Beaver Creek Patriots at Edgerton Flying Dutchmen**  
Edgerton Football Field • Edgerton, MN

# No One Can Take Your Place

## National Farm Safety and Health Week Sept. 17-23, 2023

The 2019 data for the U.S. Bureau of Labor Statistics indicates that the agricultural sector is still the most dangerous in America with 573 fatalities, or an equivalent of 23.1 deaths per 100,000 workers.

Fall harvest time can be one of the busiest and most dangerous seasons of the year for the agriculture industry. For this reason, the third week of September has been recognized as National Farm Safety and Health Week.

This annual promotion initiated by the National Safety Council has been proclaimed as such by each sitting U.S. President since Franklin D. Roosevelt in 1944. National Farm Safety and Health Week is led by the National Education Center for Agricultural Safety (NECAS), the agricultural partner of the National Safety Council.

### Did you know?

- Rural roads pose special dangers especially during harvest season. Watch out for slow-moving farm vehicles and be informed, aware, and patient while sharing rural roadways.
- Farm stress is real, and many things like weather events, tragedies, market uncertainty, or diseases can tip us out of our comfort zone.
- Every day, about 33 children are seriously injured in agricultural-related incidents.
- Hazardous gasses on farms can be found in silos, manure storages, grain bins, and other confined spaces. Be in the know about hazardous gasses and where they can be found on farms.

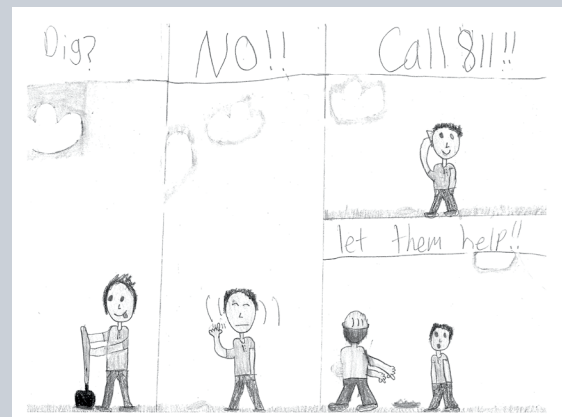
Farm and ranch life can be demanding and stressful. Over the past several years, it has reached a critical stage for the folks who grow America's food with COVID-19 pandemic impacts on top of natural disasters, extreme weather events, financial pressures due to fluctuating commodity prices, labor shortages, trade disruptions and a

long list of other factors. Given these ongoing challenges, it's no surprise that more farmers and farm families are experiencing stress and mental health concerns.

Today, safety professionals still use this promotional week to remind those working in our nation's most dangerous industry to be careful. Agriculture's death rate is why farmers and ranchers must use safe farming practices during harvest and throughout the year.

South Dakota's electric cooperatives urge our agricultural producers to make better safety and health decisions this harvest season and during the next year. Join us in promoting safety during the 80th annual **National Farm Safety and Health Week Sept. 17-23, 2023**.

During this time, please encourage others to adopt safe practices and behaviors as we prepare to prevent injuries during this harvest season.



### Call 811!

#### Evey Hinrichs, Age 9 3/4

Evey Hinrichs advises people it's not safe to dig before calling 811. Evey is the daughter of Kelby and Carrie Fey from Aberdeen, S.D., members of Northern 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.

# DIPS AND SPREADS

## SPINACH DIP

Ingredients:

- 16 oz. sour cream
- 1 cup mayonnaise (must be mayo)
- 1 pkg. frozen chopped spinach, thawed and drained
- 1 can water chestnuts, chopped
- 1 tbsp. minced onion
- 1 tsp. season salt
- 1/2 tsp. Accent
- Dash of Worcestershire sauce
- 2 dashes of hot sauce

**METHOD**

Serve with Club or Ritz crackers.

Linda Hubbard  
Rapid City, S.D.

## CREAMY CINNAMON DIP

Ingredients:

- 1 pkg. (8 oz.) cream cheese, softened
- 1 container (8 oz.) sour cream
- 1/4 cup packed brown sugar
- 2 tbsps. milk
- 2 tps. ground cinnamon
- 1 tsp. all natural pure vanilla extract

**METHOD**

Beat all ingredients in medium bowl with electric mixer on medium speed until well blended. Spoon into serving bowl. Cover.

