

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



April 6, 2022

**Advice Letters: SCE 4695-E
SDG&E 3933-E, PG&E 6473-E**

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SUBJECT: This disposition letter approves Advice Letters 4695-E, 6473-E, and 3933-E establishing the implementation details of a \$75 hot climate zone thermostat incentive program ordered in D.21-12-015.

Dear Mr. Anderson, Mr. Dietz and Ms. Menon,

Advice Letters **SCE 4695-E, SDG&E 3933-E, and PG&E 6473-E** implementing a \$75 hot climate zone thermostat incentive program, as directed in Decision (D.) 21-12-015, are approved, effective today.

Background

San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), and Pacific Gas and Electric Company (PG&E), collectively the "IOUs" submitted this joint advice letter on January 20, 2022 providing details of the thermostat rebate program as directed by D.21-12-015.

On February 9, 2022, Google Nest and OhmConnect submitted responses to the joint advice letter, referring to the responses as "comments." The IOUs responded to those comments jointly on February 16, 2022.

Energy Division has elected to treat the comments by OhmConnect and Nest as protests and address the disposition of the joint AL below.

Discussion

In its comments, OhmConnect raised four points:

1. Thermostats purchased since January 1, 2022, should be eligible for the \$75 incentive;
2. Existing customers connecting new devices must be eligible for an incentive;

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3. Customers must be able to connect their thermostat as soon as they enroll in an eligible DR program; and
4. The third-party demand response providers should be reimbursed by the IOUs 60 days following submission of an invoice.

In their response, the IOUs agreed with all of OhmConnect's points and submitted substitute sheets on March 22, 2022 to adjust program terms and details.

Google Nest raised two points in its comments:

1. A customer account number should not be required as part of program enrollment; and
2. Data verifying the terms of the \$75 rebate award (e.g. customer enrollment in a DR program, and online activation of the thermostat) must be sent to the IOU by the third-party demand response provider.

In their response, the IOUs clarified that the \$75 thermostat rebate program, as discussed on Page 6 of the joint Advice Letter, does not require customers to provide third-party demand response providers with their account number. While the IOUs will require the demand response provider (DRP) invoices to include the customer account number for each thermostat rebate reimbursement, the IOUs point out that the DRP can obtain the customer account number themselves through other channels. Energy Division agrees with this assessment and finds that it resolves Google Nest's first comment.

In regard to verification data, thermostat manufacturers who plan to participate in the rebate program, such as Google Nest, are the original source of data on 1) when the manufacturer's thermostat is installed and online communicating with the manufacturer and thus able to have its set point adjusted by them, and 2) that the customer is enrolled in a qualifying program, and only in one program (no dual enrollment). These data are central to the IOUs compliance with D.21-12-015, which says: "Prior to incentive payment, the IOU must certify installation of an eligible thermostat and enrollment in an eligible IOU or third-party supply-side DR program."

Google Nest plans to tell the DRP when a customer has completed installation of their smart thermostat and successfully enrolled in a DR program. On Page 3 of its comments, Google Nest says that it will confirm the thermostat serial number of the enrolled device provided by the DRP; provide thermostat activation and enrollment date; and confirmation of program enrollment. However, Google Nest says the DRP will have to provide these data to the IOU. Google Nest sites privacy concerns in transferring individual customer data to the IOUs. Google Nest also questions whether current contract agreements pertaining to the sharing of personally identifiable data would allow for their transfer of these data to the IOUs in a timeframe that would facilitate a timely rollout for this short-term program.

Specifically, Google Nest objects to Page 11 of the joint advice letter where the IOUs propose data flow requirements to support their verification per the decision. Google Nest says it is willing to provide counts of the number of thermostats enrolled in the DRP thermostat portal within specific "data" ranges. However, Google Nest declines to provide two other types of verification directly to the IOU: spot checks of the data provided by the DRP to the IOU, and/or a full list of all installed thermostats that are online in the DRP thermostat portal.

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In their response, the IOUs assert that they cannot independently verify the accuracy of the installation data provided by the DRP to the IOU if the original equipment manufacturer provides the installation verification data only to the DRP. The IOUs were amenable to necessary delays referred to by Google Nest, due to the importance of these data in their verification of the eligibility of thousands of new enrollees for incentive payments.

Energy Division agrees with the IOUs, that they should have the option to pursue obtaining these data directly from thermostat manufacturers in order to independently verify DRP invoice data, and to thoroughly comply with the Decision.

According to the Advice Letter, four DRPs propose to participate in the \$75 incentive program, and project that they will advance the funds for, and ask IOUs for reimbursement for, more than 100,000 thermostats in 2022 and 2023, mostly in PG&E territory. This arrangement, with DRPs providing upfront rebates to their customers and asking for reimbursement later, is a new framework that the IOUs and DRPs arrived at themselves, in Decision-ordered discussions that occurred within 15 days of the issuance of D.21-12-015. Energy Division finds it reasonable for all entities involved to cooperate in data sharing that promotes independent verification of invoices, and transparent testing of this pilot process.

