



# PSE ON VASHON-MAURY ISLAND

## FREQUENTLY ASKED QUESTIONS



To help Vashon-Maury Island residents learn more about Puget Sound Energy's efforts to improve reliability on their island, we have compiled answers to some frequently asked questions. Topics include:

- How PSE plans for reliability projects
- Vegetation management, including tree removal
- Tree wire
- PSE's wildfire mitigation strategies
- Easements
- Undergrounding & on-grounding (also called Ground-Level Distribution Systems)





### What is PSE's process for developing and maintaining electric reliability?

- PSE operates within a highly regulated framework governed by the Washington Utilities and Transportation Commission, federal and state laws, county and city codes and numerous other regulations. These laws and regulations governing our industry mandate that the providing of reliable service is not an option for PSE—it is a mandatory obligation.
- Given these requirements, we monitor the reliability of our electric system on a daily basis and develop projects to improve electric service reliability for our customers. It is important to note, our solutions to improve the reliability and resiliency of our network are not one-size-fits-all, but vary depending on the specific circumstances.

### How does PSE plan reliability projects?

- When developing projects, PSE looks at a variety of criteria. For example:
  - The area's specific outage history and causes
  - The configuration of the existing electric system
  - The cost of applicable solutions
  - Local geography and terrain
  - Historical weather patterns
  - Wildfire risk
- We then compare the costs and benefits of various solutions to come up with the best, most prudent solution. We then review the project alongside many other potential electric and natural gas infrastructure projects across our service area to construct a portfolio of capital projects that provides the maximum value to our customers.

### Who picks up the cost for a reliability project?

For PSE reliability projects, we look at various criteria to determine the solution, which does include costs. PSE is a regulated utility, which means there are a set of rules we have to work under in the interest of fairness for all of our customers. One of those rules is included in our Electric Tariff G Schedule 80. Schedule 80 says, if a party requesting or requiring that PSE build a project differently than proposed by PSE for whatever reason, then any extra project cost driven by the request/requirement must be borne by the requesting party.



### What types of reliability projects are evaluated?

PSE has a variety of projects to enhance reliability across its service area, including but not limited to:

- Trimming and removing trees that could come in contact with the transmission or distribution line. To learn more about tree trimming, see [pse.com/trees](https://pse.com/trees).
- Replacing aging poles, wires and equipment.
- Installing tree wire in areas that see many tree-related power outages. (Tree wire is a type of specially-coated power line that's designed to prevent electric shorts from brief contact with vegetation. This added protection can significantly reduce the frequency of branch-related outages.)
- Installing electrical switches and other equipment that provide for greater operational flexibility in the event of an outage.
- Burying existing overhead lines underground.

### Why is it necessary to trim or remove trees on Vashon?

- PSE understands the Vashon community values trees and vegetation and desires to minimize environmental impacts. PSE shares these values and works to balance our obligation to provide safe, reliable and affordable power with preserving Vashon Island's natural beauty.
- While trees are beautiful and an important part of living in the Northwest, they are a major cause of outages. To mitigate falling trees and limbs, PSE performs vegetation management on a cyclical schedule, with efforts focusing on achieving a safe and reliable electric system.
- For more information see [pse.com/en/customer-service/help-center/tree-trimming](https://pse.com/en/customer-service/help-center/tree-trimming).

### What is "tree wire"?

- Tree branch-related outages can be reduced by more than 95% when smaller diameter wire is replaced with tough, thick-coated wire designed to prevent outages when tree limbs make brief contact with power lines. However, tree wire cannot prevent outages caused by large falling trees.
- Tree wire has been used by utilities since the 1970s and at PSE since at least the early 2000s.





#### **Does PSE plan to put tree wire on every electric distribution line on Vashon?**

- PSE's long-term plan is to continue providing safe, reliable and affordable energy service. There is no plan to put tree wire on every line on Vashon, as it is only one tool of several available to address reliability. If reliability needs are driven by reasons other than vegetation impacts, then tree wire would not be the applicable solution.
- Because tree wire significantly reduces the frequency of branch-related outages and reduces wildfire risk, we undertake these projects throughout our entire service area where the location and the data support its use.

