

Transformers are the heart of an electric utility. Whether it's a substation transformer or a pole mounted transformer at the end of a county road, each works hard 24/7/365 to power your home.

Despite differences in scale, utility transformers share several fundamental similarities in their design and function.

Transformers take incoming large voltage and step it up or down depending on need. PUD substation transformers take transmission line voltage (115,000 volts) and reduce it to levels that are safer and more efficient for distribution. Distribution voltage running along utility poles county

wide is either 7,200 (single-phase power) or 12,470 volts (threephase).

At the household

level voltage is reduced even further. Transformers are either pole mounted or pad-mount.

Internally, transformers consist of windings. The copper is wrapped around a laminated high-grade iron core. On one side is a "primary winding" connected to incoming high voltage. A secondary winding connects to the lower-voltage output. This is where the science happens with

electromagnetic induction.

The tightly coiled copper windings create a magnetic field that is corralled by the iron core. The number of copper coil wraps are the key to taking high voltage and reducing it (or visa versa).

The difference in the number of wraps between the primary and secondary winding are what allow you to stepdown (or up) voltage, and the current moves between windings thanks to the magnetic field induction (a very efficient transfer of energy).

Transformers are insulated to (Cutout) withstand the electrical stresses and outside environment. Oil inside the transformer is used to dissipate heat and maintain optimal operating temperatures.

(Transformer)

A blue or green flash from a pole

is often mistaken for a transformer

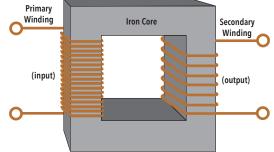
fault. In most cases it is a "cutout"

protects a nearby transformer much

device opening. This device

like a home circuit breaker.

**Inside a Transformer** 



**Event Schedule** 

**All County Picnic** Sunday, Aug. 18th, 11am-3pm **HJ Carroll Park** 

7,898

**Number of Transformers** 

Countywide

**Port Ludlow Opportunity Fair** 

Tues., Aug. 27th, 4-6pm **Port Ludlow Bay Club** 

**Quilcene Fair & Parade** 

Sat., Sept. 21st, 10am - 3pm Quilcene school

310 Four Corners Rd. Port Townsend WA 98368 (360)385-5800 jeffpud.org

## **SCAM ALERT!!!**

If you get a phone call from someone claiming to be Jefferson PUD (or PSE) and threatening to shut off power if not immediately paid over the phone, **HANG UP!** It's almost certainly a scam.

Remember: By calling PUD customer service YOU are in control of the conversation.



### The PUD will never:

**Demand immediate payment** over the phone, via text, email, or home visit.

Request credit card, banking, or financial info over the phone, via text, email, or home visit.

**Request payment** on a prepaid card.

Shut off service without providing written notice at least 7 days in advance.

## How to stay safe:

Call us directly to discuss options if you are behind on your bill.

**Download the SmartHub App** to check your real-time balance and usage anytime on mobile or desktop.

**NEVER** give utility account or payment info over the phone unless you call our customer service line directly at (360) 385-5800.

**CALL US**. Please call our customer service line to report any potential spam calls.

#### FIBER UPDATE: Installs Underway! Register Today!

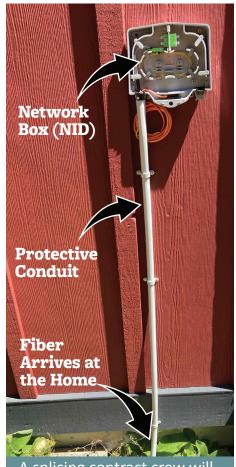
We are running out of nocharge fiber installations in our Quilcene-to-Gardiner grant funded buildout area known as the Olympic Fiber Corridor (OFC) so be sure to register soon! We have already reached registration thresholds for our Jefferson North, Discovery Bay East, and Inbetweens grant areas.

Once the threshold is reached, a \$750 construction costshare applies for any new registrations. The cost-share can be covered as a onetime payment or in monthly installments over 36 months with a \$100 deposit.

The PUD's fiber buildout represents a once-in-ageneration opportunity for dedicated fiber to the home. After our grant buildout is complete the cost of fiber construction to the home could range from \$3,000-\$10,000.

Our Southeast Jefferson grant area (blue area on mapping) is also filling up fast!

Registering takes only minutes. Log on to jeffpud.org/ broadband today.



A splicing contract crew will place a network box on the outside of the home. In-home connection by PUD fiber techs will occur in fall and winter of 2024 for Inbetweens and OFC fiber subscribers.

# \$200 Energy Credits Now Available!

JPUD has partnered with the WA State Dept of Commerce to help distribute a one-time \$200 energy bill credit for eligible households while funds are available. The PUD received \$750,000 in funds, supported by the WA Climate Commitment Act, to help low-to moderate-income families. Registeration takes about 30 seconds. Visit wacleanenergycredits.com to learn more. Registration closes Sept. 15th!

**PUD regular Board** meetings are held at 4pm on the first and third Tuesday of each month. Meetings are both in-person and online. For all meetings, plus upcoming events, visit the event calendar on our homepage.



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