Sincerely,

 FOR

Pete Skala
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**ADVICE 4695-E
(Southern California Edison Company - U 338-E)
ADVICE 6473-E
(Pacific Gas and Electric Company - U 39-E)
ADVICE 3933-E
(San Diego Gas and Electric Company - U902-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

**SUBJECT: ESTABLISHMENT OF SMART COMMUNICATING THERMOSTAT PROGRAM
PURSUANT TO DECISION 21-12-015**

PURPOSE

In compliance with California Public Utilities Commission (“Commission” or “CPUC”) Decision (“D.”) 21-12-015 (adopted December 2, 2021) (the “Decision”), San Diego Gas & Electric Company (“SDG&E”) on behalf of itself, Southern California Edison Company (“SCE”) and Pacific Gas and Electric Company (“PG&E”) (collectively, the “Investor-Owned Utilities” or “IOUs”) submits this joint advice letter to provide the Commission details regarding the Smart Communicating Thermostat program (“SCT Program”).

BACKGROUND

The Decision directs PG&E, SCE and SDG&E to take actions to prepare for potential extreme weather in the summers of 2022 and 2023. The Decision authorizes several demand-side measures to provide contingency resources that support the grid in an extreme weather event, including the SCT Program, which is intended to provide load reduction through adjustment of air conditioning (“AC”) systems via smart thermostat devices.

Regarding the SCT Program, the Decision provides as follows:

- The SCT Program is adopted with the goal of achieving load reduction in hot climate zones; specifically zones 9-15.¹
- The SCT Program will subsidize smart thermostat devices on the condition that participating customers pre-enroll in a California Independent System Operator (“CAISO”) market integrated demand response (“DR”) program that is administered either by an IOU or a third-party DR provider (“DRP”).²
- Eligible market integrated programs are (1) the Demand Response Auction Mechanism (“DRAM”), (2) the Smart Energy Program (“SEP”), (3) the Capacity Bidding Program (“CBP”)-Residential, and (4) the AC Saver Program.³

¹ D.21-12-015 at 79-80 and Ordering Paragraph (“OP”) 44.

² Id. at 79 and OP 41.

³ Id. at 81 and OP 47.

- The authorized SCT Program budget for 2022-2023 is up to \$22.5 million, which may be utilized to provide technology incentives in the form of a \$75 rebate per thermostat, not to exceed the full cost of the equipment, to incentivize the installation of up to 300,000 SCTs.⁴
- The \$75 incentive is not intended to be combined or stacked with other thermostat incentives provided by existing Auto Demand Response programs.⁵
- Prior to incentive payment, the IOUs must certify installation of an eligible thermostat and enrollment in one of the four eligible DR programs (listed above).⁶
- Up to fifty percent of the \$22.5 million budget, or \$11.25 million, will be available to third-party DRPs to provide rebates through third-party supply-side DR programs. The other fifty percent of the budget is available to the IOUs to provide smart thermostat reimbursement payments for non-DRP programs.⁷
- The IOUs may request up to an additional 10% of the incentive budget (up to \$2.25 million total) according to their proportional shares of that budget, to cover administrative costs.⁸

DISCUSSION⁹

1. Program design and budget.

As noted, per the Decision, fifty percent of the technology incentive budget, or up to \$11.25 million will be available to third-party DRPs to provide rebates through third-party DR programs.¹⁰ The IOUs hosted workshops on December 9 and 16, 2021, to confer with third-party DRPs regarding their experiences with current thermostat rebate programs and to discuss key design elements for the SCT Program. Commission staff were present during these workshops as well.

Common DRP-identified barriers during the workshops included:

- a. Customers who enroll in a DRP program via the DRP's website or mobile app also need to apply for the thermostat incentive/rebate on IOUs' websites. The extra step can cause customer confusion.
- b. Customers can be frustrated by having to buy a thermostat first and then apply for reimbursement after.
- c. DRPs lack visibility into IOU rebate processing status, which may negatively impact the quality of their responsiveness/customer service.

To address the issues raised by third-party DRPs, the SCT program is designed to allow eligible DRPs to offer SCT rebates to their customers directly. After customer rebates have been issued,

⁴ Id. at 75, 79-80 and OP 42.

⁵ Id. at OP 47.

⁶ Id. at 81 and OP 47.

⁷ Id. at 80 and OP 43.

⁸ Id. at 80 and OP 43. See also Executive director's order correcting error, OP 4. Found at: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M434/K616/434616630.PDF>

⁹ This advice letter discusses the ten issues to be addressed as set forth in D.21-12-015 Ordering Paragraph (OP) 46. For the Commission's convenience, each section heading mirrors the description of the issues set forth in OP 46 and are numbered 1 through 10 sequentially.

¹⁰ D.21-12-015 at OP 43.

DRPs could then file for and receive reimbursement from the IOUs. The Decision also requires the IOUs to certify installation of an eligible thermostat and enrollment in an eligible DR program, plus verify that the customer(s) have not received incentives/rebates from other DR programs (disqualification).¹¹ In order to fulfill these requirements, SCT original equipment manufacturers (OEMs) will play a significant role in ensuring SCTs are connected successfully and that the same SCT is not enrolled in two programs simultaneously.

