



## High Bill Concerns & What to Watch For

Pacific County PUD Customers understandably have concerns with high electric bills during periods of cold weather. High bills are a direct result of high usage. **The primary contributor of power usage during the colder months is heating. Heating alone accounts for over 40% on average of power consumption during colder periods.** For typical residential homes the weather and more specifically the temperatures are key factors leading to higher bills.

### Simple Things First:

Determine how many billing days are on your current bill. Electric bill billing days should be similar from month to month but can fluctuate a day or two. **Additional days can really add up especially during cold weather.** Consider the temperatures for the billing period as well as the number of days with very low temperatures. Remember the billing period is typically 30 to 50 days prior to you receiving your bill.

### Is it my meter?

Electric meters are tested and calibrated at the factory before the PUD installs a new meter for a Customer. **It is physically impossible for a mechanical meter to turn without an electrical current or energy going through it.** Power companies cannot push power through the meter. Power surges that can occur will make virtually no difference in usage. They typically last less than a second.

This is not to say that there is never a time when something is wrong with the District's meter but electric meters in general are very accurate and reliable. **Statistics have estimated that only 0.1% of meters, or 1 out of every 1000, that are tested will have something wrong with them or will be reading inaccurately.** Of the 0.1% that are inaccurate, the majority of those will be reading too slowly as opposed to too fast. The contributing factors that cause them to read too slowly are worn gears, corrosion, moisture, and dust, as well as insects that cause friction in the mechanical meters causing them to spin slower than they should.

In general, if power is registered on the meter, it is being used somewhere. The trick in determining the causes of high bills is to find where the current or energy is going. The energy will serve all electrical appliances in the home, but you must determine which ones are using the most energy.

### Heat pumps:

While heat pumps can be a very efficient and reliable way to heat and cool your home, they do not work as well during very low temperatures. Heat pumps generally use strip heat as a backup or supplement to the heat pump itself. **During very cold times heat pumps will not run as efficiently because of strip heating so the usage will be higher than one might expect.** If there is an emergency heat option on your thermostat and it is set to emergency heat, you are using strip heat exclusively and will not get any of the benefit from the heat pump itself. Using strip heat exclusively can cause extremely high electrical usage depending on the temperature settings and how long it runs.

Check to make sure your heat pump is performing properly. Make sure the unit has proper refrigerant levels, clean coils, and that your filters are clean.

A programmable thermostat can aid in reducing electrical consumption by adjusting the temperature automatically when you are gone and when you are at home during winter months. Lowering your thermostat even a few degrees will impact your electrical usage.

**Also make sure no duct work has separated in your attic or under your home. This can cause your heat pump to run much longer due to much of the hot air blowing directly into the attic or worse, outside. This goes for any ducted heating system.**

### **Water Heaters:**

**Electric hot water heating can account for up to 20% of your total electricity use.** Leaks, bad thermostats as well as heating elements that have failed can increase your electricity use. Lowering the temperature on electric hot water tanks can help lower your electrical usage.

### **Other:**

Keep in mind that many electronics (computers, TVs, etc.) will still consume power even when they are turned off. They can go into standby mode.

Lifestyle changes can have a drastic effect on electric bills. Kids returning home, or friends or relatives staying with you can have an effect. Adding or using electrical appliances such as tools, pumps, additional refrigerator or freezer, or anything with an electric motor will affect usage.

Look for space heaters, heat tape for water lines, extension cords to RV's, etc. All of these can have a substantial impact on your electrical usage. If possible, eliminate the appliances & heaters you can and ensure those you can't eliminate do not run continuously.



### **Detective Work:**

Turn off the main breaker to your home as well as any other breakers the meter is serving. Check to make sure the meter is not turning. If it is still turning this can indicate a problem with any underground service conductors that are serving the home or other installations (barn, shop, well, etc.).

To help determine where most of the electrical power is going, turn off all your breakers in the panel except the main breaker. Turn on each individual breaker one at a time and see if the meter is spinning faster. When you turn on a breaker that makes a substantial change in the speed of the dial, this will signal the circuit that should be checked. You will need to be sure you leave on all the electrical appliances that you normally use. This will help you determine your high usage appliances or circuits.

**Consider adding insulation, sealing cracks and/or installing energy efficient windows which will help make your home more energy efficient. The PUD has rebate programs to help defray the cost of these measures.**

**As always please feel free to call the PUD to discuss any concerns you have with your electric bill. We are willing to help and assist in any way possible. North County customers call 360-942-2411, South County customers call 360-642-3191.**