BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022.	Application 17-01-012 (Filed January 17, 2017)
And Related Matters.	Application 17-01-018 Application 17-01-019

JOINT INVESTOR OWNED UTILITIES (IOU) PROPOSED GUIDELINES FOR THE 2018-2022 AUTOMATED DEMAND RESPONSE TECHNOLOGY INCENTIVE (AUTO-DR) PROGRAM

FADIA RAFEEDIE KHOURY
ROBIN Z. MEIDHOF

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-6054
Facsimile: (626) 302-6693
E-mail: Robin.Meidhof@sce.com

Dated: February 20, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022.	Application 17-01-012 (Filed January 17, 2017)
And Related Matters.	Application 17-01-018 Application 17-01-019

JOINT INVESTOR OWNED UTILITIES (IOU) PROPOSED GUIDELINES FOR THE 2018-2022 AUTOMATED DEMAND RESPONSE TECHNOLOGY INCENTIVE (AUTO-DR) PROGRAM

In accordance with Decision 17-12-003, Ordering Paragraph 29, Southern California Edison Company (SCE) hereby submits draft guidelines to implement Auto Demand Response technology incentives. These draft guidelines were prepared jointly and are being served on behalf of Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E).

Respectfully submitted,

FADIA RAFEEDIE KHOURY
ROBIN Z. MEIDHOF

/s/ Robin Z. Meidhof

By: Robin Z. Meidhof

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-6054
Facsimile: (626) 302-6693
E-mail: robin.meidhof@sce.com

February 20, 2018

Joint Investor Owned Utilities (IOU) Proposed Guidelines for the

2018-2022 Automated Demand Response Technology Incentive (Auto-DR) Program

Joint Investor Owned Utilities (IOU) Proposed Guidelines for the 2018-2022 Automated Demand Response Technology Incentive (Auto-DR) Program

February 20, 2018

Prepared By

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

David Kaintz, Project Management Senior Manager
Ted Tayavibul, Systems Support Senior Advisor
Aimee Wong, Energy Efficiency/Conservation Advisor
Janet Zavala, Energy Efficiency/Conservation Manager

SDG&E
A Sempra Energy utility

Allison Field, Program Advisor
Mark Jensen, Program Advisor
Kathryn Smith, Program Advisor

PG&E Pacific Gas and Electric Company

Albert Chiu, Expert Product Manager
Jyoti Rao, Senior Program Manager

Table of Contents

Abstract

Technical Assistance and Automated Demand Response (ADR) technology incentives offset capital costs incurred by customers who wish to enroll in demand response (DR) programs utilizing software and systems to effectuate load drop with no manual intervention. These technologies automate participation in DR events to ensure customers provide reliable load shed during DR program events. Although non-residential customers have been the primary customer class to be eligible for these incentives, the three electric investor owned utilities (IOUs) have also provided ADR technology incentives to mass market customers, including residential and small-to-medium business (SMB) customers, to increase customer's adoption on ADR enabled end-use technologies that can automate and provide reliable DR benefits.

The guidelines in this document provide the general program parameters for the IOUs automated demand response technology incentive offerings as approved by California Public Utilities Commission (CPUC) Decision (D.) 17-12-003.

While these guidelines are intended to provide additional information about the programs' parameters, as required in D.17-12-003 Ordering Paragraph 29, these guidelines also identify potential unintended consequences from policies and requirements from other CPUC decisions such as D.17-10-017 (Competitive Neutrality Cost Causation Decision), D.17-12-003 (2018-2022 DR Application Decision), and D.18-01-003 (Multiple Use Application Decision).

