



LIGHTNING IN JANUARY

January 2024 Newsletter

General Manager Kevin Streett with the PUD's first all-electric fleet vehicle, an F-150 Lightning.

In 2023, electric-hybrid and EV's made up 16% of all new vehicles sales in the US. In Jefferson County, EV registrations continue to grow.

When we reported on the first all-electric truck in Jefferson County (May 2022), only 415 EV's were registered countywide. In Nov 2023, EV registrations totaled 638 (42% increase).

The rapid growth of EV's means that in addition to water, sewer, power, and broadband business, the PUD is now solidly in the fuel business. In fact, we installed our first 'fueling' station for the PUD's new all-electric Ford F-150 Lightning in December.

EV charging is a bit easier than the PUD's traditional gas fueling station which has 2 pumps, a covered area, and large underground tank system. The EV station is just a 240V, wall-mounted Level 2 charger.

The PUD's Lightning has an estimated 320-mile range from a 98kWh battery, which fully charges in 8-12 hours. Nationally, daily home usage is approx 30kWh of power. The Lightning itself is essentially a generator, providing field crews front and rear 120V power outlets and the potential for a 240V port in the bed capable of energizing a building.

Unlike traditional vehicles or even hybrids (both plug-in or not), fully electric vehicles require no gas or diesel, nor oil (for engine),

nor transmission fluid (there is no transmission). An EV's fuel is simply the 96% carbon-free electricity direct from the PUD.

Fueling with low-cost PUD power can save money, as shown in the 100-mile example comparing the PUD's new EV vs current fleet truck. EV's convert

between 80%-90% of stored energy into motion, while traditional vehicles average 20%-25% when converting fuel into motion.

EV's and Demand on the Grid

Adding electric vehicles to the grid is a shift from long-standing power consumption

models. Typically, power usage occurs in peaks and valleys. Peak hours are the main concern for utilities and occur in the morning between 6-9am (homes heating) and in the evening from 6-8pm.

Charging EV's during low-demand times (overnight or mid-day during work hours) helps reduce peaks and aids in flattening the power usage trend. This helps the PUD better identify power usage trends systemwide, said Kevin Streett, PUD General Manager. Continuous usage trends can also help the utility better negotiate power contracts as demand rises.

"Adding the EV and needed infrastructure to the PUD fleet helps us grow as a utility alongside our customers," Streett said.

GOING THE DISTANCE - COMPARING 100 MILES

A closer look at cost of operation for 100 miles of drive distance for the PUD's F-150 Lightning vs current PUD fleet F-150 vehicle.

F-150 Lightning (EV): \$3.89

41.6kWh needed for 100 miles. Tier 1 kWh rate 0.0936

F-150 (gas-powered): \$24.30

17mpg average. 5.8-gal needed for 100 miles. WA average: \$4.19/gal

EV Chargers

LEVEL 1

Basic Home Charging
Charge Time: 30-50+hrs



Voltage: 120V

LEVEL 2

Home & Public Charging
Charge Time: 6-12hrs



Voltage: 240V

LEVEL 3 Fast Charger

Public Charging
Charge Time: ~35mins (0-80%)



Voltage: 480V



2023 was a busy and productive year. I extend my deepest gratitude to all JPUD employees, staff and contractors for their dedication and commitment to providing reliable and quality services.

To our customer owners, thank you for your continued support and patience as this burgeoning utility takes steps to grow and succeed.

Your PUD continues to successfully collaborate with local, state, and federal entities to expand opportunities and improve broadband, electric, water and wastewater services countywide.

You have three JPUD line crews and experienced electric division specialists working tirelessly to minimize outages as they upgrade our grid and help to deploy broadband fiber optic service.

Your water/wastewater division works closely with utility stakeholders and several communities to support water and sewer services, old and new.

Retail broadband operations is a focal point for our staff, Customer Service Reps, and installers as we deliver internet service throughout grant funded areas in 2024.

The new year will see PUD organizational structure defined for decades to come as we add and/or train personnel that will contribute to the shaping and delivery of much needed and critical services to every corner of our service area.

Wishing everyone a happy and safe 2024.

I hope 2024 finds you and your family well.


In 2023, the PUD's grant-funded 100 kW solar array on our headquarters generated about 118,000 kWh of electricity—enough power to drive an electric truck like our latest all-electric Ford Lightning fleet vehicle about 200,000 miles per year. If you exclude vehicle charging, the solar array will offset about 63% of our office's annual energy use. I look forward to the PUD expanding our electric vehicle fleet and seeking more opportunities to generate clean electricity in coming years.

