

# Develop a residential ADR incentive for EV Charging Controls

## 1. Overview

In 2019, the Automated Demand Response (ADR) Program conducted a Collaborative Stakeholder Process to identify and vet emerging residential ADR technologies for potential inclusion in the program. This process found that EV charging control (such as onsite charging station, or manufacturer's telematic) were an excellent fit for the ADR program, based on the rigorous criteria and stakeholder process employed in the study. However, surveys with the vendors and their respective control technologies indicate that they were not ready for full-scale rollouts at the time for various reasons.

In order to develop a residential ADR incentive for EV charging controls, this study will test EV charging controls in a field setting and measure the DR impact of such technologies. The study will:

- Identify relevant eligibility criteria for EV charging controls' participation in the field test, and more broadly, in PG&E DR programs.
- Identify EV charging controls and assess their DR impact in a field test.
- Characterize, to the extent possible, the average load management potential for identified residential EVs in PG&E territory:
  - Characterize load management groups of PG&E EV owners based on their EV's, TOU rates, and charging habits.
  - Document existing DR incentives available through PG&E programs (e.g., Smart Rate, Demand Response Auction Mechanism (DRAM) and Capacity Bidding Program (CBP)) to inform how the residential ADR program fits into the DR landscape and how ADR incentives for EV ADR controls should apply to these different DR programs.
- Assess potential ADR incentive designs and amounts for residential EV charging control technologies.

## 2. Collaboration

The DRET team is collaborating with the internal EV team to implement this study. PG&E hired the same consultant that leads the ADR Collaborative Stakeholder Process to manage this DRET study.

### **3. Results/Status**

This assessment started on November 2020 and will last twelve months. Since the last DRET report, this study completed the following tasks:

Field Test:

- Completed eight test DR events

Conjoint Survey:

- Survey Programming/Testing on the week of 9/20/21
- Target Survey Launch Week of 9/27/21

Clustering study:

- Progress on load disaggregation, target completion by end of September

### **4. Next Steps**

Overall study timeline:

- Cluster study development target to be completed mid-Oct
- Perform cluster analysis target by mid-Nov in line with final report
- Start project close-out interviews
- Review draft questions prior to developing interview guide
- Start drafting final report using information collected in the study