

CIRCUITS

NEWS FOR DAKOTA ELECTRIC® MEMBERS



THE BUS USED AN AVERAGE
OF 1.78 KWH/MILE
FOR A TOTAL O&M COST OF
34 CENTS/MILE



First-year results in for electric school bus pilot project

Results are in for the first year of the electric school bus pilot project, a collaboration between Dakota Electric Association, Great River Energy and bus company Schmitt & Sons.

According to Jane Siebenaler, Dakota Electric's business account executive, the project was designed largely to showcase new energy-efficient electrification technologies and demonstrate how an electric school bus would perform in Minnesota's cold climate and rural areas.

"We are happy to report that it operates wonderfully in both categories. It ran smoothly and battery life wasn't an issue on the route it traveled," Siebenaler said. "It is clean transportation, which means a healthier transportation option."

Although diesel buses are built more efficiently today, the operation and maintenance costs for the electric school bus were less than a new diesel bus, with the electric bus totaling \$0.34 per mile.

Terri Johnson of Schmitt & Sons is the driver of the electric school bus, and when interviewed earlier this year, she had nothing but good things to say about the experience.

"I absolutely love driving the electric bus," Johnson said. "You don't have the smell; you don't have the noise. It handles so well and is such a smooth ride."

Johnson said the kids also appreciate the quiet, smooth ride noting there is no jerking when shifting like on a traditional bus. And the lack of engine noise means the kids don't have to talk over

the noise of the bus, which they like.

Throughout the last year, the pilot project generated plenty of attention and awareness through a tour around the state, the Lakeville Pan-o-Prog festival and the Minnesota State Fair.

Although the initial cost to purchase the bus is higher than a traditional diesel bus, Siebenaler says this project has proven that an electric school bus can be a reliable and cost-effective option for busing and transportation companies in the future.

Representatives from Great River Energy, Dakota Electric and Schmitt & Sons will continue to monitor comparative operation and maintenance costs for the life of the electric and diesel buses.

In This Issue

The latest and greatest in smart home technologies2-3
High electric bill? Find out why.....2
Member Appreciation Event photos4-5
Assistance for military service personnel . .7
Energy and safety education for kids7

Upcoming events

Labor Day - Office Closed Sept. 3
EV Ride & Drive Sept. 12, 4-7 p.m.
Board MeetingSept. 27, 8:30 a.m.

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September 2018



The latest and greatest in smart home technologies

By Tom Tate, National Rural Electric Cooperative Association

Today's smart home looks a lot like the cartoon vision of the Jetsons. The applications for home automation are racing ahead, fueled by the near ubiquitous availability of wireless technology and the growth of the Internet of Things.

With the ease of installation, programming and use enabled by wireless technology and smart phone apps, anyone not already engaged with smart home tech should at least consider dipping a toe in the water.

The actual smart home gadgets and technologies continue to evolve, but the mobile app seems to be taking the lead. The infographic to the right details some of the latest app functionalities.

Voice-controlled assistants

Perhaps the coolest new entrants are the voice-controlled assistants, i.e. Google Home, Amazon Echo (Alexa), etc. These are receiving a lot of attention and, depending on the capabilities they are given, have the potential to command everything via voice, freeing you from the tedium of opening an app to control something.

Hub or ala carte?

Wired devices simply don't offer the convenience and luxury of wireless devices.

When it comes to wireless, you can invest in a hub to which a range of proprietary devices connect before going onto

your network, or go ala carte and buy whatever you want that can connect via Wi-Fi.

Hubs lock you into those devices designed specifically to communicate with it. It is limiting, and the hub manufacturer may not provide the best-in-class product for every application. But generally speaking, overall management is easier with a single interface.

Ala carte allows you to pick the best of each category and connect directly to your network. No self-respecting smart home device is sold without an app, so you get all the bells and whistles that entails. You just have to navigate through a host of apps to control everything.

Tom Tate writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the national trade association representing more than 900 electric cooperatives.

High electric bill? Find out why.

The dog days of summer might be over, but you may still be feeling the effects this month on your electric bill.

