

Message from Advise Guy Aaron Jackson



## Was It Really The Christmas Lights?

There's really nothing like North Carolina weather. As I write this, the temperature is 63 degrees when just eight days ago the high recorded was 41! If you've lived in North Carolina for any length of time you're used to this kind of temperature fluctuation from week to week.

You may also be used to seeing your electric bill fluctuate this time of year, especially around the holidays. Many members associate these changes with Christmas lights and family gatherings. Today, I want to address the likely cause of this yearly change in energy use and provide you with tips to mitigate it.

### Energy Use is Weather Driven

The largest energy user in the average home is the heating ventilation and air conditioning (HVAC) system. If your home is all electric, the HVAC system and your electric water heater account for 50% or more of your bill monthly.

During the extreme winter temperatures (i.e. December-February) the HVAC system and water heater work overtime to produce heat for your home and for your water. Why are these systems so expensive

to operate? Because they create heat and, when you are doing that with electricity, it takes a significant amount to accomplish the task.

### Resistive Heating

If you have an electric furnace and/or an electric water heater, then your primary heating sources use the process of resistive heating, which use electricity passing through a conductive material (i.e. a heating element) to generate heat. When temperatures dip and we use our heating systems, our electricity use increases noticeably because these systems require large amounts of energy to produce heat.

If you have a heat pump, your system uses less electricity the majority of the winter because those types of systems only employ resistive heating when the temperature outdoors falls below 35 degrees.

Still, whether you have an electric furnace or a heat pump, you see an increase this time of year that gets your attention. This increase is solely due to additional energy needed to heat your home.

### Solutions for Savings

The systems we've been discussing have two things in common: they produce heat and are controlled by thermostats. Therefore, the best way to minimize impact on your bill is through thermostat settings.

For water heaters, the recommended setting is 120 degrees. For all electric HVAC systems we recommend setting it to 68 degrees. If you have a heat pump, it's best to set the thermostat and leave it. But, if you have an electric furnace, don't be afraid to drop the thermostat setting a couple of degrees when you leave for work in the morning, then return it to normal when you get home.

Air sealing and insulation upgrades are also very beneficial. These improvements help hold the heat your system is producing inside longer.

Lastly, consider installing an insulation blanket over your water heater.

If you would like more advice about how to reduce energy use this winter, reach out to us at [adviseguys@sremc.com](mailto:adviseguys@sremc.com).



PO Box 931  
Dunn, NC 28335  
910.892.8071  
800.338.5530  
[sremc.com](http://sremc.com)



 Touchstone Energy® Cooperatives  
The power of human connections®