

## Class act How do we get electricity?

Jason Brothen, Special Project/IT Manager from Lower Yellowstone Rural Electric Association, visited Mrs. Patti Wheeling's third-grade class at Sidney Public School to speak to the students about how electricity is produced.

When the class was asked, "How does electricity get to us?" the most common answer was, "You flip the light switch!"

Many of us take electricity for granted, and expect the lights to come on when we flip the switch. However, there is a much larger



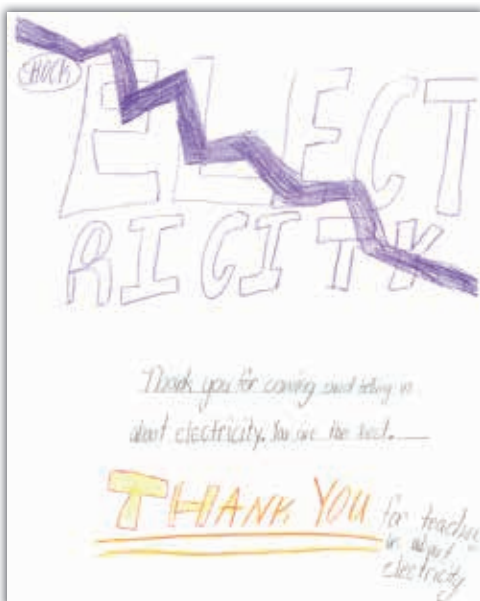
story behind the switch.

Brothen spoke to the students about alternate fossil fuels such as coal, oil and natural gas that are used to generate energy. The students saw photos of the Freedom Mine, located north of Beulah, N.D. Brothen displayed photos of the

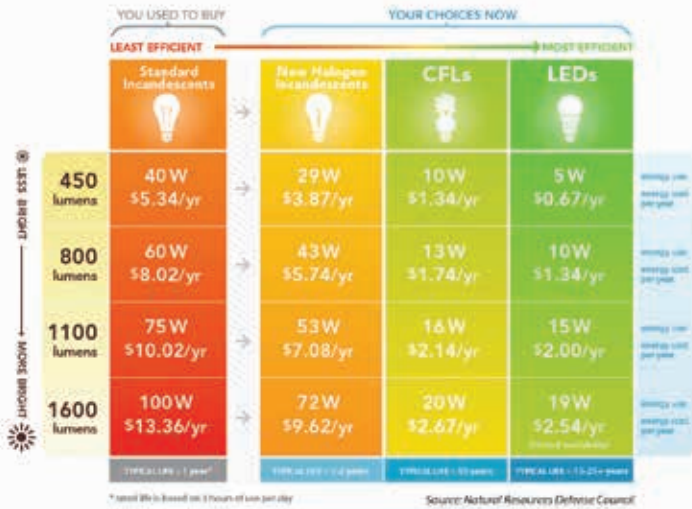
enormous machinery used to dig the coal and the large trucks that haul the coal 24/7. The students also were able to see the process of delivering power to their homes. Brothen also explained an alternate way to generate electricity by using renewable resources. By the end of

the presentation, the kids knew it took a lot more to get power than a flip of a switch.

Almost 49.8 percent of electricity in the United States is generated by burning coal. Lower Yellowstone Electric receives almost 86 percent of its power from Basin Electric Power Cooperative and the remaining 14 percent comes from Western Area Power Administration. ■



# Light shopping by B. Denise Hawkins



**B**ulbs, brands, lumens and labels – oh my! If you have been gradually making the switch to the new energy-efficient lighting choices, you’ve noticed that more changes have come to the light bulb aisle. Remember when the odd-looking corkscrew compact fluorescent lamp (CFL) was introduced to consumers a few years ago? It’s still there and so are most of the classic pear-shaped incandescent bulbs.

But today’s lighting choices have expanded and gotten serious makeovers – their packaging labels and lingo included. There are LEDs, CFLs, halogen, lumens, CRI and more, and there is a host of lighting brands. But in recent years, the focus has been on making all bulbs more energy-efficient and cost-effective.

## End of an era

We’ve basked in the golden glow of Thomas Edison’s incandescent bulb since the 1800s, but this January marked the end of its run. That’s when the federal government finalized its mandated phase out of selected general-purpose light bulbs and Edison’s less energy-efficient incandescent ones.

While you still may find 100- and 75-watt bulbs on store shelves, manufacturers in the United States stopped producing them. The old 40- and 60-watt bulbs, which represented more than half the market, are following suit.

What brought about the lighting change? In 2007, the U.S. Department of Energy estimated that home and commercial lighting was consuming more electricity annually – about 300 billion kilowatt-hours of lighting or the equivalent of about 100 power plants – but most of it was wasted.