Abbreviations

AB 793	Assembly Bill 793
Auto-DR or ADR	Automated Demand Response Technology Incentive Program
BIP	Base Interruptible Program
BTM	Behind-the-Meter
CBP	Capacity Bidding Program
CCA	Community Choice Aggregation
CNCC	Competitive Neutrality Cost Causation
CPP	Critical Peak Pricing Program
CPUC	California Public Utilities Commission
DA	Direct Access
DR	Demand Response
DRAM	Demand Response Auction Mechanism Pilot
DRAS	Demand Response Automation Server
DRET	Demand Response Emerging Technology
EMS	Energy Management System
EE	Energy Efficiency
ESA	Energy Savings Assistance
ESP	Electric Service Providers
EUL	Effective Useful Life (of measure)
HVAC	Heating, Ventilation, and Air Conditioning
IOU or IOUs	Investor Owned Utility or Investor Owned Utilities
kW	Kilowatt
M&V	Measurement & Valuation
MW	Megawatt
OpenADR	Open Automated Demand Response
PDP	Peak Day Pricing Program
PG&E	Pacific Gas and Electric Company
PTR-ET-DLC	SCE Peak Time Rebate Enabling Technology Direct Load Control Program
RTP	Real Time Pricing Program
SCE	Southern California Edison Company
SDG&E	San Diego Gas and Electric Company
SGIP	Self-Generation Incentive Program
SMB	Small and Medium Business
SSP	PG&E Supply Side DR Pilot
TA&TI	Technical Assistance and Technology Incentives Program
TD	Technology Deployment
XSP	PG&E Excess Supply DR Pilot

Definitions

OpenADR – An open and standardized software protocol for electricity providers and system operators to communicate DR signals with each other and with their customers using a common language over any existing IP-based communications network, such as the Internet.

Dispatch or Dispatchable or DR Event – The act of reducing existing load at the Customer's facility(ies), in response to a signal or dispatch instruction from a Utilities' DRAS or automated dispatch system, for all or a portion of the Customer's electrical consumption during the demand response event duration.

Qualifying Measures – A measure that qualifies for ADR incentives must meet all of the following criteria:

(i) Must be operating or online at the Customer facility or premise;

(ii) Must be incremental or has not previously received ADR Program incentives for the specified measure; and

(iii) Must be Dispatchable under the requirements identified in Appendix A, Appendix B, and Appendix C.

Qualifying DR Program – A DR program, approved by the CPUC, in which the program's participant(s) are eligible to receive ADR incentives which automate a customer's participation in program events.

Background on the ADR Program

In late 2006, the Commission modified the IOUs' 2006-2008 Demand Response portfolios by adopting programs for 2007 and 2008 that encourage automated demand response for commercial, industrial, and agricultural customers.[1] The three California IOUs have administered the statewide Automated Demand Response Technology Incentive Program (ADR Program) since that time.

The ADR Program primarily provides incentives to non-residential customers that purchase and install ADR enabled technology at the customers' facility or site to automate their participation and load curtailment in a Qualifying DR program. Non-residential customers are able to pre-program their DR participation levels, referred to as "shed strategies," through an ADR-enabled energy management system or technology, which allows the facility or building to automatically participate in a DR event. The ADR system provides the customers increased flexibility (e.g., customizable load shed strategies) and ease-of-use without the need for manual response or intervention.

Reimbursement through the ADR Program was previously available for the purchase and installation of ADR enabled equipment to all non-residential customers. Non-residential customers must also have an interval meter, must enroll and participate in at least one Qualifying DR Program, must be able to demonstrate automated curtailment, and must demonstrate receipt of a DR signal from the utility's DRAS or utility's automated dispatch system.

In CPUC Decision (D.) 16-06-029, the Commission directed the Joint IOUs to adopt common program rules and incentives levels in an effort to achieve greater consistency between the IOUs' ADR Programs. In D.16-06-029, the Commission directed each utility to modify its ADR Program for large non-residential customers and offer a 2-part (60/40) incentive, limited to $200 per kW of verified Dispatchable load reduction, limited to 75 percent (75%) of the total project costs, which ever amount is lower. The first incentive payment is paid at 60 percent (60%) of the total eligible incentives and is paid after installation, M&V load shed test, and customer enrollment in a Qualifying DR Program. The customer is eligible for a portion or all of the remaining second incentive payment, up to 40 percent (40%), 12-months after the first incentive payment is issued. The second incentive is based upon the customer's average actual DR performance during the 12-month period.

