CIRCUITS

NEWS FOR DAKOTA ELECTRIC MEMBERS



Lightbulb shopping guide: What to look for when buying energy-efficient lighting

Since lighting accounts for nearly 20 percent of the average home's electricity use, it's important to know what you are buying. The new options and packaging labels may seem confusing, but they don't have to be. Just remember two things — lumens and kelvin.

Lumens are the new watts

It's all about the lumens, or the amount of light a lightbulb emits. Remember this formula: The higher the lumens, the brighter the light. To replace a 60-watt incandescent bulb, choose a bulb that offers about 800 lumens.

Color is everything

Color seems to be the most important

factor when buying lightbulbs, especially when people are switching from incandescents to CFLs or LEDs.

A common question is, "I want a light bulb that gives off the same color as my 60-watt incandescent. What should I look for?"

The answer is Kelvin. Light color is measured on a temperature scale referred to as Kelvin (K). For residential general-use lighting, look for a soft white or warm bulb, which will most closely match the color of traditional incandescent bulbs and will be between 2700-3000K.

Check out the lightbulb color guide on page 3.

Save 4 ways on LED lightbulbs

- 1 \$8 OFF select 4-packs of GE ENERGY STAR® bulbs at participating Walmart stores, through Aug. 31, 2017.
- 2 \$3 OFF select GE ENERGY STAR bulbs with coupons mailed between June 13 and July 6.
- 3 \$3 OFF select Duracell® bulbs at Eagan and Apple Valley
 Batteries + Bulbs stores,
 through Dec. 31, 2017.
- **4 ONLINE** with instant rebates at Save.EnergyWiseMNStore.com online marketplace, through Dec. 31, 2017.



In This Issue

Upcoming events

Board MeetingJune 29, 8:30 a.m.

June 2017



Technology and 80 years of service discussed at Dakota

Celebrating 80 years of service and using technology to serve members even better were a couple of the topics discussed at Dakota Electric Association's annual meeting on April 27.

President and CEO Greg Miller discussed how good planning and technol-

"The advanced grid

project will provide

many benefits: in-

creased system ef-

ficiencies, improved

outage notification and

restoration, and more

energy information for

our members."

Greg Miller, president and CEO

has helped ogy Electric Dakota keep its reliability among the best in the nation. He also highlighted the relaunched cently outage app that allows members to easily report a power outage and receive updates on outages without having to call the dispatch center.

"With just a couple of clicks you can now use your mobile device to report a power outage and receive updates on the progress of the restoration," Miller said.

Miller reported on another new technology project the cooperative is investigating.

"Dakota Electric's meters and load management receivers are nearing the end

> of their useful life," he told the audience. "This project combines the placement of electric meters and load management receivers and adds a software system to capture the data and run analytics to improve our services."

Vice Board Chair

Jerry Pittman discussed the board's strategic planning work in 2016. He also reviewed the cooperative's roots and how local residents worked together to start the cooperative.

Board Treasurer David Jones gave an overview of the 2016 financials, which received a clean audit report from Dakota Electric's auditor.

Will Kaul, vice president and chief transmission officer for Great River Energy, brought an update from Dakota Electric's wholesale power supplier. He talked about the transformation of the utility industry affecting how electricity is generated, new technologies being developed and how technology is enabling customer choices.

"These changes are being driven by a convergence of digital technologies which enable customer choices," Kaul said. "Devices such as smart thermostats, energy management systems, more efficient appliances and lighting, and affordable renewable energy resources give consumers options they've never had before, and that's not a bad thing. But we do need to anticipate our customer's wants and needs and adapt along with the market."

Construction complete on new Randolph substation



Electric's annual meeting



The membership re-elected all four incumbent directors at this year's annual meeting (L-R): Paul Bakken (District 4), Janet Lekson (District 2), Margaret Schreiner (District 3) and John (Jack) DeYoe (District 1).



