

# CIRCUITS

NEWS FOR DAKOTA ELECTRIC MEMBERS

## Clock ticking on co-op energy efficiency program

Congressional action needed to salvage electric thermal storage water heating

A long-running and valuable cooperative program may dry up for new participants this spring if an impending ban on a certain sector of water heaters is not overturned. Electric cooperatives and other advocates are encouraging Congress to preserve large-capacity electric resistance water heaters.

At issue is a Department of Energy (DOE) standard that is slated to begin on April 16 that would effectively ban the manufacture of electric resistance water heaters with a storage capacity of 55 gallons or more. The rule will require all large-capacity electric water heaters to operate at 200 percent efficiency, a level that only heat-pump water heaters can meet.

Dakota Electric's electric thermal storage (ETS) water heating program uses super-insulated, large-capacity electric resistance water heaters. Each water heater functions as a "thermal battery" that can store energy during the off-peak hours. Only those water heaters subject to the DOE ban possess the flexibility to produce the benefits of the ETS program.

"This ban is being touted as an energy

efficiency measure, but it ignores the simple fact that a large-capacity water heater used during the off-peak hours is one of the best uses for energy," said Great River Energy Member Services and Marketing Director Gary Connett.

Load management programs like ETS water heating are strategic resources that help cooperatives boost electric system efficiency and increase off-peak energy sales while reducing wholesale demand costs and offsetting the need to build additional power plants.

"Electricity produced during the overnight hours is not only inexpensive, but it also includes a much higher percentage of wind-generated electricity," Connett added.

Member-consumers currently enrolled in ETS water heating programs will not be required to replace their existing water heaters; however, the ban does put the program in jeopardy for future member-consumers to participate.

Call Dakota Electric's Energy Experts® at 651-463-6243 who will work with members interested in ETS water heating.



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### Upcoming events

Youth Tour application deadline . . . .	Feb. 20
Board Meeting . . . . .	Feb. 26, 8:30 a.m.

February 2015



Your Touchstone Energy® Partner 



**Greg Miller**  
President & CEO

## Dakota Electric's plans for 2015

Dakota Electric Association's annual budget is the link between our strategic plan and our long-range financial, information technology and construction work plans. Our plans for 2015 are prepared and presented by staff and approved by the board of directors.

Our construction work plan is the largest item in our annual budget. We plan to invest more than \$11 million in our electric distribution system to replace aging equipment and extend service to new homes and businesses. This year we will complete and energize a new substation north of Red Wing. Safety,

reliability and having adequate system capacity are the driving forces behind all these investments.

Dakota Electric's investment in information technology also benefits our member-owners. Our customer information system (CIS) software is now over 20 years old. Therefore, a significant project this year will be replacing this important system.

Additionally, we plan to continue our investments in web-based services and cybersecurity. After participating in a communication

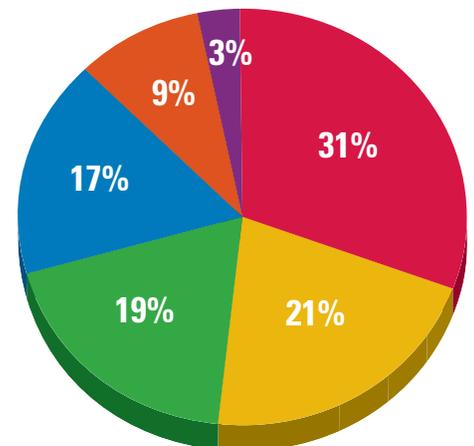
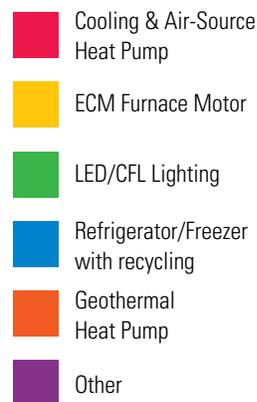
## Thank you to our members 2014 conservation and energy savings

Thank you to Dakota Electric members who participate in the co-op's Energy Wise® off-peak and conservation programs. These programs help members reduce electric use and keep their bills as low as possible. Participating members are rewarded with rebates or low, off-peak electric rates.