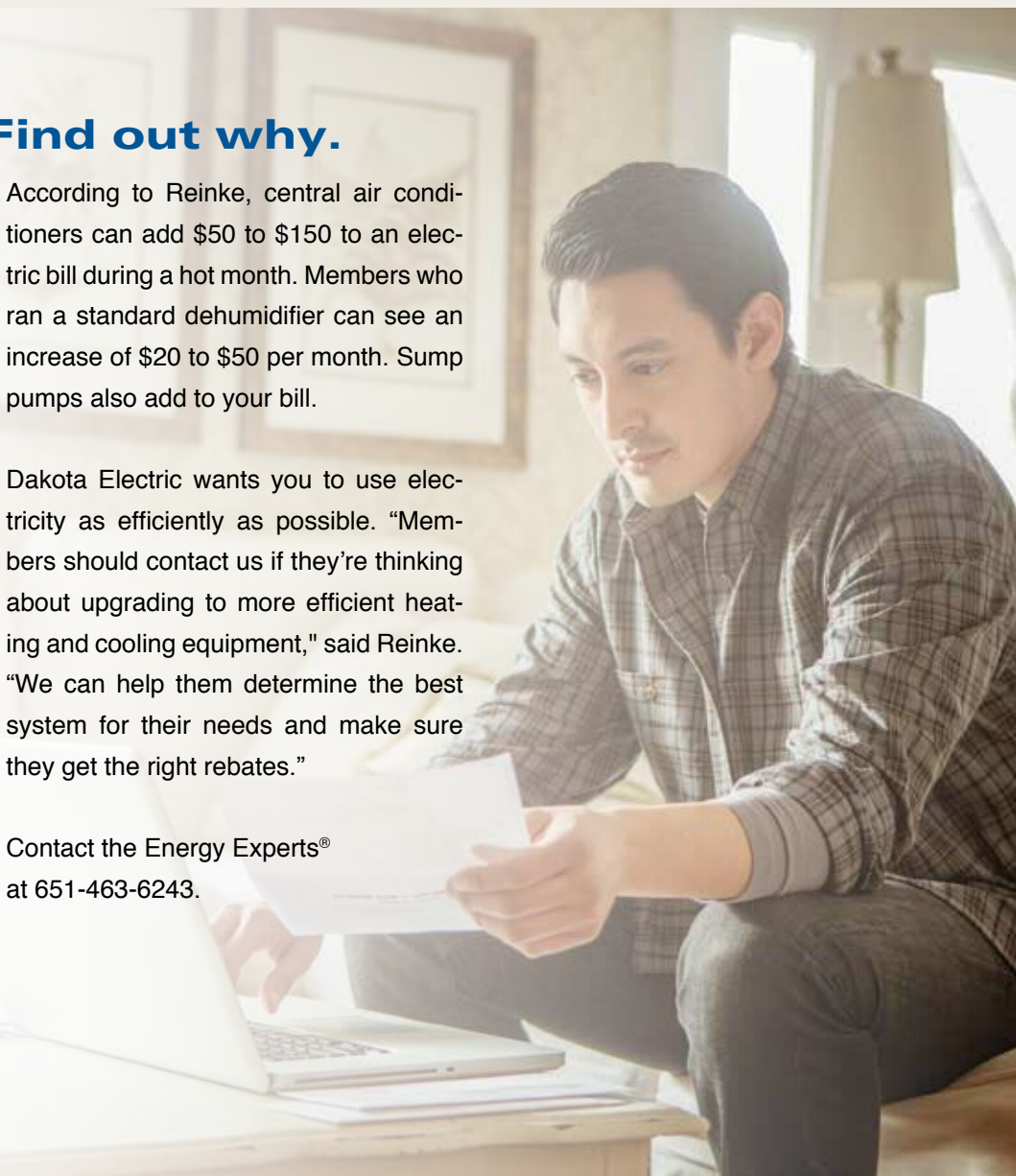
Although this summer was not the warmest on record, we did see high daytime and overnight temperatures and high humidity. According to Dave Reinke, energy services manager at Dakota Electric, residential members are billed for their electricity a few weeks after the month ends. That means members might not be billed for all of July's electric use until August or September.

"Electric bills tend to be higher in the summer because cooling and ventilation can use 20 to 50 percent of the energy in homes and businesses," said Reinke. "By the time you pay your bill, it can be hard to remember just how warm it was."

According to Reinke, central air conditioners can add \$50 to \$150 to an electric bill during a hot month. Members who ran a standard dehumidifier can see an increase of \$20 to \$50 per month. Sump pumps also add to your bill.