Refrigerate until ready to serve. Serve with fresh fruit slices, cookies or pound cake or angel food cubes.

[mccormick.com](http://mccormick.com)

## CARAWAY CHEESE SPREAD

Ingredients:

- 1 container (12 oz.) Cheddar cheese spread, at room temperature
- 2 tps. minced onions
- 1 1/2 tps. whole caraway seed
- 1/2 tsp. Lawry's® Seasoned Salt

**METHOD**

Mix cheese spread and seasonings in medium bowl. Cover. Refrigerate at least 2 hours to blend flavors.

**Serving Suggestion:** Serve with assorted vegetables such as celery sticks, cherry tomatoes, jicama sticks, carrot sticks, endive leaves, and/or assorted crackers.

[mccormick.com](http://mccormick.com)

Please send your favorite recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in December 2023. All entries must include your name, mailing address, phone number and cooperative name.

# Electric Vehicle (EV) Q&A



**Sheila Gross**  
Energy Services  
Specialist

**Contact Sheila Gross** at [sheila.gross@siouxvalleyenergy.com](mailto:sheila.gross@siouxvalleyenergy.com) to learn more. Check out our rebates and incentives here:



## HOW MUCH DOES IT COST TO OPERATE AN EV?

Using SVE's regular electricity rate of 10.26 cents per kWh, a Battery EV (BEV) that drives 15,000 miles a year and can travel three miles per kWh will cost about \$513 annually or charging on SVE's off-peak special rate of 5.84 cents per kWh would cost about \$292 annually. In comparison, a gas-powered vehicle that gets 25 mpg with gasoline at \$3.50 per gallon will cost approximately \$2,100 for that same distance—that's a big savings.

## HOW FAR CAN I GO ON A CHARGE?

Range anxiety and the fear of getting stranded from a battery running out of charge can be a real concern to a prospective car buyer. With today's technologies, the average all-electric vehicle can go nearly 300 miles on a single charge which covers the daily commute for most drivers, even in rural areas. Plug-in hybrids (PHEV) have an average range of 20-50 miles on the electric battery, along with having a gasoline engine

for backup. The benefit of being able to charge your vehicle at home at very reasonable costs allows you to start the day with a charged battery. Workplace charging options and the continued development of public charging infrastructure across the country will also make traveling easier.

## HOW WELL DO EVS PERFORM IN THE WINTER?

All vehicles, electric or otherwise, will experience some level of decreased performance in the winter months. On the coldest days, when drivers are blasting their heaters, EVs may lose up to 40% of their range. However, that loss can be minimized by keeping your vehicle in a warm garage or utilizing the vehicle's pre-heating features. An EV's center of gravity and weight distribution helps bolster its traction on slippery surfaces.

## HOW LONG DOES IT TAKE TO CHARGE AN ELECTRIC VEHICLE?

How long it takes depends on how you plan to charge it. There are different charging levels:

**Level 1** – Uses a standard 120-volt outlet providing the slowest

charge to the battery, adding two to five miles per hour. Level 1 charging may be suitable for people who drive a plug-in hybrid electric vehicle or have very short commutes.

**Level 2** – This is the most commonly installed equipment for all-electric vehicles in homes. You may also see them in public locations where people may be parked for a couple hours. It uses a 240-volt NEMA 14-50 receptacle or wall-mounted charger and adds between 10-60 miles per hour on to the battery. A level 2 charger will fully charge a vehicle overnight.

**Level 3** – This is the fastest form of charging and requires DC Fast Charge equipment. They are used for longer distance traveling and located in high-traffic areas and along highway corridors. It will charge an EV car battery up to 80% capacity in 30 minutes. There are multiple apps and websites to locate public charging stations.

## ARE REBATES AVAILABLE?

Learn about any available Federal consumer credits for EVs at [www.fueleconomy.gov](http://www.fueleconomy.gov). SVE also has incentives available listed below.

## SVE Electric Vehicle Incentives

### RATE OPTIONS

- **Time of Use Rate (TOU):** Take advantage of off-peak rates for whole home usage, including EV charging.
- **Plug-in Rate:** Take advantage of off-peak rates for electric vehicle charging (submeter required).

Refer to current rate schedules on the SVE website for info on Plug-in and TOU Rates.