DRPs will need to provide customer, device and payment information to the IOUs to receive reimbursement. The SCT information provided to the IOUs by a DRP with a DRAM contract should not be subject to DRAM firewall requirements. The IOUs will verify the provided information and eligibility before reimbursing the DRP. Detailed implementation requirements are discussed in Section 9 below.

The IOUs are also authorized to issue SCT rebates to customers participating in utility supply-side thermostat programs, such as the SDG&E AC Saver and the SCE Smart Energy Programs. Details of how the IOU will issue rebates to customers is also discussed in Section 9 below.

2. How funds and administration of the program will be split among the three IOUs, consistent with the direction in this decision.

As noted, the two-year residential SCT program budget includes:

- a. \$22.5 Million technology incentives
 - o Up to 50% of the technology incentive budget will be available to eligible third-party DRPs to provide rebates through third-party DR programs
 - o Up to 50% of the technology incentive budget will be available to IOUs to provide rebates through IOU DR programs
- b. \$2.25 Million Administrative budget
 - o The IOU may request up to an additional 10% of each IOU's proportional share of the technology incentive budget for administrative costs.¹²

Consistent with historical joint IOU budget allocations, the IOUs propose a split of 40% for PG&E, 40% for SCE and 20% for SDG&E. The IOUs will track DRP incentive reimbursement, IOU incentive payments and administrative costs via shared file, updated monthly by each IOU. If the projected incentives for a specific IOU is higher than the initial budget split for that IOU, the IOUs may confer and jointly file a Tier 1 advice letter to reallocate the statewide incentive budget. The administrative budget for each IOU will not be impacted by the reallocation; the administrative budget presented in table B below is set. This approach will mitigate the uncertainty associated with annual DRAM contracts, third-party participation, and thermostat adoption and will ensure allocations do not limit the ability to meet customer demand in IOU territories.

Table A	
Technology Incentive Budget	\$ 22,500,000
Administrative Budget	\$ 2,250,000
Total	\$ 24,750,000

¹¹ Id. at OP 46

¹² Executive director's order correcting error, OP 4. Found at:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M434/K616/434616630.PDF>

Table B	SCE	PG&E	SDG&E
Budget Allocation	40%	40%	20%
Administration	\$ 900,000	\$ 900,000	\$ 450,000
IOU Incentives	\$ 4,500,000	\$ 4,500,000	\$ 2,250,000
DRP Incentives	\$ 4,500,000	\$ 4,500,000	\$ 2,250,000

3. Amount of administrative budget up to 10% of proportional share of the technology incentive budget each IOU will need to administer the program.

All three IOUs request the full 10% of their proportional share of the SCT technology incentive budget to cover the following expenses:

- a. IOU labor to set up the SCT program (e.g., development of program procedures, contracting with DRPs, documentation of IT requirements);
- b. Ongoing IOU labor to administer the program (e.g., evaluation, measurement, verification, eligibility checks, and review of invoice back-up documentation);
- c. IT costs for system development and modifications needed to run the SCT program; and
- d. Costs to make any necessary changes to existing thermostat rebate programs resulting from the new SCT program (e.g., blocking customers who received a SCT rebate from receiving a thermostat rebate from one of the existing utility thermostat rebate programs).

4. Discussion of any balancing or memorandum account authorization sought to track program expenditures.

The IOU's will recover the costs of the program as follows:

- a. SDG&E will record these costs in its Advanced Metering and DR Memorandum Account (AMDRMA) and will recover those costs in the Rewards and Penalties Balancing Account (RPBA).
- b. PG&E will record these costs in its DR Balancing Account (DREBA).
- c. SCE's SCT Program costs will be recorded in the DR Program Balancing Account (DRPBA).

5. Goal for number of customers reached, by when, and estimated megawatt demand savings.

IOU DR Programs

SDG&E has 348,000 customers in climate zones 10, 14 and 15, which constitutes approximately 25% of the customers in its service territory. SDG&E's goal is to issue 4,000 SCT thermostat rebates to customers in hot climate zones; 2,500 by April 1, 2023, and 1,500 more by December 31, 2023. This volume of rebate is estimated to result in 1 MW of incremental capacity by April 2023 and 2 MW by December 2023.

SCE has approximately 1.9 million residential accounts/customers in climate zones 9, 10, 13, 14 and 15, which is about 45% of residential accounts in its service territory. As noted in Section 7 of this document, SCE already offers a \$75 rebate to eligible customers funded through the

Programmable Communicating Thermostat (PCT) Incentive Program.¹³ Therefore, to avoid operational challenges and delays, SCE will plan to leverage its existing processes and funds to cover thermostat rebates for SEP and CBP-Residential participants until those funds are exhausted. While these rebates will be administered in the targeted areas, these but may not be reflected in SCT Program spend for SCE. Based on historical participation and planned targeted marketing to A/C users in the hot climate zones for 2022 and 2023, SCE projects about 20,000 thermostat incentives for SEP will be funded through the PCT Incentive Program. This volume of incentives would provide an estimated 10 MW. SCE does not have any customers on Residential CBP and is therefore unable to provide a goal at this time.

PG&E's only eligible program is Residential CBP which does not have any customers at this time. Therefore, PG&E is unable to provide a goal at this time.

Third-Party DRP estimates

DRPs have provided the goals listed below. IOUs are unable to validate these estimates and are including them as they were provided by the DRPs.

