GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Providing Regional Resilience to Underserved Populations through Line Undergrounding, Real-Time Threat Monitoring, and Advanced Microgrid Capabilities

Established by the Bipartisan Infrastructure Law, the Grid Resilience and Innovation Partnerships (GRIP) Program is a $10.5 billion investment to enhance grid flexibility, improve the resilience of the power system against extreme weather, and ensure American communities have access to affordable, reliable, electricity when and where they need it. GRIP funding is administered by the U.S. Department of Energy's Grid Deployment Office (GDO). This project was selected through the second round of GRIP funding.

Puget Sound Energy (PSE) is focused on bringing energy resilience and economic development to highly vulnerable communities in the Skagit River Valley. The project focuses on strategic system undergrounding to prevent service interruptions, deploying situational awareness technology for faster response times, and adding microgrid and black-start capabilities to restore service quickly. The region has historically had low electric service reliability and is increasingly challenged by climate-worsened disasters such as floods, wildfires, and severe storms. This project can create economic growth and preserve reliability for PSE's customers, tribal communities, and Disadvantaged Communities (DACs). Major participants include Apprenticeship & Non-Traditional Employment for Women (ANEW); Bellingham Technical College; Skagit County; Town of Concrete; University of Washington; Upper Skagit Indian Tribe; and Washington State Department of Natural Resources.

Anticipated Outcomes and Benefits

Comprehensive grid resilience: The project will underground more than 30 miles of distribution circuits; deploy Gridware sensor technology and AI-powered Pano cameras to provide real-time threat monitoring; and install hardware technologies to enable black-start and microgrid capabilities. These investments will reduce customer minutes of interruption by 7.4 million minutes per year–an average of 21 hours per customer each year.

Economic development: Ensuring energy security in an area increasingly prone to climate disasters—specifically preventing disruptions and monitoring threats—will provide groundwork for future regional development.

Community benefits: The project is estimated to create or sustain more than 150 jobs, with at least 60% union-represented fieldworkers, and create a $2.2M pre-apprenticeship program. 67% of investment will occur in DACs, with 81% of reliability benefits accruing to Tribal members, DAC customers, and Community Benefits Agreement parties. Some or all of this project will be executed in collaboration with the International Brotherhood of Electrical Workers (IBEW).

Project Details

- **Project:** Skagit River Valley Transformation for Climate Resiliency
- **Applicant/Selectee:** Puget Sound Energy
- **GRIP Program:** Grid Resilience Grants (Bipartisan Infrastructure Law, Section 40101(c))
- **Federal cost share:** $45,781,599
- **Recipient cost share:** $45,781,599
- **Project location:** Washington
- **Project type:** System Hardening and Wildfire Mitigation

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