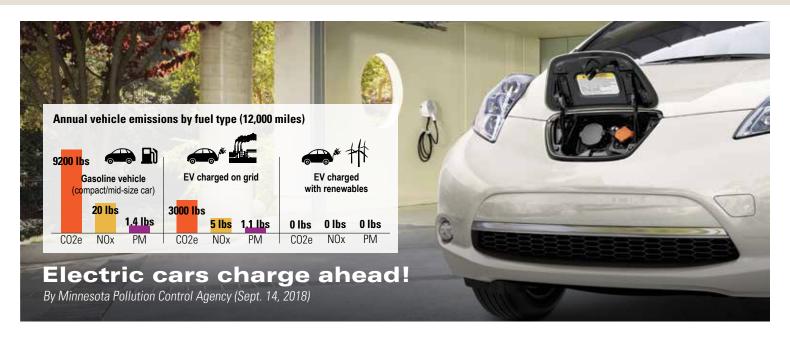
CIRCUITS

NEWS FOR DAKOTA ELECTRIC® MEMBERS



Have you been noticing more electric vehicles (EVs) on the roads these days? Or plugged into a charging station at a local grocery store or parking ramp? Here are some things to know about this new technology.

Why drive one?

Electric vehicles have zero emissions from the tailpipe. In fact, a full-electric car has no tailpipe. Driving an electric car helps improve local air quality, especially in high population neighborhoods near busy roadways. And when you charge your EV with electricity from renewable wind or solar sources, there are zero emissions both when the car is operating and during charging.

EVs are also more economical to

operate. An energy efficiency rating at four times that of a gas-powered car means "fueling" costs for full-electric

Even when charged with electricity from the grid, electric vehicles have 2/3 fewer carbon dioxide emissions than gas vehicles.

Minnesota's electricity generation continues to include more wind and solar — making it even greener to drive an EV!

- Minnesota Pollution Control Agency @MnPCA - Twitter (Sept. 17, 2018)

cars are significantly less. Because EVs have hundreds of fewer moving parts than conventional vehicles, their

maintenance costs are also much less.

Are they expensive to buy?

More models are coming out that rival gas-fueled vehicles on purchase price, especially after federal tax credits are applied. To compare the emissions and cost of driving an electric vs. gas-powered car, check out the U.S. Department of Energy's Electric Drive Cost Calculator at afdc.energy.gov/vehicles/electric.html.

How do you charge the batteries?

Most people charge EVs at home in their garage overnight. Dakota Electric offers two different EV charging programs. Call the Energy Experts[®] at 651-463-6243 for more information or visit

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Thanksgiving - office	e closed Nov. 22-23
Board Meeting	Nov. 29, 8:30 a.m.

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November 2018



Cooking up energy efficiency

To reduce costs and help the environment, make energy-efficient cooking part of your daily routine

Home cooking is a great way to make healthy and flavorful meals, but it can really add to your energy bills. The following simple tips are your recipe for a more energy-efficient kitchen:

- Use the lowest temperature setting possible.
- Preheat the oven to the exact temperature required. Preheating is not necessary for foods that cook for several hours.
- Limit the number of times the oven door is opened; opening the door lowers the temperature as much as 25 degrees.
- Glass and ceramic dishes allow you to reduce the oven temperature 25 degrees.
- Turn the oven off 15 minutes before

the cooking time is complete. Food will continue cooking at the set temperature as long as the door remains closed.

- For range tops, match the size of the pot to the size of the burner.
 A 6-inch pot on an 8-inch burner wastes over 40 percent of the burner's heat.
- Cover pots and pans; foods will cook more efficiently and the kitchen will stay cooler.
- Turn off the burner on your electric range a few minutes before cooking is complete; the heating elements will stay hot enough to continue cooking after the electricity is turned off.
- · Make sure your oven and rangetop

remain clean at all times. A well-maintained oven cooks more efficiently.

Energy-saving kitchen appliances

Slow cookers, electric skillets and toaster ovens are great for heating leftovers, and use much less energy than conventional ovens and range tops. Microwave ovens also use 50 percent less energy than conventional ovens. To save energy, reheat food in the microwave instead of on the range top or in the oven.

Looking for new appliances? Purchase ENERGY STAR® certified models. They use less energy than standard products (see sidebar).

Electric cars (cont.)

dakotaelectric.com/programs-rebates.

