

Cooperative Connections



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at Electric Vehicles**

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The Value of Electricity Continues to Shine



Joel Janorschke, General Manager

jjanorschke@traverseelectric.com

That's why Traverse Electric urges energy efficiency, encourages you to look for ENERGY STAR® appliances and promotes technology designed to give members more control over their electricity use.

How many of us remember dropping into a Traverse Electric office with our parents and grandparents to pay the light bill? Whether you do that in person, by mail or online today, paying your monthly bill does a lot more than just keep the lights on.

Electricity keeps us connected to our modern world. Consider all the necessities and conveniences we enjoy in part because of the power lines running to the electric meter outside your home.

Count up your televisions, desktops, laptop and tablet computers, printers, your gaming consoles, music and video players and personal assistant devices. Whether they get used every day or just occasionally, the electricity that keeps them working comes from Traverse Electric.

Have you looked around your kitchen lately? Between the coffee maker and toaster and the microwave and electric skillet, a lot of us have added several other modern small appliances.

If you've got a craft nook or workshop, the power tools and machines you use to cut and shape your projects are either plugged in or recharged from the outlets connecting your household wiring to Traverse Electric.

You use electricity to run all these devices and we still keep the lights on, use the stove, heating and air conditioning and get hot water from tap. The good news is, even as we rely more on electricity, it's still a bargain, especially compared to other things we pay for regularly.

Since 2011, medical care, residential rental rates and education have increased at rates of 3 percent or more per year. Butter, meat and egg costs have been up by more than 1 percent to 2 percent annually, and even bread costs have risen better than a half point on average.

Electricity costs rise about 1 percent a year, but co-ops across the country have reported a decline in average residential use per household since 2010. That means we're doing more things with less energy.

Kilowatt hour use per household dropped by 8 percent between 2010 and 2016, slightly less than the 9 percent decline reported by all electric utilities, nationwide.

When it comes to value, electricity is a clear winner and we're always looking for ways to work with you to make it even better. That's why Traverse Electric urges energy efficiency, encourages you to look for ENERGY STAR® appliances and promotes technology designed to give members more control over their electricity use.

Energy performance dashboards, smart thermostats and power strips and appliance settings that shift most water heating, laundry and dishwashing outside of peak rate periods help reduce the co-op's overall power demand. They also give you opportunities to control or even trim your monthly utility bills.

That's good for families, couples and individuals trying to live within their budgets. And it's going to become even more important as digital devices and internet-connected technologies become even more important in our lives.

The average home now has 10 Wi-Fi connected devices. That number is expected to explode to 50 by 2020. Technology and the gateways that keep it working use electricity, so you'll depend upon Traverse Electric for more than the power that keeps the lights on.

That's why we're always working to provide service that's reliable, keep it affordable and make it even more valuable to our members – you, your family and your neighbors.

Traverse Electric Cooperative Connections

(USPS No. 018-903)

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**In case of a power outage call
1-800-927-5443**

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Design assistance by SDREA.



Did you know that undersized valves on your irrigation system could be wasting energy? When high velocity water meets undersized things, your profits go down the drain.

*Together we are
RE-ENERGIZING EFFICIENCY*

Update Your Contact Information

In the utility business, we know rough weather will occur and sometimes power outages simply can't be avoided. But did you know there are steps you can take to ensure your electricity is restored as quickly and safely as possible? By keeping your contact information up-to-date, you can take full advantage of the services Traverse Electric offers.

You may have noticed prompts through our billing statements and webpage requesting your updated contact information. If we don't have the correct phone number linked to your home address, it makes it very difficult to contact you during an outage.



Updating your contact information is helpful because it speeds up the power restoration process. With correct information, we can also contact you in advance of planned outages for repairs and maintenance.

Please call 320-563-8616 and make sure you're up to date.

IN CASE OF OUTAGE

- 1ST** Check the fuses or breakers in your home or building in which you do not have power.
- 2ND** Check your breaker below your meter on the yard pole. Some residential members may not have breakers.
- 3RD** If you still do not have power, call your neighbor to check if their electricity is also off.
- 4TH** Call immediately; do not wait for your neighbor to call in the outage.
- 5TH** Call Traverse Electric Cooperative at 1-800-927-5443.



Electrical Safety on the Farm

Farming is among the more dangerous occupations for several reasons, including potential for encounters with electrical hazards. Before taking to the fields, the Safe Electricity program urges farm workers to be aware of overhead power lines and to keep equipment and extensions far away from them.

Safe Electricity encourages farm managers to share this information with their families and workers to keep them safe from electrical accidents.

- Start each morning by planning your day's work. Know what jobs will happen near power lines and have a plan to keep the assigned workers safe.
- Keep yourself and equipment at least 10 feet away from power lines in all directions, at all times. Use a spotter when moving tall equipment and loads.
- Use care when raising augers or the bed of a grain truck. It can be difficult to estimate distance and sometimes, a power line is closer than it looks. Use a spotter to make certain you stay far away from power lines.
- Always lower equipment extensions, portable augers or elevators to their lowest possible level, under 14 feet, before moving or transporting them. Wind, uneven ground, shifting weight or other conditions can cause you to lose control of equipment and make contact with power lines.
- Be aware of increased height when loading and transporting larger modern tractors with higher antennas.
- Never attempt to raise or move a power line to clear a path. If power lines near your property have sagged over time, call your utility to repair them.
- Don't use metal poles when breaking up bridged grain inside and around bins.
- As in any outdoor work, be careful not to raise any equipment, such as ladders, poles or rods, into power lines. Remember, non-metallic materials, such as lumber, tree limbs, tires, ropes and hay, will conduct electricity, depending on dampness and dust and dirt contamination.
- Use qualified electricians for work on drying equipment and other farm electrical systems.
- If you are on equipment that contacts a power line, do not exit the equipment. When you step off the equipment, you become the electricity's path to ground and receive a potentially fatal shock. Wait until utility workers have de-energized the line and confirmed it is safe for you to exit the vehicle. If the vehicle is on fire and you must exit, jump clear of the vehicle with both feet together. Hop as far from the vehicle as you can with your feet together. Keep your feet together to prevent current flow through your body, which could be deadly.

