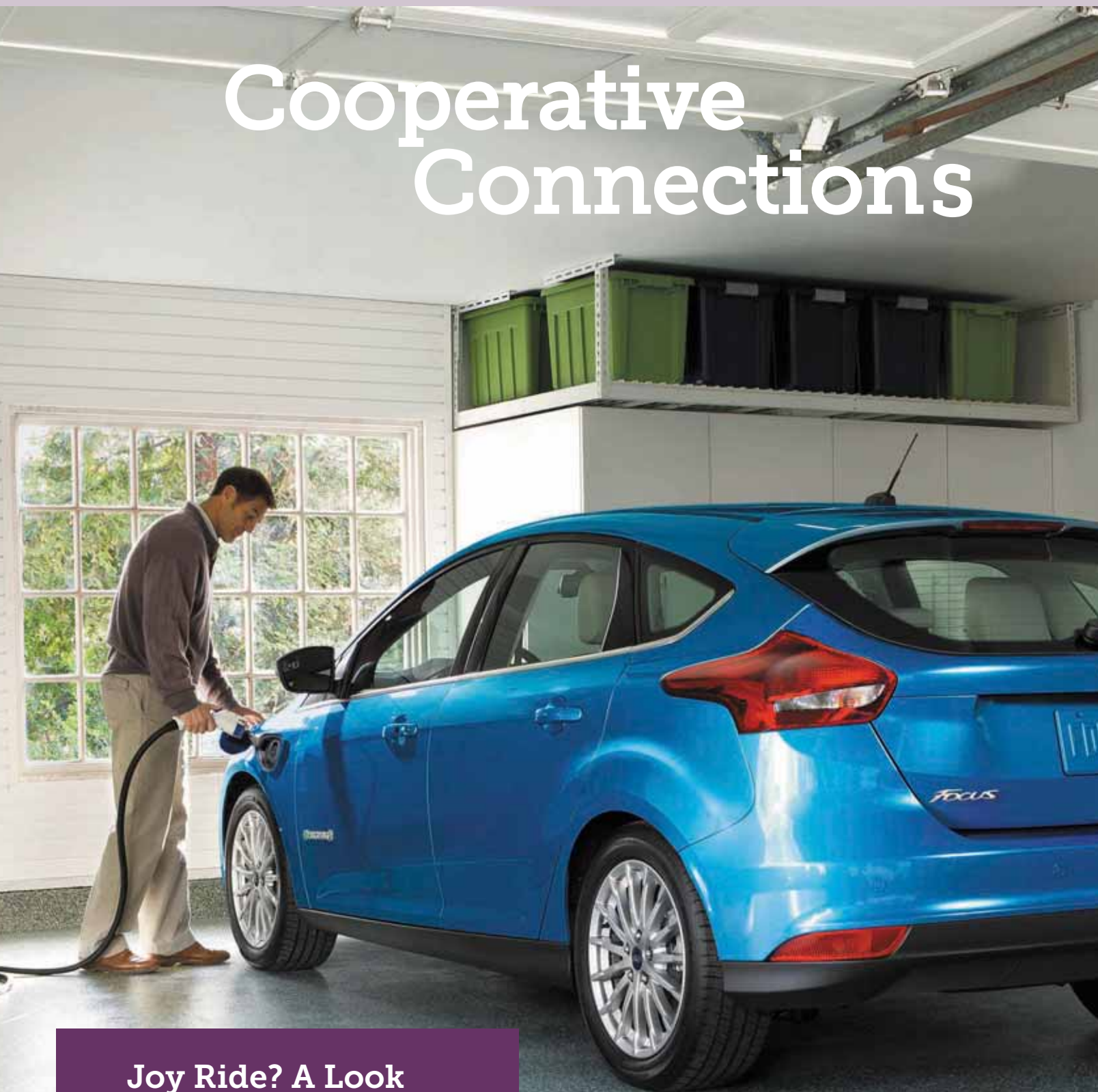


Cooperative Connections



**Joy Ride? A Look
at Electric Vehicles**

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Tractor of Tomorrow?

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Make Your Voice Heard During The June Primary Vote On June 5



Ben Dunsmoor

bdunsmoor@northernelectric.coop

As you make your summer plans please mark June 5 on your calendar as a day to take a few minutes to make some important decisions on issues that will have a big impact on a local, state, and federal level.

