

Cold Weather Impacts Bills

Winter weather, heat pumps and heat loss all can increase electricity use

January and February are normally the coldest months of the year. Consistent low temperatures often mean heaters run harder and more often, driving an increase in electricity use.

The larger the difference between the temperature inside and outside of your home, the more energy is needed to bring your home back to your desired temperature. Even if you don't adjust the setting on your thermostat, lower outdoor temperatures mean your home's HVAC system must work harder to maintain the same constant temperature inside.

For example, a common mid-January day may be 40 degrees. If your thermostat is set at 70 degrees, your heating system is making up the difference of 30 degrees. If the outdoor temperature drops down to 20 degrees at night, the temperature difference is now 50 degrees, and your heating system is having to add even more heat.

Heat Pump Efficiency Decreases Near 30 Degrees

At around 30 degrees, most heat pumps reach what is called the balance point. This is the point where the heat pump must

run constantly to maintain a consistent, comfortable temperature.

Auxiliary heat, also called emergency heat, refers to the supplemental heat being supplied by internal heat strips when the heat pump is in its defrost cycle. Auxiliary heat assists the production of heat during extreme cold weather. However, it uses more energy, decreasing system efficiency and contributing to higher energy bills. Most heating systems are designed to automatically initiate auxiliary heat when needed and do not require manual setting.

During very cold weather, it is normal for a heat pump's auxiliary heat to kick on—typically, a light will show it has engaged. If auxiliary heat is being used even after the unit warms up, you may need to contact an HVAC service provider to troubleshoot.



Heat Loss Factor Increases as Temperatures Drop

In extremely cold weather, even a few degrees' difference in sustained outdoor temperatures can raise power use. The colder it gets, the harder heating units must work to maintain consistent indoor temperature.

Heat loss in extremely cold temperatures compounds quickly, and is quicker at lower temperatures. The greater the difference between indoor and outdoor temperatures, the more heat will escape. Heat is lost through insufficient insulation, leaky doors and inefficient windows.

The good news is heat loss can be combated with increased energy conservation. Visit www.klickitatpud.com/conservation to find a range of tips on conservation and winter preparedness.

Klickitat PUD also has free weatherization kits, as well as smart thermostats that can improve energy conservation.

If you are interested in any of these items, or a home energy audit, conservation programs or energy efficiency rebates, please contact energy services for more information. ■

Automatic Meter Reads

The successful rollout of AMI meters has improved consistency between reading dates and accuracy of reads.

This means reads are not estimated, which was the previous practice when reads were not received. Reads are pulled a few days before customer bills are issued to ensure time for an internal billing review.

Usage information is available to KPUD customers. As with many things, there is an app for that: SmartHub.

SmartHub can be downloaded to assist customers in the management of their Klickitat PUD account from their phone or other device. Among many other account management features, SmartHub has charts where customers can view their monthly or daily meter usage.



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