Electrical work around the farm can also pose hazards. Often, the need for an electrical repair comes when a farmer has been working long hours and is fatigued. At such times, it's best to step back and wait until you've rested.

Source: safeelectricity.org

Primary Elections Near

Voters in South Dakota head to the polls in June for the primary election while voters in Minnesota follow suit Aug. 14.

A primary election determines which candidates will be on the ballot in the November general election.

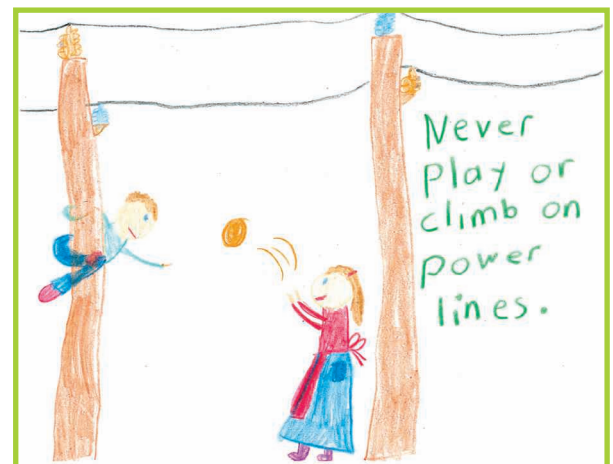
In South Dakota, there are 24 House and Senate races with primary elections that will be decided on June 5. Those wishing to vote in the primary election have until May 21 to register to vote. Absentee voting began on April 20.

Minnesota's Primary Election Day is Tuesday, Aug. 14. Minnesotans can vote by mail or in person from June 29 through Aug. 13.

As part of the election cycle, co-ops across the county are engaging in Co-ops Vote, a non-partisan program developed by the National Rural Electric Cooperative Association (NRECA), the national service organization that represents the nation's more than 900 private, not-for-profit, consumer-owned electric cooperatives. The Co-ops Vote campaign seeks to help get out the vote and insert issues important to co-ops and their communities into the public discussion.



KIDS CORNER SAFETY POSTER



"Never play or climb on power lines."

Caroline Ekberg, 9 years old

Caroline is the daughter of Lance and Doris Ekberg, Hamill, S.D. They are members of Rosebud Electric Cooperative, Gregory, S.D.

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



Dairy Delicious

Cream Cheese Chicken Taquitos

2 boneless chicken breasts	1 (8 oz.) pkg. cream cheese
1 tsp. chili powder	1/3 cup water
1 tsp. garlic powder	1/2 cup shredded cheese
1 tsp. cumin	12 6-inch flour tortillas

Place chicken, chili powder, garlic powder, cumin, cream cheese and water in crock pot. Cover and cook on LOW for 8 hours or 4 hours on HIGH. Place 1/4 cup of the chicken mixture into each tortilla. Top with 1 to 2 T. shredded cheese. Roll tightly and place in a single layer on greased baking sheet. Bake at 400°F. for 10 minutes or until tortillas are slightly browned and cheese is melted.

Cortney Reedy, Tea, S.D.

Crunchy Ice Cream Bars

1/2 cup light corn syrup	4 cup Kellogg's Cocoa Krispies
1/2 cup peanut butter, creamy or chunky	1 pint ice cream

Mix corn syrup thoroughly with peanut butter. Pour over Cocoa Krispies and stir until well coated. Press mixture into a 9x13-inch buttered pan. Place in freezer to firm up. Cut into 12 3-inch squares. Place a slice of ice cream between 2 squares. Cut each square into 2 bars. Wrap individually in foil and keep in freezer until needed.

Cindy Reu, Luverne, Minn.

Strawberry Cheesecake Pie

2 cups sliced fresh strawberries	1 (8 oz.) pkg. cream cheese, softened
1/4 cup chopped almonds	2 cups cold milk, divided
1 T. sugar	1 (3.4 oz) pkg. instant vanilla pudding
1 9-inch graham cracker crust	

In a bowl, combine strawberries, almonds and sugar. Pour into crust. In a mixing bowl, beat cream cheese until smooth; gradually add 1/2 cup milk. Add pudding mix and remaining milk. Beat for 1 minute or until blended; pour over strawberries. Cover and refrigerate for 2 hours or until set.

Stephanie Fossum, Hudson, S.D.

Lemon Ginger Blueberry Muffins

2 cups flour	1/4 cup milk
2/3 cup sugar	1/4 cup vegetable oil
1-1/2 tsp. baking powder	1 egg, lightly beaten
1 tsp. McCormick® ground ginger	1 tsp. McCormick® pure lemon extract
1/2 tsp. baking soda	1 cup blueberries
1 cup sour cream	

Lightly grease 12 muffin cups or line with paper baking cups. Set aside. Mix flour, sugar, baking powder, ginger and baking soda in large bowl. Mix sour cream, milk, oil, egg and lemon extract in medium bowl. Add to flour mixture; stir just until dry ingredients are moistened. (Batter will be thick and slightly lumpy.) Gently stir in blueberries. Spoon batter into prepared muffin cups, filling each cup 2/3 full. Bake at 400°F. 20 to 25 minutes or until toothpick inserted in center of muffins comes out clean. Serve warm. Makes 12 (1 muffin) servings.

Nutritional Information Per Serving: Calories 213, Total Fat 9g, Sodium 122mg, Cholesterol 29mg, Carbohydrates 30g, Protein 3g, Dietary Fiber 14g

Pictured, Cooperative Connections

Cowboy Caviar

2 cans Mexicorn	1 can diced tomatoes and green chilies
2 cups shredded Cheddar cheese	6 green onions, chopped
1 cup Miracle Whip	Fritos Scoops corn chips
1 cup sour cream	

Mix together all ingredients; serve with corn chips.