PG&E and SCE also offer a deemed incentive of its ADR Program referred to as Auto-DR Fast Track and Auto-DR Express, respectively. These programs streamline the

[1] Administrative Law Judge's Ruling Providing Guidance on Content and Format of 2009-2011 Demand Response Activity Applications issued on February 27, 2008 in CPUC Rulemaking (R.) 07-01-041.

ADR application process and provide incentives for the installation of ADR enabled technologies specific to lighting and HVAC controls. By offering a pre-determined, validated estimate of peak demand savings for lighting and HVAC controls, SMB customers, may be ADR-enabled more efficiently and cost-effectively than through a site-specific calculated measurement and verification process.

Over the last few years[2], the IOUs have been providing incentives for residential technologies, such as ADR-enabled smart thermostats, in response to reliability issues, such as Aliso Canyon and in response to legislative matters, such as AB 793. The IOUs continue to refine and expand residential ADR incentives to provide incentives to other residential end-uses that are ADR-enabled.

Purpose

The purpose of these Joint IOU ADR guidelines is to identify previously unspecified program eligibility rules and requirements for the IOUs ADR Program (e.g. address program eligibility for ADR incentives offered to residential and SMB customers), in compliance with Ordering Paragraph (OP) 29 of D.17-12-003.

In addition to these Guidelines, there are other issues that touch upon and impact the ADR Program, so we request that the issues identified in the "Other Issues Section" be discussed with stakeholders at the CPUC ADR workshop.

These Guidelines will also address other ADR Program changes in compliance with the following ordering paragraphs:

- The IOUs shall provide Auto Demand Response technology incentives to participants of any supply side demand response programs/activities not required to be analyzed for cost-effectiveness. (D.17-12-003, OP 28)
- PG&E's Automatic Demand Response Program is approved as amended. PG&E shall provide Auto Demand Response technology incentives to participants of any supply side demand response program/activity not required to be analyzed for cost-effectiveness. (D.17-12-003, OP 30)
- SCE's Automated Demand Response Technology Incentive Program and Programmable Communicating Thermostat Incentive Program are approved as amended. SCE shall provide Auto Demand Response technology incentives to participants of any supply side demand response program/activity not required to be analyzed for cost-effectiveness. (D.17-12-003, OP 32)

[2] PG&E started to offer residential ADR incentive to Smart Thermostat in September 2017

- SDG&E's Auto Demand Response program is approved as amended. SDG&E shall provide Auto Demand Response technology incentives to participants of any supply side demand response program/activity not required to be analyzed for cost-effectiveness. (D.17-12-003, OP 34)

The appendices contained in these Guidelines summarize Utilities' ADR proposals submitted in their respective 2018-2022 DR Applications and highlight the changes to their respective ADR Programs in compliance with D.17-12-003.

- Appendix A – Proposed Program Rules and Eligibility Requirements for Utilities' Residential ADR Program
- Appendix B – Program Rules and Eligibility Requirements for Utilities' Established Large Non-Residential ADR Program (i.e. Customized ADR Program)
- Appendix C – Program Rules and Eligibility Requirements for Utilities' Established SMB ADR Program (i.e. Fast Track or Express ADR Program)

Guiding Principles

Guiding principles affect the implementation and administration of the Statewide ADR Program. Guiding Principles serve as a foundation upon which the original components of the ADR Program were established, and serve as basic criteria for other ADR incentive programs, such as a residential ADR incentive program.

Current Guiding Principles

Auto-DR Rules and Guiding Principles Adopted in D.09-08-027

- Authorizes Utilities to require a Qualifying DR Program enrollment and participation requirement to receive incentives.
- Required reporting of incentive commitments into Utilities' DR CPUC Monthly Report.
- Established consistent incentive amounts for the IOUs TA&TI

Auto-DR Rules and Guiding Principles Adopted in D.12-04-045

- Directed Utilities to fund ADR technologies that interoperate using generally accepted industry open standards or protocols (i.e. OpenADR).
- Implemented the 60-40 split incentive for all non-residential customers to improve cost-effectiveness and motivate customers to demonstrate load shed performance at the level the equipment was incentivized and designed to achieve.
- Authorized AMP as a Qualifying DR Program for PG&E's ADR incentives.