In 2023 we began building our high-speed fiber network to improve access to the internet for Jefferson County residents. Construction of this network will take years to complete, but retail service to customers begins in 2024. On our fiber network, you'll be able to choose either the PUD or a private company to be your internet service provider (ISP) over the same high-speed network.


Looking ahead, the PUD will continue making investments to modernize and improve our electric, water, and sewer systems so that these systems continue to be efficient and reliable.

An important project for the PUD is working with Jefferson County to develop a public sewer for the Hadlock area. This project is essential to support existing and new commercial businesses and local residents.


Stay Safe During Storm Season




KEEP A 3-DAY SUPPLY OF WATER ON-HAND
Store 3 gallons per person, per day. Store extra to help others and change water yearly.




KEEP IT COLD! DON'T OPEN THE FRIDGE
Fridges & freezers are insulated and keep cold better if unopened during outages.




BATTERIES & FLASHLIGHTS
Unopened batteries have a 7-year shelf life. Keep headlamps & flashlights on-hand.



POWER LINE DOWN? STAY AWAY!
Treat any downed power line as if it is live. **STAY AT LEAST 50 FEET AWAY!**



FUEL-UP & CHARGE-UP BEFORE A STORM
Fuel-up vehicles and generators & charge EV's beforehand in case travel is needed.



STAY INFORMED VIA MOBILE
Follow the PUD on [jeffpud.org](#), Facebook, Nextdoor for update postings and info.

The Rainy Day Fund helps neighbors in need! Round-up today!	Jeff Randall Commissioner D1 jrandall@jeffpud.org	Ken Collins Commissioner D2 kcollins@jeffpud.org	Dan Toepper Commissioner D3 dtoepper@jeffpud.org	Kevin Streett General Manager kstreett@jeffpud.org
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EMERGENCY RESOURCE GUIDE



Jefferson County Emergency Mgmt

Phone: (360) 385-9368

Website: bit.ly/jeffcoec



Jefferson County Sheriff's Office

Phone: DIAL 9-1-1, Non-Emergency: (360) 385-3831

Website: www.co.jefferson.wa.us/172/Sheriff

POLICE



Port Townsend Police Department

Phone: DIAL 9-1-1, General Line: (360) 385-2322

Website: www.cityofpt.us/police

East Jefferson Fire Rescue

Phone: DIAL 9-1-1, Non-Emergency: (360) 385-2626

Website: www.ejfr.org

Quilcene Fire Rescue

Phone: DIAL 9-1-1, Non-Emergency: (360) 765-3333

Website: www.quilcenefirerescue.org

Brinnon Fire Department

Phone: DIAL 9-1-1, Non-Emergency: (360) 796-4450

Website: www.brinnonfire.org

Discovery Bay Volunteer Fire & Rescue

Phone: DIAL 9-1-1, Non-Emergency: (360) 379-6839

Website: www.dbvfr.org



FIRE EMS



NIXLE TEXT ALERT SYSTEM

Sign up for the free public safety text messaging service NIXLE alerts by texting JEFFCODEM to 888777. Countywide notifications will be sent direct to your mobile device.

Jefferson County Roads Maintenance Division

Phone: Non-Emergency: (360) 385-0890

Roadway Emergency: (360) 344-9779

Website: bit.ly/jeffcosnowandice

Washington State Dept of Transportation

Travel Route Questions: (206) 464-6400

Website: www.wsdot.wa.gov/travel

Social Feeds: Twitter(X): @wsdot / Facebook: WSDOT



ROADS



Jefferson Transit

Phone: (360) 385-4777

Website: www.jeffersontransit.com

Facebook: Jefferson Transit Authority

Twitter(X): @JTatransit



HOOD CANAL BRIDGE INFO

www.wsdot.com/travel

Search: Hood Canal Bridge

or scan with smart phone camera →



UTILITIES



Jefferson County PUD

Phone: (360) 385-5800

Website: www.jeffpud.org

Facebook: Jefferson County Pud #1

Nextdoor: Jefferson County Public Utility District

City of Port Townsend

Phone: (360) 385-3000

Website: www.cityofpt.us

Snow Info: bit.ly/cityofptsnowremoval

Facebook: City of Port Townsend, WA Government

JEFFERSON COUNTY SCHOOL DISTRICTS



Port Townsend School District

Website: bit.ly/ptschoolswinterweather

Transportation Dept: (360) 302-5812



Quilcene School District

Website: bit.ly/quilceneschoolswinterweather

Transportation Dept: (360) 765-3363



Chimacum School District

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