Frequenty asked questions — Brookwood to Shute transmission project

Project questions

Q: What is the Brookwood to Shute transmission project?

The Brookwood to Shute transmission project is one-part of the multi-year Hillsboro reliability project aimed to improve reliability and add needed electrical capacity to support Hillsboro's growth and prosperity.

This part of the project will install a new 2.9-mile, 115kV transmission line running from the Brookwood substation to the Shute substation. This work is partly an upgrade to the existing lines in the neighborhood with some additional new equipment. We will raise the lines higher, so there is additional clearance and the wires are more out your line-of-sight.

Q: Why is PGE doing this project?

This new line will provide a new power source to the upgraded substation, upgrading to a higher voltage that will provide more electrical capacity to the surrounding community.

Q: What is involved in this project?

The line will be built using a combination of wood poles, self-supporting steel poles and steel poles with foundations. This combination ensures our work complements the other existing utilities in the area, so customers continue to get all the services they need. Construction will start in March 2021 through late 2022.

Q: Is the project already approved?

Yes. In collaboration with the City of Hillsboro, the designed route has been approved. We worked closely with the City on the design, making sure to consider the proposed cycle track and road upgrades, and any future road expansions and traffic lighting. It also follows existing electrical infrastructure on Shute road, to limit as much new equipment as possible.

Q: Were other routes or options considered?

Yes. We performed various route options prior to choosing the final design. The current route was ultimately chosen due to several factors including FAA limitations and restrictions, existing PGE infrastructure, considerations from the City of Hillsboro and additional special constraints, including keeping costs low for customers.



Q: Were underground wires considered?

We always consider all options on new construction projects and underground lines were not a viable option for this project. Throughout our whole service we have very limited underground transmission. The cost to install transmission underground can be 20 times higher than overhead, which would put an undue burden of cost on our customers. Repairs also take much longer. With overhead lines, we have more paths to repair and restore power to customers. In addition, to install underground lines, we must remove all vegetation and structures above ground for the entire length of the route.

Q: Will the lines be noisy?

Last year we conducted an initial EMF study and found that the audible level for this project is 65% below the state-regulated audible levels (Oregon Secretary of State Administrative Rules OAR-340-035-0035). The study found the noise emitted is under 20 decibels, which is like rustling leaves or a whisper.

Q: Is this line specifically for a single customer?

No. The project is in response to the overall growth from both residential and commercial customers over the past few years. This line will support overall stability, reliability and electric capacity of the Hillsboro area; along with adding room for continued growth and expansion in the area.

Vegetation questions

Q: What trees will need to be trimmed or removed?

The route selected already has existing electrical infrastructure and equipment, which limits the amount of vegetation needed to be trimmed or removed. In a few instances, some trees need to be trimmed or removed for safety, and PGE arborists are working directly with the affected homeowners and will replace any removed trees as needed.

Q: Are there any environmental or wildlife concerns?

No. We consider avian protection in all designs and provide bird guards and various other covers to protect wildlife when needed.

Safety questions

Q: What about EMF?

We are committed to all customers' safety and include an Electrical Magnetic Force (EMF) study for all proposed transmission lines. You can find more information on EMFs at portlandgeneral.com/safety/electric-magnetic-fields.

Q. Will the new lines effect pacemakers or other medical devices?

We understand that this is a concern, but there is no known or expected impact to pacemakers or similar medical devices.



Q: What happens when a line falls? All transmission lines are built to survive severe weather events in the area. If a line is damaged, there are protective relays and back-up systems to keep the line safe. 115 kV transmission lines are common throughout PGE's service territory as well as used by other utilities across the US.

Q: Can people climb the towers or climb a tree to reach lines?

The structures are not easily climbable and have safety measures to restrict non-approved personnel from climbing the poles. These are single-poles and not the lattice towers that can be seen around Hwy 26. Trees will be trimmed to prevent any safety hazards below the transmission lines.

Additional questions

Q: Will this affect my property value?

There is no data that showcases transmission lines significantly affect property values. In addition, we consulted with a local appraiser who has confirmed this finding.