Auto-DR Rules and Guiding Principles Adopted in D.14-05-025

- Directed Utilities to create and implement a statewide ADR program.
- Streamline the ADR application process.
- Provide technical assistance to ADR customers.

Auto-DR Rules and Guiding Principles Adopted in D.16-06-029

- Modified eligible incentive amounts for IOUs Customized ADR Programs $200 per kW or 75% of total project costs, whichever is less.
- Re-affirmed 60-40 split incentive for Customized ADR incentives.
- Prohibits BIP as a Qualifying DR Program.

Discussion Items for ADR Workshop

As noted previously, the Joint IOUs have identified other CPUC requirements and policies that may need to be addressed in the Commission's ADR workshop. The Joint IOUs would like greater discussion and resolution or clarification of any potential inconsistencies.

Are Auto-DR Technology Incentives Intended for All Supply Side DR Programs?

In D.17-12-003, OP 28 directs ADR technology incentives to participants of *any supply side demand response program* or activity not required to be analyzed for cost-effectiveness.

Since the Base Interruptible Program (BIP) is a supply side DR program (integrated into the CAISO markets as Reliability Demand Response Resource (RDRR)), PG&E is seeking clarification as to whether to add BIP as an eligible Qualifying DR Program to receive an ADR incentive. This would require a modification from the 2017 DR Bridge Funding Decision, based on D.16-06-029 OP 23f, where PG&E's Reliability Demand Response Programs were deemed ineligible as a Qualifying DR Program for ADR incentives. PG&E is seeking clarification on whether D.17-12-003 reverses the 2017 Bridge Funding Decision. For the time being, PG&E will continue to exclude BIP from the list of Qualifying DR Programs for ADR incentives in the 2018-2022 DR program cycle. PG&E appreciates the opportunity to clarify this issue at the Commission's ADR workshop.

SCE does not plan to allow BIP (supply side DR programs) to be considered as an ADR Qualifying DR Program. SCE's AP-I and SDP programs are also not eligible for ADR incentives because these are direct load control programs where SCE installs devices (at no cost to the customer) to customers' equipment.

SDG&E agrees that clarification as to whether or not BIP is an eligible program that can receive ADR incentive would be beneficial. SDG&E notes that BIP is required to be analyzed for cost-effectiveness so in its opinion D.17-12-003, Ordering Paragraph 28 which states that "the Utilities shall provide Auto Demand response technology incentives to participants of any supply side demand response program/activity not required to be analyzed for cost-effectiveness" does not apply to BIP. However, the slash between activity and program does leave room for debate as to whether the clause "required to be analyzed for cost-effectiveness" modifies both the words "program" and "activity" and, therefore, SDG&E agree that clarification would be beneficial.

In addition, SDG&E supports a fair and level playing field between third party and utility programs and thereby agrees with PG&E opening comments on the proposed decision that DRAM participants bidding into the emergency RDRR product should not be eligible for ADR incentives when DRAM is no longer a pilot. This would be consistent with concepts in D.16-06-029 which states that reliability demand response programs are not eligible for ADR incentives.

Are DR Programs Subject to Cost-Effectiveness Still Qualifying DR Programs?

On page 79 of the decision 17-12-003, it stated that, "Accordingly, the Utilities shall offer Auto Demand Response technology incentives to customers of all supply side programs/activities *not subject to cost-effectiveness analysis*; this includes the Demand Response Auction Mechanism and, where applicable, pilots."

PG&E's Capacity Bidding Program is the only DR program that is subject to cost effectiveness and historically part of the qualifying DR programs for ADR incentive. PG&E interpreted that, both, Utility DR programs subject to cost effectiveness as well as supply side programs/activities not subject to cost-effectiveness analysis are qualifying DR programs for ADR incentive, and seeks confirmation of this interpretation from the Commission.

SDG&E agrees that customers enrolled on utility supply side programs which are subject to cost-effectiveness such as CBP and AC Saver should remain eligible for ADR and Technology Deployment (TD) incentives. Although D.17-12-003, page 79, explicitly calls out only programs/activities not subject to cost-effectiveness analysis it does not explicitly state that Utility DR programs subject to cost effectiveness are not eligible for ADR and TD incentives.