- **OhmConnect** expects roughly 10,000 to 15,000 covered smart thermostats in 2022 with the potential to double in 2023. Assuming the load reduction is 0.4 kW per device, estimated to be 4-6 MW of additional capacity in 2022. OhmConnect estimates that 7,200 of these will come from PG&E territory in 2022 and 10,000 in 2023 providing an estimated 9.2 MW.
- **Leap:** Leap states that if designed correctly, this program could easily help in the recruitment and enrollment of tens of thousands, if not a hundred thousand or more, devices over the next two years. A hundred thousand devices are equivalent to approximately 100 MW of peak summer flexibility. Leap estimates that they will distribute 26,500 rebates in 2022 and 36,300 in 2023 in PG&E territory providing an estimated 54 MW.
- **AutoGrid:** For 2022, AutoGrid estimates 3,500-5,250 customers in PG&E territory and 4,750-6,500 in 2023.
- **Voltus:** For 2022, Voltus expects 0-8,000 customers in PG&E territory providing a range of 0-5 MW. For 2023, 8,000-24,000 customers providing a range of 5-15 MW.

6. Identification of qualifying thermostats eligible for the \$75 incentive.

For a SCT to qualify for the \$75 incentive, the SCT must be:

- a. Wi-fi enabled
- b. The Original Equipment Manufacturer (OEM) must have the ability to adjust the thermostat settings during events. In addition, the OEM must agree to validate thermostat installation and adjust the thermostat settings during events on behalf of the applicable IOU, CBP or DRAM demand response provider (DRP) for its thermostats to qualify. The list of eligible thermostats may vary by DRP and by IOU.
- c. The SCT OEM must agree to verify the SCT installation for the IOUs to certify installation.

7. Process to ensure customers of both IOUs and third-party DRP programs are eligible for smart thermostat incentives.

¹³ D.17-12-003

DRAM DRPs

The process for customers enrolled with a DRAM DRP is proposed as follows:

- a. The DRP will issue incentives directly to customers.
- b. DRP will verify that the customer lives in a hot climate zone based on zip code data provided by IOUs.
- c. The OEM will verify that the SCT is installed, online, and not simultaneously enrolled in multiple DR programs and send the validated customer list to DRPs.
- d. The DRP will enroll or confirm existing enrollment of the customer in their program and registration in the CAISO DRRS.
- e. The DRP will submit an invoice to the IOU which will include at a minimum:
 - i. Customer account number
 - ii. Proof of Customer incentive payment
 - iii. DRP program enrollment date
 - iv. Thermostat purchase date
 - v. SCT serial number
 - vi. Any additional supporting data elements and/or documents required by the IOU (see Appendix A)
- f. The IOU will verify that the customer is participating in DRAM and that the customer meets all other eligibility requirements.
- g. The IOU will verify the customer has not received SCT incentive/rebates from any other DR programs or a free SCT from other ratepayer funded programs that it administers.
- h. The IOU will reimburse the DRP for all eligible customers after receipt and validation of supporting documentation. The DRP should be reimbursed within 60 days following submission of a complete and fully verifiable invoice. See section 9 for further details.

SDG&E AC Saver Program

SDG&E currently plans to implement the SCT in combination with its existing Technology Deployment (TD) program as follows: SDG&E will market the higher SCT \$75 rebate to eligible non-CARE customers in hot climate zones. Customers will be directed to a website where they can self-verify their eligibility and provide the required SCT information. Afterwards, the customer will be directed to enroll the thermostat in AC Saver through the same OEM website or app that is used for the TD and AC Saver programs. The list of TD enrollments will be merged with the list of customers who provided receipts, ensuring they will receive the higher \$75 SCT rebate; If a customer purchases a SCT for less than \$75, the rebate is capped at the cost of the thermostat. As SDG&E gains experience, it reserves the option to change the process described above so long as all program rules are met.

SCE Smart Energy Program and Capacity Bidding Program-Residential

SCE currently offers a \$75 rebate to eligible customers funded through the PCT Incentive Program.¹⁴ Therefore, SCE plans to leverage its existing processes for reimbursing customers, as noted in D.21-12-015, to avoid operational challenges and delays.¹⁵ Through this approach, SCE will also continue to utilize unspent funds from existing DR budgets adopted in D.17-12-003, to the extent existing funds are available for rebates provided to SEP and CBP Residential customers.¹⁶

¹⁴ D.17-12-003

¹⁵ D.21-12-015 at p. 81.

¹⁶ D.21-03-056 at OP 15.

Under this current structure, customers who enroll onto SEP are evaluated for a one-time \$75 thermostat rebate. Similarly, customers actively enrolled in CBP Residential who own a qualifying smart thermostat (i.e., SCE can verify installation, connectivity and is dispatchable through its Distributed Energy Resource Manager Systems (DERMS) provider),¹⁷ may apply for the one-time \$75 thermostat rebate through the DERMS providers / OEM interface.

To the extent that existing funds are depleted, SCE plans to pivot to the SCT Program funds authorized in D.21-12-015 and will at such time, implement SEP and CBP-Residential system / process changes to adhere with the eligibility requirements specified in section 9 of this advice letter.

