

DR17SDGE0002: Expansion Study of the Statewide Expansion of Auto-DR Express Solutions

OPPORTUNITY

The Small and Medium Business (SMB) community has historically been underserved by Auto-Demand Response (DR) programs.

In the past, Automated Demand Response (Auto-DR) projects were focused on large commercial or industrial sites. These Auto-DR programs were vendor driven, so their higher cost and additional instructional overhead necessitated projects that had larger incentive amounts. Vendors and aggregators perceive SMB customers as not cost effective to engage. The DR-ET teams (SDG&E, SCE, and PG&E) asked ASWB Engineering to study how to improve uptake on the existing SMB Auto-DR solutions— “Auto-DR Express” and “FastTrack” —and develop a program model that all three utilities could adopt.

TECHNOLOGY

Why is the updated Auto-DR Express Tool better for the SMB community?

The DR-ET teams determined the requirement of peak kW as an input for incentive calculations was still an issue for vendor/customer participation in the Auto-DR Express programs. In order to address the peak kW issue, the DR-ET teams requested a modification to the Auto-DR Express program structure that would remove the peak kW requirement by calculating Auto-DR incentives based on easily observable facility data, namely the number of installed thermostats and unitary AC controllers. This “\$ per device” solution would allow vendors and customers to get concrete Auto-DR incentive estimates at the time of sale based on facility type, number of devices sold and climate zone.

M&V

Where did Measurement and Verification occur?

The following Technical Approach and Methodology was used:

- Conduct a needs assessment by interviewing program participants and utility stakeholders.
- Evaluate potential for additional facility types and measures by reviewing existing Auto-DR databases, looking into new potential industries for Auto-DR application and reviewing utility DR program pilots.
- Integrate findings from efforts listed above into a new Auto-DR Express tool, and a new program design for 2018 and beyond that focuses around the needs of SMBs.

RESULTS

What are the recommended solutions to increase SMB uptake of ADR programs?

Three recommended solutions to increase SMB uptake

Immediate - Adopt a modified Auto-DR Express offering to address vendor and customer needs, such as a streamlining the offering between all three IOUs, expanding the facility eligibility and make one-time incentive calculations easier.

Long-Term SMB Program Redesign – Include a direct install option in a full program redesign intended to increase participation from SMB. Direct install will address vendor and customer concerns with difficulties in providing on-going incentives, reducing confusion during selection of DR programs, eliminate the concern of too many touchpoints and address cash flow concerns.

Dollar Per Device (Phase 2) - The dollar per device solution (\$ per device) was requested by the IOUs after ASWB presented the immediate and long-term solutions. This solution, referred to as Phase 2, utilized databases from vendors to create a \$ per device proof of concept. The tool provided incentives per unitary AC controller for retail sites.

DEPLOYMENT

What revisions should take place to the existing Auto-DR Express/FastTrack Tools and software?

Pilot Program Needed

The next step for increasing SMB uptake in Auto-DR Express is to pilot the proposed long-term solution. Including IoT devices will allow access to real time databases which would also allow the utility to yield useful data within the budgets provided.

A pilot not only best serves the needs of SMB customers, while meeting CPUC decisions regarding SMB outreach in disadvantaged communities, but will also provide more useful data at lower M&V costs via IoT devices.