Does the Multiple Use Application Decision impact the ADR Program?

On January 17, 2018, the CPUC issued D.18-01-003 "Decision on Multiple Use Application Issues." D.18-01-003 provides direction to the Utilities on how to promote the ability of storage resources to realize their full economic value when these resources are capable of providing multiple benefits and services to the electricity system. The Commission adopts eleven rules to govern the evaluation of multiple-use energy storage applications, along with definitions of service domains, reliability services, and non-reliability services, as reflected in Table 1 below.

Table 1. Domains: Reliability Services and Non-Reliability Services

Domain	Reliability Services	Non-Reliability Services
Customer	None	TOU bill management; Demand charge management; Increased self-consumption of on-site generation; Back-up power; Supporting customer participation in DR programs
Distribution[7]	Distribution capacity deferral; Reliability (back-tie) services; Voltage support; Resiliency/microgrid/islanding	None
Transmission	Transmission deferral; Inertia*; Primary frequency response*; Voltage support*; Black start	None
Wholesale Market	Frequency regulation; Spinning reserves; Non-spinning reserves; Flexible ramping product	Energy
Resource Adequacy	Local capacity; Flexible capacity; System capacity	None
*Voltage support, inertia, and primary frequency response have traditionally been obtained as inherent characteristics of conventional generators, and are not today procured as distinct services. We include them here as placeholders for services that could be defined and procured in the future by the CAISO.		

The definitions of service domains, reliability services, and non-reliability services set forth in D.18-01-003 conflict with DR policies and principles adopted in D.14-12-024. D.14-12-024, OP 4.a., states all demand response programs will need to meet resource adequacy rules to either reduce the resource adequacy requirement as a load-modifying resource or to count toward meeting the resource adequacy requirement as a supply resource.[3] Under this premise, DR programs that meet the bifurcation requirements shall receive RA and thus, under D.18-01-003 Table 1, DR programs are considered Reliability Services. But the Table lists customer participation in DR programs as “Non-Reliability Services.”

In addition, PG&E recognizes the MUA is intended to be rules for energy storage only but find the designation of Resource Adequacy as a Reliability Service in conflict with the aforementioned D.16-06-029 (OP 23f) that prohibits PG&E from offering Automated Demand Response incentives to any Reliability Demand Response Programs. PG&E recognizes that this may not be the intent of the ruling, however, further clarification is needed during the Commission’s ADR workshop.

[3] Complete implementation of bifurcation cannot occur until resource adequacy issues have been resolved.

Does the Competitive Neutrality Cost Causation Principle (CNCC) Apply to ADR Incentives?

On November 1, 2017, the CPUC issued D.17-10-017 "Decision adopting steps for implementing the competitive neutrality cost causation principle, requiring an auction in 2018 for the Demand Response Auction Mechanism, and establishing a working group for the creation of new models of demand response." D.17-10-017 adopts steps to implement the CNCC Principle, which allows CCA or DA ESPs to create and administer their own "similar" DR programs, thus exempting the CCA or DA provider's customers from the costs of the Utility's "similar" DR program.

While D.17-10-017 specifically exempted funding pertaining to DRAM and pilots from the CNCC principle, it's unclear if the CNCC principle applies to the ADR Program. Since D.17-10-017 exempts DRAM and pilots from the CNCC principle, it would be prudent to also exclude the ADR Program since DRAM and pilots are eligible for Auto-DR incentives. But there are still many implementation questions that need to be answered as to how the existing CNCC principles impact the IOUs' ADR Programs. The Joint IOUs seek clarity from the CPUC at the Commission's ADR workshop regarding this matter.

Should third party DRPs with ADR enabled end-uses require authorization by manufacturer/service provider in order to qualify for ADR incentive?

