

Name of the Applicant: Portland General Electric

Principal Manager: Matt Hubbard

Project Title: Accelerating and Deploying Grid Edge Computing.

Project Objective: PGE proposes to install a scalable, distributed artificial intelligence (AI) platform to accelerate grid edge computing capabilities and enhance DER integration.

Project Partners: Utilidata, Inc., Oregon State University, Saturday Academy and VertueLab.

Proposed Project Benefits: The project supports PGE's ambitious clean energy targets by deploying an advanced technology that helps optimize and integrate DERs. The project helps address technical constraints with AMI's ability to process and analyze high volume of grid-edge data. Several disadvantaged communities will benefit from the project as it promotes creation of programs that utilize grid edge data.

Project Abstract: PGE proposes to install a scalable, distributed artificial intelligence (AI) platform to accelerate grid edge computing capabilities and enhance DER integration. PGE will deploy up to 90,000 smart grid chips (SGC) by 2028, across approximately 10% of its service territory, as the first stage of a multiphase program. The SGC solution is an interbase meter adapter with a high-end NVIDIA processor and software platform. The meter adapter is installed between the meter socket and electric meter. Installation will be conducted by trained IBEW union labor. The SGC is equipped with LTE and Wi-Fi communication, real-time data processing and grid operational software, and a scalable, secure software application environment.