Jane Ham, Rapid City, S.D.

Please send your favorite dessert, salad and garden produce recipes to your local electric cooperative (address found on Page 3). Each recipe printed will be entered into a drawing for a prize in June 2018. All entries must include your name, mailing address, telephone number and cooperative name.

Select Proper Size and Design of Window/Door Awnings for Energy Savings, Comfort, Privacy



Jim Dulley

www.jimdulley.com

Installing window awnings can reduce summertime energy usage.

Dear Jim: I have always liked the appearance of window awnings. The salesman told me installing them can also save a lot of energy. Do they really save much energy and what awning choices are best? – Kathy F.

Dear Kathy: The awning salesman was not just blowing smoke to get a sale. Installing window awnings can reduce summertime energy usage. There are also other benefits such as reduced fading of furniture, drapes and carpeting, and protection of your primary windows and doors from the sun and severe weather. The same UV rays which fade your furniture also slowly degrade window frame and door materials over time.

The reduction in air-conditioning electrical usage results from the blocking of the direct radiant heat from the sun through windows and doors. Studies by the University of Minnesota found installing window awnings can reduce cooling energy needs by 21 percent in Phoenix, 17 percent in St. Louis and 24 percent in Boston.

Another advantage of awning energy savings is it is greatest during the hottest hours of the afternoon when the sun is most intense. This reduces the peak electricity load for the utility company's electric generation, so there is less chance of brownouts and other problems associated with excessive electricity demand.

There are many window awning options available. The first decision to make is if you want fixed or adjustable awnings. They both are equally effective during the summer to reduce your peak electricity usage in midafternoon. The advantage of adjustable awnings is the level of shading can be changed throughout the day and various seasons. Fixed and adjustable ones are available in all-aluminum or fabric over an aluminum frame.

Adjustable fabric awnings offer better protection from severe weather because some can be lowered to be almost flat over the window opening. They can also be raised to nearly expose the entire window glass for winter solar heat gain. Fabric awnings using Sunbrella® fabrics provide SPF-15 cancer risk protection. Also, ones using GORE™ Tenara® thread are durable and hold up well to UV (ultraviolet) degradation.

The maximum projection from the wall for an adjustable aluminum awning is fixed by the frame and the down arm length. To open them, the aluminum awning slats roll up above the frame and the hinged arms swing upward. The advantage of aluminum is its strength and its resistance to degradation from the sun's UV rays.

Sideless awning designs, called Venetian awnings, are effective for true south-facing windows because the most intense sun's rays come from directly overhead. Actually, just a relatively short flat board over the window, such a large roof overhang, is effective at blocking the sun over these windows. If you also need to block the late afternoon sun at those south-facing windows, install hood style awnings with sides. For casement windows, hip-style awnings provide clearance for the window sash to swing open outward.

If you are also concerned about security and privacy, select an adjustable awning which can be lowered completely flat against the window. This offers privacy and some protection from break-ins and storm damage to the window glass from flying objects.

Proper sizing (projection length from the house wall) of window awnings is important both for blocking the summer sun and for allowing the winter sun to shine. This is particularly true if you install fixed awnings, instead of adjustable ones, because their shading angle cannot be changed. The orientation of the window to the sun also affects the proper awning sizing because the sun is lower in the sky during early morning and late afternoon.

If you still remember your high school geometry, you can calculate the size of awning needed for various windows and doors. The latitude angle (varies from about 29 degrees for Houston to 45 degrees for Minneapolis) for your area determines how high the sun is in the sky and its angle of incidence on your windows. You can find the sun location for various regions, seasons and times of day in most basic solar energy books.

If you are not a math whiz, just make a "test stick" awning to determine the proper size. Hold the end of a stick against the top of the window frame or wall at the time of day when you need shading. Vary the stick lengths and the angle until its shadow provides the shading you desire. The shades width should extend at least two inches on either side of the window.

Send inquiries to James Dulley, Cooperative Connections, 6906 Royalgreen Drive, Cincinnati, OH 45244 or visit www.dulley.com.



Touchstone Energy® Scholars Recognized

Touchstone Energy® Cooperatives in eastern South Dakota and western Minnesota honored some of the area's most impressive high school seniors Saturday, April 28, during the 16th annual Touchstone Energy Scholar of the Year banquet and recognition on the campus of Lake Area Technical Institute.

The event honored the 33 high school students who were chosen each week throughout the school year as the Touchstone Energy Scholar of the Week. It's a program which recognizes students for academic achievement, co-curricular involvement and community service. The students are featured in weekly segments which air on KSFY Television and each student receives a \$100 scholarship for being chosen as the Scholar of the Week.

Nathan Hulscher, a senior at Florence High School within Codington-Clark Electric's service territory, was selected during the banquet as the Touchstone Energy Scholar of the Year. Hulscher, who plans to attend Augustana University in the fall, received a \$1,000 scholarship. Trevor Case, a senior at Webster Area High School within Lake Region Electric's service territory, and Alexander Palecek, a senior at Yankton High School within Clay-Union Electric's service territory, were both chosen to receive \$500 scholarships. The names were drawn from among the attendees.

Lake Area Technical Institute's President Michael Cartney was the keynote speaker for the Scholar of the Year banquet. KSFY News anchor Brian Allen served as the master of ceremonies.

Touchstone Energy Cooperatives in eastern South Dakota and western Minnesota provide safe and reliable electricity to more than 113,000 homes and businesses. The cooperatives have sponsored the Scholar of the Week program since 2002. In that time Touchstone Energy Cooperatives have awarded over \$80,000 in scholarships as part of the Scholar of the Week program.

