

SCE's Demand Response Disadvantage Communities Pilot Plan

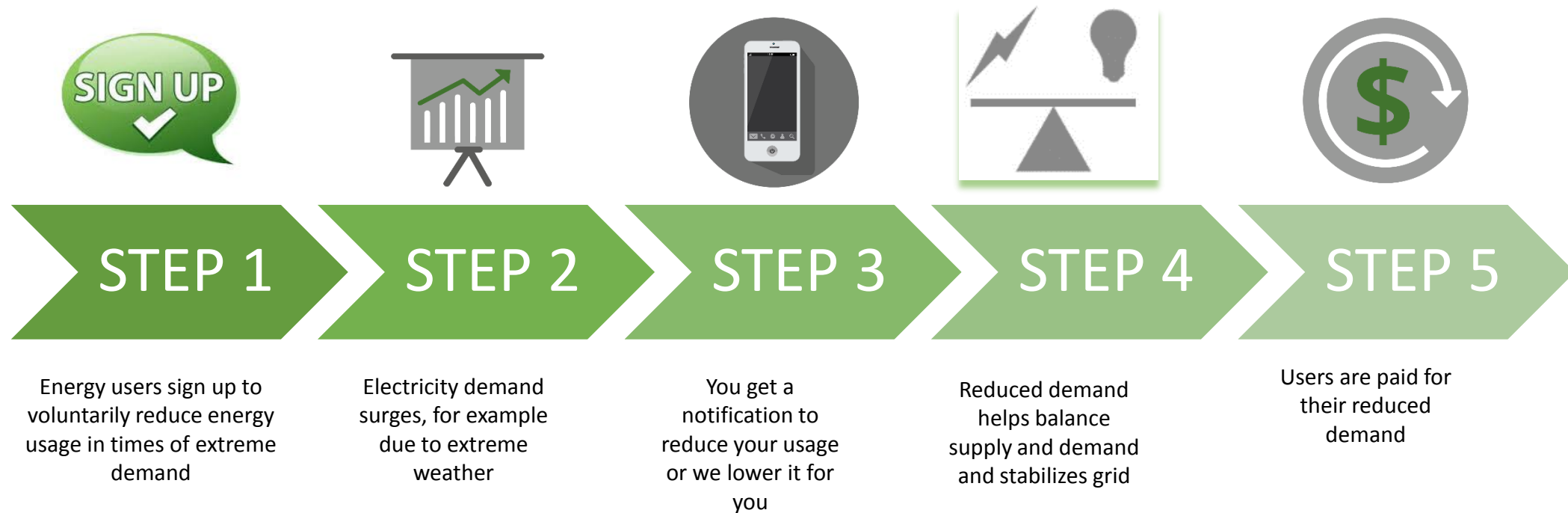
February 22, 2019

Agenda

- Define Demand Response
- SCE's DR DAC Pilot
- Purpose of the DR DAC Pilot
- Goals of the DAC Pilot Plan
- Budget
- Target Areas
- Schedule
- Consumer Protection
- Feedback

Demand Response

- Demand Response (DR): a change in the power consumption of an electric utility customer to better match the demand for power with the supply. DR helps to stabilize power consumption and minimizes the need to activate backup fossil fuel generators that pollute the environment. Consumers are paid to power down equipment or shift their load.



SCE's DR DAC Pilot

- Leveraging SCE's San Joaquin Valley pilot as well as the IOU's CARE/ESA programs to maximize the DR DAC's limited budget and leverage information, where feasible.
- As part of SCE's SJV Pilot, SCE is offering, among other things, to replace existing fossil-fuel-burning water heaters with cleaner and more efficient Heat Pump Water Heaters (HPWHs) of appropriately equal size for eligible customers.
- In partnership with SCE's SJV Pilot, SCE's DR DAC Pilot will offer to convert the HPWH into a grid-responsive water heaters by adding a grid responsive control device.
- Eligible customers can elect to allow SCE to manage their HPWH operations during demand response events throughout a specified participation period.

Purpose of the DR DAC Pilot

Commission regulated demand response programs shall assist the State in meeting its environmental objectives, cost-effectively meet the needs of the grid, and enable customers to meet their energy needs at a reduced cost.

- The DR DAC Pilot as designed will support the needs of the grid by incentivizing customers to allow SCE to manage their Heat Pump Water Heater (HPWH) in response to grid needs and demand response events.
- The program will allow customers to meet their energy needs at a reduced cost by providing a bill credit to participating customers.

Goals of the DR DAC Pilot

- Pilot results could potentially inform
 - How best to offer DR programs in disadvantaged communities
 - Identify policy recommendations to improve existing demand response programs
 - Contribute to the development of new programs

Budget

- SCE was authorized a budget of \$1 million. Ten percent of this budget shall be used to evaluate the success of the pilot.

Item	Qty	Unit Cost	Funded by DR DAC Pilot
Measurement & Evaluation	-	-	100,000
Grid-Responsive Control Devices	299	2,000	598,000
Marketing DR Pilot to Customers / Consumer Protection	449	100	44,900
Study Plan Development of the Grid Response Water Heater Study			100,000
DR Customer Incentives (for two participation periods)	299	175 / period	104,650
Administrative Costs	-	-	52,450
Grand Total			1,000,000

Target Location

- The Commission identified 11 communities to host the SJV DAC Pilots.
- SCE's SJV DAC Pilot areas include
 - California City
 - Ducor
 - West Goshen
- DR DAC Pilot is collaborating with SJV DAC Pilot to maximize its \$1 million budget.

Schedule

2019

- 449 customers will receive (at no upfront cost) new, efficient electric appliances
- installation of communication devices for HPWHs at the same time

2020

- Customers elect to participate in DR Pilot
- Begin gathering data through communication devices and survey (Participation Period #1)

2021

- Continue to gather data through communication devices (Participation Period #2)

2022

- Analyze data collected
- Identify next steps based on pilot results

Consumer Protection

- Collaborate with Community Based Organizations (CBOs) on
 - Marketing – outreach, language, etc.
 - Education – CARE, ESA, other programs and options
- Bill Protection – SJV DAC Pilot

Questions/Feedback