#### **Has there been any assessment of the impact of PSE's tree wire program on Vashon-Maury Island?**

- It is important to clarify that there is not a specific tree wire program at PSE. Tree wire is a tool used in applicable situations where trees impact the reliability or safety of electric service. PSE undertakes a wide range of projects on Vashon Island as part of its standard operation and maintenance of the electric system. Each of these projects are functionally independent and PSE ensures that all projects are compliant with county, state and federal requirements and regulations.
- PSE has a strong commitment to environmental stewardship and makes a deliberate effort to reduce or avoid environmental impacts to the extent possible. When a PSE project results in regulated environmental impacts, a State Environmental Policy Act (SEPA) threshold determination process may be conducted by the permitting authority. However, the majority of PSE electrical distribution projects are categorically exempt from SEPA threshold determination and Environmental Impact Statement (EIS) requirements under numerous exemptions listed in the Washington Administrative Code and King County Code.

#### **How does PSE determine which trees need to be removed on an affected property?**

- When PSE needs to manage vegetation during system maintenance and improvements, it is our goal to remove as few trees as possible while still ensuring the safe and reliable operation of the electric system. To help us with this goal, our engineers first develop a comprehensive project design, and in consultation with our arborists, determine whether any tree removals are necessary to meet system clearance requirements. Thereafter, property owners have an opportunity to meet with PSE representatives to discuss issues related to the project and proposed tree removals. Depending on the details of a particular project, we may be able to make minor adjustments to the design that would allow us to reduce the number of trees identified for removal.
- Because site visits are often necessary for this process, we encourage property owners to meet in person with PSE representatives to discuss their concerns.





### What does PSE do to reduce the risk of wildfires?

- Equipment upgrades and vegetation management reduce the potential for damage to the electric system. Investing in grid hardening projects helps prevent service disruptions while also reducing the risk of wildfire.
- Assessing and mitigating risk is a central component of PSE's Wildfire Mitigation Program. Our risk models identify areas of highest risk in our service territory, from the local level up to system-wide, and informs where we invest in grid hardening projects to further reduce risk.
- One way that we increase resilience and reliability is to decrease the number of faults on the system. Faults occur when something interrupts the flow of electricity, such as a tree limb hitting a power line. Faults often cause damage to equipment, which can result in sparks.
- Other wildfire risk reduction work includes:
  - Pre-wildfire season inspections and enhanced vegetation management in wildfire prone areas.
  - Installing covered overhead power lines (called tree wire).
  - Installing automated devices that quickly detect and isolate faults.
  - Upgrading equipment as new technology allows.
  - Relocating power lines underground (known as strategic undergrounding). See page 5 for more info.
  - Replacing or wrapping poles to reduce risk of wildfire damage.
- PSE has invested nearly \$50 million in grid hardening projects for wildfire mitigation across our service area since 2021 and we have an additional \$75 million in planned work through 2025.
- To learn more about how PSE works year-round to prepare for and prevent wildfires, including Public Safety Power Shutoffs, visit [pse.com/wildfire](https://pse.com/wildfire).

### What are PSE's mitigation strategies for wildfires?

As the state's largest utility, PSE is taking a comprehensive approach to mitigating the evolving risk of wildfires and working to ensure safety while balancing the reliable delivery of energy to our communities. PSE's Wildfire Mitigation and Response Program includes our year-round efforts to prepare for and help prevent wildfires in PSE's service area. For more information:

- Program website: [pse.com/wildfire](https://pse.com/wildfire)
- Medical Life Support website: [pse.com/medical](https://pse.com/medical)
- PSPS website: [pse.com/pmps](https://pse.com/pmps)
- Wildfire Program email: [wildfire.response@pse.com](mailto:wildfire.response@pse.com)



### When does PSE require an easement?

- PSE requires easements when it must place its equipment in private property. An easement applies to a specific area of land, provides durable property rights for equipment and remains attached to the title of the property regardless of change of ownership.
- To operate in any jurisdiction's right of way, PSE negotiates a detailed agreement called a "franchise." A franchise is different than an easement, being a contract that provides fewer property rights and more obligations than an easement does. They also expire after a set time where easements are permanent.