Summer is just around the corner and that means you and your family will likely be making plans for summer vacations, getaway weekends at the lake, or family reunions and picnics. I know, the calendar can fill up fast as you try to fit in as many activities as possible, but I would like you to make room for one more important date on your calendar; June 5.

June 5 is the South Dakota primary when registered Republicans, Democrats, and Independents can select the candidates who will represent their party during the general election on November 6. There is also going to be a constitutional amendment on the ballot this year so there will be important decisions no matter your party affiliation.

In 2016, America's electric cooperatives launched an effort called 'Co-ops Vote' as a way to encourage more rural voters to register to vote and show up at the polls. The National Rural Electric Cooperative Association (NRECA) reports that 500,000 more voters in co-op territories across the country went to the polls in 2016. That is a half-million more people voicing their concerns about issues such as reliable and affordable electricity, rural infrastructure, and access to rural broadband. These are issues every rural voter can support and issues that hit close to home for voters in co-op country. This June, if you are not registered to vote I ask you to register and turn out at the polls to make your voice heard on these important topics.

So, what will we specifically be voting on during the June 5 primary? Republicans will be selecting candidates they would like to run for South Dakota Governor and the U.S. House of Representatives along with some local legislative candidates and local races. Democrats in the area will also have a few primaries for state legislative races along with city and school board races. Registered Independent voters can vote in the Democratic primary in South Dakota and make their voice heard along with Democrats and Republicans on Constitutional Amendment Y. Constitutional Amendment Y proposes to make several changes to the victims' rights amendment known as 'Marsy's Law' which was passed during the 2016 election. These are changes every voter in South Dakota will be asked to approve or reject in June.

So, as you make your summer plans please mark June 5 on your calendar as a day to take a few minutes to make some important decisions on issues that will have a big impact on a local, state, and federal level.





(USPS 396-040)

Board President: Donna Sharp

Board of Directors

- Randy Kienow – Vice President
- Glen Larson – Secretary
- Wayne Holt – Treasurer
- Fran Esser
- Victor Fischbach
- Josh Larson
- Mark Sumption
- Nolan Wipf

CEO/General Manager: Char Hager - info@northernelectric.coop

Chief Financial Officer: Cathi Podoll

Operations Manager: Mike Kelly

Manager of Member Services: Russel Ulmer

Manager of Information Technology: Derek Gorecki

Communications Director: Ben Dunsmoor - bdunsmoor@northernelectric.coop

Executive Secretary: Kay Albrecht

NORTHERN ELECTRIC COOPERATIVE CONNECTIONS is the monthly publication for the members of Northern Electric Cooperative, PO Box 457, Bath, SD 57427. Families subscribe to Cooperative Connections as part of their electric cooperative membership. The purpose of Northern Electric Cooperative Connections is to provide reliable, helpful information to electric cooperative members on electric cooperative matters and better rural living.

Subscription information: Northern Electric Cooperative members devote 50 cents from their monthly electric payments for a subscription. Non-member subscriptions are available for \$12 annually. Periodicals postage paid at Bath, SD 57427.

Postmaster: Please send address changes to Northern Electric Cooperative Connections, PO Box 457, Bath, SD 57427; telephone (605) 225-0310; fax (605) 225-1684

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Northern Electric Cooperative's regular board meeting was held April 19, 2018, at the headquarters in Bath with all directors present. Eide Bailly partner Derrick Larson was a guest for the meeting. As the first order of business, the Board approved the March 23, 2018, minutes and March expenditures. The Board then reviewed and accepted monthly reports by management including details on financial, operations, member services, safety, communications and IT.

Directors viewed the East River Electric Power Cooperative video report. East River Director Mark Sumption reported on actions taken by the East River Board at the April 5, 2018, meeting. General Manager Char Hager reported on the East River MAC meeting which was April 3, 2018, in Madison, SD. South Dakota Rural Electric Association Director Nolan Wipf reported on the SDREA board meeting held March 28-29, 2018, in Rapid City. Director Glen Larson and Communications Director Ben Dunsmoor reported on the 2018 NRECA Legislative Conference which was held April 8-10, in Washington, D.C.

Manager's Report

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

- Update and discussion on new and progressing development projects and activities taking place in the community and our service area.
- Brief update on Rural Electric Economic Development (REED) revolving loan fund activities.
- Legal and Legislative report from Director Glen Larson and Communications Director Ben Dunsmoor on the 2018 Legislative Conference, April 8-10, in Washington, D.C.

