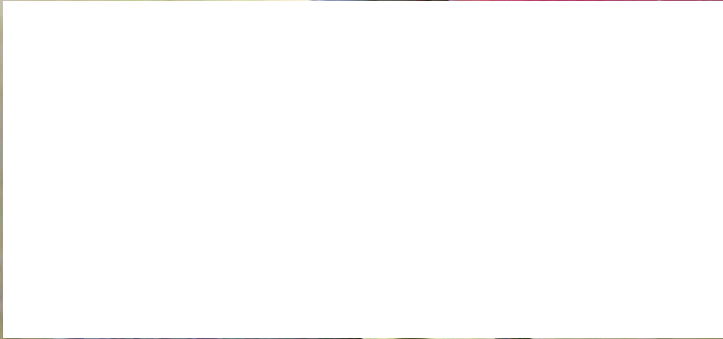


Since 1940


# WISCONSIN ENERGY *Cooperative* September 2017 NEWS

How do you like  
*them*  
*apples?*



TAYLOR ELECTRIC  
*Cooperative*



Your Touchstone Energy® Partner 



# YOUTH LEADERSHIP CONGRESS HIGHLIGHTS THE COOPERATIVE DIFFERENCE

Understanding the cooperative difference and identifying traits of leaders are just two of the topics highlighted at the 54th WECA Youth Leadership Congress (YLC).

Local high school students Selena Birkholz and Bryanne Brugger had the opportunity to participate in the YLC with other students throughout the state. The conference, co-sponsored by Wisconsin's electric cooperatives and the University of Wisconsin-River Falls, was held July 26-28, 2017 on the UW-River Falls campus.

Through a mix of workshop sessions, hands-on activities, and team-building experiences, participants were exposed to a variety of real-life issues and were given the opportunity to identify and explore their leadership potential. Renowned professional speakers, teen peers, and exceptional cooperative employees provided participants with information and tools to deal with issues high school students face every day.

Dr. David Trechter, UW-River Falls, opened the conference

with an interactive session on "The Cooperative Difference." Also featured at this year's YLC was nationally acclaimed speaker Craig Hillier. As a part of his dynamic presentation, Hillier enlightened students about being leaders, stretching their creativity, and discovering the value of cooperation. On the last day of the conference, Adam Ludwig, assistant director of new student and family programs at UWRF, gave a motivational presentation on leadership.

Other sessions focused on how and why co-ops operate and the benefits they provide members. Sessions on our energy future, careers in electric cooperatives, a day in the life of a lobbyist, and effective communications were also held.

For more than 50 years, Wisconsin electric cooperatives and UW-River Falls have sponsored this event to demonstrate to high school students the basics of cooperatives and how they can apply the ideals and philosophies of cooperation directly to their lives.



YLC participants engaged in a series of team-building activities in which students were tasked with challenges that required cooperation for a successful outcome. They also heard from professional speakers including Craig Hillier (right). Above: The entire 2017 YLC delegation gathers for a group photo.

Students interested in attending the 2018 Youth Leadership Congress can learn more by watching for news in this magazine in the spring. The tentative dates for next year's program are July 25-27, 2018.





# ENERGY DEMAND AND PURCHASING

## Understanding how these concepts work helps you understand your bill

By Meghaan Evans

You may not think you need to have an understanding of energy demand and purchasing, but do you ever look at your energy bill and wonder what it all means? If your answer to that question is “yes,” then you might be interested to learn how demand impacts your utility bill.

To start, it is important to understand how electricity is made and how it is delivered to your home.

Before Taylor Electric Cooperative can send electricity to your home, that electricity needs to be generated by a Generation and Transmission cooperative (G&T)—Dairyland Power Cooperative, La Crosse. Once the electricity has been generated, it travels over high-voltage transmission lines to substations, where the voltage is reduced to a safer level. The electricity then travels over distribution power lines and finds its way into your home. So, while you pay your bill to us—your electric distribution cooperative—we don’t

actually generate the electricity you use. That is the job of the G&T.