In addition to the one-megawatt solar project being built near Hastings, President and CEO Greg Miller said the cooperative is pursuing other opportunities for solar.

CHOOSING THE RIGHT COLOR Warm White, Soft White Cool White, Neutral, Bright White Natural or Daylight The standard color of Good for kitchens Good for reading. incandescent bulbs. and work spaces.

For more information on choosing the right lightbulb, download the Clean Energy Resource Teams (CERTs) Right Light Guide at cleanenergyresourceteams.org/ lighting/guide.



Affordable upgrades for income-eligible members

To help members with limited financial resources make energy-efficiency improvements, Dakota Electric joined with Community Action Program (CAP) to offer the following programs at reduced or no cost:

- Central air conditioner tuneups
- Replacement of inefficient refrigerators, clothes washers, dishwashers, dehumidifiers, room air conditioners and electric water heaters
- Microwaves
- **Energy audits**

Members who qualify, according to the income guidelines below, can call CAP at 651-322-3518 for more details.

Income Guidelines				
Number in	Annual			
Household	Income			
1	\$23,760			
2	\$32,040			
3	\$40,320			
4	\$48,600			
5	\$56,880			
6	\$65,160			
7	\$73,460			
8	\$81,780			



Do you participate in Energy Wise® off-peak programs?

Understand your load control receiver

Members who participate in our Energy Wise® off-peak programs receive a special rate for allowing Dakota Electric to temporarily interrupt power to certain appliances when electricity use is especially high.

To temporarily interrupt power, Dakota Electric uses load control receivers like the one below, often located near your electric meter or central air conditioner. The light panel in the center of the load control receiver indicates what loads

Dakota Electric is controlling, and if the load control receiver is operating properly.

As the summer cooling season ramps up, those members participating in Cycled Air Conditioning® will have their central air conditioner condensers cycled on and off in 15-minute increments on days when electricity use is high and purchasing wholesale electricity is more expensive. In return, participating members receive a \$13 credit on their electric bill each June, July and August.

By understanding your load control receiver, you will know when your central air conditioner is being controlled. If you experience problems with your air conditioner, see below for helpful tips.

To learn more about your load control receiver or various Energy Wise offpeak programs, contact the Energy Experts® at 651-463-6243.



	1st LED light	2 nd LED Light	3 rd LED Light	4th LED Light	5 th LED Light
Color					0
Indication	When red light is glowing, connected load is being interrupted or cycled.	When red light is glowing, connected load is being interrupted or cycled.	When red light is glowing, connected load is being interrupted or cycled.	Glows continuously to indicate the load control receiver is getting Dakota Electric's signals.	Blinking red light or clear light in- dicates the load control receiver has power.

Air conditioner problems?

If you experience air conditioning problems, please check the following items before calling Dakota Electric.

- Is your A/C circuit breaker or fuse and furnace switch on?
- Is your thermostat on "Cool" and calling for A/C?
- Are any lights on in the gray load control receiver box outside by your A/C unit?
 - If any of the red lights are on, wait 20 minutes. Dakota Electric could be in a peak demand period. If lights are still on after 20 minutes, call Dakota Electric at 651-463-6201.
 - If no lights are on, check your breaker or fuse. If these are okay and the lights still do not come on, call your A/C service technician or electrician.
- ✓ If the outdoor compressor runs but the house is not cool, was your house precooled by 3 p.m.?
 - If no, wait for cycling to end. Your A/C unit will catch up with cooling. In the future, keep your A/C on during extended hot spells.
 - If yes, call your A/C service technician.



Dakota Electric supports local environmental events

GreenTouch

Approximately 60 Dakota Electric members volunteered their time on May 6 at Whitetail Woods Regional Park in Empire Township as part of the 18th annual, statewide, Touchstone Energy® GreenTouch Day.



Volunteers of all ages planted 1,500 native plants in the 456-acre park,

which opened in 2014. The plantings this year and the trees planted previous years will provide a natural habitat for animals and nature lovers to enjoy.