### REBATE OPTIONS

- [www.siouxvalleyenergy.com/programs-and-rebates](http://www.siouxvalleyenergy.com/programs-and-rebates)
- **New EV Purchase Rebate:** Receive a \$500 rebate for the purchase of a battery electric vehicle (BEV) or \$250 rebate for a plug-in hybrid electric vehicle (PHEV). *Requires the selection of the TOU Rate or Plug-In Rate.*
  - **Rebate for one year's worth of Renewable Energy Credits (RECs):** Choose to offset 100% of your energy

with renewables for the first 12 months after the purchase of an electric vehicle.

- **EV Ready New Home Rebate:** \$300 rebate for a newly constructed home that at a minimum has 1-inch conduit installed from the breaker panel to the garage to provide a means for future EV charger installation. If preferred location is known, installation of a 40-amp

(minimum) branch circuit and NEMA 14-50 receptacle is also acceptable

- **Commercial EV Program:** Ask us about available programs.





## Event at W.H. Lyon Fairgrounds to show off EV technologies

Sioux Valley Energy and other area utilities are heading to the W.H. Lyon Fairgrounds to showcase electric vehicles. This is the third annual event in which Sioux Valley Energy has been involved.

This year's EV Expo will be held in the parking lot east of the grandstand at the W.H. Lyon Fairgrounds in Sioux Falls.

The event is being sponsored by Sioux Valley Energy, Southeastern Electric, East River Electric, Xcel Energy, Sioux Falls Electric Light and Power, and Sioux Falls Sustainability.

As with previous events, the EV Expo will feature an EV car show and test drive opportunities with several local dealerships. If you have an EV you would like to display at the EV Expo, contact Ben or Sheila at 800-234-1960. Additionally, recreational vehicles like e-bikes and electric lawn equipment will also be on display. A food truck will be available for attendees to purchase food.

Plan to attend the third annual EV Expo on Tuesday, September 19 at the W.H. Lyon Fairgrounds from 4 to 7 p.m.



Tuesday, Sept. 19, 2023  
4 p.m. to 7 p.m.

W.H. Lyon Fairgrounds  
Sioux Falls, South Dakota



# INVASIVE SPECIES

State run boat checks and washing stations aim to reduce the spread of aquatic invasive species, such as zebra mussels, in South Dakota.

## Zebra Mussels and Their Impact on the Missouri River

**Frank Turner**

frank.turner@sdra.coop

The Missouri River in South Dakota, renowned for its outstanding recreational areas, fishing holes and scenic campgrounds, draws a wide swath of tourists from around the world. However, these welcoming public waters have become the home of one unwelcome intruder—the infamous zebra mussel.

Endemic to southeastern Europe, the zebra mussel made its journey to the United States Great Lakes in the '80s as an unlikely stowaway, clinging to the hulls of large ships and barges. Since their arrival, the mussels have proliferated across the Midwest, spreading from one river system to the next.

So how can a mollusk, merely the size of a fingernail, inflict millions of

dollars in economic damage to local recreation, agriculture and hydroelectric power generation? Martin Goding, Gavins Point Dam maintenance and operations manager with the U.S. Army Corps of Engineers, explains that one zebra mussel can spawn more than a million eggs in a season, overrunning the local ecosystem. Once established, the mussels latch onto every viable surface in the water—they envelop pipes, ruin beaches and disrupt hydroelectric dams.

In 2015, local governments detected South Dakota's first infestation of zebra mussels in Lewis and Clark Lake. Goding says this discovery ignited a fierce battle against the invasive species.

“We are in the war to eradicate the zebra mussel, but I don't think we're ever going to completely eliminate them,” said Goding. “They are multiplying faster than we can get rid of them.”



Zebra Mussels completely envelop Gavins Point Dam's water gates, adding up to an additional 30 tons of weight.





With few effective treatments at their disposal, the U.S. Army Corps of Engineers has been forced to adjust to operating within a river infested with mussels. The change has significantly

increased the maintenance costs associated with running Gavins Point Dam. Pipes, essential for cooling the dam as it produces electricity, now require routine disassembly and cleaning. Over the course of six months of warm weather, the dam's lakeside gates collect an additional 30 tons of weight from the relentless accumulation of zebra mussel shells and the debris they carry.

"We have spent a million and a half dollars over the last five years just in maintenance to deal with this invasive species—and that's not even counting the cost of materials," said Goding. "Zebra mussels have really impacted the operation and turned maintenance into a nightmare."