PG&E's Capacity Bidding Program-Residential

PG&E will follow the same procedure as laid out for DRAM DRPs to verify customers are eligible for smart thermostat incentives.

- 8. A description of the DR programs a customer must enroll in to be eligible for the thermostat incentive, and how that enrollment will occur before the customer receives a rebate.**

SDG&E's AC Saver Program

SDG&E's AC Saver Program is a supply side DR program that is bid into the CAISO market. AC Saver participants have either a direct load control switch installed on their air-conditioner or a thermostat with settings that can be adjusted by the manufacturer. Events last between two and four hours per day and may be called between April and October.

Participants with thermostats will enroll in the program using the following process: Customers must first register their thermostats through the OEM website or app so that SDG&E knows that the thermostat is installed and online. Enrolling through the manufacturer also allows the OEM to adjust the thermostat settings when SDG&E activates the program; SDG&E's signaling platform will then pull the pending enrollments from the OEM application programming interface (API)¹⁸ and verify customer eligibility. After the customer is enrolled in AC Saver, the \$50 Technology deployment program rebate is paid to the customer. Once the SCT pilot program is implemented, eligible customers in hot climate zones will receive the SCT rebate, up to \$75, instead of the \$50 TD incentive.

SDG&E's Capacity Bidding Program-Residential

A residential customer may only enroll through an approved SDG&E aggregator. The customers can purchase a new device or bring their own devices to participate in Demand Response events. The aggregators are responsible for dispatching events. The aggregator is also responsible for estimating the associated load reduction and submittal of the monthly load nomination on behalf of the customers.

¹⁷ SCE DERMS providers are authorized thermostat service providers contracted by the utility to administer its DR programs. These DERMS have contractual relations with OEMs to manage thermostats on DR programs.

¹⁸ An API is software intermediary that allows two applications to talk to communicate with other. In the case SDG&E DERMS talks with the OEM portal.

Customers that do not wish to sign up through their CBP aggregator may apply for the \$75 incentive from the IOU TD incentive program. Customers who are approved for the SCT rebate will be provided with a bill credit or receive a gift card.

SCE's Smart Energy Program

SCE's Smart Energy Program (SEP) is a supply-side DR program that is bid into the CAISO market. SEP is available to eligible residential customers who own a specified Wi-Fi-enabled smart thermostat. SCE has contracts with authorized thermostat service providers ("DERMS") to administer enrollments and participation in the program. During a SEP event, SCE will notify service providers ("DERMS") to administer enrollments and participation in the program. During an SEP event, SCE will notify DERMS providers to remotely adjust the temperature setpoint on participating thermostats by up to 4-degrees to minimize A/C usage. While the program is available for dispatch year-round, enrolled participants only receive program incentives (bill credits) from June through September, up to \$40 annually.

Once a customer has a qualifying thermostat installed to a working central AC unit, connected (to their home Wi-Fi) and registered, they must enroll electronically by completing an online form in their respective thermostat provider/OEM interface. This is important because the OEMs will verify that applicants have a qualifying thermostat installed and connected in the home before the DERMS receive the information and pass through to SCE. All applicants are screened through SCE's system for program eligibility. Customers who are approved for enrollment are then screened by SCE's system for thermostat rebate eligibility. Customers who are approved for the \$75 thermostat rebate are provided with a bill credit within one to two bill periods. The credit is reflected as an Enabling Technology Incentive on the bill.

SCE's Capacity Bidding Program

The Capacity Bidding Program is a Demand Response program which is available to aggregators with service accounts served under SCE's residential or non-residential rate schedules. The CBP aggregators are responsible for designing their own demand response programs including customer acquisition, marketing, sales, retention, enrollment, dispatch systems, and event notification. Third party CBP aggregators develop portfolios of customers to be part of their aggregation and SCE compensates the aggregators based on the performance of their portfolio according to the CBP tariff.

Once a customer enrolls with a CBP-residential aggregator program and the customer has a qualifying thermostat installed to a working central A/C unit, connected (to their home Wi-Fi) and registered, they may apply for the \$75 thermostat rebate electronically by completing an online form in their respective thermostat provider/OEM interface. The customer's CBP aggregator will supply them with details on how to apply for the \$75 rebate. The OEMs will verify that applicants have a qualifying thermostat installed and connected in the home before SCE's DERMS provider receives the information and passes through to SCE. All applicants are screened through SCE's system for eligibility. Customers who are approved for the \$75 thermostat rebate are provided with a bill credit within one to two bill periods. The credit is reflected as an Enabling Technology Incentive on the bill.

PG&E's Capacity Bidding Program

Capacity Bidding Program (CBP) is an aggregator managed program where each aggregator is responsible for designing their own demand response program as well as customer acquisition, marketing sales, retention, support and event notification tactics. PG&E will follow the same procedure as laid out for DRAM DRPs to reimburse CBP aggregators for incentives/rebates.

Demand Response Auction Mechanism

The DRAM is a pay-as-bid auction of monthly system Resource Adequacy (RA) associated with a demand response product located in the IOU's service area and where sellers offer directly into the CAISO day-ahead energy market. The IOU only acquires the third-party Demand Response Aggregators' (sellers') Resource Adequacy (RA) attributes and has no claim on revenues the winning bidders may receive from the CAISO's energy market. PG&E reimburses certain scheduling coordinator related costs for winning bidders.

