




**Dunn Energy
Cooperative**

A Touchstone Energy® Cooperative 



By James Hathaway,
General Manager

BEAT THE SUMMER HEAT

Summer is here, and along with higher temperatures come higher electric bills. We get a lot of calls from members wondering why their electric bill goes up in the summer. Obviously air conditioning is the number one reason the electric bill goes up. The hot weather we usually experience in the summer is

a big reason the electric bill is higher in the summer months.

Along with heat, the summer months bring about an increase in humidity. The more humid air often means damp basements. Humid air can also cause mold and mildew to grow inside homes, which pose various health risks. To fight these issues, people run dehumidifiers. Dehumidifiers work a lot like an air conditioner and, like an air conditioner, they use a fair amount of electricity. So if you use a dehumidifier

in the summer, it's going to increase your electric bill.

Another factor that may increase your electric bill is your kids. In the fall, winter and spring, most kids are at school a good part of the day. In the summer, typically, they are home and they may be using extra electricity.

To help our members reduce their electric costs during the summer months, Dunn Energy offers an air conditioning credit.

ty. The TV is probably on more often, lights too possibly.

Still another item that may drive up your electric bill in the summer is water usage. Generally, people use more water in the summer. We water our lawns when the weather is dry and we water our gardens, too. Maybe you have a pool for the kids. How about washing the car? In the city water is supplied through water mains and people pay a water bill. That probably goes up in the summer. In the country, water comes out of the well, and the pump takes electricity to run. Up goes the electric bill. (331)

Another reason the electric bill goes up is that Dunn Energy charges more for electricity in the summer. Our electric rate increases a penny and a half a kilowatt hour during the months of June, July, and August. Most other co-op and electric utilities in Wisconsin charge more in the summer months too. The reason is that demand for electricity is higher in the summer and it costs more to generate the electricity our members use.

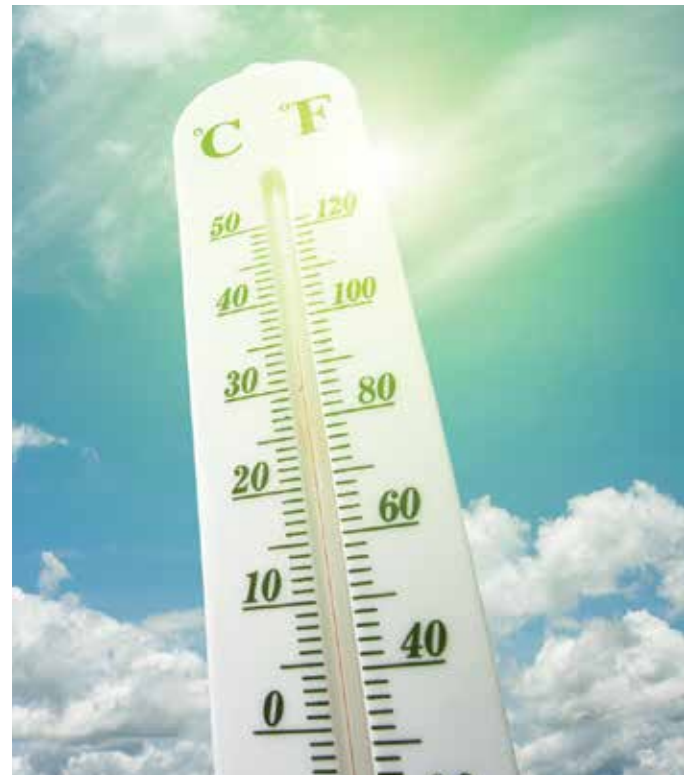
More demand for something usually does increase the cost. The cost of gasoline usually goes up in the summer because people drive more. Hot summer weather increases the demand for electricity. Again, air conditioning is probably the number one reason there is more use of electricity. But as I pointed out

above, there are a number of other factors that can cause an increase in electric usage in the summer month.

Of course there are ways to lower the amount of electricity that you use in the summer. While not very popular, setting your thermostat a few degrees higher will reduce electric usage. Running ceiling fans helps increase the cooling effect and they don't use much electricity. Using curtains and blinds in the summer blocks the sun. This will help keep your house cooler. For more information on energy efficiency, give us a call or visit EnergyEdCouncil.org.

To help our members reduce their electric costs in the summer months Dunn Energy offers an air conditioning credit. If a member allows us to control their air conditioner (15 minutes on and 15 minutes off) during peak demand times we give them an \$8 dollar credit on their bill in June, July, and August. Give us a call if you are interested in participating in our air conditioner control program.

If you have questions about your electric bill or are looking for ways to lower your bill, give us a call at the co-op. We have programs that will help lower your bill a bit. We might also have some tips to help you lower your electric usage, and your bill. Enjoy the rest of your summer!





Outage management technologies improve reliability

“The only things certain in life are death and taxes,” as the old saying goes. Well, we can add another to the list: power outages. An outage can range from annoying to dangerous, depending upon its timing and length.