### Is PSE moving onto private property with easements primarily because King County now charges a fee to utilities for the use of its rights of way?

- No. County road standards (ex: section 5.10 of the 2016 Road Design and Construction Standards) dictate the distance PSE facilities must be from the road. This is called the "clear zone", which is a safety standard to protect the driving public. The County's franchise fee applies to PSE's use of the right of way throughout the entire county and is an amount determined through the franchise agreement.
- PSE asks private property owners for easements if we are unable to place our facilities in the right of way or our facilities are located on the edge of the right of way and we may need access rights to work on our facilities. We often see this when older equipment is updated and the county or city has implemented newer standards on how close poles can be to the road for the safety of vehicles.
- There are federal and state laws, county and city codes and many rules that govern where and how we can install our facilities and the amount of space we need around the facilities.

### What is a "franchise"?

For utilities, a franchise is a contractual agreement with a local government that authorizes utility use of the jurisdiction's rights of way to provide services such as power, gas, water, sewer or telecommunications. Common provisions of a franchise include notification requirements, liability and insurance terms, relocation of utility equipment for the jurisdiction's work in the right of way and meeting the jurisdiction's published standards and permitting conditions.





**Does PSE obtain easements on private property for power lines next to roads in other counties besides King County?**

Yes. PSE has easements on properties in every jurisdiction where it operates, and all jurisdictions have clear zone requirements that often necessitate moving poles and wires onto private property. Any time we cross private property or place facilities on private property, whether underground, at the surface or overhead, we need the right to do that from the landowner. This applies to every wire that hangs over every property and every gas line going to every house. Sometimes we need easements just to install the facilities that provide service to an individual property. Sometimes we need easements to place something that serves the neighborhood or even greater area. Again, all of our projects on Vashon Island are occurring to increase reliability of power on the island.

**Has PSE sought variances on Vashon Island, to allow its distribution poles to remain in place?**

We found no records of PSE having applied for a variance to clear zone road standards in King County.

There are several reasons for this:

- First and foremost, the clear zone is a safety standard, and PSE prioritizes safety and seeks to fully comply with all safety standards in our work.
- Variances from road standards are granted provided that granting the variance will produce a compensating or comparable result that is in the public interest and meets the objectives of the standard based upon sound engineering judgment. There are few viable options to meet the safety goals of the clear zone standard with a pole still within the clear zone.

**Is PSE replacing poles even though some are not in poor condition?**

PSE only replaces poles that do not meet safety, reliability and project requirements, as assessed from an engineering standpoint. Poles in good condition and meeting project needs and road standards are not replaced.





#### When is a line undergrounded and who covers the cost?

- PSE approaches undergrounding the same way across our service territory. The four different circumstances that result in distribution lines being installed underground are below; more detail about the cost sharing is included in the fact sheets (see link below):
  - Customer plat and master planned development construction (rate schedule 85): PSE installs new distribution lines underground during construction of residential and commercial plats and master planned developments. It's easier and more cost-effective to construct lines underground as part of building a larger project. The developer generally would pay 100% of the cost to underground lines.
  - Government-entity request (rate schedule 74). This is when a city or county may request certain existing overhead electric distribution lines to be relocated underground, typically in relation to a city capital improvement project.
  - Non-government entity request (rate schedule 73). This is when developers or groups of customers may request certain existing overhead electric distribution lines to be relocated underground (e.g. a group of neighbors wants to underground existing overhead distribution lines in their neighborhood).
  - PSE-driven reliability project. PSE monitors the reliability of our electric system on a daily basis and develops projects to improve electric service reliability for our customers. There are many different types of reliability projects – see *What types of reliability projects are evaluated?* on page 1 for more info.
- For more information about the circumstances in which PSE undergrounds power lines, you can check out the factsheets linked below.
  - Distribution lines: [4153\\_109\\_ElectricPowerLines\\_0424\\_final.pdf](#)
  - Transmission lines: [4153\\_109\\_UndergroundTransmissionLinesLines\\_1220\\_vF.pdf](#)