Beyond maintenance, zebra mussels have also disrupted power generation. Outbreaks of zebra mussels within

the dam's infrastructure have resulted in unscheduled and forced outages, interrupting an energy source that has been historically reliable.

"One could safely say that Gavin Point Dam has lost a million dollars in power generation over the last five years," said Goding.

Since the initial invasion in 2015, some strategies have emerged to mitigate damage from the invasive species. The introduction of UV lights and the addition of strainers have curbed the presence of zebra mussels within the dam. Even still, the mussels have continued their spread northward through the Missouri River to Lake Sharpe near Pierre, S.D.

According to Goding, the experiences at Gavins Point Dam serve as a stark warning for dams and water systems yet to face infestation.

"Lewis and Clark Lake is beyond prevention," said Goding. "We have crossed that bridge and they are not going away."





## Cut Crops, Not Corners

Harvest is upon us and Sioux Valley Energy would like to remind farmers to stay safe this season. Overhead power lines can be easily overlooked and deadly if ignored. While you focus on getting those crops out of the ground, Sioux Valley Energy urges you to review these important tips.

### BE ALERT.

Awareness doesn't spread as fast as an electrical current, but a little goes a long way. Remember to look up and look out for power lines this harvest season. Follow these Four S's to Stay Safe.

- **STAY ALERT.** Avoid distractions when operating farm equipment. While harvest days can run long, failure to be aware of your surroundings can lead to power line contacts and other accidents.
- **SLOW DOWN.** Cold weather often delays harvest in our region. If you get in the fields later than you had hoped, avoid the temptation to rush through your work. Slow down and stay safe.
- **STUDY.** Educate yourself on any new equipment you may have purchased recently. New equipment has higher antennas and attachments than ever before. What cleared power lines in previous years may not in your new ride. Know what you're working with.
- **SEARCH.** Sometimes trees or brush can make power lines difficult to see. Don't just glance up, really take a minute to search your surroundings when moving equipment.

### BE PREPARED

Hitting a power line can be scary. In certain situations, there may be a lot of noise, which may spur your instinct

to run—you've got seconds to understand what's happening and respond appropriately. Do you know what to do if you come in contact with a power line?

- **STAY PUT.** Unless there is a fire, you need to stay calm and stay in the vehicle. Touching the ground and the vehicle at the same time (i.e. stepping out of the equipment) can be deadly. Don't risk becoming a conduit for the electricity to move from the vehicle to the ground through you, stay put. Even if it's loud.
- **CALL FOR HELP.** Call for help from the vehicle if possible. 911 is a good place to start, especially if you don't know your local electric cooperative's number. If you don't have your phone, try radioing for help. If someone comes to assist you, they need to stay at least 40 feet away from the vehicle until professional help has arrived.
- **JUMP CLEAR.** If there is a fire forcing you to leave, jump clear of the equipment. Jump with your feet together, as far away from the vehicle as possible. Be sure that no part of your body touches the equipment and the ground at the same time. Then, shuffle (tiny, quick steps) or hop with your feet together at least 40 feet away. Electricity spreads through the ground in ripples. Keeping your feet together prevents one foot from stepping into a higher voltage zone than the other foot, which could cause electrocution. Stay away from the equipment and keep others away until the authorities tell you it's safe to return.

Remember these life-saving tips while working in the fields this fall and help spread the word about the dangers of large farm equipment and overhead power lines. Together, with the power of prevention, we are re-energizing farm safety.

# BRANDON EXPANSION BEGINS

Work began in July 2023 on a 32,500 square-foot addition to Sioux Valley Energy’s Brandon Service Center. This is part of a long-range plan that may eventually include additional Co-op owned facilities in western Minnehaha county. Over the next 25 years, the Co-op expects to add an additional 22,000-plus members and between 50 and 60 megawatts of electric load on its system just in Minnehaha county.

The expansion of the current facility will add offices, truck and wash bays, additional space for the warehouse, and a training facility for employees.

The expansion project is expected to be complete by the end of 2024.



**Below:** Architect’s rendering of what the expanded Brandon facility will look like upon completion. The northwest addition features an employee training center while the southeast includes additional offices with room for future employee growth. **Lower left:** Footings are poured on the southeast addition.



## BASIN ELECTRIC BUS TOUR

Forty-five Sioux Valley Energy members traveled to North Dakota to visit Basin Electric Power Cooperative facilities to see how electricity used by the Co-op is produced. The group also stopped at the Oahe Dam at Pierre, South Dakota.