Dunn Energy’s primary goal is to deliver the highest possible quality of electric service at the lowest possible price. Perhaps the key measure of quality in the eyes of members is the number of times their lights blink or go out. Think about it. You know how often your power has gone out in the last month, don’t you?

Well, let’s talk a bit about how the electrical grid is designed as a backdrop to how technology is improving reliability by reducing blinks and outages. Along the power lines that bring electricity to your home, Dunn Energy installs protective devices in the form of fuses and reclosers (high-voltage circuit breakers). Fuses and reclosers serve the same purpose as the fuses and circuit breakers in your home.

A fuse is a one-shot device. When a fault occurs, the fuse blows and everyone downstream from it loses power. Many people hear loud bangs just before their power goes out. That’s a fuse being blown. Reclosers are multi-shot devices, meaning they can operate (think blink) a certain number of times before they stay open and an outage occurs. A common setting is what’s known as a triple-shot (three blinks). Here’s how that works. A tree limb contacts the power lines and creates a fault. The recloser senses it and opens, creating the first blink.

Here’s where a recloser differs from your home circuit breaker. It waits a certain amount of time (typically a few seconds), then recloses to try and complete the circuit. If the fault is still there, it opens again. This creates the second blink. Triple-shot settings allow the device to reclose a third time and if the fault is still there, it stays open and the members downstream experience a power outage. But if that tree limb falls to the ground, or bounces back up, coming off the wire either way, the recloser completes the circuit and the power stays on. (4698)

Blinks are a nuisance, but they eliminate a lot of extended outages by protecting wires and equipment from serious damage.

So, what kind of technology is improving service reliability?

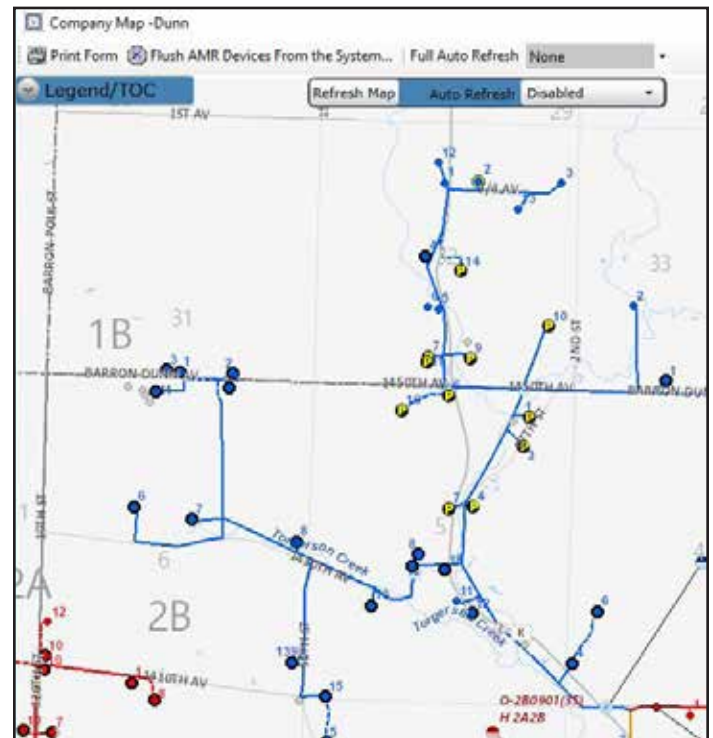
Electric co-ops are starting to use more of what are called Intelligent Electronic Devices. “Intelligent” basically means a co-op can program the device to behave a certain way when a specific event occurs. It also means the co-op can remotely command the device to take an action, either preprogrammed or ad hoc.

Eventually, there will be a power outage despite our best efforts. That is where advanced metering systems (AMI) and outage management systems (OMS) earn their keep. The basic element of an AMI is a meter that can communicate with your electric co-op. The OMS maps system data and

meter locations into a piece of software that models your local electric grid. When a device on the grid reports loss of power, the OMS runs calculations to determine the exact location of the fault and the number of members impacted.

Now, the whole suite of systems your co-op uses comes into play. The co-op dispatcher can call out or redirect a crew to where we think the exact location of the problem is. A map of the outage and number of impacted members is generated, and member service representatives are notified that an outage is in progress.

The end result of all this technology is the minimization of outages and their length, plus more availability of up-to-date information for the member. Mother Nature is a tough opponent, and it’s impossible to eliminate outages and blinks altogether. But with the way technology is advancing, we can expect to see some remarkable improvements.



This is a snapshot of the actual mapping Dunn Energy uses. On the particular day this article was written, there was a small number of meters in power fail (black dot with the yellow P) at the co-op. *During business hours*, this is monitored and would be dispatched as an outage, with or without a call from a member. Side Note: We are only about half done installing the new metering across our system, so please remember to always call in your outage.