A number of public parking ramps, workplaces and stores have charging stations for use when drivers are away from home and need a charge. Depending upon the station owner, there may or may not be a cost for using a public station. There are over 630 public charging spaces in Minnesota. Check out the locations at www. plugshare.com.

For long distance travel by EV, charging corridors are going in across the country, including right here in Minnesota, along I-35 from the Twin Cities to Duluth. The charging stations can charge an EV in about 30 minutes. In the future, these stations are expected to provide a charge in about 10 minutes, which is about the time it takes to fill a car with gas.

What does the future hold for electric cars?

New developments in battery technology, a growing number of vehicles to choose from, wireless charging and expanded charging infrastructure, among others, point to a

bright future for EVs. It helps that more and more automakers are investing in the development and expansion of EVs. Today in Minnesota, you can purchase one of 25 models of plug-in hybrid or fully electric vehicles.

Are there fewer miles per charge in the winter?

The distance you can drive per charge does decrease in the winter. Here are some things you can do to improve mileage in cold weather.

- ✓ WARM THE CAR CABIN WHILE THE CAR IS STILL PLUGGED IN. This allows you to use power from the grid to warm up the car rather than pulling electricity from the car battery.
- ✓ **USE YOUR VEHICLE'S HEATED ACCESSORIES.** Heated steering wheel, seats, etc. use less energy than heating the entire cabin. In addition, the warmth on your backside and fingers can minimize the amount of cabin heat needed to make you and your passengers feel comfortable.
- ✓ **PRACTICE ECO-DRIVING.** Watch your speed, avoid hard starts and coast to a stop when possible. Visit FuelEconomy.gov for more EV eco-driving tips.
- ✓ BE SURE TO BRUSH OFF YOUR CAR BEFORE DRIVING. Snow or ice on your vehicle adds extra weight that your battery has to drag along. It also increases aerodynamic drag by changing your vehicle's profile. Since EVs don't produce waste heat from the engine, snow on your hood will stay put if you don't brush it off before you start your trip.

 Source: Energy.gov

 Source: Energy.gov

 Note: Energy.gov

 Note

Clean up

Newer dishwashers clean heavily soiled dishes to a shine, eliminating the need for pre-rinsing. If you must pre-rinse, use cold water. If your dishwasher has a booster heater, set the temperature of your water heater to 120 degrees, and remember:

- Don't run the dishwasher until you have a full load.
- Load the dishwasher carefully to ensure the water flows freely, and the dishes are cleaned efficiently.
- Use the air-dry feature whenever possible.

Content provided for Dakota Electric members, Powered by Questline RelationshipBuilder.© Questline Inc

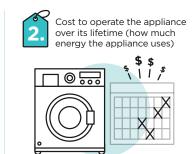


TIPS FOR PURCHASING **NEW APPLIANCES**

When shopping for new appliances, there are two price tags you should consider:

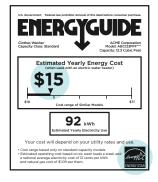


Purchase price of the



That second price is important because you'll be paying for the appliance's energy use for the next 10 to 20 years.

- Look for the ENERGY STAR® label. ENERGY STAR-qualified products exceed the federal minimum standards for efficiency and quality.
- Carefully review the EnergyGuide label on the appliance. The label provides information about how much energy an appliance uses compared to similar models.
- Once you choose your make and model, compare prices. Keep in mind, many retailers will match a lower price offered by competitors.
- Recycle or sell your old appliance. Ask the retailer if they'll pick up your old appliance, or you can sell it yourself. Either option is better than the landfill!



Source: Departent of Energy



EMBRACE ELECTRIC VEHICLES



It's a match made in heaven for your plug-in electric vehicle.

With **ChargeWise**, get up to \$500 for installing the charger for your EV, and the most affordable rate to meet your charging needs.

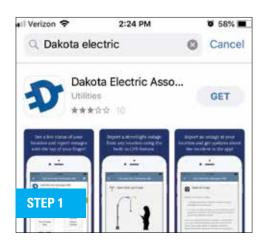
Enroll in **Revolt**, and you can power your electric vehicle with 100 percent wind energy, for the lifetime of that vehicle, at no extra cost.

It's truly a heavenly arrangement. Contact the Energy Experts® at 651-463-6243 or visit dakotaelectric.com to learn more.