In PG&E's reply comments to other parties' opening comments on the 2018-2022 DR Proposed Decision, PG&E stated that:

> *The Joint DR Parties indicate that only third-party DRPs with programmatic device control "authorized by both the manufacturer/service provider and the customer should be able to make the $75 PCT incentive available to their customers." PG&E assumes this comment, while directed at SCE's program, also applies to PG&E's proposed residential ADR Program. PG&E cautions that such policy would require all manufacturers and service providers to share their "authorized" third party partners with the utilities, and update this authorized list for ADR rebate processing. It is unclear to PG&E if all ADR enabling technology manufacturers and service providers would be willing to take on such a task. In addition, this new requirement would create additional administrative cost to the ADR Program when implementing product eligibility.*

PG&E believes that the ADR workshop will be an appropriate channel to discuss this suggestion by Joint DR Parties since all the parties that are interested in contributing toward ADR Program design will likely participate in the Commission's ADR workshop.

SCE and SDG&E support the Joint DR Parties' proposed requirement that "*only third-party DRPs with programmatic device control "authorized by both the manufacturer/service provider and the customer"* should be able to receive technology incentives. When third parties attempt to control devices without manufacturer and/or customer permissions, the manufacturer or customer cannot prohibit the device from being controlled by more than one demand response provider. In addition, SDG&E is committed to protecting customer privacy and therefore does not support 3rd party demand response providers adjusting customer technology settings by requiring customers to supply their technology passwords. Eligible third-party providers should be sending an open ADR or other open protocol signal to the manufacturer cloud with the permission of the manufacturer.

The 3rd party authorization section above is another example of how the existing ADR Program design does not cover all aspects of the residential market. The residential ADR technology market is far more complex than the non-residential ADR technology market due to the number of actors involved and the different business models of each actor. The existing ADR Program design was developed 10 years ago and focused on non-residential customers. PG&E notices that some of the program designs may not be conducive for mass market/residential customers or technology vendors. In conclusion, PG&E proposes using the Commission's ADR workshop to focus on the development of future ADR Program designs (such as residential ADR technologies' eligibility frequency and eligible devices) that fit better with the current and future technology paradigms, and use the information to propose program redesign proposals for the mid-cycle filing.

APPENDIX A - Proposed Program Rules and Eligibility Requirements for Residential ADR Incentives

IOU Program Name	**SCE PCT Incentive Program**		**PG&E AutoDR Incentive Program**	**SDG&E Technology Deployment (TD) Program**
Customer Segment	Residential *(Bundled Only)*	Residential & SMB (<200kW)	Residential	Residential
Qualifying DR Programs	PTR-ET-DLC	CPP, CBP Res Pilot, DRAM[4]	Res CBP, DRAM, Smart Rate, SSP and XSP	AC Saver, rate with events, DRAM[4]
Minimum DR Program Enrollment Requirement	No minimum DR program requirement at this time. Will evaluate the effectiveness and determine if changes need to be made in the mid-cycle review.		1 year or 1 DR season, depending on the DR program requirement	No minimum DR program enrollment requirement
Incentive/Rebate Amount	$75		$50 for Smart Thermostat. Incentive for other technologies (TBD)	$50
Incentive/Rebate Cap	One incentive per service account[5]		One rebate per household for Smart Thermostat. rebate cap for other incentivized technologies (TBD)	Two rebates/incentives per household
Incentive/Rebate Recipient	Bill credit issued to customer	Bill credit issued to customer *(eventually same process and payment structure as EE incentives; TBD in mid-cycle)*	Rebate check to customer	Gift card issued to customer
Frequency of Incentives	Technology Useful Life, subject to change at mid-cycle *(currently 11 years per the approved EE workpaper)*			5 years (depreciation period used in DR C/E calculations)
Evidence of Purchase	Device registration and verification w/ authorized 3rd party	Evidence of device registration and verification w/ an authorized 3rd party	Customer required to upload copy of receipt for Smart Thermostat. Evidence of Purchase for other technologies TBD	Device verification w/ authorized 3rd party
Controllability/Technology Registration Requirement	Authorized third-party must be able to receive OpenADR signal	Qualifying devices must be able to communicate to SCE's VTN or through an authorized third-party that communicates with SCE's VTN.	The ADR signal uses one or a combination of qualified open-based standards (OpenADR 2.0, Smart Energy Profile 1.1/2.0, or any other standard that is listed in the Smart Grid Interoperability Panel Catalog of Standards). Compliance testing can be done at the manufacturer's internet/cloud application level rather than at the end-use device level itself.	Currently, authorized third-party must be able to receive OpenADR signal. Other open standards may become eligible in the future.
Eligible Measures	PTR-ET-DLC Qualifying Thermostats	Qualifying Thermostats that meet the above requirement.	Smart Thermostat. Other technologies in the future based on the ADR stakeholder collaborative process	Controllable Thermostat. Other technologies in the future based on the stakeholder collaborative process
Application Process	PTR-ET-DLC Landing Page https://pages.email.sce.com/SCESmartBonus/	Online	PG&E eRebate and hardcopy application process (www.pge.com/rebates)	Online
Double Dipping Validation *(cannot receive multiple incentives)*	During eligibility verification process, Customer's Service Account (SA) will be validated that only one incentive was issued to the SA based upon the EUL identified above.		During eligibility verification process, Customer's Service Account (SA) will be validated that only one incentive was issued to the SA based upon the EUL identified above.	During eligibility verification process the customer service account will be validated.

