MONROE ELECTRIC NEWS
Waterloo, Illinois • 618.939.7171 • 800.757.7433
Your Touchstone Energy® Partner

Alan W. Wattles

Across The President's Desk

Understanding energy demand and purchasing

You may not think you need to understand 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 Monroe County Electric Cooperative (MCEC) can send electricity to your home, that electricity needs to be generated by a Generation and Transmission cooperative (G&T). 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.

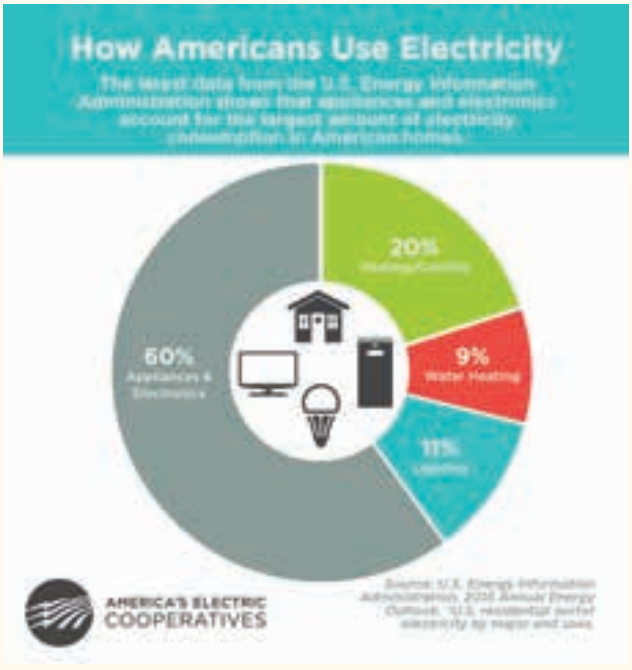
We do help to determine how much electricity our members need to power their homes and businesses, and you play a big part in determining how much electricity the G&T needs to create in order to keep the lights on in our community. That is where these terms "consumption" and "demand" come in.

Consumption is measured in kilowatt hours (kWh). Demand is measured in kilowatts (kW). A lightbulb "consumes" a certain number of watts, let's say 100 watts per hour. If that lightbulb 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 lightbulbs 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.

We (MCEC) purchase 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 MCEC 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 we 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.



Grain bins: harvesting safely

As rewarding as it may be, farming is an extremely difficult job—and it ranks among the top 10 most dangerous professions in the United States. At MCEC, we understand that, and safety for all, for both our employees and our members, is our top priority.

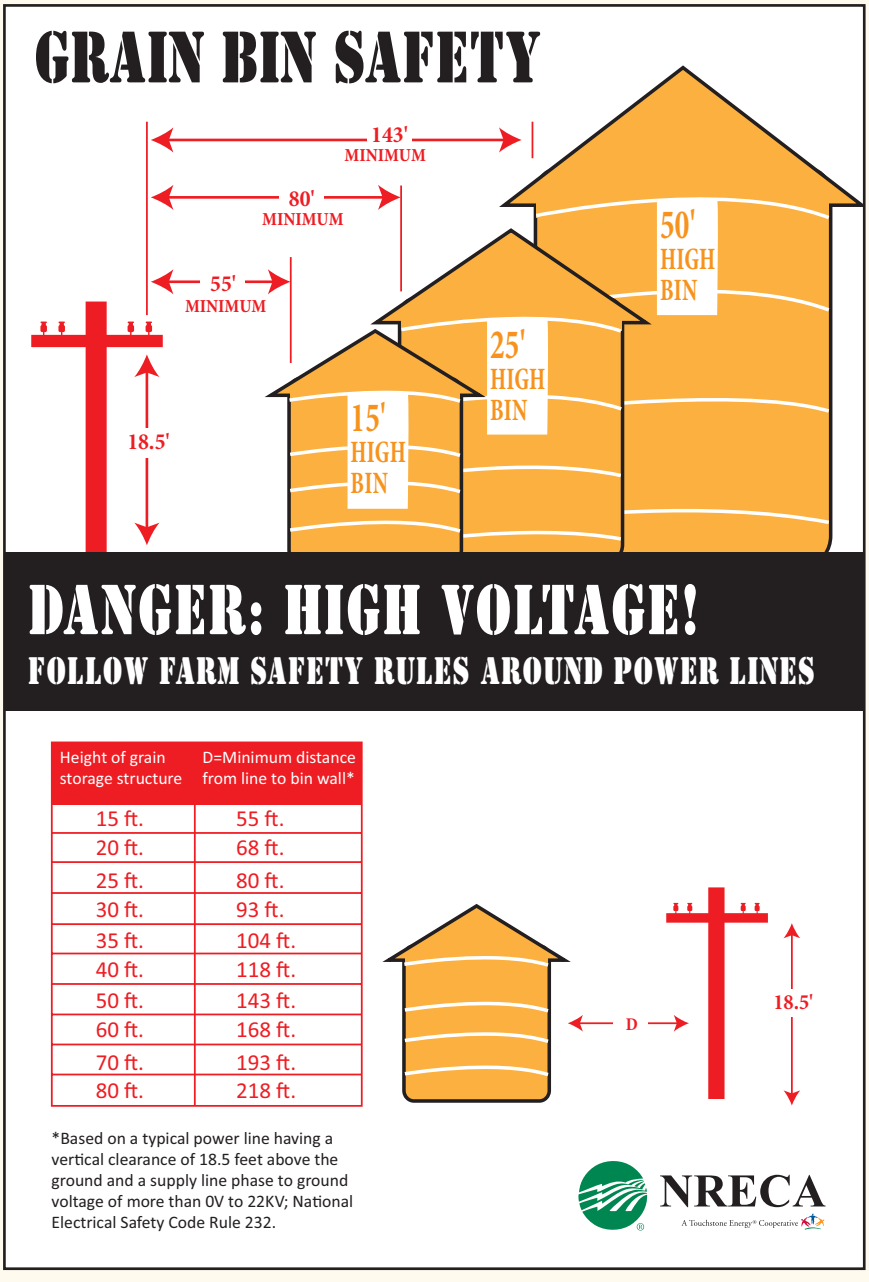
Our farmers work hard to get the job done, and sometimes it's easy to forget all the necessary steps to take when practicing safe operations, especially around grain bins. So whether you're purchasing new grain bins or remodeling areas that contain existing ones, proximity to overhead power lines must be a considered factor.

Safe clearance. The National Electrical Safety Code requires an 18-foot minimum vertical clearance from the highest point of the filling port of the grain bin to nearby high-voltage wires and a 55-foot minimum distance from the power line to the grain bin wall. See the chart at right for further guidelines. Changes to landscaping and drainage work can affect clearance heights of power lines, so remember to check these measurements regularly.

Filling grain bins. High-voltage power lines are not insulated, so it's important to remember to maintain an adequate high-wire clearance when using a portable auger, conveyor or elevator to fill your grain bin.

Moving equipment near grain bins. When moving equipment, such as a hopper or a scaffold, be aware of nearby power lines. Remember to maintain a 10-foot clearance to ensure safety.

Accidents can happen in a split-second, which is why MCEC reminds you to always use caution when working near power lines. If you are considering a plan for a new grain bin or reconstruction of an existing bin's site, please contact Chris Scott, MCEC's Superintendent of Operations at 939-7171 or 1-800-757-7433. You can also email him at cscott@mcec.org, and he will assist you in maintaining a safe environment for you and your family.



Height of grain storage structure	D=Minimum distance from line to bin wall*
15 ft.	55 ft.
20 ft.	68 ft.
25 ft.	80 ft.
30 ft.	93 ft.
35 ft.	104 ft.
40 ft.	118 ft.
50 ft.	143 ft.
60 ft.	168 ft.
70 ft.	193 ft.
80 ft.	218 ft.

*Based on a typical power line having a vertical clearance of 18.5 feet above the ground and a supply line phase to ground voltage of more than 0V to 22KV; National Electrical Safety Code Rule 232.

Monroe County Electric Co-Operative, Inc.

6132 State Rt. 3, P.O. Box 128, Waterloo, Illinois 62298 • 618-939-7171
Office hours: Monday through Friday 7:00 a.m. to 4:00 p.m. • 800-757-7433

Share the road with farm vehicles and school buses

September is here. Farmers will soon be starting their harvest, and kids are on their way to school each weekday. That means motorists will be encountering farm equipment and school buses on rural roads, increasing the potential for accidents.

Road safety is especially important as tractors, combines, large trucks, buses and cars share the road in the fall.

Vehicle collisions are often the result of the speed differential between slower-moving vehicles and passenger cars and trucks. Many times passenger vehicle drivers simply don't have enough time to react if they do not recognize the slowed or stopped vehicles ahead.

Keep in mind the following safety tips for motorists as you share the road with farm equipment:

- Farm machinery has a legal right to use public roads just as other motor vehicles.
- Farm machinery can unexpectedly turn onto a public road from a field or driveway. Farm machinery travels slower than normal traffic, often at speeds of 25 miles per hour or less. Automobile drivers must quickly identify farm equipment and slow down immediately to avoid rear-end crashes.
- Farm machinery operators may not be able to see you because the large equipment or a load can block part of their rear view. If you can't see the driver, the driver can't see you.
- Extra-wide farm machinery may take up more than one lane to avoid hitting obstacles such as mailboxes and road signs.

School buses have the extra danger of kids getting on or off the bus,

and they often cross the road to their homes. If you see a school bus in your lane or coming towards you, pay close attention to what it's doing. Give the bus extra space and be prepared to stop suddenly as it loads or unloads its cargo (kids).