Be prepared for the next power outage

Download Dakota Electric's outage app for easy, convenient outage reporting

🗸 Report a power outage 🗸 View outage map 🗸 Receive status updates/notifications 🗸 Report street lights out



Download and install the free outage app by visiting the App Store or Google Play on your mobile device and search for "Dakota Electric" (made by MTS Systems).



Once you have installed the app, you must request a code by calling 651-463-6212 or submitting a form online at dakotaelectric.com/report-an-outage/ dakota-electric-outage-app. The code is specific to your account and is required to personalize the app to your residence.



Once you receive the code, tap the \pm symbol in the upper left corner of the dashboard screen in the app, type in the code and hit "Subscribe." You can now set up your profile and alert notifications.

Why download the outage app?

- Easily report a power outage or a street light out with a tap of a button.
- Report and monitor multiple residences.
- Choose to receive alerts about:
 - A new outage
 - Estimated restore time
 - When power is restored
 - Outage cause
 - Other notifications
- View outage map.

Download it before, not during, a power outage

Be sure to download the outage app before you experience a power outage. Power outages can happen at all hours of the day or night. Because the app requires a code to personalize it to your residence, its best to request the code during business hours. Staff may be unable to issue a code during a power outage or after hours.



The days are getting shorter, and you may be out and about and notice a street light out. Now you can easily report a street light out using the app. Simply stand next to the street light that is out, enable Wi-Fi and press "Submit." The GPS on your device will report the location to Dakota Electric.



Dakota Electric donates \$47,000 to local schools

Dakota Electric recently awarded a total of \$47,000 in unclaimed capital credits to Farmington, Cannon Falls and Northfield school districts, as well as Dakota County Technical College (DCTC).

Farmington (ISD 192)

The Farmington school district will use the money to improve communication with district families and the community, and to provide transportation for students who otherwise could not participate in after-school educational programs.

Cannon Falls (ISD 252)

The Cannon Falls school district will use the money to help cover student costs related to after-school activities, student expenses related to personal needs and to pay for school lunch balances of students who have unforeseen events that impact their ability to pay.

Northfield (ISD 659)

The Northfield school district will use the money to purchase up-to-date

equipment and training so that the teachers at both the middle school and high school level are able to prepare students for a future in the technical marketplace.

Dakota County Technical College (DCTC)

DCTC will use the money to purchase tool boxes for the heavy-duty truck

technology and heavy construction technology classrooms. Students who cannot afford their own toolboxes use the classroom tools. A matching grant provided by the state will provide a welder along with the toolboxes, helping to supply

necessary equipment for several classrooms.

District representatives expressed their sincere gratitude at a recent Dakota

Electric board meeting.

"Dakota Electric is a big supporter of scholarships at both DCTC and Inver Hills Community College, and we really thank you for that," said Michelle Boe, executive director, DCTC and IHCC Foundation. "Your gift has been leveraged to the fullest extent to help students in our community."



L-R: David Jones (Dakota Electric board chair), Jay Haugen (ISD 192), Matthew Hillmann (ISD 659), Clay Van De Bogart (Dakota Electric board member), Michelle Boe (DCTC/IHCC Foundation), Paul Trapp (Dakota Electric board member), and Tom Hodges (ISD 252).

Cannon Falls High School Principal Tim Hodges added, "We are grateful to receive this money that you have so generously donated to us. Thank you so much!"

Dakota Electric named Employer of Excellence

For the second year in a row, Dakota Electric was awarded Employer of Excellence. The Dakota-Scott Workforce Development Board wanted to recognize some of the best employers in Dakota and Scott counties and provide vital information to companies about the practices they use to attract and retain employees. Twenty-nine organizations participated, and 12 area organizations were awarded the honor

Employers were evaluated on numerous metrics including turnover, rate of growth, promotion rates, employee evaluations and feedback, percentage of employees injured, diversity of management, benefits offered, training expenditures, paid days off and increase in pay.

Dakota Electric was honored in the mid-size employer category (75-200 employees) along with Firefly Credit Union, The Smead Manufacturing Company and Apothecary Products, LLC.

Other recipients include Carlson Capital Management; Custom Drapery and Blinds by

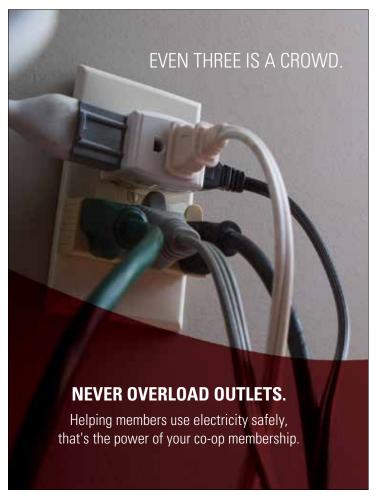


Esch, LLC; Hydra-Flex, Inc.; Reese Enterprises; Entrust Datacard: Lifeworks Services, Inc.: Prime Therapeutics and UTC Aerospace Systems.