- 9. Implementation details including whether proof of purchase is needed for reimbursement, whether customers with existing eligible thermostats are eligible if not already enrolled in a DR program, number of thermostats per account, disqualification of customers with free thermostats.**

Proof of purchase for reimbursement and eligibility for existing thermostats

Many parties expressed different views on this item during the two December workshops and consensus was not reached. Discussions focused on the financial risks and administrative complexities to avoid double payment to customers or payments for non-incremental load. The joint IOUs propose that to be eligible for the SCT rebate, the thermostat must have been purchased and installed on or after January 1, 2022. Therefore, customers with existing thermostats installed before January 1, 2022, are not eligible for the SCT rebate. The decision states that the rebate amount will be up to \$75, limited to the full cost of the SCT.¹⁹ The customer or DRP will be required to provide proof of purchase when they apply for the SCT rebate or submit for reimbursement. IOUs may choose different approaches to securing the evidence of proof of purchase as additional experience is gained.

Number of thermostats per account

One SCT per account will be eligible for a SCT rebate. Historically, homes with more than one thermostat do not incrementally double the load reduction seen with single thermostat homes. For example, an internal analysis performed during SCE's 2020 load impact study showed that customers with two or more thermostats delivered no more than 29% incremental load reduction on average when compared to single thermostat homes. This rule is also consistent with the current SCE and PG&E thermostat rebate programs and will therefore avoid operational challenges and delays.

Disqualification of customers with free thermostats

Thermostats that were provided to the customer from an IOU administered, ratepayer funded program will not be eligible for a SCT rebate. In addition, consistent with the Auto Demand

¹⁹ D.21-12-015 at OP 42.

Response Control Incentives Guidelines, customers who received a thermostat incentive from a demand response program in the past 7.5 years are not eligible for a SCT rebate.

Verification of installation of an eligible thermostat

The Decision states that "Prior to incentive payment, the IOUs must verify installation of an eligible thermostat and enrollment in an eligible IOU or third-party program."²⁰ For SCT customers participating in an IOU market integrated supply-side DR program, this process is straightforward. The verification that the thermostat is installed can be performed by the OEM on behalf of the IOU using existing processes already in place for IOU program enrollment.

The process for thermostat installation of DRP customers is more complex for several reasons.

a. IOUs do not have contractual relationships with OEMs regarding DRAM and CBP participants:²¹

When a DRP runs its own thermostat program the contractual relationship is between the OEM and the CBP aggregator or DRP rather than between the OEM and the IOU Distributed Energy Resource Manager System (DERMS) provider. Under typical IOU implemented SCT programs, the IOUs contract with a Demand Response Management System (DRMS)/DERMS provider who then has a contractual relationship with OEMs. Under CBP aggregator and DRP SCT programs, an OEM has a contractual relationship with the CBP aggregator or the DRP but not with the IOU.

In addition, even if an OEM has a contract in place with a CBP aggregator, DRP and the IOU DERMS provider, some OEMs stated that the current terms and conditions customers agreed to do not allow the OEM to share data with the IOU. Therefore, changes to customer terms and conditions and existing contracts may need to be put in place for the OEM to provide installation data directly to the IOU.

b. SCTs cannot appear in two DR programs at the same time:

The OEMs who attended the workshop stated that it is not functionally possible for a SCT to enroll in two DR programs. This makes it impossible for both the IOU and the DRP to simultaneously view the installation status of the SCT within the OEM thermostat portals. Subsequently, a work-around to verify installation cannot solely rest on an IOU and is dependent upon cooperation of the impacted OEM.

c. Verification of installation is intertwined with program enrollment and participation:

For SCE and SDG&E, the utility DRMS/DERMS used to implement existing thermostat programs are integrated with the OEMs and currently verify thermostat installation only for customers who enroll in SCE and SDG&E's thermostat programs. Therefore, at best the existing SCE and SDG&E methods for verifying thermostat installation will require IT programming changes before they can provide verification of customers participating with a DRAM DRP and at worst cannot be utilized at all.

²⁰ D.21-12-015 Attachment 2 at p. 13.

²¹ SCE's CBP-Residential program is setup to go through SCE's DERMS providers for certain OEMs. See section 8 of this advice letter for process details.

Considering the complexities noted above, the conferring parties propose the following requirements for verification of SCT installation:

d. OEMs must provide DRPs with SCT installation verification to pass to IOUs:

The OEM and DRP must have a contractual arrangement in place in which the OEM agrees to verify thermostat installation for an IOU. The OEM must also adjust thermostat settings during events on the behalf of the DRP. The DRP must contract with the IOU to permit data sharing and invoicing. The DRP must provide data to the IOU from the OEM demonstrating that the thermostat is installed and online.

e. Individual customer audits:

The IOUs shall have the right to contact SCT customers participating with DRPs in order to perform measurement verification activities.

f. Use of SCT data for DRAM audits:

Finally, the IOUs should be explicitly permitted to use SCT enrollment data when performing DRAM audits in accordance with current DRAM rules.