We do help to determine how much electricity our members need to power their homes and businesses, and you play a big part in determining how much electricity the G&T needs to create in order to keep the lights on in our community. That is where these terms “consumption” and “demand” come in.

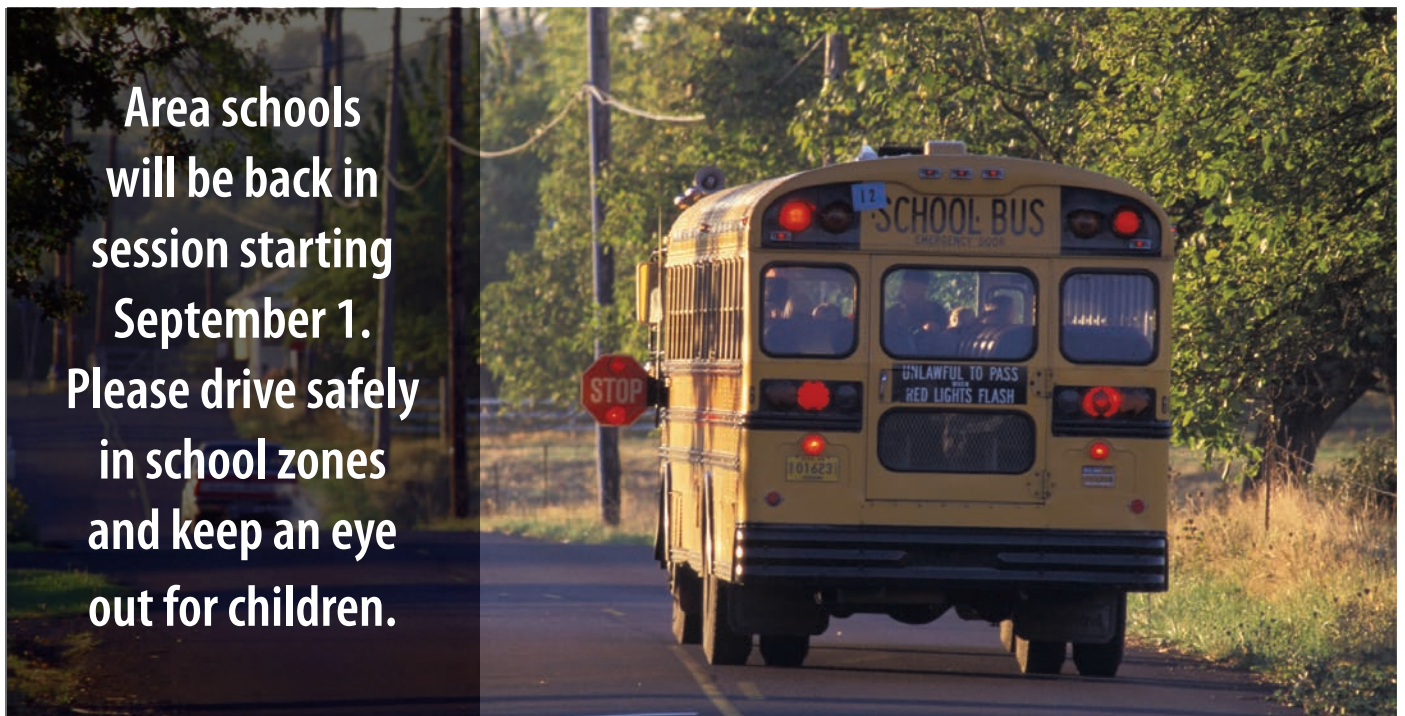
Consumption is measured in kilowatt hours (kWh). Demand is measured in kilowatts (kW). A light bulb “consumes” a certain number of watts, let’s say 100 watts per hour. If that light bulb stays on for 10 hours, it “demands” a certain number of kilowatts (in this case, 1 kW) from the generation station producing electricity. Now, if you turn on 10, 100-watt light bulbs in your home for one hour, you are still consuming the same number of kW. However, you are placing a demand on the utility to have those kW available to you over the course of one hour, instead of 10. This requires the generation and transmission plant to produce more power in less time

in order to meet your demand.