Circuits Quick Clips

Do you want to serve on Dakota **Electric's Nominating Committee?**

Dakota Electric Association is requesting member volunteers to serve on the Nominating Committee. Members who desire to serve should email Cherry Jordan at cjordan@dakotaelectric.com or call 651-463-6252. Requests must be received by 4:30 p.m. on December 7, 2018. Volunteer members are drawn by lot for each district (two members from each district and one alternate from each district). Members will be notified of their selection on or about January 4, 2019. The Nominating Committee will meet late afternoon/evening on January 28, 2019, at Dakota Electric's Farmington office to interview candidates for the Board of Directors' election.

Deadline for board candidates is Dec. 7

The following incumbent directors will be seeking re-election to the Board of Directors at Dakota Electric Association's annual meeting on April 25, 2019: David Jones in District 1, Jim Sheldon in District 2, Bill Holton in District 3, and Paul Trapp in District 4. Any member in good standing may seek election for the Board of Directors in the district in which he/she resides. Members interested in seeking election for a director seat should request an application from Cherry Jordan at cjordan@dakotaelectric.com or call 651-463-6252. Completed applications must be received at the Dakota Electric office by 4:30 p.m. on December 7, 2018. Candidate interviews will be conducted the evening of January 28, 2019.

Sales tax exemption for electric heat and GSHPs

If you are a Minnesota resident, you may be eligible for a sales tax exemption on your electric bill from November through April each year if electricity is the primary source of heat in your home or you have a ground-source heat pump. To determine eligibility, see the Minnesota Department of Revenue Sales Tax Fact Sheet 157 at www.taxes.state.mn.us. If you have questions regarding your eligibility for sales tax exemptions, please contact the Minnesota Department of Revenue at 651-296-6181 or toll free 1-800-657-3777 or by email at salesuse.tax@state.mn.us.

To apply for a sales tax exemption, download the form at dakotaelectric.com. The exemption will remain in effect until revoked.

Circuits Newsletter is getting a new look!

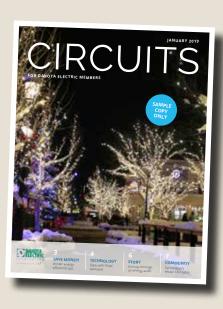
Our monthly member newsletter is getting a facelift.

The new magazine-style design will feature a cover photo, feature spreads on community members and organizations, energy-efficiency tips, technology, co-op news and education, electric safety and human interest stories.

Watch for the new issue to hit mailboxes in January!

We have also created a new emailed version that will hit inboxes in January.

For those that wish to receive it electronically, you can subscribe online at dakotaelectric.com.



Board of Directors

District 1 John (Jack) DeYoe David Jones, Chair Gerald F. Pittman District 2
Janet L. Lekson, MREA Director
Jim Sheldon, Treasurer
Clay Van De Bogart, Great River
Energy Director

District 3
Kenneth H. Danner
William F. Holton
Margaret D. Schreiner, Great River
Energy Director

District 4
Paul Bakken, Vice Chair
Judy H. Kimmes
Paul A. Trapp, Secretary



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Tanya Wolfs, Editor



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1-800-252-1166

Underground cable locations

Contact Us

7 a.m. – 7 p.m. Monday - Friday

651-463-6212 or 1-800-874-3409

Lobby 7 a.m. – 4:30 p.m., Monday - Friday 4300 220th Street West, Farmington, MN 55024

24-hour outage & emergency service 651-463-6201 or 1-800-430-9722

Minnesota Relay Service 711

Member service & drive-up window

Tree trimming & street lights 651-463-6287

Gopher State One Call 811 or 651-454-0002 or

Dakota Electric is an equal opportunity/ affirmative action employer

www.dakotaelectric.com customerservice@dakotaelectric.com



In honor of Thanksgiving, our office will be closed Thursday and Friday, Nov. 22-23. Our system control center is staffed 24/7 and ready to respond to outages and emergencies.

Program information and offers in this newsletter are subject to change without notice.