In addition to the requirements above, the IOUs request the option to require the DRP to authorize the OEM to provide data directly to an IOU to verify that the data provided by the DRP directly to the IOU is reasonable. Agreement was not reached on this topic at the workshop.

The IOU may require information be provided directly from the OEM to IOU or the IOU DRMS/DERMS provider that will allow the utility to verify the information provided by the DRP. IOUs may require the OEM to provide i) counts of the number of thermostats enrolled in the DRP thermostat portal within specific data ranges, ii) results of spot-checks of the data provided by the DRP to the IOU, and/or iii) a full list of all installed SCT that are online in the DRP thermostat portal.

Supporting documentation for invoices.

Before the utility reimburses a DRP, the rebate must have been paid to the customer. The IOU may require the DRP to provide documents to demonstrate the incentive payment. Proof of payment documentation may vary and should be specified in the contract with the IOU. At a minimum, DRPs will be required to submit:

- Customer's "Site" (SAN in CAISO DRRS) information
- Serial number
- Store or marketplace invoice or proof of purchase
- Proof of installation / connection to OEM platform
- Attestation on the invoice submittal that a rebate was paid in full to the customers for whom they are seeking reimbursement. Invoices should be submitted to the IOU electronically with all required data in xlsx or csv format with supporting proof of purchase in pdf format.

IOUs process to ensure customer/SCT is eligible for rebate.

The IOUs will conduct a review of the data submitted by DRPs to ensure the customer, customer's site and SCT qualify for a rebate. Validations that will be conducted prior to incentive reimbursement, include, but are not limited to, the following:

- Active electric account.
- Residential rate.
- Within climate zones 9-15.
- Account or thermostat, as based on the serial number, has not received a thermostat incentive/rebate or free thermostat paid for by ratepayer funds in the prior 7.5 years.
- A prior SCT program rebate has not been paid. The incentive is limited to one SCT rebate per customer.
- Installation validation and verification.
- Verification that customers are registered in CAISO DRRS system with a current IOU or DRP and not enrolled in any other DR program.
- Date of purchase is on or after January 1, 2022, and on or before 12/31/2023.
- Final Incentive invoice needs to be submitted before Jan 31, 2024.

After the invoice has been validated and verified by the IOU and the DRP has submitted the required documentation, payment will be issued for the number of thermostats that have passed all validation checks. SCT rebate information will be recorded by the IOUs to prevent duplicate reimbursement of the incentive in the future.

10. Process for identifying customers that qualify for the Energy Savings Assistance (ESA) or California Alternate Rates for Energy (CARE) programs.

Each IOU and DRP should provide ME&O messaging to increase awareness for income qualified customers about opportunities to receive a no-cost thermostat through the Energy Savings Assistance (ESA) program. The messaging should be available at customer touch points where SCT acquisition is promoted. This may include, but not be limited to, IOU, OEM, CBP aggregator and DRP marketplaces, web pages, and digital and non-digital advertising.

To ensure consistency across providers, OEMs, CBP aggregators and DRPs must provide copies of the ESA messaging and URL locations, where possible, to their respective IOUs for review and approval. Each IOU may visit the sites at any time to verify compliance with this requirement. Conversely, each IOU may request their respective DRPs to remove ESA Program messaging in instances where ESA funding is nearing capacity.

EFFECTIVE DATE

SDG&E believes this submittal is subject to Energy Division disposition and is to be classified as Tier 2 (effective after staff approval) pursuant to GO 96-B and Decision (D.) 21-12-015. SDG&E respectfully requests that this submittal be approved effective February 21, 2022, 32 days from the date filed.

PROTEST

Anyone may protest this advice letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and received by February 09, 2021, which is 20 days after the date this advice letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at EDTariffUnit@cpuc.ca.gov. A copy of the protest should also be sent via e-mail to the address shown below on the same date it is mailed or delivered to the Commission.

For SDG&E:

Attn: Greg Anderson
Regulatory Tariff Manager
E-mail: GAnderson@sdge.com and
SDGETariffs@sdge.com

For SCE:

Shinjini C. Menon
Managing Director, State Regulatory Operations
Southern California Edison Company
8631 Rush Street
Rosemead, California 91770
Facsimile: (626) 302-6396
Telephone: (626) 302-3377
E-mail: AdviceTariffManager@sce.com

Tara S. Kaushik
Managing Director, Regulatory Relations
c/o Karyn Gansecki
Southern California Edison Company
601 Van Ness Avenue, Suite 2030
San Francisco, California 94102
Facsimile: (415) 929-5544
E-mail: Karyn.Gansecki@sce.com

For PG&E:

Sid Dietz
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

NOTICE

A copy of this submittal has been served on the utilities and interested parties shown on the attached list, and to service lists R.20-11-003 by providing them a copy hereof either electronically or via the U.S. mail, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by email to SDGETariffs@sdge.com.

/s/ Clay Faber

CLAY FABER
Director – Regulatory Affairs

APPENDIX A

The IOUs require each DRP participating in the SCT program to supply, at minimum, the following data as part of the invoice submittal process. The data must be sent via an excel file. These details will be used to screen customers for the SCT rebate eligibility and, as noted in section 7 of this advice letter, the IOUs may request additional details as necessary.

