



Oregon

Tina Kotek, Governor



April 30, 2025

Senator Lew Frederick, Co-Chair
Representative Emerson Levy, Co-Chair
Joint Committee on Ways and Means Subcommittee on Natural Resources
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RE: Follow-Up Responses from April 28th Informational Hearing on the Grid Resilience Program

Dear Co-Chair Frederick and Co-Chair Levy,

We appreciated the opportunity to provide an overview of our Grid Resilience Program. We promised to follow up with more information about the undergrounding of power lines.

According to a [2024 report](#) prepared by Lawrence Berkeley National Laboratory for the U.S. Department of Energy, Grid Deployment Office,

The share of the total length of electric distribution lines underground in the U.S. has increased from 18% in 2009 [31] to approximately 20% in 2023. While undergrounding of electric distribution is on the rise and already a significant fraction of line length, undergrounding of lines at transmission voltages is much less common in the U.S. As few as 0.5% of total line lengths at capacity 200 kV or higher were installed underground as of 2009. – pg. 1

Costs are a primary factor influencing the more prevalent deployment of underground distribution lines and the extremely rare instances of underground transmission lines. From same LBNL report:

Costs will generally be higher for transmission compared to distribution systems (roughly 3 to 10 times higher for new construction, and 1.5 to 5 times higher for conversions), and in areas where labor costs are higher. – pg. 4

From the 2024 ODOE Biennia Energy Report:

One method of potentially strengthening the resilience of the electric grid is burying power lines rather than hanging them on power poles. Buried lines are less susceptible to effects from major weather events, such as wind or ice storms. However, burying lines can be cost prohibitive. The cost of constructing a high-voltage underground transmission line can be four to 10 times the cost of constructing an overhead transmission line due to material costs, labor costs, and environmental factors. Oregon-based Lane Electric [utility Cooperative](#) reports that it would cost about three to five times more per foot to install new underground

distribution system lines rather than new overhead lines. Burying the existing overhead distribution lines in its service area would cost more than \$600 million.

Eight of the 13 projects planned by Oregon electric utilities in the ODOE Grid Resilience Grant Program include undergrounding over 23 miles of distribution lines. In each case, the utilities expect a near total elimination of wildfire risk and weather-related outages in the undergrounded sections.

As mentioned by Co-Chair Levy and other members of the committee, throughout Oregon, some cities and counties have code requiring utilities to underground electric utilities in designated areas.

Under ORS 757.005 and OAR 860.300, electric utilities are required to submit Wildfire Mitigation Plans to the Oregon Public Utility Commission. The plans, [posted on the PUC website](#), often list undergrounding distribution lines as one of the actions planned by utilities for grid hardening, resilience and wildfire prevention.

If you have further questions, please be in touch.

Sincerely,

Janine Benner