While some like it hot, outdoor AC units do not

We are in the dog days of summer. As the temperature rises, so does our use of air conditioning to keep our homes cool and comfortable. According to the Energy.gov, three-quarters of U.S. homes have air conditioners. The approximate annual cost to run these air conditioners is \$29 billion. The Energy Education Council shares tips to help you keep cool, save money, and make summer efficiency no sweat:



- Often homeowners place air conditioning condensing units on the south side of the home where they are in direct sunlight most of the day, or they try to hide the condensing or heat pump units. Extreme heat can be the enemy of any mechanical equipment, causing the equipment to work harder and creating a shorter life on the equipment. In addition, covering these units makes it more difficult for them to dissipate the picked-up heat from the structure. It is more efficient to give your condensing units the space to breathe and a cooler place to reside.
- Set up a regular maintenance schedule for changing furnace and air handling equipment filters. This helps keep the return air flowing properly through the heating and cooling coils. Regular maintenance in the late spring and fall also benefits the longevity of condensing units and heat pumps. Proper cleaning of condenser coils will provide proper heat transfer, keeping your home cooler and helping that equipment run longer.
- Seal cracks around the house with weather stripping and caulk to keep cold air in and hot air out. By reducing drafts along baseboards and plugging holes around windows, doors, faucets, pipes, and electric outlets, the Department of Energy estimates between 10 and 20 percent in energy costs can be saved.
- Use outdoor air to your advantage. Open your windows at night to let cool air in, and then close them in the morning to trap it. Avoid unnecessary trips outdoors in the heat of the day.
- Use curtains and blinds to keep the sun out on hot days.
- Consider shading your home by installing awnings over windows in direct sunlight.
- Operate ceiling fans in a counter-clockwise direction, which forces air down and creates a cooling effect.
- Natural ventilation can take some of the strain off electrical systems. In breezy, dry climates ventilation can eliminate the need for an air conditioner altogether. For the many who need air conditioning to cool their homes, attic vents and fans can help reduce energy costs.
- Set your thermostat as high as comfortable to cut back on energy costs. Do not waste electricity cooling an empty home. Invest in a programmable thermostat to set your temperature a few degrees higher while you are away. The smaller the difference between your thermostat and the outdoor air temperature, the more you will save on your utility bill.
- Consider investing in an Energy Star rated air conditioning unit. Appliances with an Energy Star rating meet and often exceed energy efficiency standards and can save you money over the lifetime of the appliance. For those living in arid climates, consider evaporative or swamp coolers, which release moisture into the air for a cooling effect. These coolers work at a fraction of the cost of air conditioners.

For more information, visit EnergyEdCouncil.org.



Helping you leave worries behind WHILE ON VACATION

Are you one of the lucky families that will be getting one more vacation in before school starts? Some people like to take in many activities while on vacation, while others prefer to just kick back and relax.

Whatever you do on vacation, everyone hopes to leave worries of the daily grind behind. To help you accomplish this, the Energy Education Council and its Safe Electricity program have tips to lower your electricity use and help keep your home safe while you are away.

Energy vampires are a source of energy drain in unoccupied homes. Unplug appliances and electronics. You will not use your computer or television while you are away, but they will continue to use energy and waste money if you do not unplug them. It also reduces the chances of damage from a power surge and associated fire hazards.

Change thermostat settings before you leave. When temperatures are warm outside, it is unnecessary to keep your home as cool as you normally would since you will not be in it. You will save money on your electrical costs when the indoor temperature is as close to the outdoor temperature as possible. Turn the thermostat up to a warmer temperature, or turn it off entirely. The Department of Energy warns that you should not set your temperature higher than 90 degrees. At this



level of heat, appliances such as your refrigerator can sustain damage.

Before you leave town, also remember to secure all window covers, such as lowering blinds and closing curtains, to slow the temperature climb in the home.

If you have a programmable thermostat, you can adjust it to cool down the house just in time for your return home. Adjust the water heater. Water heaters continue to use energy to keep the stored water warm. Since you are not using this water while on vacation, either adjust the water heater temperature to the lowest setting, or turn it off if you will be gone for more than three days.

Once you return home, be sure that you run the tap before turning the water heater on once again. This will avoid potential damages to the water tank.

If you plan on leaving lights on to deter burglars, put the lights on a timer. You can save money by not having lights on constantly and make it appear that people are home by varying the times the lights are on.

For more tips on electrical safety and efficiency, visit SafeElectricity.org.

\$\$ FOR HIDDEN ACCOUNT NUMBERS

If your account number is one of the two hidden account numbers in this issue, it will mean \$10 credit on your account if you call the office before the end of the month. Two customer account numbers have been randomly selected and are hidden in the Dunn Energy Cooperative section of this *Wisconsin Energy Cooperative News*. Last month's winners were Jaelynn Scales and Philip and Nancy Arneson.

James Hathaway, Manager

N5725 600th St., P.O. Box 220, Menomonie, WI 54751

715-232-6240

www.dunnenergy.com

Jolene Neisius, Editor



**Dunn Energy
Cooperative**

A Touchstone Energy® Cooperative