APRIL BOARD REPORT

- Informed directors that 2018 District 1, 3, and 8 candidate petitions need to be submitted by July 13, 2018. Glen Larson - District 3 - is term-limited and will not be able to run again.
- Reported that the 2018 Basin VIP Tour will be June 26-27, Bismarck/Beulah, ND.
- Calendar review of upcoming meetings and events.

Board Report

The board considered and/or acted upon the following:

1. Approved the date and time of the next regular board meeting for 8:30 A.M. on Thursday, May 24, 2018.
2. Approved payment of legal fees for Harvey Oliver in the amount of \$832.83.
3. Received and approved the 2017 CPA Audit Report presented by Derrick Larson of Eide Bailly, LLP.
4. Approved allocating \$1,886,956.22 of NEC's combined 2017 margins to member patronage capital credit accounts.
5. After repeated failed attempts by the cooperative to collect unpaid balances, the Board approved a resolution to write off 31 uncollectable accounts in the amount of \$14,044.89. Any uncollected amounts have been filed in small claims court or filed with a collection agency, and any members remaining capital credit balances will be assigned against the outstanding amounts.
6. Approved donation of \$500.00 to be given to SPURS Equestrian Special Olympics.

Questions or more details on any of these matters? Please ask your cooperative manager, staff member, or director.

Financial Report	March 2018	March 2017
kWh Sales	27,247,881 kWh	27,511,694 kWh
Electric Revenues	\$2,366,931	\$2,400,460
Total Cost of Service	\$2,464,707	\$2,466,999
Operating Margins	(-\$97,776)	(-\$66,539)
Year To Date Margins	\$353,643	(-\$33,208)

Residential Average Monthly Usage and Bill

	Usage (kWh)	Rate (\$/kWh)	Bill (\$)
March 2018	2,600 kWh	\$238.25	.0916 per kWh
March 2017	2,535 kWh	\$224.54	.0886 per kWh

Wholesale power cost, taxes, interest, and depreciation accounted for 81.4% of NEC's total cost of service.

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.



GENERATOR SAFETY 101

The peace of mind a standby electric generator brings to your home, farm or business is big. It's nice to have a backup plan to keep things running through unpredictable weather and occasional outages. But with big peace of mind comes big responsibility.

The generator must be properly installed on an isolated circuit. A connection without the right switch can cause backfeed.

TELL US

First things first, let Northern Electric Cooperative know if you're installing a generator. Call your the co-op and speak with a Member Services Representative

to notify us. It's important that we update your account and are aware of all generators in the area. This keeps our linemen safe during outages. So, please, let us know!

DANGERS OF BACKFEEDING

The generator must be properly installed on an isolated circuit. A connection without the right switch can cause backfeed. This creates a dangerous current of electricity, which can be deadly to you and co-op linemen. When backfeed enters a power line from a generator it can create a hot line. If a lineman expects the line to be de-energized due to an outage situation, but it's hot because of a generator, it could create a life-threatening situation.

BE AWARE OF CARBON MONOXIDE

Generators must never be operated in enclosed buildings. Be sure your generator is vented and has enough air to be safe. Carbon monoxide emissions can build up quickly and can be deadly.

FUEL SAFETY

Whether propane, gasoline or diesel, be

sure generator fuel is stored correctly in approved containers. Never refuel while the generator is running or still hot.

DISCONNECT FROM MAIN SOURCE

Always power down and disconnect from your utility service before starting your backup generator.

GIVE IT A BREAK

Manage the use of your generator during outages to save on fuel. It helps you be more energy efficient and keeps your generator in good running order. If the power is out for an extended period of time, use the generator to run the refrigerator every few hours so it stays cool enough for food without taking up constant energy. Giving the generator breaks is important. Most portable generators are not equipped to run around the clock. Be sure to shut it down and let it cool off.

These are just a few safety guidelines. To learn more about generator safety, give Northern Electric Cooperative a call. We are happy to help keep you, and us, safe.



2018 VIP TOUR

WHO: All Northern Electric Cooperative member/consumers can apply for the VIP Tour; even if they have gone on the tour before.

WHAT: Tour Basin Electric Power Cooperative headquarters, the Garrison Dam, a coal mine, the Antelope Valley Station power plant, and the Great Plains Synfuels plant in Beulah, North Dakota.

WHERE: Bismarck and Beulah, North Dakota

DATES: June 26-27, 2018

COST: FREE (bus, meals, and lodging are covered by the cooperative. Members must bring their own shopping/spending money)

APPLY: Mail in the completed form below or apply online at www.northernelectric.coop/content/vip-tour by **May 25, 2018**.