The group took a Missouri River excursion on the Lewis & Clark Riverboat at Bismarck, North Dakota.



Participants took one last group picture when they returned to SVE’s Colman Service Center.





# Drone Spraying

## A Modern Tool in Today's Agriculture

Scott Waltman

As modern agriculture continues to evolve, drones are one of the newer tools farmers can use to help their land and crops.

The hovering, unmanned aircraft can be handy for small areas and places it's difficult for traditional spraying options to get to, according to those who offer the service to those in the ag sector.

Drones aren't the weapon of choice to spray chemicals on 1,500 acres of corn or soybeans, but that day is likely coming, said Derek Ver Helst, who operates Dakota Unmanned Aerial in Brandt.

Closer to the coasts, drones are already used for a multitude of purposes that aren't just fun and shooting videos. They are only going to become more prominent in ag-heavy states like the Dakotas, he said.

"The possibilities are pretty much

just limited by your imagination," Ver Helst said.

He said his background as an agronomist piqued his interest in spraying with drones. Dakota Unmanned Aerial is a side hustle he started about two years ago. He works as a senior conservation agronomist for AgSpire.

Nick Williams had a background in agriculture working for CHS Cooperative and selling farm equipment before starting Williams Drones southeast of Parkston in August 2020. Business has been good, he said, estimating that it has doubled each year.

"It's really taken off, it continues to grow," Williams said.

He and Ver Helst agree that farmers have been receptive to the relatively new option, willing to give it a try when the project isn't too big.

Williams said he does mostly ag-related work. In late July, he was staying busy with fungicide applications.

Drones are great near shelter belts and around wet areas. Those are places



that are hard for a land rig or spray plane to get to. Drones work better because they are smaller and more agile, he said.

A route is mapped out and the drone reads that information and flies mostly autonomously, Williams said.

He sets the height, speed, gallons of application per acre and swath width. Once a drone is in the air, it does almost all of the work, though Williams said he can control the height a little, if needed.

Drones have sensors and other features so they don't run into trees, equipment, wind turbines or structures, he said.

Depending on the amount of land to be sprayed, it can take longer to map a field than to spray it, Ver Helst said.

His drones carry 10 liters, but others have a capacity of 40 liters, he said. When a drone runs out of chemical, it returns back to the operator, who puts on a new tank, changes the battery and sends it back out, Ver Helst said. The drone will pick up spraying right where it left off, he said.

In 2016, land-grant university researchers and educators started work to increase the use of drones in agriculture, according to information from the U.S. Department of Agriculture.

That work continues today. It includes identifying and evaluating the most user-friendly and cost-effective drone platforms and sensors, according to the USDA.

Some drone operators offer swarm spraying, Van Helst and Williams said.

For instance, there could be five drones programmed to follow the same grid over a field, pasture or slough working in unison, Van Helst said. As one runs out of spray, it returns for a new tank of chemical and battery until the job is finished.

Van Helst said he doesn't do a lot of spraying. Most of it is on pastures.

But, he said, he has done some work in orchards and vineyards where grapes are grown.

Williams has branched out a little more. Last year, he said, he was hired to do a dust-control project at the Sanford Underground Research Facility in the Black Hills. That is the former Homestake gold mine near Lead.

And both men say drones can be used to combat one of South Dakota's least-popular commodities – mosquitos.

Drones can be used to spray for skeeters on fairgrounds, when there's a big city gathering and even in a residential area.

During the COVID-19 pandemic, they were even used to shower stadiums with antibacterial spray, Van Helst said.

One drone operator in Texas was contacted to see if drones could be used to drop fish food into a pond, Williams said.

He said his drones can cover about 20 acres an hour, though some can do 30 hours an acre. And he expects the new drones released next year will be able to spray 40 hours in an acre.

For large fields, a land rig or a spray plane is still a better bet, Williams said. A traditional ground sprayer can probably cover 70 acres an hour, he said.

Van Helt said his T-40 drone can handle about 100 acres a day.

One challenge in getting started is getting all of the licensing needed from the Federal Aviation Administration.

He spent about two years testing and writing exemptions and working through the legalities.

Commercial drone operators need a remote pilot certificate from the FAA. Another license is needed to dispense chemicals from a flying aircraft, Van Helst said.