Field	Description
Third Party	DRP Name
Date Submitted	Date DRP submitted request (MM/DD/YYYY)
Contract Number / Service Account Number	Customer's Service Account number
DRRS Location ID	Unique identifier created by CAISO DRRS
Service Address	Residential street address where customer receives service and where the device is physically located
Service City	City where customer receives service and where the device is physically located
Service State	State where customer receives service and where the device is physically located
Service Zip Code	Zip code where customer receives service and where the device is physically located
Device Manufacturer	OEM (i.e., ecobee, Google Nest, Honeywell Home, etc.)
Serial Number	Unique serial number of device
Device Purchase Date	Date the thermostat was purchased (MM/DD/YYYY)
Device Cost	Actual price customer paid for thermostat that can be substantiate by receipt
Proof of purchase receipt	Pdf showing proof of purchase receipt
Device Registration Date	Date device was connected / registered with OEM (MM/DD/YYYY)
Incentive Type	Type of incentive provided e.g., rebate, discount, etc.
Incentive Amount	The amount of incentive provided to customer e.g., \$75
Transaction Date	The date the incentive was provided to customer (MM/DD/YYYY)
Transaction ID	Unique identifier for incentive transaction



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: San Diego Gas & Electric (U902-E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Norma Toothman

Phone #: 619-605-9877

E-mail: NLToothman@sdge.com

E-mail Disposition Notice to: SDGETariffs@sdge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 3933-E et.al

Tier Designation: 2

Subject of AL: Joint Submittal - Establishment Of Smart Communicating Thermostat Program of Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas and Electric Company (SDG&E), Pursuant To Decision 21-12-015

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.21-12-015

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: N/A

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 2/21/22

No. of tariff sheets: N/A

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Greg Anderson
Title:
Utility Name: San Diego Gas & Electric
Address: 8330 Century Park Court, CP32C
City: San Diego
State: California Zip: 92123
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: GAnderson@sdge.com

Name: SDG&E Tariff Department
Title:
Utility Name: San Diego Gas & Electric Company
Address: 8330 Century Park Court; CP 31D
City: San Diego
State: California Zip: 92123
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: SDGETariffs@Sdge.com

General Order No. 96-B
ADVICE LETTER SUBMITTAL MAILING LIST

cc: (w/enclosures)

Public Utilities Commission
CA. Public Advocates (CalPA)

R. Pocta
F. Oh

Energy Division

M. Ghadessi
M. Salinas
L. Tan
R. Ciupagea
K. Navis
Tariff Unit

CA Energy Commission

B. Penning
B. Helft

Advantage Energy

C. Farrell

Alcantar & Kahl LLP

M. Cade
K. Harteloo

AT&T

Regulatory

Barkovich & Yap, Inc.

B. Barkovich

Biofuels Energy, LLC

K. Frisbie

Braun & Blaising, P.C.

S. Blaising
D. Griffiths

Buchalter

K. Cameron
M. Alcantar

CA Dept. of General Services

H. Nanjo

California Energy Markets

General

California Farm Bureau Federation

K. Mills

California Wind Energy

N. Rader

Cameron-Daniel, P.C.

General

City of Poway

Poway City Hall

City of San Diego

L. Azar
J. Cha
D. Heard
F. Ortlieb
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P. DeVille

Clean Power Research

T. Schmid
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regulatory@commercialenergy.net

Davis Wright Tremaine LLP

J. Pau

Douglass & Liddell

D. Douglass
D. Liddell

Ellison Schneider Harris & Donlan LLP

E. Janssen
C. Kappel

Energy Policy Initiatives Center (USD)

S. Anders

Energy Regulatory Solutions Consultants

L. Medina

Energy Strategies, Inc.

K. Campbell

EQ Research

General

Goodin, MacBride, Squeri, & Day LLP

B. Cragg
J. Squeri

Green Charge

K. Lucas

Hanna and Morton LLP

N. Pedersen

JBS Energy

J. Nahigian

Keyes & Fox, LLP

B. Elder

Manatt, Phelps & Phillips LLP

D. Huard
R. Keen

McKenna, Long & Aldridge LLP

J. Leslie

Morrison & Foerster LLP

P. Hanschen

MRW & Associates LLC

General

NLine Energy

M. Swindle

NRG Energy

D. Fellman

Pacific Gas & Electric Co.

M. Lawson
M. Huffman
Tariff Unit

RTO Advisors

S. Mara

SCD Energy Solutions

P. Muller

SD Community Power

L. Fernandez

Shute, Mihaly & Weinberger LLP

O. Armi

Solar Turbines

C. Frank

SPURR

M. Rochman

Southern California Edison Co.

K. Gansecki

TerraVerde Renewable Partners LLC

F. Lee

TURN

M. Hawiger

UCAN

D. Kelly

US Dept. of the Navy

K. Davoodi

US General Services Administration

D. Bogni

Valley Center Municipal Water Distr

G. Broomell

Western Manufactured Housing

Communities Association

S. Dey

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ckingaei@yahoo.com
clower@earthlink.net
hpayne3@gmail.com
puainc@yahoo.com
AKanzler@anaheim.net
R.20-11-003

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP Energy
Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie

Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy