PUGET SOUND ENERGY

energizeEASTSIDE

frequently asked questions

What is Energize Eastside?

The Energize Eastside project will build a new electric substation and higher capacity transmission lines to serve homes and businesses on the Eastside. This effort will upgrade our existing transmission system and provide dependable power for all Eastside communities for many years to come.

The electric transmission lines will extend from an existing substation in Redmond to one in Renton. The new substation will provide additional capacity to ensure the local electric system can accommodate our customers' growing energy usage, while the transmission lines will ensure we can deliver that additional capacity to the Eastside communities that need it the most. We won't know the exact route the transmission lines will take or the location of the potential substation until we've completed a robust public engagement process and evaluation of requirements and constraints, which is currently underway.

Why do we need it?

The Eastside is growing faster than any other region in Washington. You can see it everywhere – from Renton to Redmond, cranes are up and traffic congestion is increasing. World-class businesses are moving in and job growth is on the upswing.

While this growth is good news for our region, it is straining our existing electric system. Growth studies project that demand for reliable power will exceed capacity as early as winter 2017/2018. This doesn't mean the lights will go out, but without substantial electrical infrastructure upgrades and aggressive conservation efforts, the Eastside's power system will lose redundancy, increasing the possibility of outages for as many as 60,000 customers.

energizeEASTSIDE

- Will build a new substation and approximately 18 miles of transmission lines from Redmond to Renton
- Will ensure the Eastside's power system can continue to support the area's dramatic growth
- Route identification underway; construction expected to begin in 2017
- We want to hear from you: find us at pse.com/energizeeastside

Can we conserve our way out of needing this project?

Over the last 30 years, PSE has taken significant steps to get the most out of the electric system. In fact, through upgraded lighting, appliances and equipment, increased weatherization, and energy-efficient building technologies, PSE customers helped us save enough electricity to power 30,000 homes in 2012. Despite these aggressive conservation efforts, studies show demand is dramatically outpacing supply.

Conservation alone is not enough to keep up with our region's growth.

What is the best solution to meet the Eastside's electricity needs?

PSE's planners and engineers analyzed a variety of approaches to address the Eastside's growing energy needs, including reducing demand through conservation, increasing the capacity of our existing transmission lines, generating energy locally, and building new infrastructure. After a comprehensive review, PSE and independent experts determined that a combination of continued conservation and infrastructure upgrades – a new substation and higher capacity transmission lines – is the best way to reliably meet the Eastside's growing energy needs.

How did PSE develop the route options for the new transmission lines?

PSE's engineers and third-party experts identified potential substation sites and transmission line routes that, if selected, would meet the Eastside's energy needs. Many of the transmission line routes have existing 115 kV transmission lines along them. We considered several factors to develop the potential route options, including geography and land use.

PSE contracted with an industry leader in computer-based route evaluation to collect and analyze geographic information system (GIS) data for factors like topography and environmentally sensitive areas. We categorized the GIS features into opportunities and constraints, and then used a computer model to identify the best balance of these factors. The model produced 16 route segments, which our engineers verified to ensure they were constructible. The 18 route options being evaluated by the Community Advisory Group are comprised of these segments.

How much of the route options use existing transmission lines?

PSE prefers to route new transmission lines along existing corridors whenever possible. About 70 percent of the route options we're considering have existing lower voltage transmission lines along them.

How will the public be involved?

We are asking the public to provide feedback on which route options best reflect the values of the Eastside community. PSE has convened a 24-member Community Advisory Group representing various Eastside interests to help PSE narrow which route options should be included for further evaluation. After collecting feedback from the public, the advisory group and other stakeholders, PSE expects to select a preferred route and substation site in early 2015. Construction is planned to begin in 2017 with project completion expected in 2018.

Since launching the project in December 2013, PSE has met with Eastside residents, businesses and community leaders to share more information about the project. We are reaching out in a variety of ways and encourage you to get involved.

You can:

- Attend and observe Community Advisory Group meetings.
- Participate in community meetings.
- Send us your comments and questions via email at energizeeastside@pse.com or voicemail at 1-800-548-2614.
- Invite PSE to give an informational briefing at your neighborhood or community group meetings.
- Review the project website at pse.com/energizeeastside for the latest information.
- Join our mailing list to stay informed of project updates and opportunities for involvement.

Why doesn't PSE use the Seattle City Light corridor that runs from Redmond to Renton?

PSE looked into using the Seattle City Light corridor and yes, if rebuilt, the corridor could work to meet the Eastside's energy needs. However, PSE has been told by Seattle City Light that this corridor is a key component of their transmission system and is not available for our use.

Could PSE put the new transmission lines along Interstate 405?

When we inquired with Washington State Department of Transportation (WSDOT) about the possibility of installing new electric transmission lines along the I-405 corridor, they indicated that standard policy doesn't allow utilities along an interstate. Additionally, there are prohibitive challenges with building the line along either side of I-405; if our lines were in conflict with any future WSDOT project, PSE would need to relocate out of the WSDOT property without sufficient lead time to re-site the line. The potential risk of losing the corridor rules this out as a viable option for PSE.

Why is PSE considering the Eastside Rail Corridor (ERC) when a trail is planned for that area?

PSE does, and will continue to, work closely with local jurisdictions, King County and interested groups to ensure the Energize Eastside project aligns with other regional plans and preserves the corridor as a public asset. Trails and transmission lines are compatible uses as demonstrated by numerous examples throughout King County. Additionally, PSE is a member of the ERC Advisory Council and has development rights along the corridor.

Can PSE put the lines underground?

PSE can build underground transmission lines; however, overhead transmission lines are PSE's first option for their combination of reliability and affordability – both of which are important to our customers. While undergrounding is an available option, the biggest challenge to underground transmission lines is cost.

The construction costs for an overhead transmission line are about $3 million to $4 million per mile, versus $20 million to $28 million per mile to construct the line underground.

When a new line is constructed overhead, project costs are distributed evenly between PSE's 1.1 million customers and paid for over time. If a transmission line were to be constructed underground, PSE can't justify asking customers across its entire service territory to pay the significant cost increases.

That's why, per state-approved tariff rules, the requesting party, often the local jurisdiction, must ultimately decide whether to make this investment. The requesting party would then be responsible for paying the difference between overhead and underground costs.

In addition to cost, there are other factors to consider such as environmental and neighborhood impacts.

- Underground transmission lines require an easement 30 to 50 feet wide, which, unlike with overhead lines, must be completely free of trees.
- Underground transmission lines require large (20 feet x 30 feet) access vaults every quarter mile which can be very disruptive to adjacent neighborhoods and the environment.
- Repairs take much longer and can be more difficult with underground lines. While overhead lines can be repaired within hours or days, underground transmission line repairs can take days or even weeks.

How much will the project cost?

We don't yet know the total cost of the project, but estimates range from $150 million to $300 million. We expect the average monthly bill increase for residential customers to be about $1 to $2 per month. Once we select the route and determine the final design and alignment, we will have a better idea of the total cost.

What about electric and magnetic fields (EMF)?

Electric and magnetic fields, or EMF, are found wherever there is electricity – in household wiring, electrical appliances, computers or power lines. Over the past 45 years, there have been many scientific studies conducted to determine if EMF has any effect on human health. To date, the scientific community has concluded that current evidence does not support the existence of any health consequences from exposure to EMF.

At PSE, safety is always our top priority and we are committed to keeping our customers informed. We understand that local residents may still wish to learn more. PSE has hired Drew Thatcher – an independent, board-certified health physicist – to address more specific EMF questions. If you or your neighbors would like to ask questions of Drew, the Energize Eastside team would be happy to connect you with him for more information.

We want to hear from you

Your feedback will help us identify a route option and substation location that work best for the Eastside. Keep an eye on our website for more information on how you can get involved in the route discussion process.

For additional information/questions please visit our project website at pse.com/energizeeastside or contact:

- **Leann Kostek**, Senior Project Manager
- **Jackson Taylor,** Community Projects Manager
- **Keri Pravitz,** Community Projects Manager

We also welcome your comments and questions on the Energize Eastside project at energizeeastside@pse.com, or you can call the project voicemail at 1-800-548-2614.