### **What are the challenges with undergrounding power lines?**

- Environmental and neighborhood impacts: Putting power lines underground can have significant environmental and neighborhood impacts. Undergrounding requires extensive vegetation removal, trenching and installation of large access vaults every quarter to half mile, which can be very disruptive to neighborhoods and the environment. While some vegetation can remain under or beside an overhead line, vegetation must be removed along an underground power line route to ensure trees' root systems do not grow into the line.
- Length of time for outage restoration: Underground lines typically take longer to repair, and repairs are more difficult. When an overhead line fails, our crews can often repair it within hours. Repair of underground power lines can take days and even weeks, depending on the repairs that need to be made.
- Maintenance challenges: Overhead power line maintenance typically includes visual inspections, pole treatment and vegetation management. Underground power lines are more difficult to maintain due to their unique design and operating conditions. Underground cables are sensitive to changes in soil cover and above-ground changes, and patrolling is necessary to assess changes in soil depth, cover type, vegetation changes or other issues that could impact the ability of the line to dissipate heat effectively.
- Aesthetics: While the majority of an underground power line is not visible above ground, vaults are typically installed every quarter to half mile and above-ground steel termination structures are installed at the end of the underground cable route.
- Easements: PSE must acquire easements whenever underground placement of power lines is not possible in the right of way. PSE also often requires easements for placement of the vaults and transformers due to clearance standards and the size of the vaults. Vegetation must be cleared from around the vaults.

### **Has PSE considered undergrounding of distribution lines on Vashon Island as an alternative to installation of new overhead lines?**

Yes, PSE reviews each distribution project to make sure it is providing reliable and safe electric service at an appropriate cost. Of the 257 miles of electric lines PSE currently operates and maintains on Vashon Island, 113 miles of cable, or 44% of facilities on the island, have already been placed underground.

PSE will continue to evaluate all of its options, including undergrounding, for future projects on the island to make sure that it continues to provide the safe, reliable and affordable service.





### **What is the process for PSE to look at undergrounding for Vashon as a whole?**

- There is not a process for PSE to consider undergrounding all of Vashon Island. Undergrounding is driven by considerations of reliability and safety, and taking a blanket approach across the whole island would ignore PSE's system planning and prioritization. Presently, PSE maintains approximately 140 miles of overhead distribution line on the island and the cost to underground these lines would amount to hundreds of millions of dollars.
- For PSE reliability projects, we look at various criteria to determine the solution, which does include costs. PSE is a regulated utility, which means there are a set of rules we have to work under in the interest of fairness for all of our customers. One of those rules is included in our Electric Tariff G Schedule 80. Schedule 80 says, if a party requesting or requiring that PSE build a project differently than proposed by PSE for whatever reason, then any extra project cost driven by the request/requirement must be borne by the requesting party.
- In the interest of fairness for all of our customers, PSE approaches undergrounding the same way across our service territory. If individuals would like to underground sections of the island via a project under Schedule 73 (which is at the individuals' cost), it would be better to have the Vashon community identify priority areas rather than take an island-wide approach. (How community members identify such priority areas would be up to those members and would not alter or impact PSE's overall approach to undergrounding in any way).
- Similarly, if Vashon would like to work with King County to support capital project funding for a project under Schedule 74 (which includes costs to the County), having identified those community priority areas could make more sense.

### **Whom do I contact at PSE to initiate a dialogue about undergrounding?**

Should a private property owner wish to inquire about undergrounding, they should reach out to PSE's Customer Construction Services (CCS) at 1-888-321-7779 (7 a.m. to 5 p.m., Monday – Friday). Upon contacting CCS, an agent will ask for your contact information, service address and the reason for the call. You can let the agent know you would like to know the feasibility for undergrounding your electrical service. From there, the agent will begin the process to create an electronic file for your request and queue the request to the project management team. A member of the project management team will then reach out to you within five business days to discuss your request, and that project manager will be your single point of contact moving forward.

### **Is Ground-Level Distribution System an option for Vashon-Maury Island?**

The Ground-Level Distribution System (GLDS) method of installing power lines is a new and unproven technology currently being tested by Pacific Gas & Electric Company (PG&E) in California. This experimental pilot project places power lines at or near ground level. PSE tracks emerging industry technologies and will incorporate tools as they become viable options within our regulatory environment. GLDS is not yet at that point.