

SDG&E Signaled Grid Isolation at a Meter for Demand Response

1. Overview

SDG&E is planning to conduct internal testing of a grid isolation adapter that enables whole home/facility self-consumption from solar and/or battery storage during a signaled Demand Response event or outage.

The technology features Open ADR control of solar, batteries and EV chargers for Demand Response, grid balancing, and resilience to Public Safety Power Shutoff (PSPS) mitigation and extreme weather outages. The device features a worker safety interlock for safe and reliable control of Distributed Energy Resources (DERs). The technology is UL tested and UL 414 SB verified.

SDG&E contracted with the vendor to purchase a test wall for testing in a controlled environment at SDG&E's Integrated Testing Facility (ITF). The test wall replicates the side of a home and includes devices and systems that typically reside there including breaker connected plugs for loading with residential appliances and DERs.

2. Collaboration

The progress will be shared with other CA IOUs during scheduled monthly Statewide DR-ET Leadership Collaboration calls. SDG&E's ET Team is also collaborating with its Distributed Energy Resources, Electric Distribution Engineering, Metering, Cybersecurity and Demand Response Program teams.

3. Status

SDG&E contracted with the vendor in Q1 2023. A test plan is under development and undergoing review by SDG&E teams. Testing is expected to begin in Q2 2023.

4. Next Steps

Once the testing is completed, SDG&E will share the results internally and determine whether the device can be incorporated into a future field evaluation and installed at customer meters.