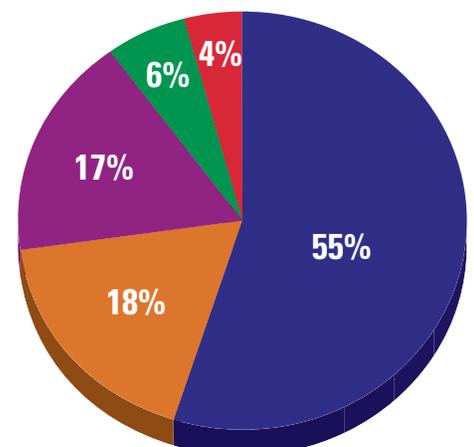
These members have also helped us exceed our 12.5 million kilowatt-hours (kWh) Conservation Improvement Program (CIP) goal for 2014, a state law that requires every electric utility to achieve energy savings equivalent to 1.5 percent of their annual retail energy sales. Member participation in the organization's energy conservation programs is essential for Dakota Electric to meet this challenging goal. In 2014, our members saved more than 14.4 million kWh through rebate programs, off-peak programs and energy conservation. By participating in off-peak programs, members helped save around \$17 million in wholesale power costs. The pie charts to the right indicate the top rebate programs for residential and commercial members in 2014.

Dakota Electric offers a variety of off-peak programs and energy-efficiency rebates. Visit [www.dakotaelectric.com](http://www.dakotaelectric.com) for a full list of programs. Click on Residential or Business to find the appropriate programs for you, or call 651-463-6243.

### RESIDENTIAL PROGRAMS



### COMMERCIAL PROGRAMS



study last year, Dakota Electric will utilize fiber optics to link our 29 substations and field devices back to our headquarters in an effort to safely and easily move increasing amounts of critical data.

Despite seeing new residential construction and a growing number of member-owners, we are seeing little related growth in energy sales. This is primarily due to energy efficiency and conservation. We are pleased that our member-owners are embracing energy conservation since it delays the need to add new generating resources, but it is a new challenge to operate with flat or declining sales.

We are excited about the future and feel the staff and board have put forth a plan for 2015 that is prudent and will continue to enhance our reliability, member services, safety and environmental commitment.

## 2015 RTA details

The Resource and Tax Adjustment (RTA) charge will increase on most members' bills in 2015.

### How much is the increase?

For residential members, the 2015 RTA charge will be \$0.0156 per kilowatt-hour, which is \$0.0024 higher than 2014. This will increase the average residential member's bill by approximately \$1.95 per month. Commercial and industrial accounts should contact an account representative to discuss the RTA charge for their rate class.

### What is the RTA?

Dakota Electric uses the RTA to adjust prices according to changes in wholesale power cost, property and real estate taxes and conservation spending. The charge is a direct pass-through of costs and is reviewed by the Minnesota Public Utilities Commission.

### What else can increase bills?

Winter can unexpectedly increase electricity use. February bills reflect energy use from January when short, cold days require more energy for lighting, furnace fans and electric space heaters. Humidifiers, electric blankets, heat tapes and heaters for engine blocks, birdbaths and outdoor water dishes for animals all increase electricity consumption.

Members can visit the Energy Efficiency section at [www.dakotaelectric.com](http://www.dakotaelectric.com) or call an Energy Expert® at 651-463-6243 for energy-saving tips.



## Rate Case Update

The state agency review process for Dakota Electric's general rate case continues. The report and recommendations from the Administrative Law Judge who presided over the evidentiary hearing is expected by the beginning of March.

### MORE INFORMATION

Learn more about the rate case at [www.dakotaelectric.com](http://www.dakotaelectric.com). Members can also email [rates@dakotaelectric.com](mailto:rates@dakotaelectric.com) or call 651-463-6212.

# The 2015 Minnesota legislative session



**Joel Johnson**  
Minnesota Rural Electric Association

The 2015 Minnesota Legislative Session is expected to be a busy one. Three important topics that could see legislative initiatives this session include net metering, third-party sales and stray voltage.

### Net Metering

Minnesota law allows individuals who invest in solar panels or small wind generators to “net” out their use — meaning

they are allowed to use any excess generation they produced to offset the electricity they purchased from the utility when the sun wasn't shining or the wind wasn't blowing. In addition, if they end up producing more electricity than they used in a given month, the utility is required by law to purchase that excess energy from them at retail prices, which is higher than

the wholesale power we would otherwise purchase.