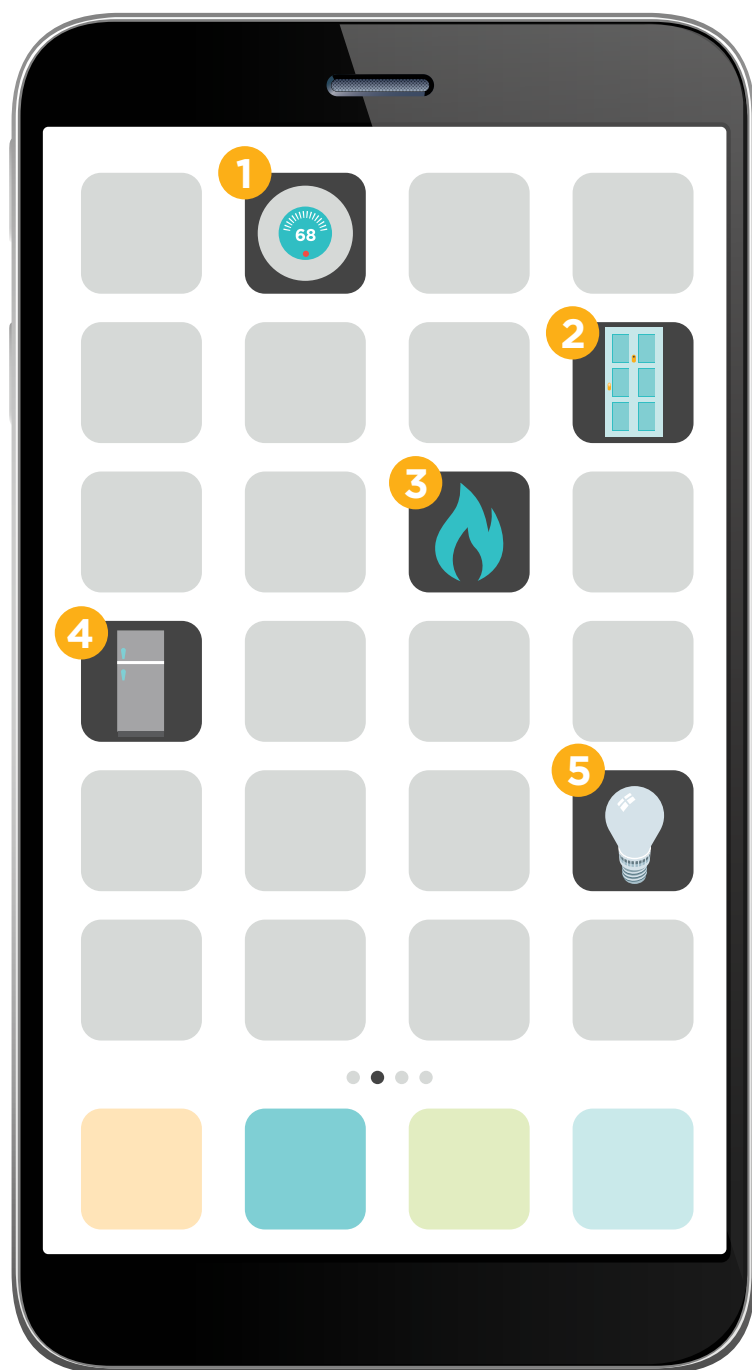
Dakota Electric wants you to use electricity as efficiently as possible. "Members should contact us if they're thinking about upgrading to more efficient heating and cooling equipment," said Reinke. "We can help them determine the best system for their needs and make sure they get the right rebates."

Contact the Energy Experts® at 651-463-6243.



SMART HOME TECH APPS

Smart home technologies are continuously improving, but their companion mobile apps are taking convenience to a whole new level. Let's take a look at some of the latest app functionalities.



1 Smart Thermostat Apps: Geofencing is great enhancement for smart thermostat apps. Set a boundary with your smartphone and when you leave the boundary, the thermostat switches to away or return mode.

2 Smart Security Apps: Video doorbells are becoming increasingly popular, allowing consumers to keep a watchful eye from anywhere. Smart security apps send alerts to signal activity outside your home, giving you peace of mind.

3 Smart Smoke and CO Sensor Apps: These apps have the ability to send alerts, conduct status checks and silence alarms – even when you're away.

