Upshur Rural Electric Cooperative

November 2016

E L E C - O - N E W S

Veteran's Day ~ November 11, 2016

Veteran's Day is a celebration to honor America's veterans for their patriotism, love of their country, and their willingness to serve and sacrifice for the common good of all. It is celebrated every November 11 and gives us the opportunity to reflect on the past and realize just how blessed we are.

To each and every veteran, we would like to say "thank you" for all you have done for this country so that we may enjoy the freedoms we have today!

Set your account up on

Bank Draft!

It is a safe and simple process! Never worry about another late payment!

Contact our Member Service department or visit our website for more information!

www.urecc.coop

Members Helping Members

You can help your neighbors who may get behind on their electric bills due to extreme temperatures during the summer or winter months. State and private agencies that provide utility assistance are low on funds to help these individuals. Capital credit checks will be mailed out in December, and you may opt to have your money donated to the agencies that help Upshur Rural members in the county in which you live. You can make this a one time donation or you may choose to have all future years' capital credit retirements donated. For more information, contact one of our member service representatives.

Upshur Rural Electric will be closed on Thursday and Friday, November 24th and 25th in observance of Thanksgiving. As always, we will have employees on call should the need arise.

On behalf of all our employees and Board of Directors, we would like to wish you and your family a very

Happy Thanksgiving!

ELEC-O-NEWS November 2016

Ask the General Manager

Submit your question to Mr. Rob Walker, our General Manager at **ask@urecc.com** and he will select a question and address it in the following months' newsletter.

Why do my bills get so high in the winter?

Each year we see a rise in the number of questions regarding why bills are so high, especially January through March. There are multiple reasons why bills tend to be higher in the winter months, the greatest of these is simply the amount of energy or technically speaking the kilowatt hours (KWh) used by members.

For starters, KWh is a measure of the energy consumed by a member. Energy is the amount of power going through a home over a number of hours (time) so, hence the KWh's or thousand of watts times the number of hours (KWh). The reason to elaborate is because figuring out why bills can tend to be elevated in the winter is based on both the extra power (kilowatts) or load flowing into a home and secondly the extended number of hours load flows into a home.

So both the higher power load at any moment and the extended power flow are the two key reasons why KWh's are higher and bills larger. The higher loads typically occur because of appliances that are running in the home. For example, as temperatures drop outdoors, the amount of heat needed to keep a residence at a steady temperature increases. Many residences use either heat pumps or resistance type heaters (oil heaters or the simpler electric heaters) to heat their homes. And while heat pumps are very efficient ways to heat, normally they are not as efficient below approximately 30-32 degrees outdoors. Heat pumps are designed to move heat from outdoors to the indoors. As the temps drop outside the amount of heat available to "rob" from the outdoors to bring inside shrinks. To account for this, many heat pump units supplement heat pump heating with what is referenced as "emergency" or alternate heat. The emergency heat or alternate heat is a straight out, old fashioned resistance heater built into the duct work of the heat pump. So when the emergency heat kicks in to supplement a heat pump, a resident is using two heat sources. The only ways to reduce the amount of additional heat is to adjust the required residence temperature downward or insulate the residence so that heat is not wasted into the outdoors or in other words the residence is tightly sealed. Other additional loads a residence might expect to see in the winter includes heat for animals, plants or heat to keep things like water pipes from freezing. Those things affect the first part of the higher use or higher bill discussion.

The second reason earlier noted is the amount of time the load (often referenced as demand) actually runs. In the winter time the days are short and nights are long. As the sun goes down, or very cold fronts blow through, the temperature drops quickly and remains low for longer periods of time. The longer nights of cold hours means heat runs longer. The longer number of run hours for heat means the hours part of the kilowatt hour energy measurement increases proportionately. A typical measurement of the amount of cold for the hours it remains cold in meteorological terms is heating degree days. That simply means the amount of time needed to heat from the actual outdoor temperature to the desired level expressed in days of time. The heating degree days measurement can typically be found on many weather websites. The longer a day remains cold the longer the heater must run to keep the residence warmed and the more KWh's used. Beyond heating a residence the same is true for water heaters and other heaters like those for animals and water as earlier mentioned.

These two factors are the main reasons most members see higher bills. But don't despair! There are some things everyone can do to change the amount of heat used in any moment and how long it will run. Added insulation into the roof, walls, windows and doors is a start. While one has to be careful about gas burning indoor units that produce Carbon Monoxide (a deadly gas concentrate), a better sealed residence will use less heat over time and not have to work as hard (use a second emergency heating source) to make added heat. Some other simple solutions include sealing up windows and doors or installing things like storm doors or windows. In instances where a residence is a mobile home, skirting and other things to keep wind from blowing the heat from underneath the home will also help. Other things include a properly functioning water heater that is well insulated. For electric water heaters, a low cost water heater blanket can make a large difference. Also make sure that both heater units in a water heater are functional. If one of the heater units is malfunctioning then the other will work over time to keep the water at the desired heat level. Insulating heated water lines is also a benefit.

Many other tips are available on our website at urecc.coop and through other web research. I hope this is good information and please prepare as we enter the winter season.