Taylor Electric purchases kilowatt hours from the G&T based on the average demand of our members. Peak demand refers to the time of day when the demand for electricity is highest. This is typically during the evening when families return home from work or school, cook dinner and use appliances the most. Using electricity during this peak demand period often costs more to both Taylor Electric and to our members.

Demand is the reason your electricity bill fluctuates season to season and even year to year. Generating and distributing power can be a tricky and complicated business, but rest assured Taylor Electric will always meet the necessary demand to provide safe, reliable, and affordable electricity to your family.

Meghaan Evans writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation’s 900-plus consumer-owned, not-for-profit electric cooperatives.



**Area schools  
will be back in  
session starting  
September 1.  
Please drive safely  
in school zones  
and keep an eye  
out for children.**



# OVERHEAD



# UNDERGROUND

## *What's the difference?*

By Tom Tate

There are two methods of installing the power lines that carry electricity to your home, overhead and underground. Taylor Electric Cooperative members sometimes ask why we use one versus the other, or more to the point, why all power lines are not installed using the underground construction method. Isn't one method better than the other? These are great questions, and the answer is that each method has its place.

Overhead line construction starts with the setting of utility poles. Poles can be set in nearly any type of terrain, even rocky. In the case of heavy rock, special equipment is used to auger out the hole. If placement occurs in boggy or wet terrain, many techniques are available to set poles securely. Once the poles are in place, wires can be strung and then equipment—like transformers, fuses and reclosers—are installed. Power can now flow.

Underground line construction requires digging a trench that is deep enough to keep the lines well away from surface activities. Where the terrain is extremely rocky, underground lines may not be an option. Next, wires are laid in the trench directly or placed in conduits for protection. The trench is filled in, and the surface is restored to its original condition. Padmount transformers and additional equipment are installed as needed, now the system is ready to deliver electricity.

Let's take a look at some the advantages and disadvantages of each construction method, beginning with overhead.

### Overhead construction

Pros:

- Lower cost, quicker construction, easier to spot damage and faults, less expensive to repair and upgrade, can be built anywhere, any voltage can be placed overhead.

Cons:

- Susceptible to wind, ice and snow; more vulnerable to damage from trees and vegetation, which requires right of way trimming; vulnerable to blinks when animals and branches contact lines; susceptible to damage from vehicle collisions; less attractive.

### Underground construction

Pros:

- Not vulnerable to damage from tree branches; no right of way trimming required; less susceptible to damage from vehicle collisions; not impacted by wind, ice and snow; less vulnerable to blinks when animals and branches contact lines.

Cons:

- More expensive to build; susceptible to flooding; difficult to locate faults; expensive to repair; fed by overhead lines at some point, making the lines vulnerable to outages and interruptions; limitations on voltages that can be buried underground; can be vulnerable to dig-ins. ▶



Determining if power lines should be overhead or underground boils down to what is best for the situation. Underground lines might be ideal in situations where there is a desire to keep the poles and wires out of sight, such as a residential neighborhood, park or historical area. There are many cities and towns that construct only underground lines for a variety of reasons.

Overhead systems work well when appearance is not a major concern. Examples include extremely long line distances across country, where the voltages are higher than the limitations set for underground lines.

The ultimate mix of underground and overhead construction used by Taylor Electric Cooperative provides you, our members, with the highest possible quality of service at the lowest possible price. Cost, appearance, reliability, maintenance and future upgrades will drive which is the better approach, overhead or underground.

Tom Tate writes on cooperative issues for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.

The office will be closed on Monday, September 4, for Labor Day. Have a safe and enjoyable weekend.



2017 October 10						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Mark your calendars for **Customer Appreciation Day**

on Thursday, October 5, at the Stetsonville Community Center



If you own an area business and would like **free advertising**, join Taylor Electric's Co-op Connections.

Call today 715-678-2411 for details.

**Michael Schaefer, President/CEO**

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**Lainie Kellnhofer, Editor**



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