Here are some rules to follow:

- School buses are required to stop at railroad crossings, so be ready to hit the brakes if you're behind one.
- Pay attention to any stop signs or signals on the bus.
- If a bus has its red lights flashing, you must stop from either direction unless you are on a divided highway.

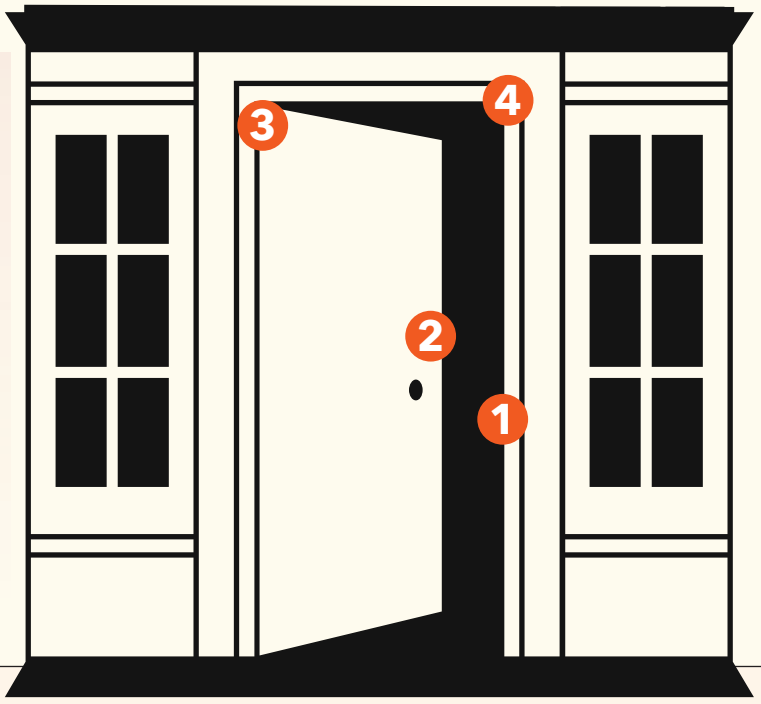
MCEC line outages - July 2017

Date	Duration	Duration	Location	Cause Desc	Substation
07/11/17	0:53	42	Bluff Rd/Levee Rd	Vehicles Or Machinery	Fountain
07/11/17	0:58	58	Bluff Rd/Levee Rd	Maintenance	Fountain
07/11/17	2:27	92	Wildwood Estates	Electrical Overload	Smithton
07/11/17	1:18	3	Triple Lakes Rd	Large Animals	East Carondelet
07/13/17	1:10	6	Lunch Rd	Electrical Overload	Smithton
07/16/17	2:18	3	Douglas Rd	Trees, Other	Smithton
07/19/17	0:32	115	LL Rd/Kern Rd	Member Caused	Poe
07/19/17	1:17	3	Kern Rd	Electrical Overload	Poe
07/21/17	0:28	5	State Rt 163	Small Animals or Birds	East Carondelet
07/23/17	2:44	14	Upper Saxtown Rd	Trees, Other	Millstadt
07/26/17	1:15	533	Fults Area	Equipment	Fults
07/26/17	1:12	2	Levee Rd	Lightning	Columbia
07/26/17	0:26	960	Waterloo Area	Equipment	Waterloo

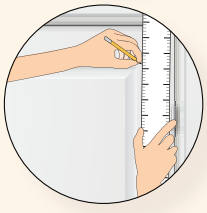
Weather stripping doors

Capturing energy savings by sealing air leaks

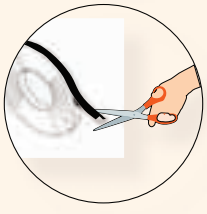
Save energy and seal air leaks by weather stripping exterior doors. How do you know if you need to weather strip? If you can see any amount of light between the door frame and the floor, weather stripping should be applied to eliminate energy waste. This DIY energy-saving project is relatively easy and inexpensive depending on the type of materials selected. The most common weather stripping material is self-adhesive foam strips, although rubber, vinyl, metal, or a combination of materials may also be used.



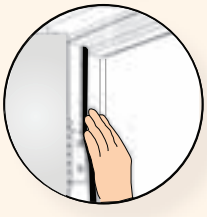
1 CLEANING SURFACES – Clean the door and door jamb to be weather stripped. For best results, weather stripping should be applied to clean, dry surfaces above 20°F.



2 MEASURING DOOR & DOOR JAMBS – To ensure greater accuracy, measure your space twice before cutting the material. It is best to plan for one continuous strip for each side of the door and door jamb.



3 CUTTING FOAM – Cut long pieces of self-adhesive weather stripping material (foam, vinyl, etc.) for each side of the door jamb and door.



4 APPLYING WEATHER STRIPPING – Peel back the self-adhesive foam. Apply one continuous strip of material snugly along each side. Make sure the weather stripping meets tightly at the corners and is pressed firmly onto the door and door jamb. The material should compress tightly between the door and door jamb, without making it difficult to shut.