Accordingly, as the number of installations increases, this law quickly becomes unsustainable. This is because the law allows net-metered customers to avoid paying for the infrastructure required to provide them with “grid” electricity when the sun isn't shining or the wind isn't blowing. Instead, it shifts those costs onto neighbors. Moreover, it encourages self-generators to oversize their generation, which increases the magnitude of shifted costs. Electric cooperatives believe that, before we can encourage more distributed generation, the Minnesota Legislature must either change or repeal net metering policies in order to maintain the viability of the grid and avoid excessive cost-shifting onto others.

### Third-Party Sales

We expect there to be a push from solar developers to allow unlimited third-party sales of electricity directly to consumers. We have serious concerns about this approach. First, Min-

## Miracle League Project wins Touchstone Energy Community Award

Dakota Electric Association named Miracle League Project of Lakeville the 2014 Touchstone Energy Community Award winner. Military Family Support Group of Burnsville and Town Square Television of Inver Grove Heights were named runners-up. The award recognizes organizations for outstanding contributions to the local community. Each of the non-profits received a plaque and a check for \$500.

### Miracle League Project

Provides opportunities for children with disabilities in the south metro area to play Miracle League Baseball, regardless of ability. The league provides eight weeks of baseball bringing smiles and enjoyment to the players and volunteers alike. You can learn more at [www.lakevillebaseball.org](http://www.lakevillebaseball.org).

### Military Family Support Group

Provides assistance to deployed military personnel and their families. The organization's main focus is to provide packages to personnel serving in combat zones and caring for the families back home. The organization has helped more than 2,000 people so far.

### Town Square Television

Serves seven cities in northern Dakota County with local programming including high school sports, music, arts, local government, multi-faith, education, news, community activities

and more. Town Square airs more than 1,500 programs each year and provides equipment and facilities for community members to produce their own TV shows.

Miracle League's award application will be submitted for the statewide Minnesota Touchstone Energy Community Award. The winner will receive \$1,000 and will be announced at the Minnesota Rural Electric Association's (MREA) annual meeting in February.



Dakota Electric board members and winners of the Touchstone Energy Community Award (L-R): Al Lenhart, Military Family Support Group; Jerry Pittman, Dakota Electric; Lois Finan and Jim Finan, founders of Military Family Support Group; Brian Roseen, South Metro Miracle League director; Mark Jones, Military Family Support Group; Judy Kimmes, Dakota Electric; Jodie Miller, Town Square Television executive director; Ken Danner and Clay Van De Bogart, Dakota Electric.

Minnesota utilities have made substantial investments in utility generating plants, transmission lines, and local distribution facilities that have provided consumers with affordable and reliable energy in every community in the state. We need to be thoughtful about the impacts that this potential policy change could have on the affordable and reliable service now provided. Second, third-party providers rely on the grid to allow their products and generation to work. We need to make sure there is a way for existing utilities to build and maintain the grid — and for all consumers to pay for the grid services they use.

### Stray Voltage

Electrical systems — farm systems and utility distribution systems — are grounded to the earth to ensure safety and reliability. This includes water lines and metalwork on farms. Inevitably, some current flows through the earth at each point where the electrical system is grounded and a small voltage develops. This voltage is called neutral-to-earth voltage

(NEV). When NEV is found at animal contact points, it is frequently called stray voltage.

While stray voltage or NEV and its symptoms are widely known and documented, the state of Minnesota has not formally adopted standards or guidelines for responding to and testing it. Minnesota electric cooperatives are taking the lead in a stakeholder process with various farm groups and other utilities that provides clear guidelines for measuring and mitigating stray voltage. It's hoped that once that stakeholder process is complete, the Minnesota Public Utilities Commission will then adopt formal standards into law.

We hope that all our efforts in the upcoming session will help Minnesota's electric cooperatives to continue to provide safe, affordable and reliable energy to all of our members.

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## Did you know upgrading your furnace motor can help you save on your electric bill?

While your furnace might use fuel to generate heat, it uses electricity to power the fans and motors that distribute air throughout your home during both the heating and cooling seasons.

Electronically commutated motors (ECMs) help save energy and money by running at the best speed as compared to traditional motors that always run at top speed. Because your furnace fan distributes air in your home during both the heating and cooling season, an ECM helps save money throughout the year.