Cooperatives Honored

Four cooperatives that serve in South Dakota and western Minnesota were recognized with Spotlight on Excellence Awards. The Spotlight on Excellence Award is an initiative of the Council of Rural Electric Communicators and is NRECA's highest communication honor.

The awards are presented by the cooperative recognizes a body of outstanding work produced by electric co-op communications and marketing professionals across Co-op Nation.

Winners of the 2017 Spotlight on Excellence Awards represent leading practices across all communication platforms and position them as the best in the field through their superior accomplishments that have lasting impact, demonstrate a high level of professionalism and deliver exceptional results.

Gold winners scored 90 points or more in their category and classification, while Silver winners scored at least 80 points. Awards are presented for best projects and programs for the year that embody high standards of quality and achievement.

Among the cooperatives honored:

- Basin Electric Power Cooperative, Bismarck, N.D. – Gold Award for Best Wild Card, "Pathfinders: Coal and the future of energy" and Gold Award for Best Event, "2017 Basin Electric Annual Meeting"
- Central Electric Cooperative, Inc., Mitchell, S.D. – Gold Award for Best Event, Solar Informational Workshops
- East River Electric Power Cooperative, Madison, S.D. – Silver Award (Tie) Best Total Communication Program "Powering Your Safety"
- Northern Electric Cooperative, Bath, S.D. – Gold Award for Best External News Publication, "Northern Electric Cooperative Connections"



The 2017 Ford Focus, with a price tag in the \$35,000 dollar range, can accelerate from 0 to 60 mph in 6 to 11 seconds, which is about average for all U.S. cars.

What You Don't Know about Electric Cars Could

THRILL YOU

Electric Vehicles Aren't Just for City Driving.

Paul Wesslund

NRECA Contributing Writer

If you want a really powerful car, maybe one that can accelerate from 0 to 60 mph in less than 3 seconds, consider an electric vehicle like the NIO EP9.

You're right, that's too powerful. The NIO EP9 would also cost you more than a million dollars. But even more modest versions offer a respectable kick. The Chevy Bolt and Ford Focus, with price tags in the \$35,000 dollar range, make the jump to 60 mph in 6 to 11 seconds, which is about average for all U.S. cars.

There's a built-in reason electric cars hold their own in performance, says Brian Sloboda, a program and product manager at the National Rural Electric Cooperative Association.

"In an electric car, all of the power is going into the wheels. With a gas-powered car, a lot of power is lost inside the mechanical engine," says Sloboda. "If you sit in an electric car and the driver smashes down on the accelerator, you are going to be thrown into the back of your seat, much more so than many gasoline cars."

In March, Goodyear announced a new tire that would hold up better under the "instant torque from electric motors."



Photo Caption

But wait, there's more.

"The battery is at the bottom of the car, so you have a lower center of gravity, which means you can take the corners crisper," says Sloboda. "If you do a lot of driving in the hills or mountains, they are fun."

Electric vehicles hold a lot of other surprises compared to the

traditional view of them as a glorified golf cart. Even electric co-op in rural parts of the country are hearing interest from their members.

About 700,000 electric vehicles drive on U.S. roads today, according to an analysis by CoBank, a financier for electric co-ops. That number could jump to 3 million in the next five years, says CoBank. The U.S. Department of Energy's Energy Information Administration projects electric vehicle sales growing from about 1 percent of the market today, to 12 percent by 2050.

Car makers are pushing those trends. In October, General Motors said it would launch 20 new electric vehicles by 2023. In January, Ford announced plans to invest \$11 billion in a lineup of 40 hybrid and electric vehicles by 2022. In March, Volkswagen said it had secured \$25 billion in electric car batteries and technology and plans to scale that up to \$60 billion.

One of the most radical new notions about electric vehicles, advises Sloboda, is to think of them not as cars or trucks, but as consumer electronics.

"The internal combustion engine is a perfected technology, so those cars aren't improving at a very rapid pace," says Sloboda. "But electric vehicles are evolving at a very rapid pace, so you're really kind of comparing it to a cell phone or a computer."

What that means for consumers, says Sloboda, is that they might consider leasing an electric car rather than buying one, to make it easier to trade in the car to take advantage of the annual improvements in battery life, and other features.

Other unexpected benefits of electric vehicles that could speed their acceptance, says Sloboda, include range, maintenance and more competitive costs.

Will I run out of juice?

The electric vehicle industry has a term for the biggest roadblock to its growth—range anxiety. But Sloboda says the fear of getting stranded far from home with no way to refuel may be overblown, and getting less concerning.

"The range on the electric cars you can buy today is perfectly sufficient to cover almost everyone's daily commute," he says. Sloboda says that while electric cars won't work for someone regularly commuting 100 miles a day, "For most people, even in rural areas, that number is under 40 miles a day. Most electric cars on the market today have between a 120 mile range and some of them are getting close to a 200 miles."

The Federal Highway Administration reports the average American drives 37 miles a day.

Less hassle

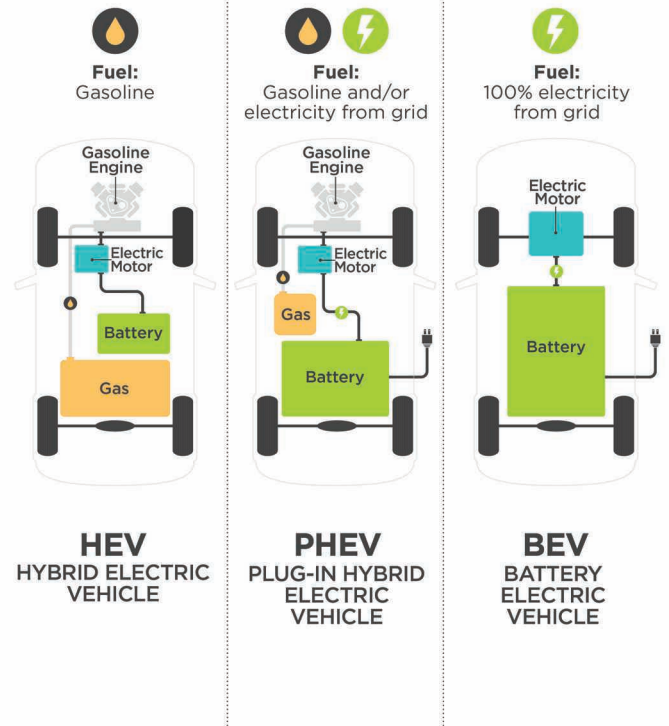
Electric car acceptance doesn't need to wait for a network or charging stations to appear around the country, says Sloboda. He sees refueling more like this: you plug your car into an outlet in your garage at the end of each day, and by morning it's fully charged.