He said he has procured 14 FAA exemptions and will need two more next year.

That's why some drone operators hire a business to navigate that process. That's the route Williams took.

Being a drone operator can be fun or frustrating, just like any other job, he said. He just checks the forecast and hopes it holds. Trying to spray when the wind is 20 mph or more just isn't going to work, he said.

Even so, Van Helst said, drones are a fantastic tool. Ground rigs and spray planes will always be needed, and drones are just one more option for farmers to tap.

"There's a right time and a right place for everything," he said.





# OPERATION ROUND UP

## Habitat for Humanity Partners with CTE Students and Receives ORU Grant

Habitat of Humanity of Greater Sioux Falls recently received a \$2,500 Operation Round Up® grant from Sioux Valley Energy.

This most recent grant helped the organization purchase construction materials to build one Habitat home in partnership with the Career and Technical Education (CTE) Academy of the Sioux Falls Public School System. The program provides students the opportunity to receive real life experience in the home building process. Habitat for Humanity, with support from donors like Sioux Valley Energy’s Operation Round Up, covers all of the cost for the building materials that students will use to construct the home.

“We cannot thank you, your members, and your Customers’ Trust Board of Directors enough for continuing to support our mission,” said Shawna Andersen, Habitat for Humanity Office Coordinator.

The home was transported from the CTE Academy to its final location. From there, the partner family (who is required to put in 300 hours of sweat-equity), Habitat volunteers, and staff will help finish off the home.

All Operation Round Up grant applications must be received by the 20th of the month preceding a quarterly Board meeting. Deadlines include: April 20, May 20, August 20, and November 20.

For more information, log on to: <https://www.siouxvalleyenergy.com/operation-round-up>.



**\$SHIFT**  
TO TIME OF USE RATE &  
**\$SAVE**

Put the power in your hands by signing up for the Sioux Valley Energy Time of Use (TOU) electric rate. You can **\$SAVE** big just by **\$SHIFTING** your energy use to off-peak times with the Time of Use Rate.

**On-peak hours are:**  
7 a.m.-10 a.m. & 4 p.m.-9 p.m. (7 days per week).  
Off-peak kilowatt-hours (kWh) are all hours other than those described above. During off-peak hours, you pay a much lower kilowatt-hour charge.

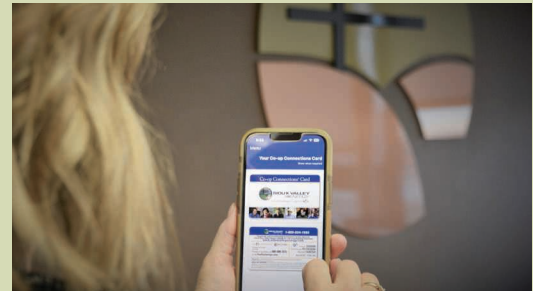
Visit us at: [www.siouxvalleyenergy.com](http://www.siouxvalleyenergy.com)

## Rate Comparison

<p><b>Regular Rate Program:</b> <b>All Time:</b> <b>10.26</b> cents per kWh <i>(any time of day)</i></p> <p><i>* 6.35 cents per kWh for sub metered electric heat on both the regular and TOU rate.</i></p>	<p><b>TOU Rate Program:</b> <b>Off Peak:</b> <b>5.84</b> cents per kWh <i>(10 a.m. 4 p.m. &amp; 9 p.m. 7 a.m.)</i></p> <p><b>On Peak:</b> <b>16.15</b> cents per kWh <i>(7 a.m. 10 a.m. &amp; 4 p.m. 9 p.m.)</i></p>
---	--

**A few ideas to help shift electric use to off-peak hours:**

- Use appliances such as dishwashers, clothes washers, and dryers, during off-peak times.
- Consider smart appliances.
- Use a wireless smart thermostat to control your home's heating and cooling from anywhere. SVE offers a \$50 smart thermostat rebate.
- If you own a plug-in electric vehicle, schedule charging to take place during off-peak hours.