4 Changes in red reflect modifications in compliance with D.17-12-003.

5 Customers that receive a free smart thermostat through an existing ratepayer-funded incentive program or pilot are not eligible for an additional PCT incentive.

APPENDIX B – Proposed Program Rules and Eligibility Requirements for Large C&I ADR Incentives

IOU Program Name	SCE ADR Customized [6]	PG&E ADR Program	SDG&E ADR Program
Customer Segment	Large Commercial, Industrial, & Agricultural (must provide at least 30kW of automated load reduction)	Large Commercial, Industrial, & Agricultural	Commercial, Industrial, & Agricultural
Qualifying DR Programs	CBP, CPP, RTP, DRAM, or Other Qualifying Pilots[7]	PDP, CBP, DRAM, SSP and XSP	CBP, CPP, DRAM or Other Qualifying Pilots[7]
Minimum DR Program Enrollment Requirement	Must be enrolled in a Qualifying DR Program for at least 36 consecutive months		
Incentive Type	Calculated		
Incentive Structure	60% / 40% Split Incentive Payment		
Incentive Level	$200 per kW		
Incentive Calculation Methodology	Incentive calculated based upon verified load shed test *(e.g. subject to 2-hour M&V test)*	Incentive based upon engineering calculations and/or verified load shed test, whichever is lower	Incentive based upon engineering calculations and/or verified load shed test
Incentive Project Cap of Eligible Costs	75% of total actual eligible costs		
Incentive/Rebate Cap	$5 million per customer per funding cycle; Individual SAs requesting incentives >$200k must sign an LOA	Not Applicable	
Incentive/Rebate Recipient	Rebate check issued to customer		
Frequency of Incentives	One time. Customer can re-apply for incentives if they can demonstrate incremental kW.	Technology Useful Life, subject to change at mid-cycle	twice (based upon the 60/40 split payment methodology)
Evidence of Purchase	Customers must provide receipts for actual costs incurred	Customers must provide receipts for actual costs incurred	Customer required to provide invoices and/or documentation to support measure costs. Such documents must comply with SDG&E's Invoicing Guidelines and (6) Any other documents related to the Project, Project Site, measures, load reduction (kW) or otherwise requested by SDG&E.
DR Event Signal	Dispatch signal or instructions from SCE VTN to Customer VEN	Direct to building EMS or devices	
Controllability/Technology Registration Requirement	Customer's ADR device/client must be OpenADR 2.0 certified and be connected to Utility's DRAS[8] For PG&E, please refer to Controllability/Technology Registration Requirement in Appendix A.		
Eligible Measures	ADR enabled equipment that facilitates sitewide automatic load reduction such as controls for lighting, motors, pumps, fans, air compressors, process equipment, HVAC load control devices, etc.		
Application Process	Submission of hard copy ADR application and customer agreement		

6 ADR Program incentives cannot be provided to customers that have received rebates, incentives, funding, or services for measures and/or costs from other utility, third party, or government (federal, state, or local) program funded by public purpose funds, taxpayers, or utility Request For Offer (RFO) solicitations, unless explicitly exempted.