"No more having to stop and fill your tank up once or twice a week," he says. "You can charge it at home while you're sleeping and wake up to a full tank every single day."

Electric cars can also save on maintenance, says Sloboda.

Types of Electric Vehicles

If you're looking to purchase an electric vehicle, use this cheat sheet to help determine the various options. Drivers can choose between three types of electric vehicles (EVs). EVs are classed by the amount of electricity that is used as their energy source.



Source: Electric Power Research Institute

"With an electric vehicle, you don't have oil changes, and you don't really have transmission fluid changes," he says.

And regenerative braking in electric cars uses the electric motor to slow the car rather than relying only on brake pad friction. Sloboda says, "A lot of electric vehicle owners are saying they've never replaced their brakes because you just don't have the physical wear and tear on the brake pad."

Costs are coming down.

Sloboda says electric car costs today make them a luxury car, but that's changing. As electric car research, development and production increases, costs will be coming down. Tax breaks for electric cars at the federal level and in some states can reduce costs by several thousand dollars. And Sloboda notes that electric costs less per mile than gasoline.

But one of the main reasons drivers buy electric cars is for environmental reasons.

Sloboda says an electric car "is cleaner than a gas-powered car, no doubt about it."

Another advantage of an electric car, he adds, is that "you're powering it with electricity from your local electric co-op."

Paul Wesslund writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

Braun Wins Trip-of-a-Lifetime



Traverse Electric's board of directors is proud to announce that they have selected Kimberlea Braun as its Washington, D.C., Youth Tour representative. The trip takes place June 9-14, 2018.

Kimberlea is the daughter of Erin Braun and Lisa Braun of Rosholt, S.D. Kimberlea is a sophomore attending Rosholt High School.

Congratulations, Kimberlea!

Below is Kimberlea's essay answering the following question:

"If chosen, what do you hope to learn from this experience and how will this help you in your future?"

If I was chosen to go on this trip, I would hope to learn more about how electric companies run and how electricity works. This would help my future by helping me know how electricity runs through cables and how it also runs underground. It would also help me to know how to conserve electricity and how to use it in everyday life. It would help to know in the future how the world runs on all of the electricity and how much of it is used every day.

By going on this trip, it would help me to socialize with others who would help me later in life. This trip would help me to learn about our country's history and how it fought. It would help me to better understand about how our great nation was formed and how it was made from basic scratch.

Seeing the different memorial grounds will help me get to know just how many men and women lost their lives for the sake of the freedom of others. The Arlington Memorial is one thing I would look forward to because it would be so nice to see who all has fought in the Civil War and wars before that.

Art is one thing I would look forward to because there were so many great artists from the Renaissance Era that have had paintings brought over. Meeting our Rep. Kristi Noem and our Sens. John Thune and Mike Rounds would be a great honor. They would hopefully further my knowledge of how the government works. I am very thankful to have this opportunity to go on this trip and represent Traverse Electric.

Member Comments

Thank you for the plant I won at the annual meeting. We really enjoyed the meal and the meeting. Thank you for your service to the rural communities.

Stan and Carol Schade, Sisseton, SD

Many thanks for the \$100 credit I received at the annual meeting as a door prize. What a surprise!

Jo Satter, Norcross, MN

Thank you for your generous contribution to the post prom party. It is greatly appreciated. Thanks for helping us provide a safe and fun night for the students.

C-G-B Post Prom Committee, Graceville, MN

We'd like to thank you for a great evening, the wonderful dinner, meeting and the air fryer that we won. Thanks again.

Galen & Connie Roark, Rosholt, SD

Thank you so much for your service to the rural areas in all sorts of weather. It is very much appreciated! Stay safe!

Stan and Carol Schade, Sisseton, SD

Thanks so much for the Netflix gift certificate I won at the annual meeting. It was really appreciated.

Bonnie Hamling, Rosholt, SD

Thank you for the \$25 I won at the annual meeting. It was fun playing bingo.

Mary Lou Widhalm, Rosholt, SD

Thank you for your donation to the 2017-2018 Campbell-Tintah School yearbook. We greatly appreciate the support from your business!

Campbell-Tintah Publications Class, Campbell, MN

Thank you for the Fire Stick I won at the annual meeting. Also, thank you for the good meal and entertainment. We look forward to the meeting every year.

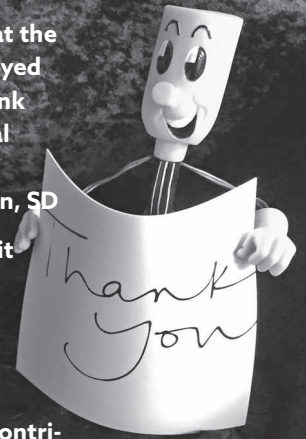
Albert Braun, Rosholt, SD

The sophomore class of Rosholt High School would like to thank you for your donation to our post prom party. We are very grateful for all the continued support that you give to the students of Rosholt High School.

Rosholt High School Sophomore Class, Rosholt, SD

Thank you for your contribution to Post Prom.