**CO-OP CONNECTIONS® CARD CORNER**

The Co-op Connections Card is a partnership between Sioux Valley Energy and local businesses! Each member received the Co-op Connections Card free in their January magazine. You get your Co-op Connections Card simply because you're a member of Sioux Valley Energy. Each month, we'll include a listing of businesses participating in the program. Below are Sioux Falls businesses:

- |                                   |   |
|-----------------------------------|---|
| <b>Sioux Falls</b>                | Juice Stop                              |
| 24/7 Fitness & Tanning Club       | Justice Fire & Safety, Inc.             |
| Advanced Tech Inc:                | Keller Williams Realty – Dawna Kuck     |
| Arietis Tax and Business Services | Michaels Fence                          |
| Audiology Specialty Clinic        | Nothing Bundt Cakes                     |
| Bagel Boy                         | Overhead Door                           |
| Batteries Plus                    | Company of Sioux Falls                  |
| Big D Technology Solutions, Inc   | Pearle Vision                           |
| Carnaval Brazilian Grill          | Physicians Vein Clinics                 |
| Chris's Auto Repair               | Piper Custom Framing & Fine Art Gallery |
| ClubHouse Hotel & Suites          | Pita Pit-Sioux Falls                    |
| Combined Pool & Spa               | Premier Auto Group                      |
| Crossroads Book & Music           | Riddle's Jewelry                        |
| Dakotaland Autoglass              | Roto Rooter of Sioux Falls              |
| Graham Tire Company               | SAFE-N-SECURE                           |
| Heartland Computers               | Spencer Furniture & Floors              |
| Homewood Suites by Hilton         | T&A Service                             |
| Honey Baked Ham Co. & Café        | TownePlace Suites                       |
| Hydraulic World, Inc.             | Ultimate Automotive                     |
| Interstate All Battery Center     | Vacuum Center LLC                       |
| Jenny Craig                       | Valvoline Instant Oil Change            |
|                                   | Visions Eye Care                        |
|                                   | Walden Carpets                          |
|                                   | World Wide Automotive                   |

Scan this code to access the Sioux Valley Energy website where you can download the Cooperative Connections Card app for mobile devices.

## REGISTER TO WIN!

Bring this coupon and mailing label to the Touchstone Energy® Cooperatives booth at Dakotafest or the South Dakota State Fair to win a prize!

Your Phone Number: \_\_\_\_\_

Your E-mail Address: \_\_\_\_\_



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.

**AUG 20**  
**22nd Arlington Car Show**  
Arlington, SD

**AUG 21**  
**30th Annual Bishop's Cup Golf Tournament**  
Minnehaha Country Club and The Country Club of Sioux Falls  
Sioux Falls, SD  
605-988-3765

**AUG 26**  
**McCrossan Boys Ranch Xtreme Event Challenge**  
4 p.m.  
Sioux Falls, SD

**AUG 26**  
**Hartford Area Fire & Rescue's 5th Annual Public Safety Day**  
10:30 a.m.  
Hartford Fire Station  
Hartford, SD

**SEPT 2**  
**Hidewood Valley Barn Dance**  
7 p.m.  
47236 183rd St  
Clear Lake, SD

**SEPT 4**  
**Hidewood Valley Steam Threshing Show**  
Steam Whistle Blows  
1 p.m.  
47236 183rd St  
Clear Lake, SD

**SEPT 7**  
**Hartford Farmer's Market**  
5 p.m.  
Hartford, SD

**SEPT 8-10**  
**James Valley Threshing & Tractor Show**  
World's Largest Steam Traction Engine  
Andover, SD  
605-868-3242

**SEPT 10**  
**Homesteader Day**  
1 p.m.  
Beaver Creek Nature Area  
Sioux Falls, SD

**SEPT 17**  
**St. Anthony of Padua Catholic Church Church Bazaar**  
12 p.m.  
Hoven, SD

**SEPT 22-24**  
**Coal Springs Threshing Bee**  
Meadow, SD  
605-788-2229

**SEPT 23**  
**Harvest Supper**  
West Nidaros Lutheran Church  
Crooks, SD

**SEPT 28**  
**Hartford Farmer's Market**  
5 p.m.  
Hartford, SD

**SEPT 29-30**  
**Junkin' Market Days**  
Ramkota Exhibit Hall  
Sioux Falls, SD  
605-941-4958

**OCT 7**  
**Spirit of Dakota Award**  
Huron Event Center  
Huron, SD  
605-352-6073

**OCT 14-15**  
**Sioux Falls Quilt Guild Bi-Annual Quilt Show**  
Oct. 14, 9 a.m.  
Oct. 15, 11 a.m.  
Sioux Falls Convention Center  
1201 N West Ave  
Sioux Falls, SD

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