NORTHERN ELECTRIC VIP TOUR:

Name: _____

Address: _____

E-mail: _____

Phone: _____

DEADLINE FOR ENTRIES IS MAY 25, 2018
 Return form to: Northern Electric
 Attn: Kay Albrecht
 PO Box 457
 Bath, SD 57427



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."

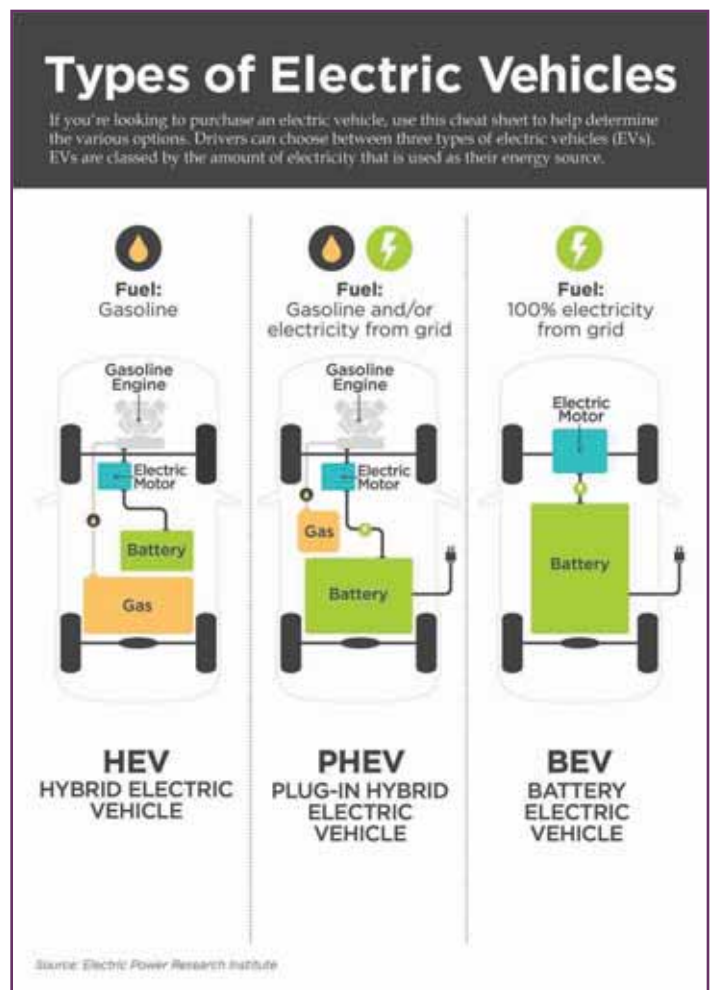
The Federal Highway Administration reports the average American drives 37 miles a day.

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.



"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.

CALL FOR NOMINATIONS

Nominating Petition Due By July 13, 2018

Call For 2018 Board of Directors Nominations

During Northern Electric Cooperative's 2018 Annual Meeting (Wednesday, September 12, 2018, at the Aberdeen Civic Arena) members will elect Directors for Districts 1, 8, and 3.

Incumbent directors Mark Sumption, Frederick (Dist. 1) and Francis Esser, Redfield (Dist. 8) are eligible to run again. The District 3 seat will be vacant because Secretary Glen Larson of Aberdeen has reached his term limit.

Northern Electric Cooperative uses a petition process to nominate directors. The procedure requires all candidates to circulate a petition. Candidates must be cooperative members and reside in the district they wish to represent. Each petition must be signed by at least ten (10) cooperative member-consumers residing in that candidate's district.