CGB Juniors & Seniors and their dates, Graceville, MN



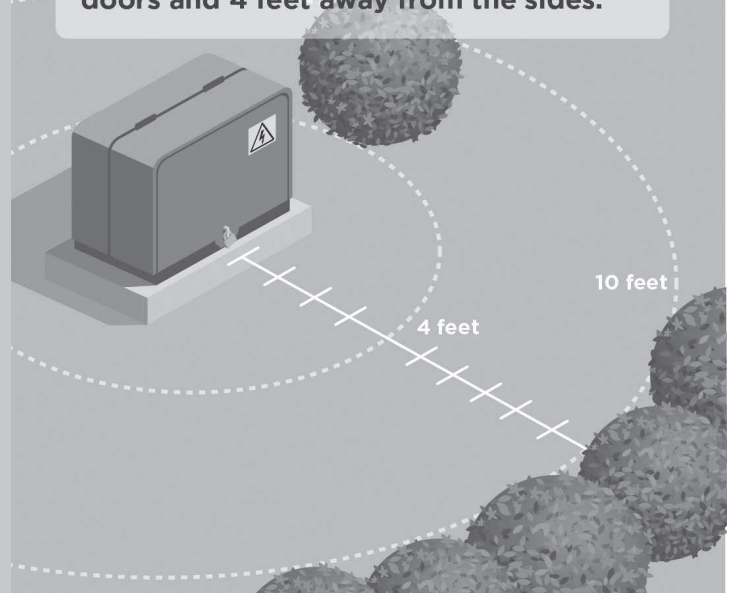
Avoid the Big Green Box

Please stay away from pad-mounted transformers (the big green box). While safe, they are not meant for touching, climbing or playing. Pad-mounted transformers carry high voltages of electricity that serve many homes in our communities.

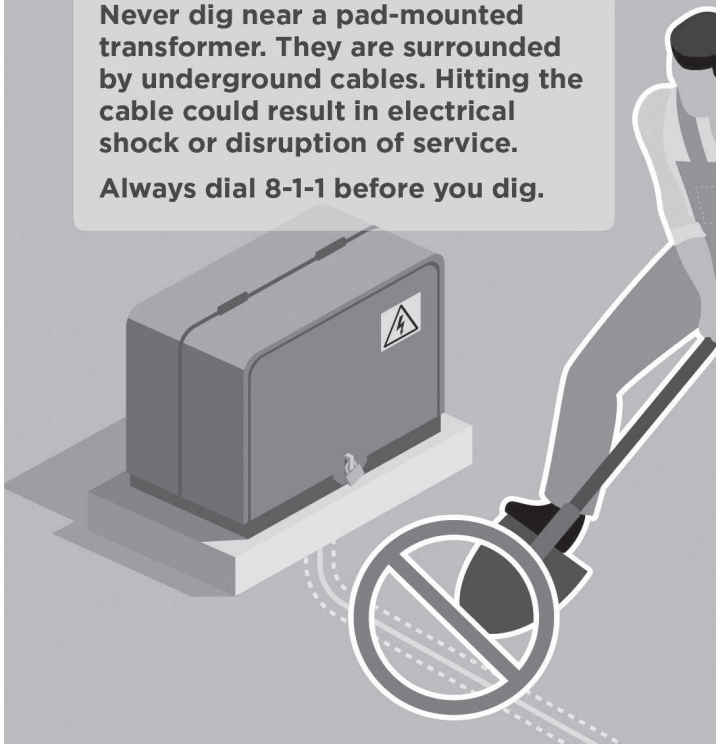
Never touch, climb or play on pad-mounted transformers. Never put fingers, sticks or other objects through cracks in the transformer.



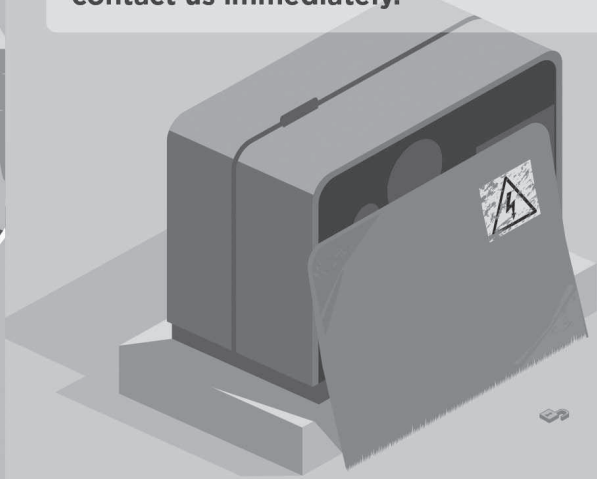
Keep areas surrounding the pad-mounted transformer clear so that workers can safely maintain transformers as needed. Keep shrubs and structures at least 10 feet away from the transformer doors and 4 feet away from the sides.



Never dig near a pad-mounted transformer. They are surrounded by underground cables. Hitting the cable could result in electrical shock or disruption of service. Always dial 8-1-1 before you dig.



Report problems. If you notice anything amiss, like an unlocked transformer or one that has been damaged, please contact us immediately.



AMERICA'S ELECTRIC COOPERATIVES

Meet the Electric John Deere

Battery-run Tractor Showcased in Paris

Kaley Lockwood

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In order for the SESAM to take off, the battery capacity will need to expand to support the sun-up to sun-down longevity of farm work.

Green and yellow are arguably the second-most American set of colors, behind red, white and blue of course. This rings true particularly for those who operate John Deere machinery on a daily basis, as the growth of our nation is supremely dependent on the country's agriculture industry, including the good folks who support it.

Technology in recent years has been the catalyst for the boom and bust of many industries. In the past decade or so, advancements in farming technology have primarily been focused on automation and precision, but with the automobile industry moving towards electric vehicles, the ag-industry is following suit.