7 Changes in red reflect modifications in compliance with D.17-12-003.

8 DRAM participants are not required to be connected to Utility's DRAS because DRAM participants receive dispatch instructions from their third-party demand response provider.

APPENDIX C – Proposed Program Rules and Eligibility Requirements for SMB ADR Incentives

IOU Program Name	SCE PCT Incentive	SCE ADR Express [9]	PG&E Fast Track	SDG&E Small Commercial Energy Management Pilot[10]	SDG&E TD Program
Customer Segment	See details in Appendix A	Small Retail Stores, Small Office (<100,000 sq ft), and Food Stores (including liquor stores)	SMB	SMB (with no less than 3 locations: =<20kW peak demand per site)	Commercial
Qualifying DR Programs		CBP, CPP, RTP, DRAM, or Other Qualifying Pilots[11]	PDP, CBP, DRAM, SSP and XSP	CBP, CPP, DRAM or Other Qualifying Pilots[11]	AC Saver, rate with events, CBP, DRAM[11]
Minimum DR Program Enrollment Requirement		Must be enrolled in a Qualifying DR Program for at least 36 consecutive months		Must be enrolled in a Qualifying DR Program for at least 24 consecutive months	One-Year
Incentive Type		Deemed		Calculated	Deemed
Incentive Structure		100% Up-Front			
Incentive Level		Up to $300/kW	$200/kW		TBD (based upon $100/kW)
Incentive Calculation Methodology		Incentive based upon pre-determined kW reduction potential of the specific measure		Incentive based upon verified dispatchable load reduction	Cost of the technology
Incentive Project Cap of Eligible Costs		100% of project cost		Capped at 50% of the actual project cost (including the purchase price & costs for installation by a third-party)	
Incentive/Rebate Cap		$1 million per customer per funding cycle (Incentive requests >$200k require a Letter of Agreement)	Not Applicable	$10,000 or cost cap, whichever is lower	
Incentive/Rebate Recipient		Rebate check issued directly to customer			Customer or Vendor/Installer
Frequency of Incentives		One time. Customer can re-apply for incentives if they can demonstrate incremental kW.	Technology Useful Life, subject to change at mid-cycle	One time	5 years, used in DR C/E calculations
Evidence of Purchase		Customers must provide receipts for actual costs incurred	Customers must provide receipts for actual costs incurred	Customers require to invoices and/or documentation to support measure costs. Such documents must comply with SDG&E's SBCP Invoicing Guidelines.	Device verification w/ authorized 3rd party
DR Event Signal		Dispatch signal or instructions from SCE VTN to Customer VEN	Direct to building EMS or devices	Direct to device or through manufacturer's cloud	Currently, authorized third-party must be able to receive an OpenADR signal. Other open standards may become eligible in the future.
Controllability/Technology Registration Requirement		Customer's ADR device/client must be OpenADR 2.0 certified and be connected to Utility's DRAS[12]. *For PG&E, please refer to Controllability/Technology Registration Requirement in Appendix A.*		The ADR signal uses one or a combination of qualified open-ADR standards (OpenADR 2.0a or 2.0b).	
Eligible Measures		Systems that control standard lighting and HVAC technologies		All controllable devices that meet communication protocol requirement are commercially available and are cloud based.	Controllable Thermostat. Other technologies in the future based on the stakeholder process
Application Process		Submission of hard copy application and customer agreement			TBD

9 ADR Program incentives cannot be provided to customers that have received rebates, incentives, funding, or services for measures and/or costs from other utility, third party, or government (federal, state, or local) program funded by public purpose funds, taxpayers, or utility Request For Offer (RFO) solicitations, unless explicitly exempted.

10 Part of AB793. Marketed as the Small Business Real Time Energy Manager (SBREM).

11 Changes in red reflect modifications in compliance with D.17-12-003.

12 DRAM participants are not required to be connected to Utility's DRAS because DRAM participants receive dispatch instructions from their third-party demand response provider.