Old-fashioned incandescent bulbs used plenty of energy to produce only 10 percent light, with 90 percent of the energy given off as heat. In comparison, today’s

more energy-saving incandescent light bulbs use 25 percent less energy to do the job of lighting the same spaces in your home.

## Look on the bright side

Prime replacements for the traditional incandescent light bulb are the higher-efficiency CFL and LED or light emitting diode bulbs. But be prepared to pay more upfront for some of the bulbs you choose. Lighting experts say that LEDs are the best choice for energy efficiency and if price is not a concern, they can last for up to two decades, save you 75 percent or more in energy costs, and offer superior color and brightness. However, they can cost an estimated \$10 to \$60 per bulb.

The Energy Department assures consumers that there is a bright side – lower electricity bills over the longer term. These are its estimates: Using a traditional incandescent bulb adds about \$4.80 per year to the average household electric bill, but a CFL bulb adds just \$1.20 a year and an LED about \$1 per year. That means a typical household could potentially save about \$50 per year by replacing 15 old incandescent bulbs.

## Lighting the way

Since lighting accounts for nearly 20 percent of the average home’s electricity use, don’t stay in the dark when shopping for new bulbs that save on energy and your electric bill. Things to know before you go:

- Lumens are the new watts. It’s all about the lumens or the amount of light a light bulb emits. Remember this formula: The higher the lumens, the brighter the light – to replace a 100-watt incandescent bulb, choose a bulb that offers about 1,600 lumens. There are handy charts at [www.energystar.gov/](http://www.energystar.gov/) that help you compare the old measure of watts to lumens.
- Three-steps to your new bulbs. STEP 1: Choose the amount of lumens you need based on how bright you want a room; STEP 2: Determine which bulb has the lowest estimated energy cost per year. This will save you the most money; and STEP 3: Choose bulbs based on your needs – how long it will last and light appearance.
- Read the label. Always check the package, making sure that it carries the U.S. Department of Energy’s Energy Star logo. New lighting facts labels on boxes will also help consumers understand what they are purchasing – the amount of lumens, estimated annual operating cost, and light color. ■

Sources: U.S. Department of Energy, Natural Resources Defense Council

## The landscape of reliability

Vegetation management programs keep power flowing safely to homes

Trees may seem harmless on a calm, sunny day. But add a bit of wind or ice on a stormy night and those towering pillars may threaten your home's electric supply.

Storm outages are sometimes related to trees contacting power lines, so regular trimming of trees and brush along power lines helps cut down on the number of outages as well as annoying blinks.

Electricity interruptions can occur when branches break and fall across power lines, or when trees tumble onto power lines. When strong winds blow, limbs growing too close to power lines may sway and touch wires. These momentary power disruptions (commonly called "blinks" or "blips") aren't just mild annoyances – they can damage computers and other sensitive electronic equipment and leave digital clocks flashing. And then there's arcing – when electricity uses a nearby tree as a path to the ground. That action poses hazards to anyone in the vicinity and could spark a fire.

To fight these potential problems, electric cooperatives clear growth away from power lines as a way of reducing potential outages and safety risks.

Lower Yellowstone Rural Electric Association is committed to providing safe, reliable and affordable power, and a tree-trimming program is key to fulfilling that promise.

Crews look for foliage growing under lines, overhanging branches, leaning or other types of dangerous trees that could pull down a power line if they fall. As a rule of thumb, 25 feet of ground-to-sky clearance should be available on each side of utility poles to give power lines plenty of space. ■

No matter how small the job!  
Call before you dig!

Call **811**

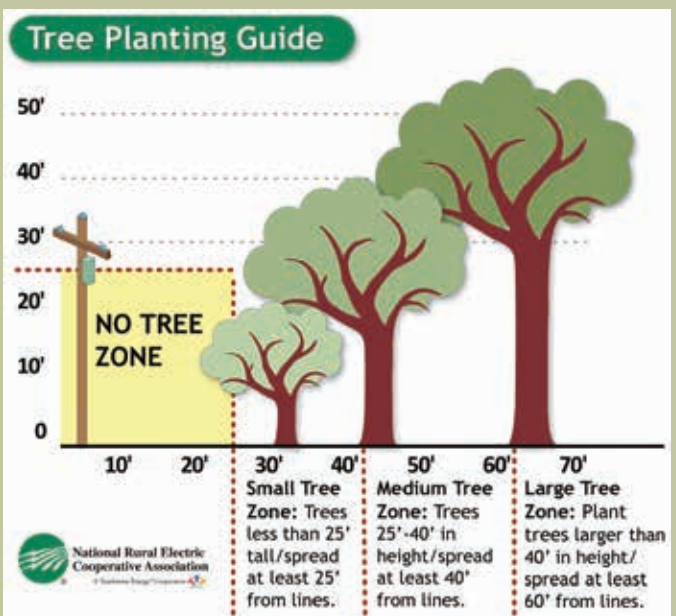


## Never plant near power lines:

Trees which should never be planted near an overhead power line include:

- |                            |                     |
|----------------------------|---------------------|
| <i>Ash</i>                 | <i>Larch</i>        |
| <i>Birch</i>               | <i>Linden</i>       |
| <i>Black walnut</i>        | <i>Maples</i>       |
| <i>Corktree</i>            | <i>Oak</i>          |
| <i>Cottonwood</i>          | <i>Ohio buckeye</i> |
| <i>Elm</i>                 | <i>Pine</i>         |
| <i>Hackberry</i>           | <i>Spruce</i>       |
| <i>Honeylocust</i>         | <i>Poplar</i>       |
| <i>Kentucky coffeetree</i> | <i>Willow</i>       |

Source: North Dakota State University Extension Service  
JUNE 2014



## Budget billing Sign up between April 1 and Aug. 29

Does panic set in when you get your electric bill each month? Do you find yourself in a frenzy, running around the house shutting off lights, unplugging any unnecessary electronics or turning off the air conditioning on a day that you can fry an egg on the sidewalk? Or do you find yourself huddled up, teeth chattering due to turning down your thermostat during the coldest winter months? Although these are good practices to conserve energy, budget billing may be able to help balance your bills.

How does it work? Lower Yellowstone Electric will take an average of your electric bill for the past 12 months. This will determine your monthly budget amount.

Who qualifies? You must have an "A" credit rating and have established a 12-month usage history. If your account remains current, you may remain on

budget billing.

What if I don't qualify? If you don't qualify, you can always build credit on your account throughout the year so that on the months your bills are really high, you have a bit of a cushion. You can always apply for the budget billing the next year if you have stayed current throughout the year.

When can I sign up? You can sign up for budget billing between April 1 and Aug. 29.

How do I apply? You can call the office at 406-488-1602 to see if you qualify. If you do qualify, you can either stop in at the office and sign a form or the office personnel can send you a form to sign. The form needs to be returned by Aug. 29.

If you have any other questions regarding budget billing, please call our office at 406-488-1602. (Meter 30353) ■

## Farewell to Lester

In 1984, Lester Larson was elected to represent District 5 on the Lower Yellowstone Rural Electric Association board of directors.

Don Prevost, CEO/general manager, remarks, "Lester's knowledge of our system and the business as a whole has been an asset to Lower Yellowstone. Lester brought a certain amount of wit to our meetings that was enjoyed by all. I thank him for his 30 years of outstanding service to



our cooperative."

The June 4 annual meeting will be the last annual meeting during which Lester will serve as a director, as Lester has decided to retire. Good luck, Lester! ■



**Kevin Van Dusen** is Lower Yellowstone Electric's new warehouse worker. Kevin was born and raised in Glendive, Mont. He enjoys spending time outdoors. He has worked for Coca-Cola for the past 16 years. ■

# HIDDEN NUMBERS

If you find your meter number hidden in this issue, it is worth a \$25 credit on your next statement. The meter number will appear within the four Lower Yellowstone Electric pages. Give us a call during the month your meter is listed, and claim your \$25 bill credit. ■



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**Fax: 406-488-6524**

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Greg Rauschendorfer ..... Vice President  
John Redman ..... Secretary/Treasurer  
Colin Gartner ..... Trustee  
Marvin Kilen ..... Trustee  
Lester Larson Jr. .... Trustee  
Dennis Schmierer ..... Trustee

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Scott D. Johnson ..... Mgr. of Office Services  
Jami Propp ..... Member Services Coordinator  
Brenda Bond ..... Staff Accountant  
Margo Zadow ..... Billing Clerk  
Pam Wilcoxon ..... Cashier/Receptionist  
Chris Hillesland ..... Operations Manager  
Doug K. Hettich ..... Asst. Mgr. of Operations  
Rich Gorde ..... Sub-Foreman  
Kevin Goff ..... Engineer Assistant/Materials Mgr.  
Kelly Keyser ..... Engineering Staking Technician  
Eric McPherson ..... Journeyman Lineman  
Lee Alvstad ..... Journeyman Lineman  
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Aaron Eide ..... Journeyman Lineman  
Bryan Franck ..... Journeyman Lineman  
Dan Gieser ..... Apprentice Lineman  
James Pihl ..... Apprentice Lineman  
Blade Jankovsky ..... Apprentice Lineman  
Mike Eberling ..... Mechanic  
Bodrey Kindopp ..... Staking Technician  
Alan MacDonald ..... Meter Reader/Shop Asst.  
Jason Brothen ..... Special Project/IT Manager  
Corey Candee ..... Electrical/IT Tech.  
Kevin Van Dusen ..... Warehouse Worker  
Edwin Gatzke ..... Electric Line Loc./Meter Reader

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