Dakota Electric's effort to organize volunteers at the park is part of a larger, statewide program started by electric cooperatives in 2000. Since then, Green-Touch has attracted more than 9,300 volunteers statewide who have completed more than 33,000 volunteer hours benefitting Minnesota parks.

Tree plantings & seedling donations

Each year Dakota Electric participates in several environmental activities related to

Arbor Day and Earth Day. This year, the co-op donated more than 5,300 tree seedlings to local schools and community events in addition to participating in tree-planting ceremonies.



Energy Trends Expo draws crowd

On May 9, Dakota Electric, along with Lakeville Friends of the Environment, hosted its fourth annual event for residential members interested in learning more about electric vehicles and new energy technologies.

The event was held at the Eagan Community Center, and included an EV car show, vendor trade

show and breakout sessions on energy storage technologies, home automation and a residential solar testimonial.

Wellspring Renewable **Energy®**

Support renewable energy technologies by choosing to buy wind or solar energy.

Wellspring is a voluntary program offered to members who want to do more to support renewable energy.

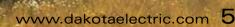
OPTION 1

Purchase the same amount of 100-kilowatt-hour blocks each month.

OPTION 2

The number of blocks you purchase each month will fluctuate based on the amount of energy you use.

Visit dakotaelectric.com or call the Energy Experts® at 651-463-6243 for more information.







Paid Advertisements: For more information about advertising in Circuits call 651-463-6270.







Circuits Quick Clips

Summer energy efficiency tips

Use your windows to gain cool air and keep out heat

If the temperature cools off at night, turn off your cooling system and open your windows while sleeping. When you wake in the morning, shut the windows and blinds to capture the cool air and keep out the hot sun.

Operate your thermostat efficiently

Set your thermostat as high as comfortably possible in the summer. The smaller the difference between the indoor and outdoor temperatures, the lower your overall cooling bill will be. Install a programmable thermostat to make it easy to adjust the temperature when you are sleeping or away from home.

Use fans and ventilation strategies to cool your home

If you use air conditioning, a ceiling fan will allow you to raise the thermostat setting about four degrees with no reduction in comfort. Turn off ceiling fans when you leave the room. Fans cool people, not rooms.

Keep your cooling system running efficiently

Schedule regular maintenance for your cooling equipment and change the air filter monthly or per manufacturer's guidelines. Vacuum registers to remove any dust buildup and ensure that furniture and other objects are not blocking the airflow through your registers.

Don't heat your home with appliances and lighting

On hot days, avoid using the oven; cook on the stove, use a microwave oven, or grill outside. Install efficient lighting that runs cooler. Only about 10-15 percent of the electricity that incandescent lights consume results in light — the rest is turned to heat.

Keep hot air from leaking into your home

Seal cracks and openings to prevent warm air from leaking into your home.

Lower your water heating costs

Water heating accounts for about 18 percent of the energy consumed in your home. Turn down the temperature to the warm setting (120 degrees).

Source: Department of Energy



For more energy-saving tips, visit DakotaElectric.com/save-energy-save-money/. While there, you will see a link to Touchstone Energy's new *Home Energy Adventure*, an interactive online experience that evaluates how energy efficient you are and how you can improve your home's energy efficiency and save money.

Apple Valley couple wins TV from Dakota Electric!

By simply downloading Dakota Electric's new outage app, Alan and Pam Keuler of Apple Valley were the lucky winners of a new Samsung 32" LFD TV

Dakota Electric sponsored the contest for any member who downloaded the outage app by April 30.

The outage app provides convenient outage reporting and outage information right from your mobile device. It's quick, easy and free!

To download

Visit Google Play or the App Store. It is compatible with iOS and Android.

To learn more and request a code

Visit dakotaelectric.com > Power Outages > Outage App.



Board of Directors

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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 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

Dakota Electric is an equal opportunity/ affirmative action employer

www.dakotaelectric.com customerservice@dakotaelectric.com





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