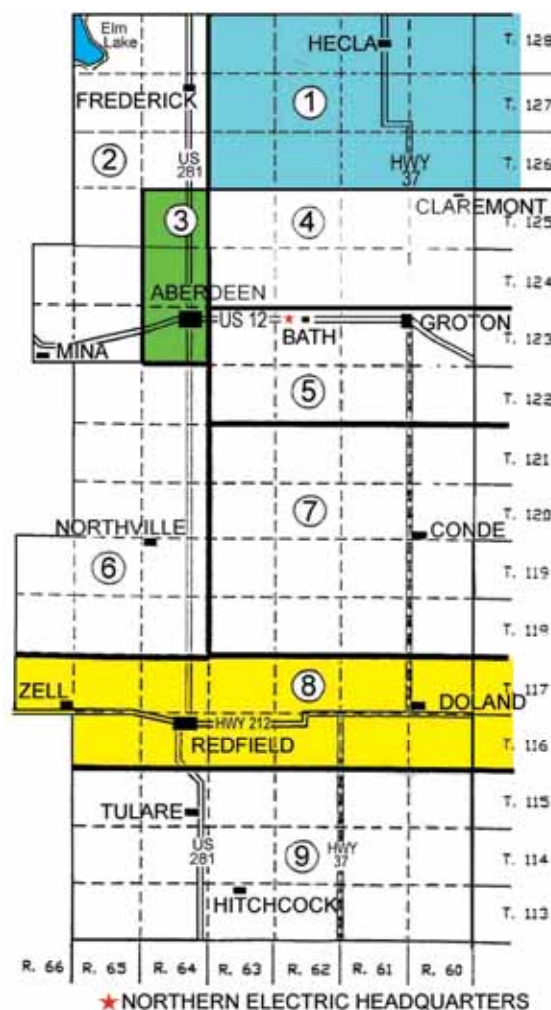
For a joint membership, either the husband or wife may sign a petition but NOT both.

Petitions are available at the Northern Electric offices in Bath and Redfield. Director petitions must be submitted at least sixty (60) days before the Annual Meeting to have names placed on the official ballot and the Notice of the Meeting. No petition filed later than sixty (60) days prior to the meeting shall be considered valid.

Petitions must be filed at a Northern Electric Cooperative office by close of business (4:30 p.m.) **Friday, July 13, 2018.**

Nominations are not permitted from the floor during the meeting.

Members may only sign ONE nominating petition for a director candidate from their district of record.



Director Qualifications

Northern Electric Cooperative Bylaws Article IV Section 3

No person shall be eligible to become or remain a director who:

- 1) Is an employee of Northern Electric Cooperative.
- 2) Is not a member and bona fide resident of the service area served by the Cooperative located within the particular District up for election;
- 3) Is in any way employed by or financially interested in a competing enterprise or business selling electric energy or supplies to the Cooperative or a business primarily engaged in selling electrical or plumbing appliances, fixtures or supplies to the members of the Cooperative;
- 4) Has been previously removed as a Director of the Cooperative in accordance with the procedures provided for removal in these Bylaws;
- 5) Has failed to attend at least 2/3 of all regular board meetings during any consecutive twelve (12) month period.
- 6) Has been employed by the Cooperative in the past five years.
- 7) Has pled guilty or has been convicted of:
 - A felony,
 - Any crime involving dishonesty, or
 - Any crime involving moral turpitude

2018 Annual Meeting Scheduled September 12

Director Nomination and Election Process

At the 2018 Annual Meeting, Districts 1, 8, and 3 are up for election. Northern Electric Cooperative Bylaws set the criteria required to seek election as a Northern Electric Cooperative director:

Article IV, Board Members:

Section 1. General Powers. The business and affairs of the cooperative shall be managed by the Board of Directors consisting of nine members elected by the membership at an annual meeting from districts as provided in this article, which Board shall exercise all of the powers of the Cooperative, except such as are by law, the Articles of Incorporation or these Bylaws conferred upon or referred to the members. It shall be the duty of each Director to participate in such activities as are deemed necessary to enhance the prestige of the Cooperative, broaden its operation and fulfill its public obligation as a member of the various communities in which it does business and in furtherance, thereof, to devote reasonable time and attendance at meetings of affiliate organizations and at training sessions to assist and improve Directors and Officers in carrying out their duties.

Section 2. Election and Tenure of Office. At each Annual Meeting of the members, Board Members shall be elected by secret ballot; provided, that when there is no contest for the representation of a particular district and there is no objection, balloting may be dispensed with in respect of that district and voting may be conducted in any other proper manner. Board Member shall, unless the Cooperative's members determine otherwise in advance of the initial balloting, be elected by a plurality vote of the members. Drawing by lot shall resolve, when necessary, any tie votes.

Except as hereinafter provided, no Directors shall be eligible for re-election who has served as a Director for nine (9) consecutive years and such Director shall be disqualified for a period of three (3) consecutive years.

Section 3. Voting Power. Each of the Directors will be entitled to one (1) vote upon all issues which they are called upon to vote.

