SDG&E DRET Project: In-Home Display & Smart Phone Application (PEEK) Behavioral Conditioning with Time of Use Billing for Energy Efficiency & Demand Response

Overview

The Peek Smartphone App is available for customer download, registration and activation. The application is complimentary to the in-home device, enabling the customer to view time-of-use (TOU) pricing periods and period prices via their smartphones. The application can also provide other functions such as SDG&E message pushes to the customer, helpful links and other functionality as developed by the vender.

The goal of this project is to verify if an SDG&E residential customer will:

1. Interact with the in-home display.
2. Interact with the smart phone application.
3. Yield any meaningful annual kWh savings verified using the NMEC (Normalized Metering Energy Consumption) analysis.
4. Yield any Demand Response values due to smart phone application messaging using regression analysis as well as a 3-in-5 baseline; and/or
5. Yield a positive residential program design in the form of Total Resource Cost (TRC), Program Administrators Cost (PAC), and Ratepayer Impact Measure (RIM) tests.

Collaboration

The progress and results will be shared with other CA IOUs ET-DR Leads. SDG&E's Emerging Technologies Team has collaborated with internal Residential Customer Program Advisors to keep them informed of potential measure value as the project yields positive cost-effectiveness. The ET Team also collaborated with SDG&E's rates team and marketing groups to ensure effective messaging efforts.

Results/Status

Testing began in Q3 2020 and continues for approximately 250 registered devices. The first phase of testing is aligned with SDG&E called DR events and is expected to be complete by the end of this DR season in Q4 2020. The next phase of testing will be initiated in Q4 2020 and continue into 2021.

Next Steps

The next steps are to complete the first phase of testing and to initiate the second phase of tests. Post trending and data analysis are expected to begin in Q1 2021 when the second phase of testing is completed. The final report is expected to be drafted by Q3 2021.