



Breaker Check for High Energy Usage

Central Virginia Electric Cooperative

Please follow these easy steps to perform a breaker check on your home. If possible, it is preferred to perform this check with two people; however, it can be done with one.

Completing the steps below will give an idea of where your kilowatts are being used:

1. With two people, one person should position at the meter outside and one person at the panel box inside your home. It is also suggested to have a cell phone to easily communicate during the process. If only one person is completing these steps, this person will need to move from meter outside to panel box inside.
2. Determine if your meter is mechanical meter or digital. If you have a mechanical meter, you will need to locate the rotating disk. If you have a digital meter, you will see a small dashed line moving from left to right at the bottom of the digital display. The disk or the dashed line serve the same purpose and move faster as more electricity is used.
3. Note the speed at which the disk or dashed line is moving.
4. Next, begin switching off one breaker at a time watching the disk or dashed line speed. It is best to start with the hot water heater, well pump, and heat pump first as these are commonly found to be the source of the problem.
5. If you turn off a breaker and find the speed slows drastically, this will most likely indicate source of your high energy usage.

Examples of the most common problems in a home:

Hot Water Tank---Sometimes the elements in the hot water tank can burn out and will cause increased energy usage, resulting in an increase in your bill.

Well/Well Pump---If you are on a well, you may have a failing pump or foot valve. Also check in the crawl space or basement for leaks or ruptured pipes. Check the yard between the well and the house for unusual wet spots which could indicate a water leak. Any of these things could cause the pump to run continuously, causing an increase in energy usage.

Water Running--- If you have a faulty toilet that is constantly running or a leaky faucet that drips, this can cause your well pump to kick on and off and contribute to higher usage.

Central Heat/Air---Your HVAC unit may need servicing. Check your outside unit to make sure that the fan and compressor are running periodically and no ice buildup on the lines leading into the house. If the outside unit never runs or there is ice on the lines, these are indicators of a problem. Also colder months, be aware of your heat pump running in emergency heat mode. This will also contribute to higher usage.

IMPORTANT NOTE: Electric Space heaters burn a lot of electricity, even “energy efficient” rated models. If you use one, switch it on and off and note the difference at the meter.