

Shelter Valley Virtual Power Plant Project

1. Overview

The Shelter Valley Virtual Power Plant (VPP) project is evaluating the control, dispatch and real-time signaling of behind the meter resources installed throughout a vulnerable community in the SDG&E service territory.

Shelter Valley is a small, unincorporated community located in an area of East San Diego County that is more prone to outages and Public Safety Power Shutoff (PSPS) events. The project seeks to help build a smart, resilient community while boosting energy reliability and emergency preparedness. The project is evaluating the impact the VPP can have during peak energy consumption periods and when load might need to be shifted or curtailed due to severe weather or other grid conditions.

The VPP includes a variety of resources including battery storage, smart thermostats, and other smart devices. New battery storage systems are being prioritized to customers with existing solar who are on medical baseline and/or those with access & functional needs.

SDG&E contracted with a vendor to assist with administration of the project including the recruitment of customers to participate in the study and installation of devices inside participating customers' homes. A separate vendor is contracted to enable a cloud-based platform that can control multiple resources integrated into the VPP.

2. Collaboration

The progress and results are shared with other CA IOUs ET-DR Leads. SDG&E's ET Team is also collaborating with its Advanced Clean Technology, Sustainability, Marketing & Communications and Demand Response Program teams on this study.

3. Status

The cloud-based VPP control platform has continued to signal installed devices since Q4 2022.

4. Next Steps

Signaled events are expected to continue thru Q4 2023. The vendor is analyzing the data for signaled events and is preparing the final report. The final report will be published to the ETCC web site for public review and reference.