(Qualifications printed in inset on page 14)

Upon establishment of the fact that any person being considered for, or already holding, a Directorship or other position of trust in the Cooperative lacks eligibility under this Section,

it shall be the duty of the Board to withhold such position from such person, or to cause the member to be removed therefrom as the case may be. Nothing in this Section shall contain or shall be construed to affect in any manner whatsoever the validity of any action taken at any meeting of the Board, unless such action is taken with respect to a matter which is affected by the provisions of this Section and in which one (1) or more of the Directors have an interest adverse to that of the Cooperative.

Section 4. Director Districts. The territory served or to be served by the Cooperative shall be divided into nine (9) Director Districts, the boundaries of each being established by the geographical area within the township and ranges as set forth opposite of the District designation including adjacent areas on the outer perimeters of the Cooperative's territory. One (1) Director shall be elected from each of the nine (9) Director Districts.

District 1 shall consist of the following: Townships 126, 127 & 128 in Ranges 60, 61, 62 & 63; Township 127 in Range 59; Township 129 in Range 63; and Township 129 in Range 60.

District 2 shall consist of the following: Townships 123, 124, 125, 126, 127, 128 & 129 in Range 65; Township 123 in Range 66; and Township 126, 127 and 128 in Range 64.

District 3 shall consist of the following: Townships 123, 124 & 125 in Range 64.

District 4 shall consist of the following: Townships 124 & 125 in Ranges 60, 61, 62 & 63; and Township 124 in Range 59.

District 5 shall consist of the following: Townships 122 & 123 in Ranges 60, 61, 62 & 63.

District 6 shall consist of the following: Townships 118 & 119 in Range 67; Townships 118, 119, 120 & 122 in Range 66; Townships 118, 119, 120, 121 & 122 in Range 65; and Townships 118, 119, 120, 121 & 122 in Range 64.

District 7 shall consist of the following: Townships 118, 119 & 120 in Ranges 60, 61, 62 & 63; Township 119 in Range 59; and Township 121 in Ranges 59, 60, 61, 62 & 63.

District 8 shall consist of the following: Townships 116 & 117 in Ranges 60, 61, 62, 63, 64, 65 & 66; and Township 117 in Range 67.

District 9 shall consist of the following:

Townships 113, 114 & 115 in Ranges 61, 62, 63 & 64; Townships 114 & 115 in Ranges 65 & 66; Townships 114 & 115 in Range 60; and Township 115 in Range 59.

Section 5. Nomination of Directors. The nominating process shall be premised on a nine (9) District - nine (9) Director Cooperative. **Any ten (10) or more members residing in such District may file a nominating petition with the Secretary placing in nomination any qualified member from such District. Each signatory shall place the date of signing and his address on said petition. No member may sign a petition to nominate more than one candidate, and to do so shall invalidate the member's signature on the petition signed on the latest date.**

This procedure shall be followed in each Director District in which the Director terms shall expire. Upon receipt of such petition and having found the same to be in order, the Secretary shall post such nomination in the principal office of the Cooperative. Candidates so nominated shall be identified in the Notice of the Meeting and shall also be named on the official ballot.

No petition filed later than sixty (60) days prior to the annual meeting shall be considered valid. The order in which the nominees shall appear on the printed ballot shall be determined by lot under the supervision of the Secretary. If any nominee should refuse to become a candidate or is not qualified, in accordance with the requirements of the Bylaws, the Secretary of the Cooperative is authorized and directed to remove the name or names from the list of posted nominees and/or from the ballot.

The Secretary shall be responsible for mailing with the Notice of the Meeting, or separately, but at least ten (10) days before the date of the meeting, a statement of the number of Board Members to be elected and the names and addresses of the candidates nominated. No nominations shall be permitted from the floor. **Each member of the Cooperative present at the meeting shall be entitled to vote for one candidate from their specific District from which a director is to be elected. Voting may occur two hours before or during the official meeting in accordance with the procedure established by the board of directors.** The candidate from each District receiving the highest number of votes at the meeting shall be considered elected as a Board member.

Meet the Electric John Deere

Battery-run Tractor Showcased in Paris

Kaley Lockwood

editor@sdrea.coop

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.

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.

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 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

July 7
Hedahls Auto Value Car Show,
Hav-A-Rest Campground,
Redfield, SD, 605-380-9985

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

July 22
Summer Fest/Car Show, City
Park, Groton, SD, Topper
Tastad at 605-397-7337,
Facebook: Groton SD Lions Club

July 28
Make-A-Wish South Dakota
Poker Run, On the Road
to Wishes, Aberdeen, SD,
Contact Lorren and Jan
Weber at 605-225-7262,
www.facebook.com/bieglers

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.