John Deere showcased the first, fully battery-powered tractor in 2017 at SIMA, an international agribusiness tradeshow in Paris. This technological innovation was given a 'special mention' as it truly the first of its kind. Nicknamed SESAM, for Sustainable Energy Supply for Agricultural Machinery, this all-electric tractor is modeled after John Deere's 6r series tractors.



A peek under the hood of John Deere's first, fully battery-powered tractor. The all-electric tractor is modeled after John Deere's 6r series tractors.

In a press release by John Deere, SESAM is said to have all of the same "features and functionality of a 'conventional' tractor while offering the benefits of electric power." This emissions-free tractor runs at a lower noise level than other traditional tractors and is operated using two independent electric motors. The electrification of this tractor simplifies the moving parts and thus, greatly reduces the need for maintenance.

These two motors power an adapted DirectDrive transmission, producing 130 kilowatts of continuous power with a peak output of 400 horsepower, according to Farm-Equipment.com. The website also affirms that the tractor takes three hours to fully charge and can run up to four hours in the field with speeds ranging from 2 mph to 30 mph. As a comparison, the Tesla model 3 may have a capacity of up to 75 kilowatt hours of battery storage (kWh), providing a range of about 310 miles. The SESAM has a capacity of 130 kWh with a range of about 34 miles, which

means that this tractor uses a lot more electricity in a shorter period of time.

In order for the SESAM to take off, the battery capacity will need to expand to support the sun-up to sun-down longevity of farm work. In fact, the President and CEO of Autonomous Tractor Corporation, Kraig Schulz, purported that a 200 horsepower electric tractor would hypothetically need about 1,500 kWh of batteries to complete a full day's work. As energy storage technology continues to advance, it's only a matter of time before John Deere manufactures a tractor that can meet this need.

Although SESAM's battery technology may not yet be practical for a full day of farming, the all-electric tractor is a very exciting development for the agriculture industry. This is one of many future steps in the direction of electrifying agricultural machinery and integrating this equipment with renewables. As the press release

stated, "The SESAM tractor is a major part of John Deere's vision of the energy-independent farm of the future."

This push towards electrification of farm machinery in lieu of using fossil fuels directly supports the beneficial electrification movement. This concept, known fully as "environmentally beneficial electrification," is gaining traction among a growing number of groups in the U.S. including local electric cooperatives. Frequently promoted as a means to reducing greenhouse gases and helping the environment, beneficial electrification also helps consumers by providing products that are cleaner, quieter and easier to maintain. John Deere's SESAM tractor does just that.

Kaley Lockwood writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

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In 2017, John Deere showcased the first, fully battery-powered tractor. This technological innovation is truly the first of its kind. Nicknamed SESAM, for Sustainable Energy Supply for Agricultural Machinery, this all-electric tractor is modeled after John Deere's 6R series tractors.





Matt Greek, Basin Electric senior vice president of Research, Development, and Technology (second from left); and Doug Hardy, general manager of Basin Electric Class A member Central Montana Electric Power Cooperative (third from left), were among witnesses testifying before the U.S. Senate Committee on Energy and Natural Resources April 19 in Washington, D.C.

Basin Electric, Member Co-op Staff Testify on **CAPITOL HILL**

Basin Electric Power Cooperative

April 24, 2018

Matt Greek, Basin Electric senior vice president of Research, Development, and Technology; and Doug Hardy, general manager of Basin Electric Class A member Central Montana Electric Power Cooperative, testified before the U.S. Senate Committee on Energy and Natural Resources April 19 in Washington, D.C.

The purpose of the hearing was to examine energy-related challenges and opportunities in remote and rural areas of the United States.

“We have rural and remote communities all over the United States,” said U.S. Sen. Lisa Murkowski (R-AK), committee chairman. “We’re here today to focus on their energy challenges and opportunities, in hopes of moving the ball forward on more affordable, more reliable, and increasingly clean energy for all of them.”

Greek shared the challenges Basin Electric and its members are facing in order to continue providing reliable and affordable energy in a carbon-constrained future.

“Basin Electric has a fiduciary responsibility to its members to provide electric generation at the least cost,” Greek said. “The cooperative has worked to achieve this goal by diversifying its portfolio with wind and market purchases.”

According to Greek, Basin Electric is also investing in the development of carbon capture solutions to help “crack the code” with respect to cost-effective technologies that capture, utilize, and sequester carbon dioxide, such as the Integrated Test Center and Allam Cycle.



Matt Greek, Basin Electric senior vice president of Research, Development, and Technology, shares about Basin Electric’s efforts to reliably and economically serve its members-consumers in a carbon-constrained environment. Dale Niezwaag, Basin Electric vice president of government relations, is pictured back left.

Hardy discussed challenges of serving the rural areas in Montana, as well as the importance of federal power marketing administrations, and the cooperative’s hydropower purchased from Western Area Power Administration.

“The challenges of serving these rural areas are great,” Hardy said. “These challenges include high, fixed costs of the power lines and the associated power system infrastructure, across vast distances, with fewer customers per mile of line to pay those costs.”

Find video of the full committee hearing and transcripts of Greek’s and Hardy’s testimony on the Committee on Energy and Natural Resources webpage at <https://www.energy.senate.gov>.

UREA Production Facility Reaches Milestone

The first unit train carrying urea fertilizer pulled away from Dakota Gasification Company's Great Plains Synfuels Plant at about 10 p.m. April 5, marking another significant milestone regarding the new urea production facility.

Urea is one of 12 products and one of three fertilizers produced at the Synfuels Plant. The 65-railcar unit train carried 6,523 tons of urea, or about 100 tons per railcar.

Spencer Wagner, Dakota Gas fertilizer production executive sales account manager, said unit trains will generally move throughout the year to the large terminals around the state.