According to the Minnesota Department of Energy Resources, an ECM can save homeowners up to \$430 a year on their electric bill.

### Rebate available

In addition, Dakota Electric offers a \$100 rebate for members who purchase a new furnace with an ECM motor or upgrade to an ECM motor in an existing furnace.

### To learn more

Visit [www.dakotaelectric.com](http://www.dakotaelectric.com) > Residential > Programs & Rebates or call the Energy Experts® at 651-463-6243.



# Are you ready to purchase an electric vehicle?

Contact Dakota Electric for EV charging options

Dakota Electric Association supports the growing electric vehicle (EV) market and wants to work with members who purchase an electric vehicle to make sure they get the most affordable rate to meet their charging needs.

More than 50 EVs in Dakota Electric's service territory are on one of the two rates offered by the cooperative. Members who charge their EVs overnight, during off-peak hours, are rewarded with lower electric rates and are using energy to charge the vehicle during a time when much wind energy is generated.

## EV1 Program

This rate offers members the most charging hours in a week while still providing an off-peak electric rate at almost half-off the normal residential rate.

## EV Storage Program

This rate offers members the lowest-cost off-peak electricity for charging an EV (\$0.0424/kWh), but the hours available are the most restrictive and only available during the off-peak hours of 11 p.m. - 7 a.m.

## Rebate available for EV charger installation

Dakota Electric offers up to a \$500 rebate for the installation of a Level 1 or Level 2 charger on a qualifying program.

To learn more about Dakota Electric's EV charging options, contact the Energy Experts® at 651-463-6243.



## Utility Bill High?

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## 2015 Youth Tour application deadline is Feb. 20

The 2015 Youth Tour to Washington, D.C. takes place June 13-18. Dakota Electric will send five local high school juniors or seniors on an all-expenses-paid trip. The application deadline is Feb. 20, 2015.

Visit [www.dakotaelectric.com](http://www.dakotaelectric.com) and click on Safety and Education > Teachers and Kids > Washington, D.C. Youth Tour to print an application, or ask your high school guidance counselor for an application.



# Circuits Quick Clips

## Dakota County Crops Day at Dakota Electric

**WEDNESDAY, MARCH 18**

**9 a.m. — 2 p.m. | 4300 220th St. W, Farmington, MN 55024**

For the ninth year, Crops Day will bring University and agency specialists to Dakota County to share local research results and crop management strategies with producers and other agricultural professionals. Topics this year will include:

- An update from the DNR on irrigation well permitting
- A research update from Joshua Stamper (Extension Irrigation Specialist) on irrigation management tools and technology
- A research update from Fabian Fernandez (Extension Nutrient Management Specialist) on local on-farm nitrogen management research and in-season nitrogen management strategies.
- A research update from Extension specialists on cover crops for grain and canning crop systems.
- An update from Dakota County's "Targeted Townships" nitrate sampling project
- An update from the local USDA-NRCS
- An update from the local SWCD
- An update from David Nicolai (Extension Crops Educator) on weed control trends
- An update from Mike Plutowski (Dakota Electric Association) on energy conservation programs
- A local trade show

Lunch will be provided. This event is free and open to the public, but pre-registration is requested by Thursday, March 12th.

For more information or to RSVP, contact Neith Little: 651-480-7723.

## Thank you for your generosity

Dakota Electric members donate more than \$27,000 to Helping Neighbors®

Dakota Electric would like to thank those members who donated to our Helping Neighbors® program. In 2014, we collected \$27,246 in donations. That money supports the energy assistance programs of 360 Communities, the CAP Agency and the Salvation Army, and helps struggling families and individuals catch up on utility bills during unexpected hardships.

Dakota Electric created the program in 1994 and since then, members have donated more than \$500,000.

For more information on how you can help, visit [www.dakotaelectric.com](http://www.dakotaelectric.com) > Residential > Programs & Rebates or call 651-463-6212.



## Board of Directors

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Greg Miller, President & CEO  
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## Contact Us

Member service & drive-up window  
7 a.m. – 7 p.m. Monday - Friday  
651-463-6212 or 1-800-874-3409  
Hearing Impaired TDD 651-463-6144

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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Program information and offers in this newsletter are  
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