4 Smart Appliance Apps: App functionality depends on the appliance. Refrigerator cameras allow you to see what needs to be stocked (while grocery shopping!), and smart dryers can sense when electric use is high and turn off.

5 Smart Lighting Apps: Control lighting options for individual rooms, adjust brightness and color, create lighting scenes based on mood – all from the convenience of your smartphone.



AMERICA'S ELECTRIC
COOPERATIVES

2018 MEMBER APPRECIATION EVENT

MINNESOTA ZOO
JULY 26

Check out our Facebook page for more photos!





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*In-Home Estimate Needed, Offer Expires September 30, 2018

TEST DRIVE

Experience the performance and handling of electric vehicles at Dakota Electric's Ride & Drive event.

Wednesday, Sept. 12 | 4-7 p.m. | Buck Hill Ski Area

Come out and test drive various makes and models, enjoy refreshments and hear a Minnesota EV expert present the features and benefits of owning an electric vehicle.

Register online at:
<https://dearideanddrive.eventbrite.com>

The event is free and open to Dakota Electric members.



DAKOTA ELECTRIC ASSOCIATION
Your Touchpoint Energy Cooperative



Circuits Quick Clips

Members who qualify for **Cold Weather Rule** protection can sign up beginning **Oct. 15**

Are you struggling to pay your utility bills? Members can avoid disconnection or be eligible for reconnection between Oct. 15 and April 15 by following steps outlined by Minnesota's Cold Weather Rule.

Watch for your September bill statement mailed between Sept. 12 and Oct. 3. The bill will include a Cold Weather Rule brochure with more information on program details and contact information for agencies that provide utility payment assistance. You can also visit our website for more information at www.dakotaelectric.com and click on Billing & Payment > Electric Rates & Consumer Rights.

The Minnesota Public Utilities Commission also has details available at www.puc.state.mn.us.

Assistance for military service personnel

If a member is ordered into active duty, for deployment or for a change of duty station, Minnesota law may protect these military personnel and their families from shutoff if they cannot pay their utility bills in full.

How to apply

Call 651-463-6212 to get an application and set up a payment plan. You must keep your payment plan to qualify for protection.

Payment plans

- If your household income is below the state median household income, pay 10 percent of your household's gross monthly income toward your gas/electric bill; or
- If you receive energy assistance, pay 10 percent of your household's gross monthly income toward your gas/electric bill; or
- If your household income is above the state median household income, make and keep a payment plan.

Energy and safety education for kids

It's back-to-school time, and if you're a teacher looking to bring energy education into the classroom, check out the resources Dakota Electric has available!

Safety Programs

To help keep children safe around electricity, Dakota Electric offers two safety programs. Play It Safe Around Electricity is designed for children in preschool to third grade. Dakota Electric's power line safety demonstration programs are available for children ages 10 and older and presented by a former power line specialist. Call Ann at 651-463-6192 for more information.

McGruff Safe Kids ID Kit

Dakota Electric provides local law enforcement agencies throughout Dakota County, Northfield and Cannon Falls with McGruff identification kits each year. Each kit contains a personal identification section, complete with fingerprinting kit, to help parents keep an up-to-date file on their child. Police officers distribute the kits to classrooms if a teacher makes a request.

Speakers Bureau

Dakota Electric has a speakers bureau that presents to schools, Rotary clubs, chambers of commerce and other community organizations on a variety of energy-related issues, including power line safety, renewable energy and energy efficiency. LED Lucy is also available for community events. Call Brenda at 651-463-6234 for more information.



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Thank you!

See inside
for more
photos from
the event!

Our Member Appreciation Event at the Minnesota Zoo was another successful evening! Despite the cool, rainy weather, more than 5,000 people attended the event donating just over 2,000 pounds of food and nearly \$800 cash for local food shelves!

Contact Us

Member service & drive-up window
7 a.m. – 7 p.m. Monday - Friday
651-463-6212 or 1-800-874-3409
Minnesota Relay Service 711

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

Underground cable locations
Gopher State One Call 811 or 651-454-0002 or
1-800-252-1166

Tree trimming & street lights 651-463-6287

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affirmative action employer

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

Dakota Electric's EV Ride & Drive Event is happening Sept. 12! See page 6 for more details.