"Our heaviest unit train traffic is expected to be in the winter and spring when our customers will need to get product in place for farmers," he said. "There are several unit-train capable facilities in North Dakota that will be potential locations where we will sell urea unit trains."

Wagner said the current advantage of moving urea by train includes lower freight costs.

"It is a cost-effective way to move a lot of product fast," he said. "It is a quick way to fill up storage facilities across the region, allowing farmers quick access to product when they are ready to apply it."

Another milestone was accomplished in early April when the first batch of diesel exhaust fluid was produced. Commissioning also continues on the carbon dioxide liquefaction unit, with startup planned for late April.

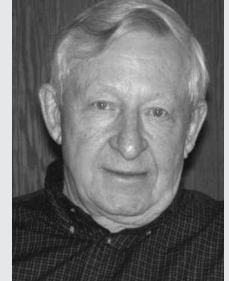


BNSF Railway Conductor Dan Bitner, left, and Bruce Banks, Dakota Gas fertilizer shift supervisor, shake hands at the exchange of the first unit train carrying urea fertilizer from the urea production facility.

Last Remaining Original Incorporator Says Basin Electric Today Is

'Beyond His Wildest Imagination'

Leroy Schecher was just 29 years old, and a newly hired manager for Grand Electric Cooperative in Bison, South Dakota, when he signed his name on May 5, 1961, to incorporate Basin Electric, a cooperative that today serves a 550,000 square mile territory in nine states and provides electricity to 3 million consumers.



Leroy Schecher
Original Incorporator, Basin Electric Power Cooperative

Schecher says he remembers that day well. He and four board members drove to Bismarck, N.D., because something needed to be done about power supply. Shortly before that, Fred Aandahl, assistant secretary of Interior during the Eisenhower administration, had been telling cooperatives that all the power that could be generated from the Missouri River dams had been allocated, so it was up to them to find a way to generate their own power.

"There were a lot of people there, but not a soul present on incorporation day would have ever dreamed Basin Electric would become what it is today," Schecher says. "Forming it was just something we felt we needed to do to provide for ourselves."

Schecher says he remembers many milestones throughout the years, including when it was just Jim Grahl, Basin Electric's first general manager, and the day the co-op bought Dakota Gasification Company for \$85 million.

Today, 57 years after signing those papers that brought Basin Electric into being, Schecher is the last remaining original incorporator. And while he has been retired from his nearly five decades of service to the electric co-op industry for 22 years, he still is genuinely interested in what is going on with the co-op he helped form, still receiving every year's annual report, reading every issue of "Basin Today" magazine, and even attending special events, such as Basin Electric's 50th anniversary celebration.

"It feels funny," he says. "When you do something, you don't typically look ahead and think about what consequences that action is going to have in 50 or 60 years. What Basin Electric is today was beyond my wildest imagination."

DATELINE

May 19-20, May 26-27
Northeast Area Pari-Mutuel
Horse Racing, Aberdeen, SD,
605-715-9580

May 25-September 30
Legends in Light® Laser
Light Show at Crazy Horse
Memorial, Crazy Horse, SD,
605-673-4681

May 25-27
South Dakota Kayak
Challenge, Yankton, SD,
605-864-9011

May 26-27
Annual SDR A Foothills Rodeo,
Wessington Springs, SD,
605-770-4370

June 1-2
South Dakota BBQ
Championships, Huron, SD,
605-353-7354

June 1-3
Fort Sisseton Historical
Festival, Lake City, SD,
605-448-5474

June 1-3
Annual Black Hills Quilt
Show & Sale, Rapid City, SD,
605-394-4115

June 1-3
Wheel Jam, Huron, SD,
605-353-7340

June 1-3
Fish Days, Lake Andes, SD,
605-487-7694

June 2
Annual Casey Tibbs Match of
Champions, Fort Pierre, SD,
605-494-1094

June 2
Dairy Fest, Brookings, SD,
605-692-7539



June 15-16: Czech Days, Tabor, SD, www.taborczechdays.com, taborczechdays@yahoo.com

June 2-3
Spring Volksmarch at Crazy
Horse Memorial, Crazy Horse,
SD, 605-673-4681

**June 2, 16, July 7, 21,
Aug. 25, Sept. 8, 22**
Lawn Mower Races, Pukwana,
SD, 605-680-1718 or
605-682-9781

June 7-9
Senior Games, Sioux Falls, SD,
Contact Nick at 605-978-6924

June 7-10
South Dakota Shakespeare
Festival, Vermillion, SD,
605-622-0423

June 8-9
Senior Games, Spearfish, SD,
Contact Brett Rauterhaus at
605-772-1430

June 9-10
Siouxland Renaissance
Festival, Sioux Falls, SD,
866-489-9241

June 14-17
Jamboree Days, Hartford, SD,
605-359-4929

June 15-16
Wild Bill Days, Deadwood, SD,
605-578-1876

June 15-17
Black Hills Fat Tire Festival,
Rapid City, SD, 605-394-5223

June 16
Vinegar Festival, Roslyn, SD,
605-486-0075

June 16-17
South Dakota Peach Festival,
Sioux Falls, SD, 605-789-4098

June 21-23
Crystal Springs Rodeo, Clear
Lake, SD, 605-874-2996

June 21-23
Senior Games, Mitchell, SD,
Contact Howard Bich at
605-491-0635

June 22-23
Oahe Days Arts & Music
Festival, Pierre, SD,
oahedaysinfo@gmail.com

June 22-24
Annual Main Street Arts and
Crafts Festival, Hot Springs,
SD, 605-440-2738

June 29
Naja Shrine Circus, Wall, SD,
605-342-3402

June 30
Naja Shrine Circus,
Deadwood, SD, 605-342-3402

July 1
Naja Shrine Circus, Lemmon,
SD, 605-342-3402

July 10-15
4th Annual 3 Wheeler Rally,
Deadwood, SD, 605-717-7174,
www.d3wr.com

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.